

Pilot Impacts Portal: User Acceptance Testing

Compilation of Primer and User Test Scripts

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1 Introduction

1.1 Background

User Acceptance Testing (UAT) is a process performed by users to determine if a system functions correctly according to the system specification. The process is guided by a series of test scripts which are each aimed at verifying that a particular business function is achieved by the system being tested. The test scripts are established in reference to the system requirements.

The UAT process is performed at the end of system development. It is the final task undertaken to ensure the delivered system meets the user's expectations and correctly achieves the stated business functions defined in the requirements. Successful completion of the UAT is necessary for the client to accept the new system.

The information contained in this report was originally developed as a series of reports for use by the testers. These reports consisted of an overview describing the UAT process, a primer introducing the Pilot Impacts Portal graphical user interface (GUI) features and 8 test scripts. These reports have been compiled into this report. Appendix B contains a summary of the feedback received by the testers.

1.2 Overview

A series of test scripts have been developed for the Pilot Impacts Portal based on the requirements specification. The requirements describe the system features of the portal in 11 categories:

- 1. Navigate the Impacts Framework
- 2. Provide a Geographical User Interface
- 3. Link from the Impacts Framework to related Data Items
- 4. Explore the Available Data Items
- 5. Produce Reports

- 6. Extract Data Items
- 7. Include New Data Item
- 8. Update Existing Data Item
- 9. Portal Access and User Management
- 10. Pilot Impacts Portal Monitoring
- 11. Miscellaneous

1.3 UAT Test Scripts

The UAT test scripts outline the process a user will undertake in performing the UAT task. A template test script is included in Appendix A. The template is applied to the numerous requirements to derive the final UAT test scripts that will then be used by FRNSW to verify the developed portal operates as expected when the software development is finished.

1.4 Mapping the Requirements to the UAT test scripts

The Pilot Impacts Portal Requirements Specification defines the system features as precise and unambiguous descriptions of the system. The test scripts may demonstrate the capabilities of the portal in terms of multiple requirements. That is, there is a many to one mapping of the requirements to the test scripts. This mapping is focused on a general theme of activity a user is expected to perform when using the portal.

The mapping of the UAT test scripts to the specific requirements is shown below, along with an indication of the approximate amount of time expected to complete the test script.

Portal User Theme	Script #	Requirements demonstrated	Approximate time to complete (minutes)
Impacts Framework	1	NAV-Req1, Nav-Req2, EXT-Req1, USR-Req2	45
User Registration	2	USR-Req1, USR-Req3, USR-Req4, USR-Req11, MSC-Req1, MSC-Req3, MSC-Req4	45
Map GUI Navigation	3	GUI-Req1, GUI-Req3, GUI-Req4, GUI-Req6	30
Map GUI Locations	4	GUI-Req2	25
Data Linkages	5	LNK-Req1, LNK-Req2, GUI-Req8	25
Data Exploration	6	EXP-Req1, EXP-Req2, EXP-Req3	25
Reports	7	RPT-Req1, RPT-Req2, RPT-Req3	15
Data Extracts	8	EXT-Req2, EXT-Req3, EXT-Req4, EXT-Req5	15

1.5 General Instructions

Note the following:

- The tester is expected to be familiar with the Impacts Framework as described by the report and Microsoft Excel spreadsheet available at: http://www.fire.nsw.gov.au/page.php?id=914.
- The tester is expected to be familiar with the Pilot Impacts Portal Requirements Specification. This will be provided as part of the UAT package.
- The test scripts assume the tester is using one of the following web browsers: Internet Explorer version 8, Mozilla Firefox version 6, Google Chrome version 13 or Safari version 5.1. More recent version numbers are ok.
- The tester is expected to be using the Windows XP or Windows 7 platforms.
- The Pilot Impacts Portal is located at: http://www.fend.org.au/portal/.
 To self register, click on the Register link and fill in the required details. An e-mail will be sent with a URL that must be followed to activate your account
- The Pilot Impacts Portal Map View is located at: https://www.fend.org.au/portal/secure/index.html?page=map.
- The tester must have a username and password to access the Map View in the Pilot Impacts Portal. This is set up during self registration as described above.
- The Pilot Impacts Portal is best viewed using a 17 inch monitor or larger, with a landscape screen orientation and a screen resolution of at least 1280 x 1024.
- The tester is required to complete all seven test scripts identified on page 2. This should take approximately three and a half hours to complete.
- For any technical assistance or usability issues please contact Robert Power, CSIRO on 02 6216 7039 or robert.power@csiro.au. For any project related questions, please contact Melanie Stutchbury on 02 9265 2674 or melanie.stutchbury@fire.nsw.gov.au.

2 Primer

There are a number of user interface elements available that users must know how to use in order to successfully operate the portal. These elements are described below and include specific names that will be used in the UAT test scripts when referencing the user interface elements.

It is expected that users will be familiar with most of these controls, such as "buttons", "drop down lists" and so on. However, there are some terms introduced, such as the "Navigation Bar" and "Accordion Tabs" which may not be familiar.

These terms are used extensively in the User Acceptance Testing scripts.

2.1 General Instructions

When operating the portal we recommend at least the following specifications:

Operating System:	Windows XP or Windows 7
CPU:	2.4 GHz
RAM:	2 GB
Internet connection speed:	50 Mbps
Screen resolution:	1280 x 1024
Browser version:	Internet Explorer 8, Mozilla Firefox 6,
	Google Chrome 13 or Safari 5.1

To find out your internet connection speed you may need to ask someone from your IT support department. Or for a rough estimate, you can try this web site: http://www.speedtest.net

It is also recommended that you make your browser window full screen so that all of the portal components fit comfortably. To make your window full screen, click on the "Maximise" icon in the top right corner of the window.



The browser version numbers specified are minimum values: more recent versions will work also. To check the version number of your browser, do the following:

• Internet Explorer:

Click on the "Help" menu item and then select "About Internet Explorer". You should then be presented with a popup box much like the following. The version number is circled.



• Firefox: Click on the "Help" menu item and then select "About Firefox". You should then be presented with a popup box much like the following. The version number is circled.



Chrome:

Click on the "Spanner" icon in the top right of the Chrome window as shown below.



Then select "About Google Chrome" from the drop down menu. You should then be presented with a popup box much like the following. The version number is circled.



• Safari:

Click on the "Cog" icon in the top right of the Safari window as shown below.



Then select "About Safari" from the drop down menu. You should then be presented with a popup box much like the following. The version number is circled.



2.2 Portal Overview

The Pilot Impacts Portal is available at: http://www.fend.org.au/. Opening this URL in a web browser will present the user with the portal as shown in Figure 1 below:



Figure 1: Pilot Impacts Portal Home Page

Note that the URL is redirected to: http://www.fend.org.au/portal/.

The user interface elements described below are used extensively in the Pilot Impacts Portal. The following examples use Microsoft's Internet Explorer version 8¹.

• URL Links

A URL link is shown in blue and underlined. On the Pilot Impacts Portal home page, there are 11 links. These are indicated in Figure 2 using red ovals.

Note that a link is blue when the page has not been previously visited. A link is shown as a dull red colour when the link has been visited before.

¹ Or to be precise, version 8.0.7601.17514



Figure 2: URL Links and the Navigation Bar

• The Navigation Bar

The portal has a number of interrelated components that can be switched between using the tabs on the navigation bar. The tab components are identified by their labels: Home, Framework, Registry, Map, Help, Acknowledgements and Contact Us.

The different tabs are mostly referred to as pages, for example the "home page", the "help page". However, some are referred to differently since they provide special features specific to the portal:

- Framework Explorer
 The Framework Tab on the Navigation Bar.
- Registry Explorer
 The Registry Tab on the Navigation Bar.
- Map View
 The Map Tab on the Navigation Bar.

The navigation bar is highlighted in Figure 2 using a blue rectangle.

Only one tab can be active at a time. A tab is activated by moving the mouse over the tab label and selecting it by clicking the left mouse button. The active tab is shown in white while the inactive ones are greyed.

Pilot Impacts Portal - Windows Int	ernet Explorer				_D×
← ← kttp://www.fend.org.au	/portal/		•	🔸 🗙 🔽 Bing	₽ •
🔶 Favorites 🏾 🏀 Pilot Impacts Portal					
		END - Pilot Im	pacts P ort		
	Home Framework Re	gistry Map Help Ac	knowledgements	Contact Us	
Drop Down List	Please select from the following I Impact Descriptions for your cho Event: Earthquak Event Characteristic: (all) Object Category: Object: Harm: Find Impacts Clear Impacts	went and Object options and the res.	n click on the button	below to find Economic Social Environmental	
		Copyright Legal Notice and Disclaimer			

Figure 3: Example Drop Down Lists and Buttons

• Drop Down Lists

A drop down list allows the user to choose from a range of options. Figure 3 shows the Framework tab of the portal where there are five drop down lists allowing the user to choose various options to explore the content of the Impacts Framework.

The first drop down list is highlighted using a blue rectangle. Inside this are a further two blue rectangles to distinguish the different features used in a drop down list:

o Label

The drop down list has a label to indicate what the choice is for. In this example of Figure 3, the highlighted label is *Event*.

 \circ Options

These are the choices that can be made using the drop down list. The user must place the cursor in the options box and click the left mouse button to active the drop down list. This shows the user the list of available options to choose from. Note that only one choice can be selected. When there are a large number of choices available, the list will appear with a scroll bar on the right.

The user makes a choice by either moving the mouse to the required option or by using the up and down arrow buttons. As this is done the current option is highlighted using reverse video of the text.

The choice is made by again clicking the left mouse button or by hitting the "Enter" button on the keyboard.

The options are displayed as black test indicating they may be chosen. When the text is displayed in grey it cannot be chosen. Greyed options are used to indicate to the user that in some circumstances the choice is available: but not for the current settings. This use of greyed text is also used elsewhere in the portal.

In the example of Figure 3, the user has chosen the event *Earthquake*.

• Buttons

A button is used to perform an action. The action is activated by using the mouse to position the cursor over the button and clicking it using the left mouse button.

There are four buttons shown in Figure 3 with two highlighted using red ovals. Each button is labelled with text on it providing an indication of the action associated with the button.

A button that is inactive, meaning the action cannot be performed, is indicated by the text being greyed out. An example in Figure 3 is the right button labelled "View Impact Data Items".

Accordion Tabs

Accordion tabs are similar to regular tabs except they are vertical instead of horizontal. An accordion tab is used as part of the Map Tab on the Portal Navigation Bar, as shown in Figure 4. There are five tabs available, identified by their labels: Layers, Locations, Building Information, Historical Events and Reports.

Only one tab can be active at a time. A tab is activated by moving the mouse over the tab label and selecting it by clicking the left mouse button. The active tab is shown in white while the inactive ones are greyed.

Text Boxes

A text box allows a user to enter text in the box provided. The text box has a label indicating what the text is for.

Two text boxes are shown in Figure 4. The "From" text box is highlighted using a blue rectangle and contains the value 2000.

Check Boxes

A check box is used to indicate that an option is either active or inactive. When active, there is a tick inside the box (\checkmark). When inactive, the box is empty.

There are numerous check boxes shown in Figure 4.Two are active, the last one and the one highlighted using a red oval.

The state of check box is toggled by placing the cursor over the check box and clicking the left mouse button.



Figure 4: Accordion Tabs, Text Boxes and Check Boxes

• The Map View

The Map is available when the Map Tab on the Portal Navigation Bar is active, as shown in Figures 4 and 5. The Map is a Google Map which provides street map, terrain and satellite imagery backdrops for Australia.

The Map is also referred to as the "Map View" and is highlighted in Figure 5.

Navigation Controls

The Google Map includes its own mechanisms for navigating the map: the Navigation Controls highlighted in Figure 5. These controls consist of four elements, seen from top to bottom in Figure 5:

- Arrows
 The four arrows are used for panning north, south, east or west.
- Street View "Person"
 This is for Street view, which has not been utilised by the Portal and should not be used.
- o Zoom

The "+" and "-" allow the Map View to be zoomed in or out.

 Zoom Slider An alternative method for zooming.

Google provide detailed online help with navigating their mapping interface, refer to the following:

- o Google Maps Help
- o Getting to Know Google Maps
- o Navigating in Google Maps



Figure 5: The Map View, Google Map Navigation Controls and Radio buttons

The Map View can be controlled as follows:

o Zoom

The Map View can be zoomed in or out by using the mouse scroll button (if present) or by using the navigation controls:

- moving the slider up or down
- clicking the "+" (zoom in) or "-" (zoom out) at either end of the slider
- o Pan

The Map View can be panned, where the map displayed is moved, by placing the cursor within the Map View, holding down the left mouse button and dragging the map to the desired location. Alternatively, the Google Navigation controls can be used to pan the map by

- Press the up arrow to move north
- Press the down arrow to move south
- Press the right arrow to move east
- Press the left arrow to move west
- Radio Buttons

A radio button allows one choice to be made from two or more available options. The radio buttons are labelled to indicate what the choice is for. The chosen selection has a black dot next to it. A different choice is made by placing the cursor over a different selection and clicking the left mouse button.

Figure 5 shows a group of four radio buttons allowing the user to choose the different kinds of Boundary Layers to enable in the Map View. *SLA* has been chosen. Note that the option CCD is not

available, indicated by the label being in grey text.

2.3 Other Graphical Elements

There are a few other graphical elements the user will encounter when using the Pilot impacts Portal. These are noted below:

• Population Statistics

ABS Populations Statistics are available for LGA, SLA and CCD regions. In the example of Figure 6, the SLA corresponding to the suburb of Florey in Canberra is shown.

Note the outline of the suburb is highlighted in yellow on the Map View.



Figure 6: Population Statistics and Building Information

Building Information

NEXIS Building Information is available from the Accordion Tab. Note there are three categories of building information: Residential, Commercial and Industrial. This can be seen in Figure 6. Note there are two scroll bars displayed: one for the Building Information Accordion tab content and another for the displayed NEXIS building information itself.

• Event Display Elements

Fire Emergency and Natural Disaster (FEND) events are displayed in the Map View as shown in Figure 7. There are two methods used to represent such events on the Map View:



Figure 7: Displaying Events

o General FEND events

So far the portal has event information for cyclones, earthquakes and flood regions. These events are shown as cyclone tracks (the red lines), earthquakes (semi-transparent maroon dots of varying sizes with larger dots indicating stronger earthquakes) and flood regions (semi-transparent blue regions). The list of such events is expected to increase as more relevant data items are identified and integrated into the portal.

• Attorney General's Department Disasters Database events

This data item includes information about numerous FEND events. Instead of dispersing the information about the AGD described events into the various FEND event categories, they are reported as a group in the portal. These events are shown using icons to distinguish them. The icons used are shown in Table 1 below. Note the bushfire and urban fire icons are the same.

Bushfire	>	Flood		Tornado	9
Cyclone	Q	Landslide	Ę	Tsunami	
Earthquake	1	Storm		Urban Fire	ø

Table 1: AGD event icons

Impacts Pop-ups

Individual FEND events may have associated impacts information defined for them. When this is the case, the depiction of the event in the Map View can be selected by placing the cursor over it and clicking the left mouse button. The event details will then be displayed in a pop up. Two examples are

shown are Figure 8. These pop-ups remain displayed until their close button is selected – the cross (X) in the top right hand corner of the pop-up.



Figure 8: Displaying Impacts

2.4 Error Messages

There are some error conditions that may occur when using the portal. These are described below.

• Boundary Layers

The ABS Boundary Layers are overlaid onto the Google Map. On rare occasions, these layers do not load correctly. An example is shown in Figure 9. This is usually an intermittent problem which will go away after the user pans or zooms the map.



Figure 9: Boundary Layer problems

• Error Message Pop-ups

Error messages are reported using pop-ups. The message will be displayed in a pop-up and the user may have to use a button to make the pop-up close.

Figure 10 shows a message that may result when displaying many events in the Map View.



Figure 10: Unresponsive Error Message

Message Pop-ups

Two other message pop-ups are shown below. The first is displayed when no historical event data is found for a chosen time period, see Figure 11.

This example is obtained when using the data range of 1800 to 1850 on the *Historical Events* Accordion Tab in the Map View.



Figure 11: No historical data available message

A similar message may occur when historical events exist for a specified date range but not for the specific events chosen by the user. Refer to Figure 12.

This example was obtained by selecting only earthquake events on the *Historical Events* Accordion Tab in the Map View with a date range of 2000 to 2012. As the message below indicates, event information exists for this time period, but not earthquake events.



Figure 12: No historical event data visible message.

3 UAT: Impacts Framework

Pilot Impacts Portal – Test Script # 1				
System Feature Theme: Impacts Framework	Browser: <i>Please specify one of:</i> IE, Firefox, Chrome, Safari Version #: <i>Include the version number</i>	Test Date: Start Time: End Time:		
Tester Name: Your name	Platform: <i>Please specify one of the following</i> : Windows XP, Windows 7	Attempt Number: Is this the first, second, etc attempt at performing the test		

3.1 Introduction

The portal user will be able to explore the content of the Impacts Framework by navigating it in terms of the disaster category (bushfire, cyclone, flood, and so on), the event characteristics, the type of objects impacted by an event, the harm that results, and the economic, social and environmental impacts themselves.

Access to the Impacts Framework content will be enabled using predefined access paths with the user selecting from predefined choices. These choices are determined by the content of the Impacts Framework. For example, a user can select from the predefined collection of 11 natural disaster and fire emergency events; for example if a user selects a storm event, there will be four associated event characteristics (hail, lightning, rain or wind) and so on that the user can select from.

Once the user has identified a subset of information of interest from the Impacts Framework, it can be saved as a CSV or XML file.

While some aspects of the Pilot Impacts Portal require authentication, a username and password, access to the Impacts Framework does not.

3.2 Functional Requirements Tested – Script 1

Functional requirement:	NAV-Req1
Description:	Allow the user to access the Impacts Framework content using predefined access paths.
Expected Results:	The content of the Impacts Framework spreadsheet will be accessible using a web accessible user interface making the information content more accessible to navigate than is currently possible using Microsoft Excel.

Functional requirement:	NAV-Req2
Description:	Allow the user to restrict the information returned using the predefined access paths. For example, only return environmental impacts, not all impacts.
Expected Results:	Present the content of the Impacts Framework chosen by the user in different ways to allow different methods of exploring the identified information.

Functional requirement:	EXT-Req1
Description:	Extract a subset of the Impacts Framework as a CSV or XML file.
Expected Results:	Save the Impacts Framework content chosen by the user as a CSV or XML file.

Functional requirement:	USR-Req2
Description:	Access to the Impacts Framework data item component of the portal does not require a user to login.
Expected Results:	Direct access to the Impacts Framework content using the Pilot Impacts Portal.

3.3 Tasks

The following steps are to be performed by the tester to complete script 1.

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
1	Begin test.	Start a web browser. Fill in the details in the header of the test script above noting who the tester is, the operating platform, browser and versions.	Web browser started and connected to the internet.		
2	Access the Pilot Impacts Portal Framework Explorer web page.	Open the URL: http://www.fend.org.au/	This will be redirected to: http://www.fend.org.au/portal/ See Figure 13.		
3	Access the Pilot Impacts Portal Framework Explorer web page.	Select the second tab labelled "Framework" on the Navigation Bar.	The Framework Explorer web page is displayed. See Figure 14.		
4	Investigate impacts about ground collapse resulting from earthquakes.	In the <i>Event</i> drop down list, select "Earthquake".	The <i>Event</i> selection is changed to "Earthquake".		
5		In the <i>Event Characteristic</i> drop down list, select "Ground collapse".	The <i>Event Characteristics</i> selection is changed to "Ground collapse".		
6	Show the impacts resulting from destroyed public roads.	In the Object Category drop down list, select "Infrastructure – Public (excl. parks and reserves)".	The Object Category selection is changed to "Infrastructure – Public (excl. parks and reserves)".		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
7		In the <i>Object</i> drop down list, select "Roads".	The Object selection is changed to "Roads".		
8		In the <i>Harm</i> drop down list, select "Destroyed".	The Harm selection is changed to "Destroyed".		
9		Press the <i>Find Impacts</i> button.	The results section at the bottom of the web page is updated showing the found impacts. The impacts first shown are the direct impacts. There is only one for this example. The result will be the same as shown in Figure 15.		
10	Examine the indirect impacts. There are two categories of impacts defined by the Impacts Framework: direct and indirect. Direct impacts occur as an immediate consequence of the event. Indirect impacts occur as a consequence of the previous impact.	In the results section of the Framework Explorer, the <i>Tree</i> <i>View</i> option should be displayed. See Figure 15. Expand the impact description by pressing the icon on the left.	Three indirect impacts that may result from the original impacts are displayed. See Figure 16.		
11		Repeat step 10 six more times.	A further 8 indirect impacts are shown. See Figure 17.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
12	Use the <i>Table view</i> results to view all impacts. The <i>Tree View</i> uses indentation to distinguish the different impact levels while the <i>Table</i> <i>View</i> presents the related impacts in the same row. Note that in the <i>Table View</i> , repeated impacts are greyed.	In the results section of the Framework Explorer, select the <i>Table View</i> option. Use the scroll bar in the results section as required to view all the impacts information.	The result will be as shown in Figure 18. The same information is displayed but using a different structure.		
13	Examine the economic impacts. The impacts, both direct and indirect, may be classified as being economic, social or environmental. Note that not all impacts are classified into one of these three options.	In the results section of the Framework Explorer, select the <i>Economic Impacts</i> option. Economic impacts are indicated as such in the <i>Tree View</i> and <i>Table View</i> using the following icon:	The user can view the impacts by their category without regard to the direct/indirect hierarchy. The result will be the same as shown in Figure 19.		
14	Examine the social impacts.	In the results section of the Framework Explorer, select the Social Impacts option. Social impacts are indicated as such in the Tree View and Table View using the following icon:	The result will be the same as shown in Figure 20.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
15	Examine the environmental impacts.	In the results section of the Framework Explorer, select the <i>Environmental Impacts</i> option. Environmental impacts are indicated as such in the <i>Tree</i> <i>View</i> and <i>Table View</i> using the following icon: $\stackrel{4}{\searrow}$.	The result will be the same as shown in Figure 21.		
16	Download the discovered impacts as a HTML file. Below the results section of the Framework Explorer are two links that allow a user to download the identified impacts.	Select the "HTML" link.	A browser specific file download dialog box will be displayed, see Figure 22. The user can choose to save the file or open it. Save the file to the desktop.		
17	View the downloaded HTML file.	Open the downloaded HTML file in a browser. Either double-click the file icon or drag the file icon over the browser window.	The contents of the file will be displayed in a browser. The result will be the same as shown in Figure 23.		
18	Download the discovered impacts as a CSV file. Below the results section of the Framework Explorer are two links that allow a user to download the identified impacts.	Select the "CSV" link.	A browser specific file download dialog box will be displayed, similar to Figure 22. The name of the file will be different. The user can choose to save the file or open it. Save the file to the desktop		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
19	View the downloaded CSV file. Note: on Windows 7, WordPad is available from the Start menu and following All Programs, then Accessories.	Open the downloaded file in Microsoft Excel or using WordPad. The CSV file is expected to be used by software and is not structured to be viewed by the user.	The contents of the downloaded file will be displayed. The result will be the same as shown in Figure 24 when viewed using WordPad.		
20	Compare the results with the Impacts Framework MS Excel spreadsheet. The impacts in the example presented above can be verified to be correct in terms of the original Impacts Framework XLS spreadsheet.	 Open the Impacts Framework MS Excel spreadsheet². Display the corresponding section as follows: 1. For help with the Impacts Framework spreadsheet, refer to the Introduction worksheet. 2. Open the earthquake worksheet. 3. In the "Ground collapse" <i>Event Characteristic</i>, open the "Infrastructure - Public (excl. parks and reserves)" impacts. 	The content shown in the spreadsheet should correspond to the Figure 25. There are 5 rows present which corresponds to the <i>Table View</i> of Figure 18.		

² The Excel spreadsheet is available from the FRNSW Impacts Project web page: http://www.fire.nsw.gov.au/page.php?id=914.



Figure 13: Pilot Impacts Portal

Spilot Impacts Portal - Windows Interne	et Explorer							
COO V Attp://www.fend.org.au/por	rtal/						🕶 🐓 🗙 📴 Bing	P -
🔶 Favorites 🛛 🌔 Pilot Impacts Portal								
) – P	ilot I	mpacts Por	rtal	
			-				Login <u>Register</u>	
	Home	Framework	Registry	Мар	Help	Acknowledgements	Contact Us	
	Please sele Impact De	ect from the follov scriptions for your	ving Event and choices.	d Object	options and	d then click on the butto	on below to find	
	Event:			•				
	Event Cha	racteristic:	-					
	Object Cat	tegory:						
	Object:							
	Harm:					-		
	Find Impa	ct Descriptions	Map Events	6	<u>d</u>	Economic 🛛 🐣 Social	🏜 Environmental	
			Сору	right <u>Legal</u>	Notice and Disc	claimer		

Figure 14: Impacts Framework Explorer

Pilot Impacts Portal - Windows Interne	t Explorer					
COO V Attp://www.fend.org.au/por	tal/	· · ·		•	👉 🗙 🔁 Bing	<u> </u>
🔶 Favorites 🖉 Pilot Impacts Portal						
			FEND - Pilot II Fire Emergencies and Natural Disaste	mpacts Port	tal	
					<u>Login</u> <u>Register</u>	
	Home	Framework	Registry Map Help	Acknowledgements	Contact Us	
	Please select Impact Desc	t from the follow riptions for your	ing Event and Object options and choices.	then click on the button	below to find	
	Event:		Earthquake 💌			
	Event Charao	cteristic:	Ground collapse	•		
	Object Categ	jory:	Infrastructure - Public (excl. parks and	i reserves) 💌		
	Object: Harm:		Roads			
	Find Impact	Descriptions	Man Events	Formaria 🔒 Conial	Section and a large state	
	T ind impact	Descriptions		Economic 🥌 Social	· Environmental	
Tree View Table View B	Economic Impa	cts Social I	mpacts Environmental Impacts			
🕨 鳻 Destruction of Roads (km	's of roads de	stroyed)				
Download Impacts Framework Sub	set: <u>HTML</u> <u>CS</u>	V				
			Copyright Legal Notice and Discle	<u>aimer</u>		

Figure 15: Earthquake Impacts

Pilot Impacts Portal - Windows Inter	net Explorer							
Favorites Pilot Impacts Portal	ortal/	1-1						
			FENI Fire Emerge	D – P ncies and N	ilot i	Impacts Po	rtal	
							Login <u>Register</u>	
	Home	Framework	Registry	Мар	Help	Acknowledgement	s Contact Us	
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Figure 16: First Indirect Impacts

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Figure 17: All Indirect Impacts

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nload Impacts Frame	ework Subset: <u>HTML</u> <u>CSV</u>		Copyright Legal Notic	e and Disclaimer			

Figure 18: Impacts displayed using Table View

Pilot Impacts Portal - Windows Interr	iet Explorer							
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							Login <u>Register</u>	
	Home	Framework	Registry	Мар	Help	Acknowledgements	Contact Us	
	Please sele Impact De Event:	ect from the follov scriptions for your	ving Event and choices. Earthquake	d Object o	ptions an	d then click on the butto	n below to find	
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	Object Cat	tegory:	Infrastructure	- Public (e:	kcl. parks a	and reserves) 💌		
	Object:		Roads	•				
	Harm:		Destroyed	•				
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Unable to leave residence / t	own, as road	was only way in	and out (no. t	л реорге т	solated)			
Download Impacts Framework Su	bset: HTML (CSV						Y
			Сору	right Legal N	lotice and Dis	sclaimer		

Figure 19: Economic Impacts

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	Download Impacts Framework Subset: <u>HTML</u>	<u>CSV</u>	Copyright Legal Notice and Disclaimer

Figure 20: Social Impacts

Image: Second	₽ •
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FEND - Pilot Impacts Portal Fire Emergencies and Natural Disasters	
Home Framework Registry Map Help Acknowledgements Contact Us	
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Figure 21: Environmental Impacts



Figure 22: File Download Dialog Box for Internet Explorer

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Destruction of Roads (km's of roads destroyed)	Use of alternative route to reach destination	Increased petrol costs for individuals and businesses (cost of additional petrol)				
Destruction of Roads (km's of roads destroyed)	Use of alternative route to reach destination	Increased time required to reach destination (additional time required to reach destination)				
Destruction of Roads (km's of roads destroyed)	Unable to leave residence / town, as road was only way in and out (no. of people isolated)	For businesses, loss of income, as movement of goods out of the town and people into the towm has stopped (loss in revenue for affected businesses)	Employees laid off (no. of employees laid off)	Pressure to find another job	Decrease in mental health (i.e. stress, anxiety) (medical costs / cost of professional counselling)	
Destruction of Roads (km's of roads destroyed)	Unable to leave residence / town, as road was only way in and out (no. of people isolated)	Feelings of isolation (no. of people taking time off work or school)	Decrease in mental health (i.e. stress, anxiety) (medical costs / cost of professional counselling)			
Destruction of Roads (km's of roads destroyed)	Replace roads (cost of replacing roads)					
						7

Figure 23: Downloaded HTML file
"Direct Impact Category", "Direct Impact", "Direct Impact Data Item", "Indirect Impact Level 1 Category", "Indirect Impact Level 1", "Indirect Impact Level 1 Data Item", "Indirect Impact Level 2 Category", "Indirect Impact Level 2", "Indirect Impact Level 2 Data Item", "Indirect Impact Level 3 Category", "Indirect Impact Level 3", "Indirect Impact Level 3 Data Item", "Indirect Impact Level 4 Category", "Indirect Impact Level 4", "Indirect Impact Level 4 Data Item", "Indirect Impact Level 5 Category", "Indirect Impact Level 5", "Indirect Impact Level 5 Data Item", "Indirect Impact Level 5 Category", "Indirect Impact Level 5", "Indirect Impact Level 5 Data Item", "Indirect Impact Level 5 Category", "Indirect Impact Level 5", "Indirect Impact Level 5 Data Item", "Indirect Impact Level 5 Category", "Indirect Impact Level 5", "Indirect Impact Level 5 Data Item", "Indirect Impact Level 5 Category", "Indirect Impact Level 5", "Indirect Impact Level 5 Data Item", "Indirect Impact Level 5 Data Item", "Indirect Impact Level 5 Category", "Indirect Impact Level 5", "Indirect Impact Level 5 Data Item", "Indirect Impa

economic,"Destruction of Roads","(km's of roads destroyed)",,"Use of alternative route to reach destination",,economic,"Increased petrol costs for individuals and businesses","(cost of additional petrol)",,,,,,,,,,

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,,,economic,"Unable to leave residence / town, as road was only way in and out","(no. of people isolated)",economic,"For businesses, loss of income, as movement of goods out of the town and people into the towm has stopped","(loss in revenue for affected businesses)",economic,"Employees laid off","(no. of employees laid off)",,"Pressure to find another job",,social,"Decrease in mental health (i.e. stress, anxiety)","(medical costs / cost of professional counselling)"

,,,,,social, "Feelings of isolation", "(no. of people taking time off work or school)", social, "Decrease in mental health (i.e. stress, anxiety)", "(medical costs / cost of professional counselling)",,,,,

Figure 24: Downloded CSV file

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•	99	Major arterial road (fwy, hwy)						Feelings of	isolation			(no. of people taking time off work or school)		Decrease in me	ntal health (i.e. stress, anxiety)	(medical costs / cost of professional counselling)		
· 4	00	Minor arterial (main road through city, town)		7	Replace or repair roads	(cost of replacing or repairing roads)										, , , , , , , , , , , , , , , , , , ,		
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Figure 25: Impacts Framework XLS Earthquake Impacts

4 UAT: User Registration

Pilot Impacts Portal – Test Script # 2					
System Feature Theme: User Registration	Browser: <i>Please specify one of:</i> IE, Firefox, Chrome, Safari Version #: <i>Include the version number</i>	Test Date: Start Time: End Time:			
Tester Name: Your name	Platform: <i>Please specify one of the following:</i> Windows XP, Windows 7	Attempt Number: Is this the first, second, etc attempt at performing the test			

4.1 Introduction

Users are required to register to access the mapping and feedback components of the portal. Registration requires an email address which is used as the user name to access the portal. A user self registers by completing a registration web form. Once submitted the user is sent an email including a URL link to activate the newly created user account plus URL links to the copyright and terms and conditions. A user can change some of their registration details.

The aim is for users to be self managing. There is online help available for the portal and user feedback can be submitted using the online web form available on the web or by contacting to the site administrator using the ICTC-fend@csiro.au email address.

4.2 Functional Requirements Tested – Script 2

Functional requirement:	USR-Req1
Description:	Include a terms and conditions statement for using the Pilot Impacts Portal
Expected Results:	The user has access to the terms and conditions for using the Pilot Impacts Portal and they are easily identifiable.

Functional requirement:	USR-Req3
Description:	The user must agree to the terms and conditions before being allocated a username
Expected Results:	Registration is only successful if the user accepts the terms and conditions.

Functional requirement:	USR-Req4
Description:	Access to the content of the Pilot Impacts Portal requires the user to login using their allocated username
Expected Results:	The mapping component and the user feedback form require the user to login to the portal. If a user tries to access the mapping component without first logging in, they will be presented with the login form. When a user is logged in and they access the "Contact Us" page, a web form is available to provide feedback; otherwise a web page is shown with the contact details of the portal administrator.

Functional requirement:	USR-Req11
Description:	Provide a web form to allow a potential new user to request a user account to access the portal
Expected Results:	The user can access the registration web form to successfully register to create an account to login to the portal.

Functional requirement:	MSC-Req1
Description:	Provide online user documentation
Expected Results:	Online user documentation is available to the user.

Functional requirement:	MSC-Req3
Description:	Include a disclaimer on the Pilot Impacts Portal indicating that the contents are made available from various data custodians and that this information may be incomplete or inaccurate
Expected Results:	The disclaimer is part of the general disclaimer for all CSIRO managed web sites. There is also an "Acknowledgements" web page showing the different data sources available in the portal, the third party software used to develop the portal and the icons used.

Functional requirement:	MSC-Req4
Description:	Allow a user to provide a comment on their experience of using the portal or pose a question.
Expected Results:	A user must be logged in to the portal in order to access the feedback form. This is a web form allowing the user to make a comment on the system or to provide feedback. The comments are emailed to the portal administrator.

4.3 Tasks

The following steps are to be performed by the tester.

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
1	Begin test.	Start a web browser. Fill in the details in the header of the test script above noting who the tester is, the operating system, browser and versions.	Web browser started and connected to the internet.		
2	Access the home page. The user must not already have a portal account. If they do and they want to reuse this account to test the registration process, please send an email to ICTC-fend@csiro.au to remove the existing account.	Open the URL: http://www.fend.org.au/	This will be redirected to: http://www.fend.org.au/portal/		
3	Access the registration web form.	Click the "Register" link. Figure 26 shows the Pilot Impacts Portal home page with 3 circles indicating where the "Register" link is, three tabs on the Navigation Bar that will be explored in this test script and the links to the Copyright statement and Legal notice and disclaimer.	The user will be presented with the Pilot Impacts Portal Registration form. An example is shown in Figure 27. Note that the CAPTCHA word will be different.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
4	Complete the form by filling in the details.	The user must have an email account from one of the nominated organisations listed at: http://www.fend.org.au/pipadmin/admin_orgs.jsp A user account can be created by the portal administrator if this is not the case. Please contact: ICTC-fend@csiro.au. The user must agree to the Copyright and Legal Notice and Disclaimer before the "Register" submit button becomes active. The user must also enter the generated CAPTCHA word. This is to ensure a person is creating a user account and not a software agent.	The user is able to provide the necessary registration information. An example completed form is shown in Figure 28.		
5	Register.	Click the "Register" button to create an account. If there are any problems, try to register again by clicking the "Register" submit button. The CAPTCHA word has an expiry time – if the user takes too long to register, then the word will expire and a new one will be needed. This is achieved by reloading the registration page. Please contact the administrator if they are continued problems.	When registration is successful, the user is informed as shown in Figure 29.		
6	Review the activation email.	When registration is successful, the user will receive an activation email. The user account cannot be used until it is activated. If the user attempts to do so, they are presented with the message shown in Figure 31.	An example email is shown in Figure 30.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
7	Activate the account.	Open the activation URL in a browser. If there are any problems, try to activate again.	A registration successful message will be shown, similar to Figure 32.		
8	Open the "Contact Us" page.	Click the "Contact Us" tab on the Navigation Bar. This step is to show the different pages displayed before and after logging in to the portal.	The contact details of the Pilot Impacts Portal are displayed as shown in Figure 33.		
9	Login.	Open the Pilot Impacts Portal home page: http://www.fend.org.au/portal/ and click the "Login" link. Enter your user name (full email address) and password. Then click the "Log In" button.	The Login page is displayed, see Figure 34.		
10	View the secure Pilot Impacts Portal page.	The secure Pilot Impacts Portal home page is: https://www.fend.org.au/portal/secure/ Note the use of https in the URL. The "Map" tab on the Navigation Bar is now accessible	The secure home page is shown in Figure 35. The differences between the secure home page and the original one (Figure 26) are highlighted.		
11	Open the "Contact Us" page.	Click the "Contact Us" tab on the Navigation Bar. Compare the content with Figure 33 in step 8 above.	The feedback form is displayed as shown in Figure 36.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
12	Enter a comment.	Choose a "Feedback Type" from the drop down list and then enter some text in the form. Click the "Submit Feedback" button.	The following message is displayed to the user below the "Submit Feedback" button: <i>Thank you for your feedback!</i> The feedback is sent as an email to: ICTC-fend@csiro.au and is recorded in a database along with the email address (portal user name) of the user providing the feedback.		
13	Review the user documentation.	Select the fifth tab labelled "Help" on the Navigation Bar. Use the scroll bar on the right to review the help content.	The help page is displayed as shown in Figure 37.		
14	Review the "Acknowledgments" page.	Select the sixth tab labelled "Acknowledgements". Use the scroll bar on the right to review the help content.	The acknowledgements page is displayed as shown in Figure 38.		



Figure 26: Pilot Impacts Portal home page highlighting areas being tested



Figure 27: Registration Form



Figure 28: Example Completed Registration Form



Figure 29: Successful Registration Message

Pilot Impacts Portal Registration

ICTC-fend@csiro.au

Sent: Tue 8/05/2012 3:54 PM

To: Power, Robert (ICT Centre, Acton)

Hello Robert

Welcome to the Pilot Impacts Portal.

You must now activate your account before it can be used. To do this, open the following link in a browser:

http://www.fend.org.au/pipadmin/activate? id=baba63723d4edbe9b628db3c7a26e4e7&verify=05a671c66aefea124cc08b76ea6d30bb

The secure section of the Pilot Impacts Portal is available here:

http://www.fend.org.au/portal/secure

By using your account to access this web site you are agreeing to the copyright and terms and conditions as defined by the following links:

http://www.csiro.au/en/Copyright.aspx http://www.csiro.au/en/Legal-Notice-and-Disclaimer.aspx

You can change your account details here:

http://www.fend.org.au/pipadmin/admin change.html

CSIRO uses your email address to ensure you belong to one of the registered organisations allowed to access the secure portion of the Pilot Impacts Portal web site. We may, on occasion, notify you of important changes to this site. Your email address will not be shared with third parties.

Only encoded passwords are stored for this site. If you forget your password, a new one can be generated and emailed to you by contacting:

Pilot Impacts Portal Team Contact: Robert Power Email: ICTC-fend@csiro.au Phone: +61 2 6216 7039

Figure 30: Example Registration Email



Figure 31: Inactivated Account Message

Phot Impac	ts Portal Admin - Windows Internet Explorer			
)⊙ • [https://www.fend.org.au/pipadmin/activate?id=baba63723d4edbe9b628	3db3c7a26e4e7&verify=05a671c66aefea124cc08b76ea6d30bb	💌 🔒 🐓 🗙 🔽 Bing	P
Favorites	C Pilot Impacts Portal Admin			
Activ	ation Successful			
10111	ation Succession			
ello Robert				
our accoun	t has been successfully activated.			
ou can now	login into the secure area of the Pilot Impacts Portal here.			

Figure 32: Activation Successful Message



Figure 33: The Contact Us Page



Figure 34: Login Page



Figure 35: The Secure Home Page

🖉 Pilot Impacts Portal - Windows Inte	rnet Explorer		
CC C P Attps://www.fend.org.au	J/portal/secure/index.html	💌 🔒 🍫 🗙 💽 Bing	P -
🔶 Favorites 🛛 🌈 Pilot Impacts Portal			
	FEND - Pilot Impa Fire Emergencies and Natural Disasters	cts Portal	A
		<u>Change Details Log Out</u>	
	Home Framework Registry Map Help Ackno	wledgements Contact Us	
	The FEND Pilot Impacts Portal has been developed by the CSIRO as pa <u>Disasters Impacts Framework Project</u> . The Portal is also hosted by CSI If you have any feedback on the Portal or would like to contribute to it form below:	rt of the <u>Australian Natural</u> RO. t in any way please use feedback	
	Feedback Type: General		
	 I am ok with being contacted directly by the Pilot I Submit Feedback 	impacts Portal team.	
	Alternativley you may use the following contact information:		
	Pilot Impacts Portal Team Project Manager: Robert Power CSIRO ICT Centre Canberra Email: <u>ICTC-fend@csiro.au</u> Phone: +61 2 6216 7039		
	If you would like to find out more about the Australian Natural Disaster please contact <u>Fire & Rescue NSW</u> who are managing the project. <u>Copyright Legal Notice and Disclaimer</u>	s Impacts Framework Project	•

Figure 36: The Contact Us Feedback Form



Figure 37: The Online Help Page



Figure 38: The Acknowledgements Page

5 UAT: Map GUI Navigation

Pilot Impacts Portal – Test Script # 3					
System Feature Theme: Map GUI Navigation	Browser: <i>Please specify one of:</i> IE, Firefox, Chrome, Safari Version #: <i>Include the version number</i>	Test Date: Start Time: End Time:			
Tester Name: Your name	Platform: <i>Please specify one of the following</i> : Windows XP, Windows 7	Attempt Number: <i>Is this the first, second, etc attempt at performing the test</i>			

5.1 Introduction

The Pilot Impacts Portal will include a map based interface to allow the user to navigate to an area of interest. As the zoom level passes a predefined level, new geographic data layers will become visible to the user. These layers can then be enabled or disabled by the user and are again removed from view when the zoom level threshold is again passed. The geographic data items may be linked to the corresponding elements of the Impacts Framework.

Users are required to register to access the mapping components of the portal. Test Script # 2 should be completed prior to performing this one.

The baseline data items provide context for a fire emergency or natural disaster event described by the Impacts Framework. This data includes geographic information describing the built environment, local government boundaries, residential zoning, land use details and demographics as well as information described by the Impacts Framework such as bridges, road signage, fencing, national park facilities (BBQs, shower blocks, tables and chairs, shelters, toilets), telephone poles, the electricity network, walking trails, fire towers, field crops and so on.

5.2 Functional Requirements Tested – Script 3

Functional requirement:	GUI-Req1
Description:	The map will be navigable using pan and zoom operations
Expected Results:	The user will be able to pan and zoom the map in multiple ways.

Functional requirement:	GUI-Req3
Description:	The map will include geographic layers of baseline data items
Expected Results:	The user will be able to recognise different baseline data items available in the portal.

Functional requirement:	GUI-Req4
Description:	Data layers will be enabled and disabled depending on the zoom level
Expected Results:	The user will understand when and why layers are enabled and disabled automatically when navigating the map.

Functional requirement:	GUI-Req6
Description:	An enabled layer can be disabled by the user
Expected Results:	The user will be able to turn layers on (enabled) and off (disabled).

5.3 Tasks

The following tasks will demonstrate how to navigate the mapping component of the portal.

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
1	Begin test.	Start a web browser. Fill in the details in the header of the test script above noting who the tester is, the operating system, browser and versions.	Web browser started and connected to the internet.		
2	Access the Map View component of the Pilot Impacts Portal.	Open the URL: http://www.fend.org.au/ Select the "Map" tab on the Navigation Bar. The user will be prompted to login.	The URL will be redirected to: http://www.fend.org.au/portal/ The user will successfully login and be presented with a map as shown in Figure 39.		
3	Review the Accordion Tabs. On the right of the map are a number of display elements organised as an <i>accordion</i> . Only one display element is visible at a time. Note that the state (contents) of each element is maintained as the accordion view is changed.	Select the various tabs available in the accordion view.	 The user will be comfortable with switching between the following tabs: Layers Locations Building Information Historical Events Reports 		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
4	Navigate the Google Map.If the user is unfamiliar with using a Google Map, then review the help available at:The map in the Pilot mpacts Portal is a Google Map. This provides street map, terrain and satellite magery backdrops for Australia.If the user is unfamiliar with using a Google Map, then review the help available at:A legend of the elements of a Google Map can be found here:A legend of the elements of a Google Map can be found here:Getting to know Google Maps Note the "Navigation Controls" mentioned there.Note the "Navigation Controls"		The user understands that the map is a Google Map and can be navigated (pan and zoom functions) using the features available from Google. These operations are further explained in the next two tasks.		
5	 Zoom the map. Refer to the highlighted Google Map navigation controls in Figure 40. Also refer to: Navigating in Google Maps. Use the navigation controls to zoom the map view in or out by: moving the slider up or down clicking the "+" (zoom in) or "-" (zoom out) at either end of the slider Alternatively, use the mouse scroll button (if present). 		The map can be zoomed in and out.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
6	Pan the map. Refer to the highlighted Google Map navigation controls in Figure 40. Also refer to: Navigating in Google Maps.	 Use the navigation controls to pan the map by: Press the up arrow to move north Press the down arrow to move south Press the right arrow to move east Press the left arrow to move west Alternatively, click and drag the map to the desired location. 	The map can be panned around.		
7	Display baseline data items. First zoom to a set location: Tasmania.	Select the "Locations" Accordion Tab. Select the state of "Tasmania" for the <i>Zoom to:</i> option.	The Map View is changed to the state of Tasmania as shown in Figure 41.		
8	Display baseline data items: Local Government Areas (LGA's) for Tasmania. Baseline data is overlayed on top of the Google Map to provide further context of the natural and built environment.	Select the "Layers" Accordion Tab. Select "LGA" for the <i>Boundary Layers:</i> option. Note that while the "CCD" <i>Boundary Layer</i> is greyed it can still be selected. The use of greyed text in this case means the layers cannot be displayed in the Map View at the current zoom level.	The LGA regions for Tasmania are displayed as shown in Figure 42.		
9	Display baseline data items: Statistical Local Areas (SLA's) for Tasmania.	While still in the "Layers" Accordion Tab, select "SLA" for the <i>Boundary Layers:</i> option.	The SLA regions for Tasmania are displayed as shown in Figure 43.		

No.	Objective	Tester Action		Expected Result	Actual Result	Pass/Fail
10	Demonstrate that baseline layers are enabled only when the zoom level is past a threshold.	Select the "Locations The state of Tasmania selected. Now enter to other <i>Zoom to:</i> option Statistical Division: Statistical Subdivision: Statistical Local Area (SLA):	 Accordion Tab. a should still be the following for the ns: Greater Hobart Greater Hobart Hobart (C) Remainder 	The Map View is as shown in Figure 44.		
11	Display baseline data items: Census Collection Districts (CCD's) for the SLA "Hobart (C) Remainder".	Select the "Layers" Accordion Tab. Note that the "CCD" <i>Boundary Layer</i> is not available (it is greyed out). Now click the "+" on the navigation control to zoom the map view one "level". Now the "CCD" <i>Boundary Layer</i> is available – select the "CCD" option.		The Map View is as shown in Figure 45. Note the information in the "Layers" Accordion Tab includes information about the selected layer under the heading: <i>Highlighted area</i> : The chosen SLA is drawn in yellow. This can be seen in Figures 44 and 45.		
12	Turn off the boundary layers.	While still in the "Lay select "None" for the option.	ers" Accordion Tab, Boundary Layers:	The boundary layer is removed. Note the highlighted area remains as a yellow region on the Map View.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
13	Explore the boundary layers and the pan and zoom functions.	The tester is encouraged to explore the pan and zoom functions, turning on/off the different boundary layers and to observe when the LGA, SLA and CCD boundary layers are enabled or disabled depending on the map zoom level.	The user is familiar with the pan and zoom functions and turning on/off the different boundary layers.		



Figure 39: Pilot Impacts Portal Map Component



Figure 40: Google Map Navigation Controls



Figure 41: Map View of Tasmania



Figure 42: LGA Boundaries for Tasmania



Figure 43: SLA Boundaries for Tasmania



Figure 44: The "Hobart (C) - Remainder" SLA



Figure 45: CCD Boundary Layers for "Hobart (C) - Remainder"
6 UAT: Map GUI Locations

Pilot Impacts Portal – Test Script # 4				
System Feature Theme: Map GUI Locations	Browser: <i>Please specify one of:</i> IE, Firefox, Chrome, Safari Version #: <i>Include the version number</i>	Test Date: Start Time: End Time:		
Tester Name: Your name	Platform: <i>Please specify one of the following</i> : Windows XP, Windows 7	Attempt Number: <i>Is this the first, second, etc attempt at performing the test</i>		

6.1 Introduction

The Pilot Impacts Portal Map View can be focused (zoomed) to a known location in a number of ways:

- choosing a state or territory;
- entering a Local Government Area (LGA) name;
- entering a Statistical Local Area (SLA) name;
- typing a location to search for.

The Map View "Layers" and "Locations" Accordion Tabs have interrelated functionality which presents the user with different options when navigating the map interface to a specific location. Some of these features were demonstrated in Test Script 3 where the aim was to demonstrate the Map View functionality. This test script shows all the different ways of navigating the Map View interface to a known location.

6.2 Functional Requirements Tested – Script 4

Functional requirement:	GUI-Req2
Description:	The map will be navigable by the user providing location information, such as a town, suburb, or postcode
Expected Results:	The user will be able to navigate to a location in the various ways described above.

6.3 Tasks

The following tasks will demonstrate how to navigate the mapping component of the portal to a specific location.

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
1	Begin test.	Start a web browser. Fill in the details in the header of the test script above noting who the tester is, the operating system, browser and versions.	Web browser started and connected to the internet.		
2	Access the map component of the Pilot Impacts Portal.	Open the URL: http://www.fend.org.au/ Select the "Map" tab on the Navigation Bar. The user will be prompted to login.	The URL will be redirected to: http://www.fend.org.au/portal/ The user will successfully login and be presented with a map of Australia.		
3	Understand the relationship between the "Layers" and "Locations" Accordion Tabs.	Select the "Locations" Accordion Tab. There are three options available: • Zoom to • Enter an LGA or SLA • Enter a location	The Map View is as shown in Figure 46. Make sure "None" is selected as the <i>Boundary Layer</i> in the "Layers" Accordion Tab.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
4	Show the Western Australian LGA layers.	Select "Western Australia" as the state to <i>Zoom To</i> . Select the "Layers" Accordion Tab. Select "LGA" as the <i>Boundary</i> <i>Layer</i> . Select the "Locations" Accordion Tab again.	The Map View is as shown in Figure 47. Note there is now an extra option available for <i>Zoom To</i> – there is a drop down list of available LGA regions.		
5	Show the WA Albany LGA.	Select "Albany (C)" for the LGA.	The Map View is as shown in Figure 48. Note the region is now highlighted in yellow.		
6	Show Western Australian SLA layers.	Select the "Layers" Accordion Tab. Select the "SLA" option for <i>Boundary Layers</i> . Select the "Locations" Accordion Tab again.	 When on the "Layers" Accordion Tab, note the <i>Highlighted area</i> is shown as "LGA Albany (C)" as a result of the previous task. The Map View is as shown in Figure 49. Note there are now extra options available for <i>Zoom To</i> – there are three pull down lists of available allowing the user to choose a Statistical Division, Statistical Subdivision and Statistical Local Area (SLA). 		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
7	 7 Navigate to the "Albany (C) Bal" SLA. 7 SLA. 7 The state of "Western Australia" should still be selected. Now enter the following for the other Zoom To options: 7 Statistical Division: Southern Statistical Statistical Statistical Statistical Statistical Albany (C) Local Area Bal (SLA): 	The Map View is as shown in Figure 50. Note that the various options in the drop down lists must be completed in sequence. After choosing a Statistical Division, the Statistical Subdivision pull			
		StatisticalKingSubdivision:StatisticalStatisticalAlbany (C)Local AreaBal(SLA):Statistical	the Statistical Subdivision pull down list is populated. Then when one of these is chosen, the SLA pull down list is populated and may be chosen from.		
8	Return the map to its original view of the whole of Australia.	Select "None" for the <i>Boundary</i> <i>Layers</i> in the "Layers" Accordion Tab. Clear the <i>Highlighted area</i> . Click "Reset Zoom" in the "Locations" Accordion Tab.	The Map View is returned to its original state showing Australia with no boundary layers. Note the user may need to use the scroll bar in the "Locations" Accordion Tab to be able to access the "Reset Zoom" button.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
9	Navigate to the Albany LGA.	 While in the "Locations" Accordion Tab, enter the letters "alb" in the text box labelled <i>Enter LGA:</i> The user will be presented with a choice of known LGA's throughout Australia that match the first three characters entered. The possible matches are: Albany (C) Albury (C) 	The Map View is as shown in Figure 51. The user can either choose the first to select Albany, or continue typing. Note the matching is case insensitive. The Map View will be updated to show the Albany LGA, as shown in Figure 52. Note there are no boundary layers shown.		
10	Navigate to the Albany Creek SLA.	While in the "Locations" Accordion Tab, enter the letters "alb" in the text box labelled "Enter SLA:". Choose or type "Albany Creek". Use the Navigation Controls to zoom in and out. This SLA is near Brisbane.	The user will again be presented with a choice of matching SLA's Australia. There are nine SLA's that match "alb". Note the matching is anywhere in the SLA name, not only the start. Choosing the "Albany Creek" SLA will update the Map View as shown in Figure 53.		
11	Navigate the Map View by entering a location. The Google Map is global and not restricted to Australia.	In the "Locations" Accordion Tab, enter the letters "alb" in the text box labelled "Enter Location". Then click the "Find" button.	The Map View is as shown in Figure 54. Use the Navigation Controls to zoom in and out: this location is in Romania!		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
12	Navigate the Map View by entering a location.	In the "Locations" Accordion Tab, enter the location "Albany Creek" in the text box labelled <i>Enter Location</i> . Then click the "Find" button.	The Map View is as shown in Figure 53. The SLA of "Albany Creek" near Brisbane is again shown.		
13	Navigate the Map View by entering a location.	In the "Locations" Accordion Tab, enter the location "alb australia" in the text box labelled "Enter Location". Then click the "Find" button.	The Map View is as shown in Figure 55. The location could not be found and so an error pop-up is shown.		
14	Navigate the Map View by entering a location.	In the "Locations" Accordion Tab, enter the location "albany australia" in the text box labelled "Enter Location". Then click the "Find" button.	The Map View is as shown in Figure 56. The town of Albany in Western Australia is found.		
15	Navigate the Map View by entering a location.	In the "Locations" Accordion Tab, enter the location "Springfield" in the text box labelled <i>Enter Location</i> . Then click the "Find" button.	The location Springfield near Brisbane is found.		
16	Navigate the Map View by entering a location and an Australian state.	Repeat the above task using the various Australian state and territory abbreviations: "Springfield ACT", "Springfield NSW", etc.	"Springfield" is found except for NT and ACT. When searching for "NT" an error is returned, while the "ACT" finds a location in the USA.		



Figure 46: The Locations Options on the Accordion Tab



Figure 47: The Western Australian LGA regions



Figure 48: The WA "Albany (C)" LGA Region



Figure 49: The WA SLA Regions around Albany



Figure 50: The WA "Albany (C) Bal" SLA Region



Figure 51: Starting the Navigation to the Albany LGA



Figure 52: Completing the Navigation to the Albany LGA



Figure 53: The Albany Creek SLA



Figure 54: The "alb" location



Figure 55: Location Not Found Message



Figure 56: Albany Australia

7 UAT: Data Linkages

Pilot Impacts Portal – Test Script # 5			
System Feature Theme: Data Linkages	Browser: <i>Please specify one of:</i> IE, Firefox, Chrome, Safari Version #: <i>Include the version number</i>	Test Date: Start Time: End Time:	
Tester Name: Your name	Platform: <i>Please specify one of the following</i> : Windows XP, Windows 7	Attempt Number: Is this the first, second, etc attempt at performing the test	

7.1 Introduction

The data items available in the Pilot Impacts Portal consist of the Impacts Framework, baseline (context information, refer to Test Script # 3), fire emergency and natural disaster event information and details of the impacts associated with these events.

The event and impacts data items are expected to relate to the Impacts Framework. For example, only event types found in the Impacts Framework are contained in the portal. There are no data items relating to heat waves or pandemics since these events are not in the Impacts Framework.

The linkage of the event and impacts data items to the Impacts Framework can be used in the portal: the user can navigate the map to discover data items of interest, then link to the Impacts Framework content. The reverse will be possible also: from the Impacts Framework, link to related data items. This link may be to the metadata description of the data items or allow the user to select instances of the data items by indicating a geographic region of interest, for example using a gazetteer, a local government area (LGA), statistical local area (SLA) or a census collection district (CCD).

7.2 Functional Requirements Tested - Script 5

Functional requirement:	LNK-Req1
Description:	The user can find associated metadata of relevant data items while navigating the Impacts Framework
Expected Results:	The user can find information about data items available in the portal based on the content of the Impacts Framework.

Functional requirement:	LNK-Req2
Description:	The user can find associated relevant data item instances while navigating the Impacts Framework by providing a location of interest (for example using place name from a gazetteer, LGA, SLA or CCD)
Expected Results:	The user can find information about data items available in the portal based on the content of the Impacts Framework and for a specific region of interest based on a user specified location.

Functional requirement:	GUI-Req8
Description:	The user can find associated information from the Impacts Framework by selecting a data item on the map
Expected Results:	The user is able to switch from the map component to the Impacts Framework component of the portal.

7.3 Tasks

The following tasks will demonstrate how to navigate the mapping component of the portal and to link to content in the Impacts Framework.

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
1	Begin test.	Start a web browser. Fill in the details in the header of the test script above noting who the tester is, the operating system, browser and versions.	Web browser started and connected to the internet.		
2	Access the Pilot Impacts Portal – Map View by selecting the "Map" tab on the Navigation Bar.	Open the URL: http://www.fend.org.au/ Click the "Map" tab on the Navigation Bar and login. Refer to Test Script 2 for details of registering and logging in to the portal.	The user can access the Map View of the Pilot Impacts Portal.		
3	Show all events for a given time period.	Select the "Historical Events" Accordion Tab. Change the date range to be from 1980 to 2000. Click the "Show" button.	20 years of events are displayed on the Map View as shown in Figure 57. Make sure the "Only show events with impact data" is selected. Note the "Show" button changes to be "Update".		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
4	Turn off (hide) some of the events in the Map View.	Turn off the first three events: Cyclone Tracks, Earthquakes and Flood regions.	The Map View will be as shown in Figure 58. The events that remain are from the AGD Disaster database and contain information about various event types as shown.		
4	Turn off most of the events in the Map View.	Turn off all but the AGD Earthquakes. Note that the icons are located approximately where the event occurred.	The Map View will be as shown in Figure 59. There are three earthquake events corresponding to the time period selected.		
5	Find the details of an event.	Click the icon in the Northern Territory. Details of the event are shown in a pop-up. The pop up may move the Map View slightly.	Refer to Figure 60. The event details include URL links to further information from the original data source and a link back to the Impacts Framework.		
6	Link to the Impacts Framework content about impacts from earthquake.	Click the last link in the pop-up labelled: View Impacts Framework for Earthquake events.	A query is done on the Impacts Framework, selecting the <i>Event</i> "Earthquake", <i>Object Category</i> "Infrastructure - Public (excl. parks and reserves)" and <i>Harm</i> "Destroyed". Refer to Figure 61.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
7	Return to the Map View.	Click the Map tab on the Navigation Bar.	The Map View will return to the way it was before following the link in step 6 above, see Figure 60.		
			This demonstrates that state is maintained between the different tabs in the Navigation Bar.		
8	Close the pop-up.	Click the close icon in the top right hard corner of the pop-up to close it.	The Map View will be the same as it was in Figure 59, although the map of Australia may have been moved slightly to make room for the pop-up in step 5.		
9	Show all earthquake data for the chosen time period. Data items for the same event types exist from different data sources.	Turn on the "Earthquakes" events by clicking the second check box.	More earthquake icons appear as small circles which sometimes correspond to the icons already shown from the AGD Disaster database. Refer to Figure 62.		
10	Show event summary description.	Hover the mouse over the icon near Newcastle.	A brief description of the corresponding event is displayed as shown in Figure 63. This feature is only available for the events from the ADG Disasters database.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
11	Show the non-AGD events.	 Enable the Cyclone Tracks and Flood regions in the Map View by clicking the boxes so there is a "tick" (✓) in them. Disable the AGD Disaster Events by clearing the tick in the corresponding check box. Pan and zoom the map as desired. 	The Map View will be the same as it is in Figure 64. Note the AGD Earthquake check box has a tick in it – but the parent check box overrides this and so the AGD earthquake icons are not displayed.		
12	Explore the event details.	Click on the various cyclone tracks or flood extents to view event information.	Various pop-ups will be displayed which may alter the Map View by moving the map of Australia.		
13	Reset the Map View.	Click the "Clear" Button on the Historical Event Accordion Tab and clear any open pop-ups. Click the "Reset Zoom" button on the Locations Accordion Tab.	All events are cleared from the Map View, pop-ups are removed and the map of Australia is returned to its starting position.		
14	Use the Impacts Framework Explorer to show events of interest on the Map View. This shows the linkage of the Impacts Framework and the Map View.	Click the "Framework" tab on the Navigation Bar. Choose "Earthquake" as the <i>Event</i> . Click the "Map Events" button.	The Map View is displayed showing all earthquake information. The result is the same as task 9; refer to Figure 62. Note the previous date range for the "Historical Events" Accordion Tab in the Map View is retained.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
15	Show earthquake events that have impacts data.	On the "Historical Events" Accordion Tab, change the date range to be 1980 – 1990 and only select the Earthquakes (turn off the AG Disasters Events). Click the "Update" button.	Only two events are shown. All the events shown so far in the steps above have been events that have impacts information recorded for them as well. This is indicated by the "Only show events with impact data" check box being ticked.		
16	Show earthquake events that have no impacts data.	Turn off the "Only show events with impact data" check box. The "Historical Events" Accordion Tab may need to be scrolled to access this check box. Refer to Figure 65.	Many more events are shown. Refer to Figure 65.		



Figure 57: Historical Events for the period 1980-2000



Figure 58: Attorney-General's Disaster Events



Figure 59: Attorney-General's Earthquake events



Figure 60: Attorney-General's Earthquake event details

🥖 Pilot Impac	ts Portal - Windows Intern	iet Explorer						
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🔆 Favorites	<i> P</i> ilot Impacts Portal							
			٢	FEND -	Pilot 1 nd Natural Disas	mpacts Port	al	
		Home	Framework	Registry M	ap Help	Acknowledgements	Contact Us	
	Please select from the following Event and Object options and then click on the button below to find Impact Descriptions for your choices. Event: Event: Event Characteristic: (all)							
		Object Cate	egory: Infras	structure - Public (exc	I. parks and res	erves) 🔽 🕹	Social	
		Object:	(all)			-	Environmental	
		Find Impac	to Clear Impact	royed 💌		Man Evente View I	maast Data Itoma	
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				Copyright	Legal Notice and Di	<u>sclaimer</u>		

Figure 61: Impacts Framework Earthquake Information



Figure 62: All Earthquake Events



Figure 63: Earthquake Event Summary Information



Figure 64: All Non-AGD Events



Figure 65: All Earthquake Events, including those without Impact data

8 UAT: Data Exploration

Pilot Impacts Portal – Test Script # 6		
System Feature Theme: Data Exploration	Browser: Please specify one of: IE, Firefox, Chrome, Safari Version #: Include the version number	Test Date: Start Time: End Time:
Tester Name: Your name	Platform: <i>Please specify one of the following:</i> Windows XP, Windows 7	Attempt Number: <i>Is this the first, second, etc attempt at performing the test</i>

8.1 Introduction

A list of the data items contained in the Pilot Impacts Portal will be available for the user to browse. This will be static content updated by the portal administrator when new data items are included.

The description of the data items contained in the portal is maintained as a registry. The registry contents can be searched by the user.

8.2 Functional Requirements Tested – Script 6

Functional requirement:	EXP-Req1
Description:	Provide a list of the data items included in the portal for the user to browse
Expected Results:	A complete listing of all data items in the portal can be displayed for the user.

Functional requirement:	EXP-Req2
Description:	Allow a user to obtain a complete metadata description for a given data item
Expected Results:	The description of each data item in the registry includes a metadata description.

Functional requirement:	EXP-Req3
Description:	Show any linkages from the data item to the Impacts Framework
Expected Results:	The data items may be linked to the Impacts Framework content. When this is the case, the linkages are recorded in the registry and can be viewed by the user.
8.3 Tasks

The following tasks demonstrate how to explore the data items available in the portal.

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
1	Begin test.	Start a web browser. Fill in the details in the header of the test script above noting who the tester is, the operating system, browser and versions.	Web browser started and connected to the internet.		
2	Obtain a full listing of the data items available in the portal.	Open the URL: http://www.fend.org.au/ This shows the portal home page. Follow the link "Data Items Registry Listing". The following page is opened: http://www.fend.org.au/portal/registry	A scrollable listing of the data items currently available in the portal is shown, refer to Figure 66. Each data item has a number of metadata elements described: a description of the data item, when it was created, how it was obtained, the category it is in and links to further information.		
3	Access the registry component of the Pilot Impacts Portal.	Open the URL: http://www.fend.org.au/ Click "Registry" tab on the Navigation Bar. The user is not required to login.	The URL will be redirected to: http://www.fend.org.au/portal/ The user will be presented with the registry explorer as shown in Figure 67.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
4	Find Earthquake data items. The events are defined in the Impacts Framework. They are: bushfire, cyclone, earthquake, fire emergency, flood, landslide, meteorite strike, storm, storm surge, tornado and tsunami.	Select "Event" for the <i>Data Item</i> <i>Category</i> and "Earthquake" for the <i>Event</i> . Click the "Find Data Items" button. Note that the linkage to the Impacts Framework is the event described.	The data items describing earthquake events are shown; refer to Figure 68. Note that in the <i>Event</i> drop down list, the events without data items in the portal are greyed and cannot be chosen.		
5	Review data items metadata. The data items available in the portal are documented by noting where the copyright, licensing conditions and where the original data can be obtained.	Click the first copyright link in the "Links" column.	The user's web page is directed to the copyright information of the AGD Disasters database.		
6	Return to the Pilot Impacts Portal. When the user navigates away from the Pilot Impacts Portal, all state is lost.	Click the Browser's back button.	The "state" of the registry search performed in task 4 has been lost. Such links should be opened in a new browser window or a new browser tab.		
7	Find Earthquake data items.	Repeat task 4 to again display the metadata for the earthquake data items.	The data items describing earthquake events are shown; refer to Figure 68.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
8	Explore the metadata.	Follow the various data items metadata links.	Open these links in a new window or browser tab to retain the user's state of the Pilot Impacts Portal.		
9	Download the registry subset.	Return to the Registry Explorer showing the data items describing earthquake events. Refer to task 4. Click the "HTML" link labelled "Download Registry Subset" at the bottom of the page. Either save the file and open in a new browser window or tab, or choose open.	The same information as shown in Figure 68 is available as a HTML web page. The Registry Explorer user's settings ("Event" and "Earthquake") are shown at the top of the HTML page. This allows the same report to be reproduced later. Refer to Figure 69.		
10	Find Impacts data items. The data items are categorised as describing events, impacts or baseline information.	Return to the Registry Explorer and enter "Impacts" for the Data Item Category.	The available options for searching the registry are changed as shown in Figure 70. There are 11 predefined events in the Impacts Framework. Impacts and baseline data items are categorised by the objects in the real world that an event can cause harm to. The objects are organised in the Impacts Framework into categories.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
11	Find data items in the portal impacting public roads. Note that Object Categories and Objects for which there are no data items available are greyed in the drop down lists and cannot be chosen.	In the Object Category and Object drop down lists, select "Infrastructure – Public (excl. parks and reserves)" and "Roads". Click the "Find Data Items" button. Note that the linkage to the Impacts Framework is the Object described.	Two data items are found as shown in Figure 71. Note that the "Find Data Items" button needs to be clicked before the list of matching data items is refreshed.		
12	Find all baseline data items.	In the Registry Explorer enter "Baseline" for the Data Item Category and leave "all" for the options in the two objects drop down list. Click the Find Data Items button.	A scrollable list of nine data items is shown; refer to Figure 72. Note that the linkage to the Impacts Framework is in the Object column of the table displayed.		



Figure 66: Full listing of Data Items in the Registry

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🔶 Favorites 🛛 🏉 Pilot Impacts Portal		
	FEND - Pilot Impacts Por	tal
		Login Register
	Home Framework Registry Map Help Acknowledgements	Contact Us
	Please select from the Data Item Category, Event and Object options below and then Data Items button. Data Item Category: vent vent vent vent vent vent vent vent	click on the Find
	Copyright Legal Notice and Disclaimer	

Figure 67: Registry Explorer

🖉 Pilot Impacts	Portal - Windows I	nternet Explorer						_0_
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Event	Title	Custodian	Description	Date Created	Obtained Via	Date Obtained		Links
Earthquake	AGD Disasters DB	AGD	The Disasters Database contains records of all natural and non-natural disasters within Australia, and outside Australia where a number of Australians have been affected, dating from 1622 to the present day.		download	26/10/2011	Copyright Licence Licence Data	copyright CC BY 3.0 Creative Commons Legal Code Attribution 3.0 Australia Attorney-General's Department Disasters Database
Earthquake	GA Earthquakes DB	GA	Australian earthquake data for all earthquakes with magnitude >= 4.0.		download	01/11/2011	Copyright Licence Licence Data	copyright CC BY 3.0 Creative Commons Legal Code Attribution 3.0 Australia Geoscience Australia Earthquake database
Download Reg	Download Registry Subset: HTML							

Figure 68: Earthquake Data Items Description

Image: Control of Control (Control of Control	Image: Provide Provide Product Network Product Network Image: Provide Provide Product Network P	<i>(</i>	ilot Impact	ts Portal Registry	Subset - Win	dows Internet Explorer							×
Event Title Custodian Description Date Created Obtained Via Date Obtained Copyright copyright Licence CC BY 3.0 Earthquake AGD Disasters AGD The Disasters Database contains records of all natural and non- natural disasters within Australia, and outside Australia where a number of Australians have been affected, dating from 1622 to the present day. download 26/10/2011 Ceceptraticence Creative Commons Licence CE BY 3.0 Earthquake GA Ba Australian earthquake data for all earthquakes with magnitude >= 4.0. Australian earthquakes with magnitude download 01/11/2011 Ceceptraticence Licence Copyright Licence Copyright Centrative Commons Licence Earthquake GA Australian earthquake data for all earthquakes with magnitude >= 4.0. download 01/11/2011 Copyright copyright Licence Copyright Licence Copyright Licence Cecept 3.0 Copyright copyright Licence Licence Licence Ligal Code Attribution Licence Licence Licence Ligal Code Attribution	Operation Plot Impacts Portal Registry Subset Category: Event Event: Eathquake Category: Event Event: Eathquake Date (Category: Event Event: Eathquake Category: Event Event: Eathquake Use (Category: Event Event: Eathquake Category: Event Event: Event Event: Eathquake Category: Event Event: Event Event: Event Event: Event Event: Event Event: Event Event: Event: Event Event: Event Event: Event Event: Event Event: Event Event: Event Event: Even	G	€ - €	C:\Users\pow128	Desktop Regist	trySubset.html		•	🕈 🗙 🔽 Bing)		P •	
Pilot Impacts Portal Registry Subset Category: Event Event: Earthquake Event Title Custodian Description Description Date Created Obtained Via Obtained Copyright Copyright Copyright Copyright Copyright Licence CC.BY 3.0 Creative Commons Barthquake AGD Disasters AGD Disasters Database contains records of all natural and non-natural disasters within Australia, and outside Australia where a nuture of Australians have been affected, dating from 1622 to the present day. Copyright Copyright Licence CC.BY 3.0 Creative Commons Licence Legal Code Attribution 3.0 Australia Attorney-General's Data Department Disasters DB GA Australian earthquake data for all earthquakes with magnitude download 01/11/2011 Copyright copyright Licence CC BY 3.0 Creative Commons Licence Legal Code Attribution 3.0 Australia Attorney-General's Data Department Disasters Database B GA Australian earthquake data for all earthquakes with magnitude download 01/11/2011 Creative Commons Licence Legal Code Attribution 3.0 Australia DB Data Copyright copyright copyright Licence CC BY 3.0 Creative Commons 3.0 Australia Data <t< th=""><th>Pilot Impacts Portal Registry Subset Category: Event Event: Earthquake Event Tritle Costodian Description Date Via Obtained Via Date Obtained Via Obtained Obtained Via Unks Earthquake ACD Disasters DB The Disasters Database contains records of all natural and non- number of Australians have been affected, dating from 1622 to the present day. download 26/10/2011 Coeparity Coemands Use Comparity Coemands 20 Australians Data Description Earthquake ACD DB GA Earthquake S CA Ba Australian earthquake data for all earthquakes with magnitude DB Date S Coeparity Coemands Data Description Data Description Database Coepright coemands Database GA Earthquake Ba Australian earthquake data for all earthquakes with magnitude DB Data Coeparitic coemands Database Coepright coemands Database DB Data Database Coepright coemands Database Coepright coemands Database Coepright coemands Database</th><th>*</th><th>Favorites</th><th>🟉 Pilot Impacts Po</th><th>ortal Registry Su</th><th>ibset</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Pilot Impacts Portal Registry Subset Category: Event Event: Earthquake Event Tritle Costodian Description Date Via Obtained Via Date Obtained Via Obtained Obtained Via Unks Earthquake ACD Disasters DB The Disasters Database contains records of all natural and non- number of Australians have been affected, dating from 1622 to the present day. download 26/10/2011 Coeparity Coemands Use Comparity Coemands 20 Australians Data Description Earthquake ACD DB GA Earthquake S CA Ba Australian earthquake data for all earthquakes with magnitude DB Date S Coeparity Coemands Data Description Data Description Database Coepright coemands Database GA Earthquake Ba Australian earthquake data for all earthquakes with magnitude DB Data Coeparitic coemands Database Coepright coemands Database DB Data Database Coepright coemands Database Coepright coemands Database Coepright coemands Database	*	Favorites	🟉 Pilot Impacts Po	ortal Registry Su	ibset							
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Figure 69: HTML Export Registry Subset

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	Object Category:	
	Object: (all)	
	Find Data Items	
	Copyright Legal Notice and Disclaimer	

Figure 70: Registry Explorer – Impacts

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Object	Title	Custodian		Description		Date Created	Obtained Via	Date Obtained		Links	
Roads	AGD Disasters DB	AGD	The Disasters Data and non-natural di outside Australia w been affected, dat	abase contains rec sasters within Aus /here a number of ting from 1622 to t	ords of all natural tralia, and Australians have the present day.		download	26/10/2011	Copyright Licence Licence Data	<u>copyright</u> <u>CC BY 3.0</u> <u>Creative Commons</u> <u>Legal Code</u> <u>Attribution 3.0</u> <u>Australia</u> <u>Attorney-General's</u>	
										<u>Department</u> <u>Disasters Database</u>	
Roads	BOM Tropical Cyclones DB	BOM	Raw cyclone track 2007 season.	data until the end	d of the 2006 -		download	25/10/2011	Copyright Data	<u>copyright</u> <u>Previous Tropical</u> <u>Cyclones</u>	
Download	Registry Subse	et: <u>HTML</u>									

Figure 71: Example Impacts Data Items

🤌 Pilot Impacts Porta	l - Windows Internet Ex	plorer						
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						Login	Register	
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	Please select from the Data Item Category, Event and Object options below and then click on the Find Data Items button. Data Item Category: Baseline • Object Category: (all) Object: (all) Find Data Items Clear							
Object	Title	Custodian	Description	Date Created	Obtained Via	Date Obtained	Links	
Waterways	BOM Australian Hydrological Geospatial Fabric	вом	The important water features (rivers, dams, lakes, catchments, etc) in the Australian landscape		download	12/01/2012	Copyright Licence <u>CC BY 3.0</u> Data <u>Geofabric p</u> <u>are distribu</u> <u>ESRI File</u> <u>Geodatabas</u>	roducts ited in the se format
Other structures	GA National Exposure Information System (NEXIS)	GA	NEXIS contains detailed residential, commercial and industrial information about people, buildings and their replacement cost for every Statistical Local Area (SLA) in Australia.		contact	27/10/2011	Licence <u>licence</u> Licence <u>CC BY-NC 2.5</u> Licence <u>Creative Com</u> Legal Code A <u>NonCommerci</u> <u>Australia</u>	2 mons ttribution- ial 2.5
Property - Public (i.e. Government)	GA National Exposure Information System (NEXIS)	GA	NEXIS contains detailed residential, commercial and industrial information about people, buildings and their replacement cost for every Statistical Local Area (SLA) in Australia.		contact	27/10/2011	Licence <u>licence</u> Licence <u>CC BY-NC 2.5</u> Licence <u>Creative Com</u> Legal Code A <u>NonCommerci</u> <u>Australia</u>	2 <u>ttribution-</u> ial 2.5
Property - Residential	GA National Exposure	GA	NEXIS contains detailed residential, commercial and industrial information		contact	27/10/2011	Licence <u>licence</u> Licence <u>CC BY-</u> NC 2.5	5 💌
Download Registry	/ Subset: <u>HTML</u>		<u>Copyright Legal Notice</u>	and Disclaimer				

Figure 72: All Baseline data items

9 UAT: Reports

Pilot Impacts Portal – Test Script # 7						
System Feature Theme: Reports	Browser: <i>Please specify one of:</i> IE, Firefox, Chrome, Safari Version #: <i>Include the version number</i>	Test Date: Start Time: End Time:				
Tester Name: Your name	Platform: <i>Please specify one of the following</i> : Windows XP, Windows 7	Attempt Number: <i>Is this the first, second, etc attempt at performing the test</i>				

9.1 Introduction

A report is a summary of the information obtained by the user when using the portal. This will be a hard copy print out or saved in an electronic format, such as a simple text file, XML or PDF. This information is expected to provide evidence for the user to support their investigation. This feature will only be available for data where the terms and conditions allow it.

9.2 Functional Requirements Tested – Script 7

Functional requirement:	RPT-Req1
Description:	A report can be produced from the Pilot Impacts Portal system. The report content will correspond to the information being displayed to the user
Expected Results:	PDF reports can be produced containing a summary of the information available in the portal corresponding to the user's current settings.

Functional requirement:	RPT-Req2
Description:	The report can be saved as a file in a format yet to be decided; for example as plain text, XML, PDF, CSV or an image file (similar to a print screen operation)
Expected Results:	Reports are saved in PDF format.

Functional requirement:	RPT-Req3
Description:	A report will contain the details of when it was created, the user connected to the portal who created it, and describe how to re-create the same information when using the portal
Expected Results:	The report contains details of when it was created and the portal settings used to produce it.

9.3 Tasks

The following tasks will demonstrate how to produce reports of information contained in the portal.

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
1	Begin test.	Start a web browser. Fill in the details in the header of the test script above noting who the tester is, the operating system, browser and versions.	Web browser started and connected to the internet.		
2	Locate a region to generate a report about. Access the Pilot Impacts Portal – Map View web page.	Open the URL: http://www.fend.org.au/ Click the "Map" tab in the Navigation Bar and login. Refer to Test Script 2 for details of registering and logging in to the portal.	The user can access the Map View of the Pilot Impacts Portal.		
3	Locate the Adelaide Hills region. This is the region that will be reported on.	In the "Layers" Accordion Tab, select the "LGA" <i>Boundary</i> <i>Layer</i> . Select the "Locations" Accordion Tab. Choose "South Australia" and "Adelaide Hills (DC)" for the <i>State</i> and <i>Local</i> <i>Government Area</i> (LGA) drop down lists.	When choosing the "LGA" Boundary Layer, the default zoom level means the option is greyed out but still selectable. These layers will appear when the zoom level passes the threshold. The Map View is as shown in Figure 73.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
4	Show all AGD events for the date range 1900-2012 that have impacts data. Note that the location of the events in the Map View are at fixed locations, however their depiction may seem to change relative to the map depending on the zoom level.	On the "Historical Events" Accordion Tab, change the date range to be 1900 – 2012 and only select the "AG Disasters Events" with all event options selected as shown in Figure 74. Make sure the "Only show events with impact data" button is selected.	Seven events are shown, with three in the Adelaide Hills region, see Figure 74.		
5	Generate a report. Reports are generated for a chosen LGA or SLA region. Note that different browsers use different methods of saving files.	Open the "Reports" Accordion Tab. Press the "Generate Report" button. Save the PDF report to a known location, for example on the desktop.	The Map View is as shown in Figure 75. Note the LGA name is noted (Adelaide Hills (DC)) in the "Reports" Accordion Tab. By default the building information and historical events are chosen.		
6	Open the report that has a file name is a format similar to: LGA40120_20120510_094217.pdf. The file name starts with "LGA" followed by the ABS code used for the region and finishes with a timestamp of when the file was created.	Double click the file to open it. Note the timestamp format is: year, month, day, hour, minutes and seconds.	The generated report is included as an attachment to this UAT test script. Screen shots are also provided in Figures 76-78.		

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail
7	Review the report contents. The report contains embedded URL links to further information about the report contents.	The report begins with a Google Map overlayed by the LGA region highlighted in yellow. Next to the map is the ABS population by age group data for the region.	See Figure 76. The user's email (their portal login) is noted at the top of the report along with information about the portal settings used to generate the report.		
8	Review the report contents. Note the generated report only includes information about events described by the AGD Disasters database. This is not currently configurable.	Then the historical events for the regions are listed.	See Figure 77. A summary of each event considered to be in the region of interest is listed, including details of: • Event title • Impact Summary This is followed by a link to the original event report.		
9	Review the report contents.	Lastly the NEXIS building information is included.	See Figure 78.		



Figure 73: Adelaide Hills LGA



Figure 74: All AGD Disasters in the Adelaide Hills region for 1900-2012



Figure 75: Generating a Report



Figure 76: Report Google Map region and ABS Population Statistics



Figure 77: Report Events and Impacts



Figure 78: Report NEXIS Information

Appendix A UAT Test Script Template

Pilot Impacts Portal – Test Script #			
System Feature Theme: Describes the test being performed	Browser: <i>Please specify one of:</i> IE, Firefox, Chrome, Safari Version #: <i>Include the version number</i>	Test Date: Start Time: End Time:	
Tester Name: Your name	Platform: <i>Please specify one of the following:</i> Windows XP, Windows 7	Attempt Number: <i>Is this the first, second, etc attempt at performing the test</i>	

A1 Introduction

Provide a brief description of the system features being tested and note the specific requirements being demonstrated.

A2 Functional Requirements Tested

For each functional requirement, include a summary in the table below.

Functional requirement:	
Description:	
Expected Results:	

A3 Tasks

No.	Objective	Tester Action	Expected Result	Actual Result	Pass/Fail

Appendix B User Feedback

The User Acceptance Testing was performed by staff from WA FESA (21 May 2012), Queensland DCS (23 May 2012) and FRNSW (May – June 2012). A summary of the results is outlined below.

B1 WA FESA

Issue	Comment	Date Resolved
When opening the framework explorer, the table was not visible due to the small screen size. How to make the table visible?	Both Framework and Registry results tables now have a minimum height of 300. If this doesn't fit in the visible screen area the browser will display a scroll bar at the side. If you increase the browser window size, you will need to "Find Impacts" again to get the results table to fill the expanded space available, it does not dynamically expand.	4 June
Indirect impacts not obvious - how to highlight this?	See above.	4 June
Raw CSV. Could make it pretty like the Impacts Framework. The CSV is difficult to view in Excel. Rob explained that the CSV is for machine processing not human reading. This was accepted.	Provide documentation in the user guide.	5 June
The Comodo certificate was not recognized! Need to contact Mark from FESA (via Carole) to find out about certificates. How do you find out the list of CA certs that are trusted by a browser?	Email sent to Mark Purchase (FESA IT person) 1 June. Awaiting reply.	
Need a glossary on the Web site.	Glossary and Abbreviations used now part of the online help.	5 June
Spelling mistake: Test Script 4 item 4 LDA => LGA.	Simple fix	4 June

Issue	Comment	Date Resolved
State extents not correct for laptops. Need to set screen resolution as defined in primer. Or modify the extents? See the WA example. Then the LGA didn't show up as described in the UAT.	State extents were checked and found to be correct. Google Maps zooms and pans the map so that the entire state is visible and centered. In some cases this only results in a map "pan" (eg QLD and WA) which the user may not notice.	4 June
For the Historical Events tab, Change "Show" to "Update" (or just keep at one and don't swap).	Now just keeps the label as "Show".	1 June
Having some events display event name when hover over was confusing - do for the others as well?	All historical events now display a tooltip when mouse hovers over it on the map. When the map is cluttered though, sometimes the marker (icon) tooltips fail to appear, eg AFAC fires. The marker tooltips are provided by the Google Maps API so not much we can do there, except turn off if its annoying!	31 May
Why put the AGD events separate? Discussed this. Maybe make it more clear on the listing of events?	Changed the events data items names to indicate where the information comes from. Makes it clearer that the information is based on data item – not event type.	5 June
Look up cyclones by name?	All events now have a summary displayed as a tool tip (hover the mouse over the icon). Specific searching of events by name is only relevant for cyclones - other events are not normally named, with a few exceptions (Black Saturday, Ash Wednesday,). We want to stay with the current method of using a date range to search for events, then let the user explore. Also - see below regarding efforts to select cyclones easier.	5 June
Difficult to click on cyclones? Want a measure of the impacts corridor of a cyclone. Maybe after one is selected?	Cyclone tracks now have a invisible "buffer" around them. Note the red cyclone tracks are 2 pixels wide and the new (not visible) buffer is 10 pixels wide. Cyclone selection (hover tool tip and mouse click) are associated with the buffer making it much easier to select the cyclones.	6 June
Maybe link related events. Example quoted was Yasi turned into a storm for WA which had lightning strikes which caused fires. All the one event?	This is beyond the scope of the portal: it is a data warehouse of existing information. If the data custodians don't link the data in this way, neither do we.	6 June

B2 Queensland DCS

Issue	Comment	Date Resolved
Ross noted that in the UAT the framework diagram was not clearly defined. (thought that the downloaded CSV would look like this also).	Need to explain that the exported CSV information is for machine processing, not human readability in Excel. Provide documentation in the user guide (see above also).	5 June
When finding albany - when hitting clear, should remove the text.	The clear button clears the "marker". The user interface will be updated to better reflect the behaviour.	31 May
	Update: Button now labelled "Clear Marker". Find location text is not cleared in case the user just wants to edit it before searching again (eg to add a state).	
When navigating away from the portal (following a link), when return (browser back button), should return to the same tab on the navigation bar.	All hyperlinks to non FEND pages now have the target="_blank" attribute which should force them to open in new browser tabs. When the user returns to the Portal's tab its state will be retained.	4 June
TS 4 task 4 - LDA => LGA	Simple Fix (see above also)	4 June
When browsing for locations - the OR wasn't clear. Thought entering "Springfield" under "Enter Locations" would also use the "Zoom To" state of WA. Maybe use boxes to distinguish that these are distinct methods of navigating.	Replaced "OR"s with horizontal rules and removed the "Zoom To" heading. Also when one method of zooming/selected is carried out, the others are cleared, to hopefully make it clearer that they are independent.	1 June
When doing a place name location search, don't go to locations outside Australia?	The location search had been modified to display a "No matching Australian location found" message if there are matching locations, but none from Australia. (It already displays a "none found" message if no matches found at all).	31 May
In the list of event types, indicate where the data is from.	Changed the events data items names to indicate where the information comes from. Makes it clearer that the information is based on data item – not event type (see above also).	5 June
Highlight that the list of events are from different custodians, not just "this is the cyclone data".	Changed the events data items names to indicate where the information comes from. Makes it clearer that the information is based on data item – not event type (see above also).	5 June

Issue	Comment	Date Resolved
Don't allow AGD disaster elements to be selected when the parent check box is not selected.	Selecting/Deselecting the AG events check box now enables/disables its children sub event checkboxes.	1 June
Selena found an error when navigating the framework: line 1689 jquery.jstree.js char 33. When clicking the "Clear Impacts" button. Ross also had JavaScript error.	Investigated (5 June). Unable to replicate. Will contact Ross to test again. Sent email to Ross and Selena (13 June) asking them to check for the error again.	
Selena wants a "reset" button for the impacts framework explorer - to take it back to the starting settings.	Added Reset button which both resets the drop down menus and clears any impacts found earlier.	1 June
Ross had an intermittent error - the hover over events wasn't working - then it did!	Unable to replicate. Ignored.	
Cannot use the Google Maps API in a closed community. Must be public. Will need to provide general access to the portal.	Allow anyone with an email address to self register - but those not from a recognized agency cannot extract data, generate report and maybe restrict access to some data items on the map.	13 June
	Removed the organisation drop down list when registering. Organisation now determined by email address. Those will "recognized" email addresses are given the role "pip-recognized" which allows them to access the reports tab to generate a report and download data.	
In the Framework Explorer, when viewing results in the tree view, the hand remains visible, hinting there is a link to follow when this is not the case.	Adjusted style sheet so that "hand" cursor doesn't appear when over tree view text.	4 June
On the Historical Event accordion tab, the clear button didn't clear the dates. "This was confusing when I went to the framework page as the previous dates were retained but nothing showed this on the framework page."	Updated the buttons to be more specific: "Show Events" and "Clear Events".	5 June

B3 FRNSW

Issue	Comment	Date Resolved
Entering a location doesn't select (highlight) a region (LGA/SLA).	A highlighted area needs to be chosen (noted on the Layers tab) by the user. Finding a location is not enough - must select a region. When the region is selected, the outline of the region/area is coloured yellow to make it obvious to the user.	31 May
A date range cannot be defined when exploring the Impacts Framework.	The user interface will be updated to make this more obvious for the user.	1 June
Building information is blank when a location has been selected.	Update: Highlighted area has been renamed to "Selected region" and is always visible on all relevant tabs. If no region is currently selected, "None selected" is display in italics. Also to avoid confusion about the relation between the various ways of selecting/finding a location/region on the Locations tab, once an sla/lga or location is selected or found, the other items are cleared.	31 May
Generated reports sometimes contain details of events which seem not to be related to the chosen region.	Correct. The date range is available on the Historical Events Accordion Tab. We don't want to have multiple places where this can be defined for the user - having it in one place is preferred.	31 May
The clear Impacts button in the framework explorer doesn't clear the selection.	A highlighted area needs to be defined (noted on the Layers tab). Finding a location is not enough - must select a region. The user interface will be updated to make this more obvious for the user.	5 June
The map doesn't refresh when you select another event from the framework explorer. All other tabs retain the previous information.	Update: Highlighted region has been renamed to "Selected region" and is always visible on all relevant tabs. If no region is currently selected, "None selected" is display in italics. Building information is also now always in sync with the other panels, i.e. clears its data when selected region is cleared.	5 June
Under locations, the clear button doesn't appear to clear anything.	The events reported on are from the AGD Disaster's Database. The event locations are defined in reference to the disaster regions. These regions are "coarse" and as such sometimes overlap a chosen region when the event text description seems to indicate the event is not relevant.	31 May
Multi-regions cannot be selected for reporting.	The selection of overlapping disasters for selected SLA/LGA region when generating reports will be checked.	5 June

Issue	Comment	Date Resolved
On the Layers tab, when selecting "None" after having one of LGA, SLA or CCD being chosen. The legend for the layer remains. This should be removed.	Update: The behaviour of the disaster region overlapping code has been checked and is behaving correctly. To better understand why a disaster has been included, the list of affected regions is now displayed, plus a link to the region map. This is done both on the map (in the event popup window) and in the pdf reports.	31 May
Load up the new NEXIS data	Correct. It clears the impacts results. We prefer to keep it this way. There is a new "Reset" button which clears the Impacts selection and results.	
Fix spelling mistakes in the online help	Yes it does? This can occur if the user starts operating the framework explorer prior to logging in. When displaying the events (selecting the "Map Event" button on the Framework Explorer), the user must log in which then redirects to a new web site. The previous Framework Explorer selection has been lost. From then on, however, the framework and map view should be "linked".	5 June
Include the AIRS conditions of use information and update the registry	The clear button clears the "marker". The user interface will be updated to better reflect the behaviour.	6 June
New role for the monitor app	Update: Button now labelled "Clear Marker". Find location text is not cleared in case the user just wants to edit it before searching again (eg to add a state).	5 June
Deploy monitor app on fend with correct authentication	Correct. This wont be done by the end of June, but may be implemented next financial year.	5 June
Make it easier to select cyclone tracks on the Map View.	Fixed the code so that population scale legend for LGA and SLAs is only visible with layer is visible.	6 June
Closing the event popups when hitting the "Clear Events" button.	Data loaded (12 June 2012). Integrating into the portal will take longer since the data format has changed significantly. This will require changes to the Building Information tab, the reports generated and the data download options.	13 June
When the population popups are present for SLAs or LGAs, they disappear when a different layer (or none) is chosen. This is managed by Google Fusion tables. When a CCD popup is present, choosing a different layer (or none) and the pop up remains. Investigate the option of removing them when choosing a different layer.	Fixed (mostly removed since the online help now available in the User's Guide pdf).	13 June

Issue	Comment	Date Resolved
DFO (flood) data is incorrect in places. For example, there is a flood in China and another in WA that are noted as being in NSW!	AIRS info now in registry and registry updated.	13 June
Reduce the number of AIRS events. There are a lot of fire icons to be displayed. Investigate ways of reducing the number displayed. For example, only obtain event where the amount of area burnt is > some threshold?	New role created: esa-monitor.	13 June
Data Download problem for IE 8.	Monitor web app deployed: http://www.fend.org.au/monitor.	13 June
Problem with CAPTCHA when registering	Cyclone tracks now have a invisible "buffer" around them. Note the red cyclone tracks are 2 pixels wide and the new (not visible) buffer is 10 pixels wide. Cyclone selection (hover tool tip and mouse click) are associated with the buffer making it much easier to select the cyclones.	14 June

Glossary

ABS	Australian Bureau of Statistics
AGD	Attorney-General's Department
BOM	Bureau of Meteorology
CCD	Census Collection District
CIPMA	Critical Infrastructure Program for Modelling and Analysis
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSV	Comma Separated Values
FEND	Fire Emergency or Natural Disaster
FEND web site	www.fend.org.au
FRNSW	Fire and Rescue New South Wales
GA	Geoscience Australia
HTML	Hypertext Markup Language
IT	Information Technology
LGA	Local Government Area
NEXIS	National Exposure Information System
PDF	Portable Document Format
SLA	Statistical Local Area
URL	Uniform Resource Locator
XLS	Microsoft Excel spreadsheet, from the 3 letter file extension used
XML	Extensible Markup Language

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