

WHOLESALE



LINXONLINE MOBILES USER GUIDE

Issue Number 4: 29 April 2008

DOCUMENT CONTROL SHEET

Contact for Enquiries and Proposed Changes

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Issue No.	Issue Date	Nature of Amendment
2.0	24/10/2002	All screen layouts updated to align with Internet Standard 6.02. Information included to reflect the addition of GSM Postpaid as an available product
2.01	28/11/2002	Product codes NO_MTSMS and NO_MOSMS added to Attachment 1.
2.02	17/12/2002	Product codes WCAFX14, WCFAX14 and WCDATA14 added to Attachment 1
2.03	14/01/2003	Product code NO_MODATA added to Attachment 1 Remove Product code 5WCONF (obsolete) from Attachment 1 Remove duplicated Attachment 1 and re-paginate
3.0	25/02/2003	Updated to align with LOLM version 2.2. Home Region and MSA table added as Attachment 4. Product code MSGWRPIN added to Attachment 1. Added Attachment 5 (Fault reporting)
3.01	04/07/2003	Page 36 – Create GSM – add note regarding SIM insertion
3.02	05/09/2003	Page 57 – Port/Churn in for GCSPs – clarified new SIM requirement
3.03	09/09/2003	Page 79 – remove redundant CDMA International Roaming codes, and add new GSM International Roaming product code
3.04	08/12/2003	Page 52 - addition of GPRS information. Page 81 - addition of GPRS product codes. Page 86 - new potential GPRS fault codes. Pages 90-93 - new error descriptions.
3.05	27/05/2004	Update and align Attachments 1 & 4 – Home MSAs and Home Regions. Page 32 - added 1xRTT section. Page 82 - added new product codes for 1xRTT. Page 84 - updated reference data for GPRS Activation, and added 1xRTT Activation reference data. Add GSM reactivation reasons on Page 84.
3.1	22/08/2004	Updated Attachment 2 with new GPRS & 1xRTT error messages. Moved EN tasks to topic 5. Page 89 - Updated port request status section. Page 38 - removed reference to provisioning GPRS after activation. Page 84 - removed GPRS & 1xRTT activation reference data. Page 53 - expanded the GPRS activation description to include handset dropdown box functionality. Page 32 – modified 1xRTT section.
3.2	08/09/2005	Pages 32 & 53 - new Premium SMS instructions.

3.2.1	08/09/2005	Page 38 – updated barring code for 1XRTT. Page 57 – updated barring options for GPRS
3.3	24/11/2006	Full review of document to maintain data currency. Add information regarding Premium SMS adult content
4.0	29/04/2008	Removal of all Reference, Products, Processes, etc relating to CDMA Resale, due to Telstra CDMA Network Closure on 28/04/08. Telstra Wholesale no longer provides the CDMA Resale Product.
5.0	07/10/2010	New template

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About This Document

This User Manual provides the reader with step-by-step instructions on how to use LinxOnline Mobiles (LOLM). LOLM is used by Telstra Resellers to manage GSM (Global System for Mobile) mobile services, and to port/churn in and port/churn out GSM services from/to other Mobile Service Providers.

This User Manual is targeted at groups who manage and port GSM services.

These groups include:

- Telstra Wholesale Service Providers (also known as Resellers) who resell Telstra GSM network services
- Wholesale Customer Transfers (based in Adelaide)
- National Wholesale Service Centre (based in Townsville)

It is assumed that you will already have:

- Knowledge of current processes for managing GSM services.
- An understanding of Mobile Number Portability, based on:
[ACIF C570:2005 Mobile Number Portability](#)
[ACIF G574:2001 Mobile Number Portability - Customer Information](#)
- Knowledge and understanding of the system LinxOnline Mobiles and an understanding of how transactions relating to Mobile Number Portability are performed and managed via LinxOnline Mobiles.

This document has been developed as a user manual for LOLM, providing topics for each of the major functions that LOLM provides.

This User Manual provides detailed information on the content covered during the LOLM system training course, and can also be used as a reference source when using LOLM back at the work place.

The content shown in the screens throughout this User Manual reflects the data within the LOLM prototype, and not the production version of LOLM. The prototype data is not real data, and it is only used for the purpose of training LOLM.

Topic 1 – Overview of LOLM

LinxOnline Mobiles

Background Information about MNP

In October 1999 the Australian Competition and Consumer Commission (ACCC) directed the Australian Communications Authority (ACA) to amend the Telecommunications Numbering Plan 1997, to provide for Mobile Number Portability (MNP). This mandate specified that all mobile Service Providers (SP) must allow customers to retain their mobile service number when changing (or “porting”) to another Service Provider.

MNP will target mobile customers wishing to change mobile SPs, allowing them to take their existing mobile service number with them to their new SP on both a technical and customer service level.

As a mobile SP, Telstra will be able to port customers to Telstra with their mobile service numbers that had been allocated to other SPs. Telstra will also liaise with other SPs to ensure that they can successfully receive customers porting to them from Telstra.

Additionally, as a carriage service provider, Telstra needs to ensure a call to a ported mobile service number is routed to the appropriate carriage service provider.

The Role of LOLM

One of the roles of LOLM is to manage the day-to-day tasks for GSM services, such as creating, modifying and maintaining.

LOLM’s other role is incorporated with MNP, where it manages the porting of GSM mobile services to/from other mobile SPs. LOLM interfaces to internal Telstra systems for information sharing with other mobile SPs/Carriers.

LOLM Functions

LOLM provides SPs with the tools to manage and port GSM services. It’s important to understand that each SP can only access data for their own GSM services. Data on GSM services that belongs to other SPs cannot be accessed.

LOLM will provide the following functions:

- Provide facilities to enquire on the details of a GSM service including service details, network settings, and products and features.
- Allow the update of a service, including the updating of service details, updating of network settings, and provisioning and de-provisioning of products and features.
- Allow the activation of a new GSM service, including the provision of service details, network settings, and products and features.
- Allow the modification of an existing GSM service, including network settings, products and features.
- Allow the update of SIM details for GSM services and the replacement of a SIM card.
- Provide the ability to identify the status of a mobile service number (MSN) service, provide a list of available numbers, and enable a mobile number to be held.
- Provide the ability to temporarily suspend, or temporarily disconnect a service.
- Provide the ability to deactivate a service, reactivate a disconnected service, or reactivate a temporarily suspended or disconnected service.

- Provide the ability to create, monitor, and modify a potential fault request.
- Provide the ability for passing:
 - Account Enquiry Notifications
 - Port/Churn Notifications
 - Port/Churn Notifications Responses
 - Port/Churn Cutover Notifications
 - Port/Churn Withdrawal Notifications
 - Port/Churn Reversal Updates
 - Broadcast Cutover Completion Notifications
 - Port/Churn Expiry Notifications

Turning Functions into Processes

Using the list of functions above, we can group these into main processes that a user can perform on LOLM. The processes are:

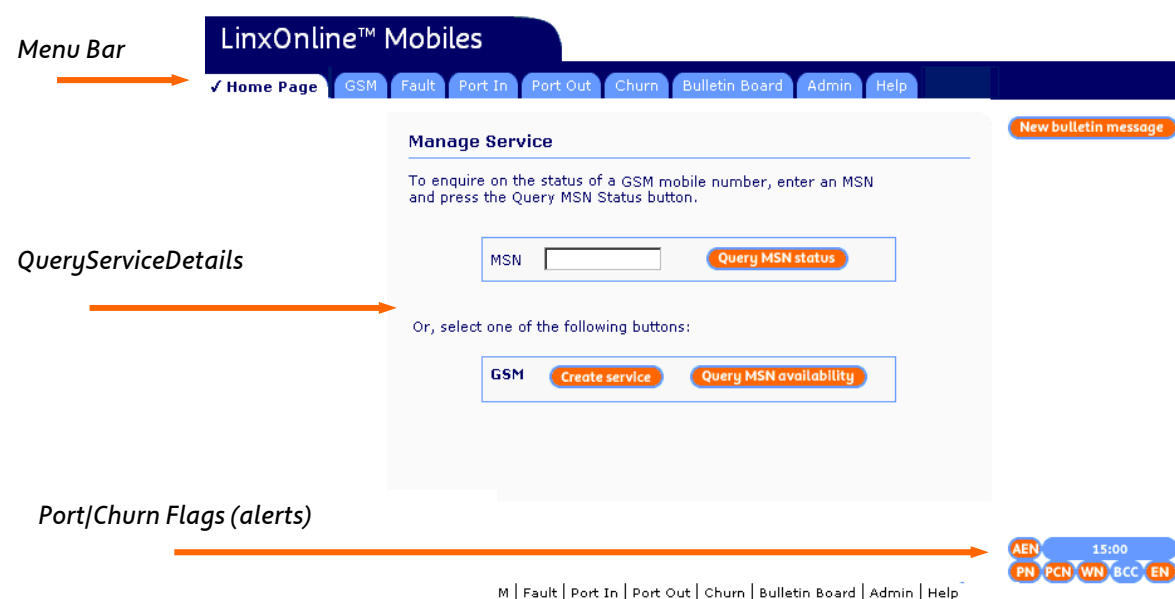
- Managing a GSM service
- Managing a SIM card
- Managing Fault Service Requests
- Wholesale Port/Churn In
- Wholesale Port/Churn Out
- Bulletin Board
- LOLM Support

LOLM Main Page

The three main areas of LOLM's home page are:

- the menu-bar across the top of the page which is used to perform most of the main processes listed on the previous page.
- a section for the CSP to enquire about GSM services to:
 - create/port in a GSM service with a specified MSN (queries status of MSN first)
 - create a GSM service with a non-specified MSN (first available MSN)
 - create a GSM service within in range of available MSNs (queries status of MSNs first).
- the Port/Churn Flags (alerts) for Service Providers that indicate when LOLM receives:
 - an account enquiry notification, AEN (for LCSP)
 - a port notification, PN (for GCSP)
 - a port cutover notification, PCN (for GCSP)
 - a withdrawal notification, WN (for LCSP)
 - a broadcast cutover completion, BCC
 - an expiry notification, EN (for LCSP)

The following diagram shows the Home page of LOLM.



Functionality of the Port/Churn Flags

The Port/Churn Flags will be displayed on every page of LOLM, and are refreshed each minute to check for incoming messages. The top row of the Port Flags shows Account Enquiry Notifications (AEN) and the time remaining to respond to them (this is discussed in more detail on page 75). The bottom row of the Port Flags displays the remaining Port Flags that a CSP can receive during a Port/Churn.

The status of each individual Port Flags is indicated by a colour. If there's:

- a current message to respond to, the Port Flag will become active and will be coloured red
- no message to respond to within LOLM, the Port Flag colour remains blue until you mouse-over the flag which changes the colour to orange.

On the side menu bar, there is a red alert to inform the user whenever there are any New Bulletin Board Messages.

Topic 2 – Managing a GSM Service

Overview

To manage GSM services involves several tasks that a CSP can perform for its customers. The GSM menu item on LOLM is used to manage GSM services, with tasks including:

- Query a GSM service
- Modify a GSM service profile
- Create a GSM service
- Query a GSM MSN Status
- Query GSM MSN Availability.
- Deactivate a GSM service
- Reactivate a GSM service
- Temporarily Suspend/Disconnect a GSM service
- Change MSN
- Replace SIM
- Query PUK

Managing GSM Screen

To perform any of these events, you first need to select GSM from the menu-bar across the top of the home page.

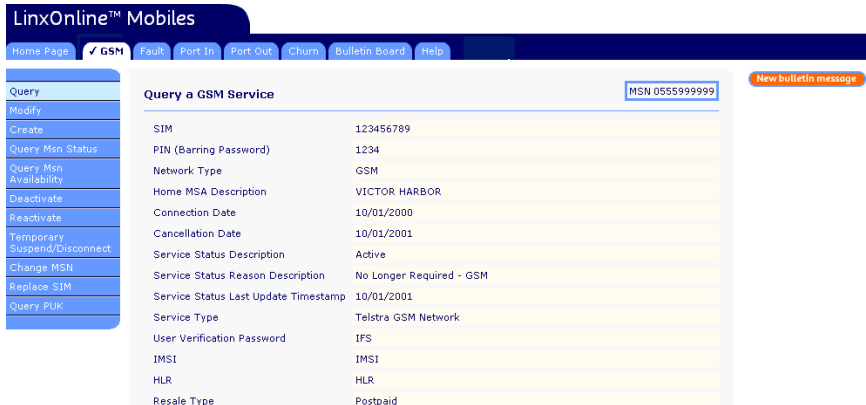
You will see the GSM page.

The screenshot displays the LinxOnline™ Mobiles web interface. At the top, a dark blue header contains the 'LinxOnline™ Mobiles' logo and a navigation bar with links: Home Page, GSM (selected), Fault, Port In, Port Out, Churn, Bulletin Board, Admin, and Help. A 'New bulletin message' notification is visible in the top right. On the left, a vertical menu lists various GSM-related actions: Query, Modify, Create, Query Msn Status, Query Msn Availability, Deactivate, Reactivate, Temporary Suspend/Disconnect, Change MSN, Replace SIM, and Query PUK. The main content area is titled 'Query a GSM Service' and includes a description: 'Enquire service details about a GSM mobile number. Returned only if the mobile number is administered.' Below this is a form with a label '*MSN' and an input field. A 'Search' button is positioned below the input field. A note states '* Denotes a mandatory field'. At the bottom of the page, a status bar shows the time as 15:00 and a series of status indicators: AEN, PN, PCN, WN, BCC, and EN.

Query

If a Carriage Service Provider (CSP) wants to enquire about details of a GSM service, they need to select Query from the GSM page menu.

The following table lists the steps to query a GSM service.

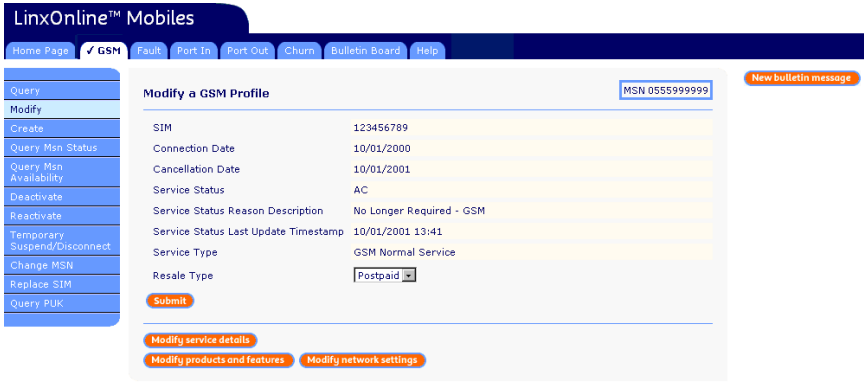
Step	Action
1.	From the GSM page, enter the MSN you wish to enquire about.
2.	Click on Search .
3.	If: - Successful, you will see the details of the GSM service, including: - Service Details - Network Settings - Product Details - Product Type (Prepaid or Postpaid).  From this result, you can perform other events such as: - modifying a service - deactivating a service - reactivate a service - suspend/disconnect a service - Unsuccessful, you will see the transaction failure screen.

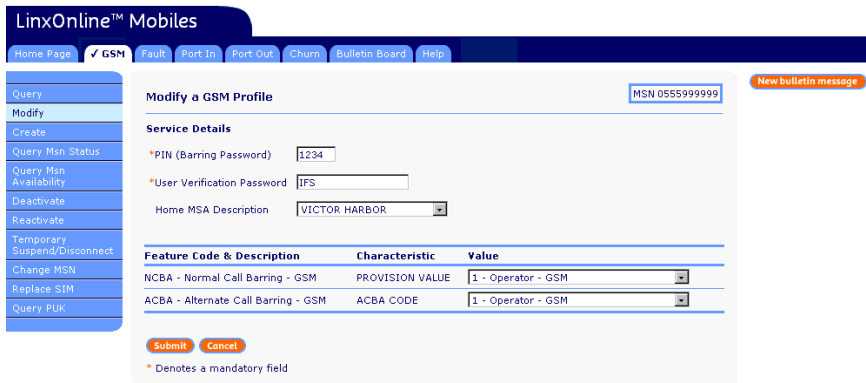
Modify Profile

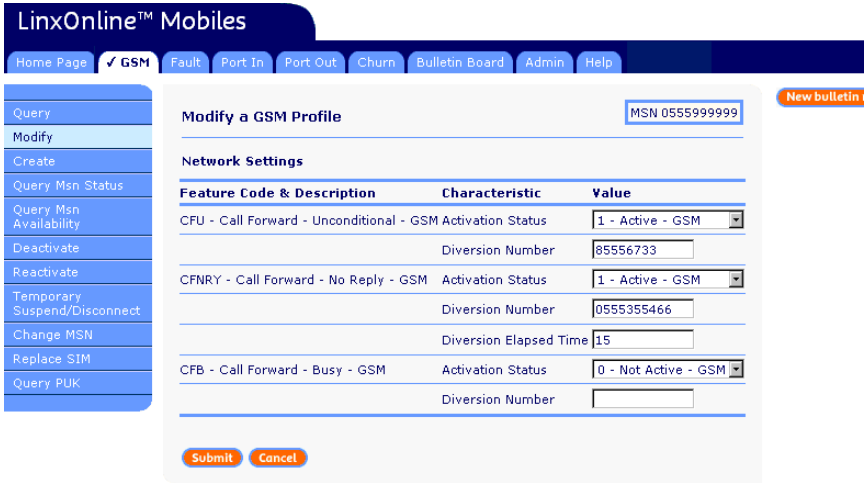
To modify a GSM service profile allows the user to update the:

- Service details
- Product features
- Network settings.

The following table lists the steps to modify a GSM service.

Step	Action
1.	From the GSM page (Query a GSM service), enter the MSN for the service to be modified.
2.	From the bottom of the Query a GSM Service page, click on the Modify Profile button. You will see the Modify a GSM Profile page.  From here, you can select either: • Modify Service Details • Modify Products and Features • Modify Network Settings to modify the service.

Step	Action
3.	To modify the service details, click on the Modify Service Details button. You will see the Modify a GSM Profile – Service Details page.  Enter the appropriate amendments and click on submit to pass on the changes to Telstra Systems. Note: If Home MSA is changed, the Home Region may also change. If the existing SIM is not validated to that Home Region, modification will fail. SIMs are only validated to a specific Home Region You will be returned to the modify page.
4.	To modify the product details, click on the Modify Product and Features button. You will see the Modify a GSM Profile – Product Details page.  Enter the appropriate amendments and click on submit to pass on the changes to Telstra Systems. You will be returned to the modify page.

Step	Action
5.	To modify the network settings, click on the Modify Network Settings button. You will see the Modify a GSM Profile – Network Settings page.  Enter the appropriate amendments and click on submit to pass on the changes to Telstra's Mobile Management System. You will be returned to the modify page.

Create

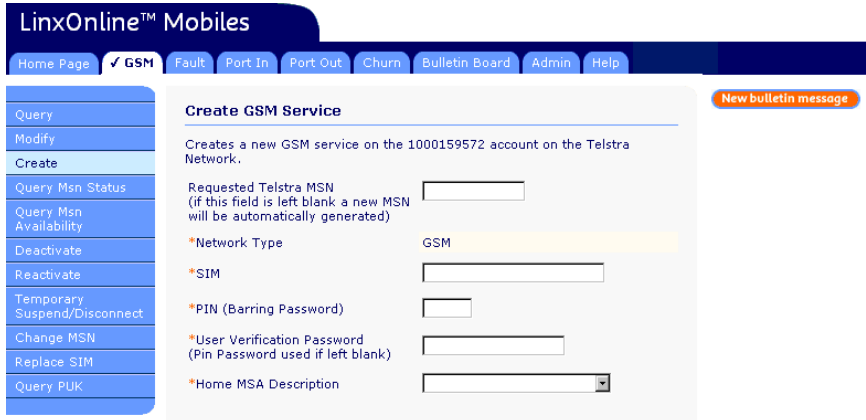
To create a new GSM service on LOLM, you can either:

- obtain the next available number; or
- select an MSN from a range of available numbers; or

When the status of the MSN has been checked as available, the creation stage can commence.

*** To avoid possible network difficulties, do not insert SIM card into handset until activation has been confirmed**

The following table lists the steps to create a GSM service.

Step	Action
1.	From the GSM page, select Create from the menu on the left. You will see the Create GSM Service page. 
2.	Enter/select the mandatory GSM details for the new service. Note if the SIM has not been validated to the selected Home MSA/Home Region, the Create function will fail. <i>Note: Mandatory fields are indicated with a *.</i>
3.	Select the appropriate Service details for the new service.
4.	Select the appropriate Network Settings for the new service.
5.	Select the appropriate Product and Feature details for the new service.
6.	Click on submit. This will commence the create process. You will see the GSM Service Created page.
7.	Click on OK. You will be returned to the Home page.

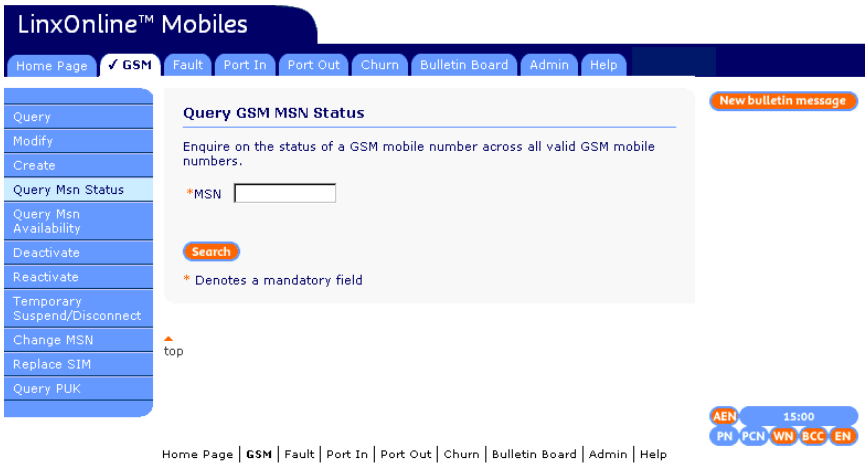
Query MSN Status

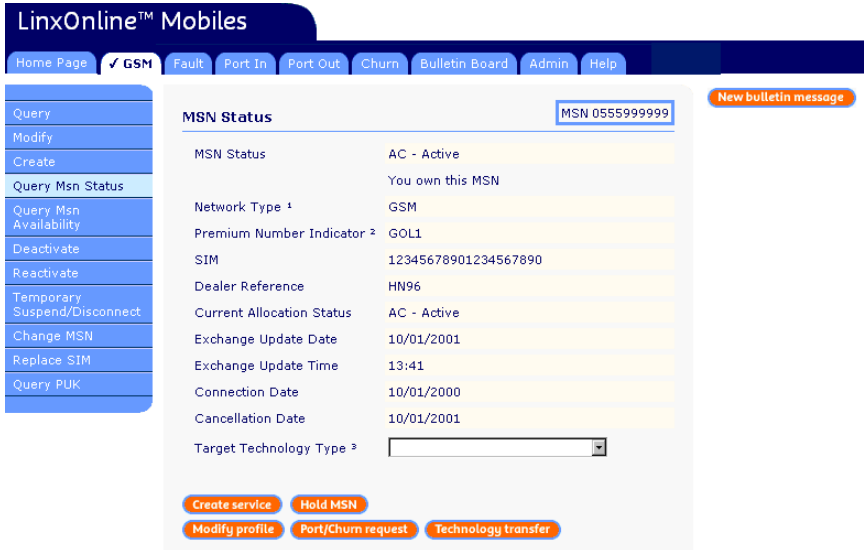
Query MSN status is used to establish the status of an MSN to either:

- create a GSM service
- hold a MSN
- modify the profile of a GSM service (if you're the CSP for the MSN)
- port/churn in the

If you're the CSP for the MSN, you can view all details of the service, otherwise you'll only see the status of the MSN.

The following table lists the steps to query the status of an MSN.

Step	Action
1.	From the GSM page, select Query MSN Status from the menu on the left. You will see the Query MSN Status page. 
2.	Enter the MSN to be queried.

Step	Action
3.	Click on Search. You will see the MSN Status page.  <i>Note: The detail on this screen will vary depending on if you are the CSP or not.</i>
4.	The following buttons could be enabled to perform additional functions: • Create GSM, if the MSN is available (see page 14) – Note: new premium numbers are not available for creating a Prepaid service • Hold MSN, if the MSN is available (see page Error! Bookmark not defined.) • Modify GSM Profile, if you're the CSP for the MSN (see page 11) • Port/Churn Request, if the MSN is with another CSP and able to be ported/churned (see page Error! Bookmark not defined.) You will then return to the Home page after the action is performed.

Query MSN Availability

You can query if a GSM MSN is available or not. This allows you to create or hold a service with that MSN.

The following table lists the steps to query the availability of an MSN.

Step	Action
1.	From the GSM page, select Query MSN Availability from the menu on the left. You will see the Query MSN Availability page.
2.	You can enquire on a range of available GSM numbers, with a maximum of 20 numbers displayed. To set the search conditions, you can enter a combination of the following: • MSN prefix eg. 0438 (mandatory field) • MSN suffix eg. (12 for numbers starting with 0438 12).
3.	After the search conditions have been set, click on Search . You will see the MSN Availability page.

Step	Action																		
4.	LinxOnline™ Mobiles Home Page ✓ GSM Fault Port In Port Out Churn Bulletin Board Admin Help Query Modify Create Query Msn Status Query Msn Availability Deactivate Reactivate Temporary Suspend/Disconnect Change MSN Replace SIM Query PUK MSN Prefix 0555 MSN Suffix 1234* New bulletin message GSM MSN Availability Results <table><thead><tr><th>Select</th><th>MSN</th><th>Premium Number Indicator</th></tr></thead><tbody><tr><td>☒</td><td>0555123456</td><td>GOL1</td></tr><tr><td>☐</td><td>0555123457</td><td>BRO1</td></tr><tr><td>☐</td><td>0555123458</td><td>BRO1</td></tr><tr><td>☐</td><td>0555123459</td><td>BRO1</td></tr><tr><td>☐</td><td>0555123460</td><td>SIL1</td></tr></tbody></table> Create GSM Hold MSN New search	Select	MSN	Premium Number Indicator	☒	0555123456	GOL1	☐	0555123457	BRO1	☐	0555123458	BRO1	☐	0555123459	BRO1	☐	0555123460	SIL1
Select	MSN	Premium Number Indicator																	
☒	0555123456	GOL1																	
☐	0555123457	BRO1																	
☐	0555123458	BRO1																	
☐	0555123459	BRO1																	
☐	0555123460	SIL1																	
5.	Select the required MSN from the list of numbers displayed.																		
6.	You can click on the: • Create GSM button to create a new GSM service using the MSN selected; or • Hold MSN button to hold the selected MSN for possible action in the future; • New Search button to repeat the search for another set of MSNs. You will then be returned to the home page.																		

Hold MSN

After enquiring about the availability of an MSN, and the result is that the number is available, you have an option of holding the MSN. Make note of the MSN for future use.

By placing the MSN on hold allows the CSP approximately 72 hours to create a mobile service with that number. If no action is taken within this time, the MSN will be made available to the general number pool again and cannot be retrieved if Selected and/or Activated by another Customer.

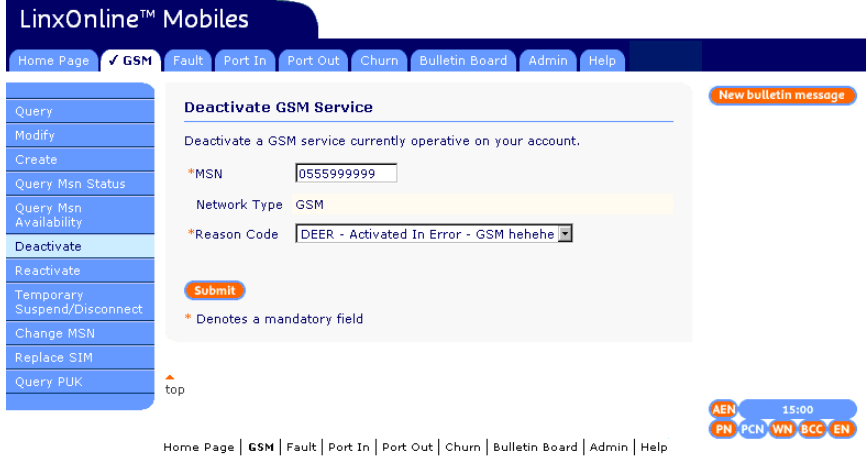
The following table lists the steps to hold an MSN.

Step	Action
1.	If the GSM MSN has the status of "Available" (after examining its status or availability), click on the Hold MSN button. Remember to make note of the MSN selected. If successful you will be returned to the home page. <i>Note: If the MSN is not available after attempting to hold it, you will receive an error message.</i>

Deactivate

To deactivate or cancel a GSM service, the MSN has to be an existing service with the Carriage Service Provider (CSP).

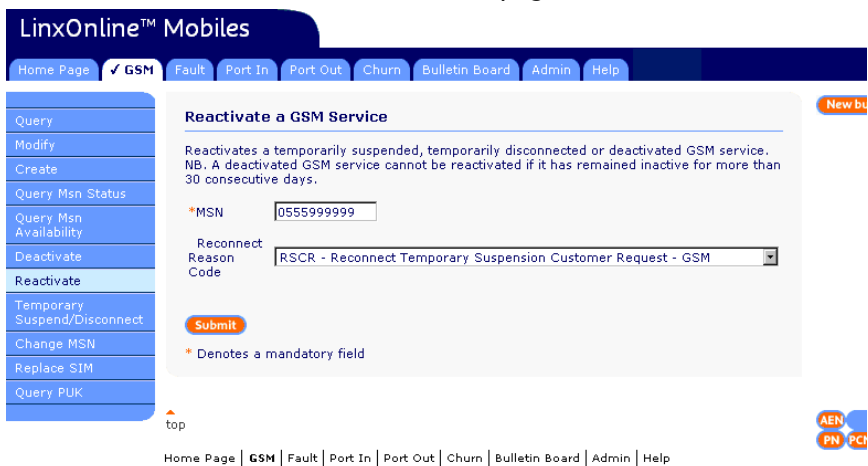
The following table lists the steps to deactivate a GSM service.

Step	Action
1.	From the GSM page, select Deactivate from the menu on the left. You will see the Deactivate GSM Service page. 
2.	Enter the MSN to be deactivated.
3.	Enter the Reason Code for the deactivation.
4.	Click on Submit. You will be returned to the home page.

Reactivate

After a service has been temporarily suspended or disconnected, it can be re-activated with a Reconnect Reason Code. A GSM service can also be reactivated from a deactivation, so long as it is within 30 days of the deactivation date (allows original SIM to be re-used).

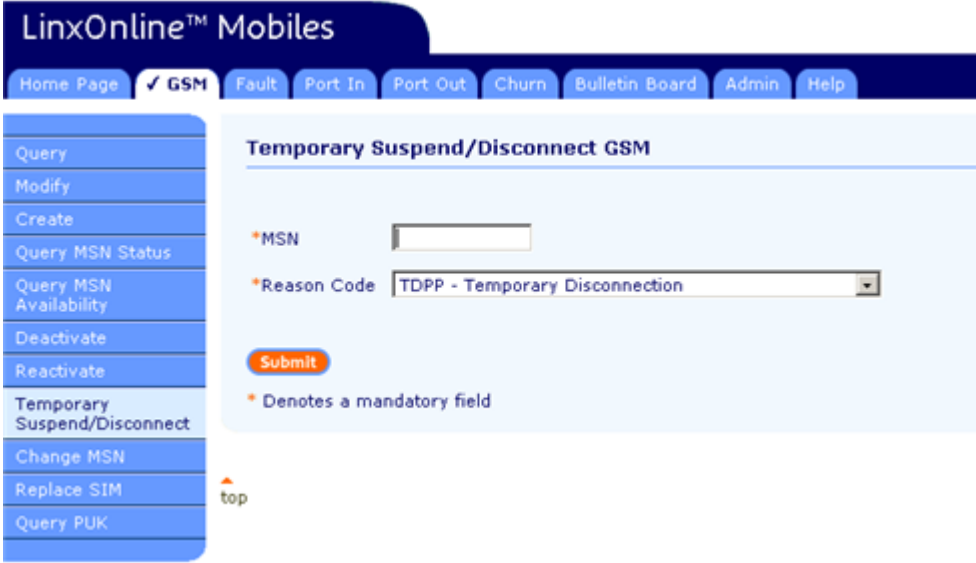
The following table lists the steps to reactivate a GSM service.

Step	Action
1.	From the GSM page, select Reactivate from the menu on the left. You will see the Reactivate a GSM Service page. 
2.	Enter the MSN to be reactivated.
3.	Enter the Reason Code for the reactivation. It is important that the correct and appropriate Reason Code is used to ensure system integrity is maintained. An incorrect Reason Code may also produce an error.
4.	Click on Submit. You will be returned to the home page.

Temporary Suspend/Disconnect

When a GSM is temporarily suspended or disconnected, a customer won't be able to make or receive a call, except for emergency calls.

The following table lists the steps to temporarily suspend/disconnect a GSM service.

Step	Action
1.	From the GSM page, select Temporary Suspend/Disconnect from the menu on the left. You will see the Temporary Suspend/Disconnect GSM page. 
2.	Enter the MSN to be temporarily suspended/disconnected.
3.	Enter the Reason Code for the suspension/disconnection.
4.	Click on Submit. You will be returned to the home page.

Change MSN

You can change an active MSN to another available GSM MSN, when/if requested by a customer.

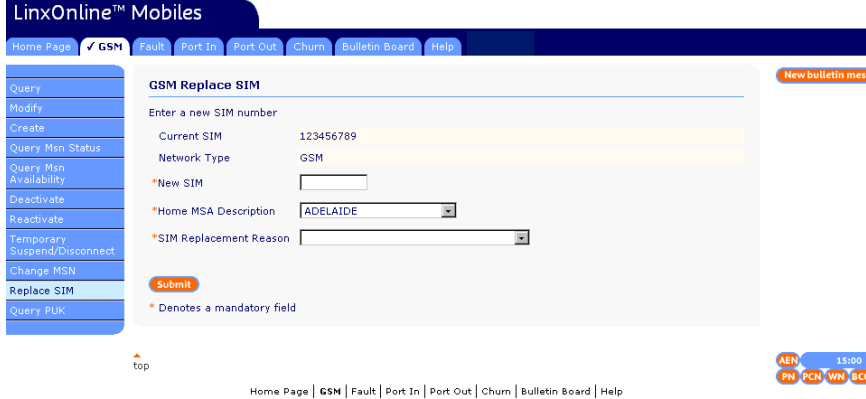
The following table lists the steps to change a GSM MSN.

Step	Action
1.	From the GSM page, select Change MSN from the menu on the left. You will see the Change GSM MSN page. 
2.	Enter the MSN to be changed in the Current MSN field.
3.	Enter the new MSN.
4.	Click on Submit. You will be returned to the home page.

Replace SIM

If an incorrect SIM was activated it can be replaced using this function. You can also change the SIM for a GSM service when/if requested by a customer. Reasons why this may be requested include lost card, damaged card or upgrade.

The following table lists the steps to replace the SIM of a GSM service.

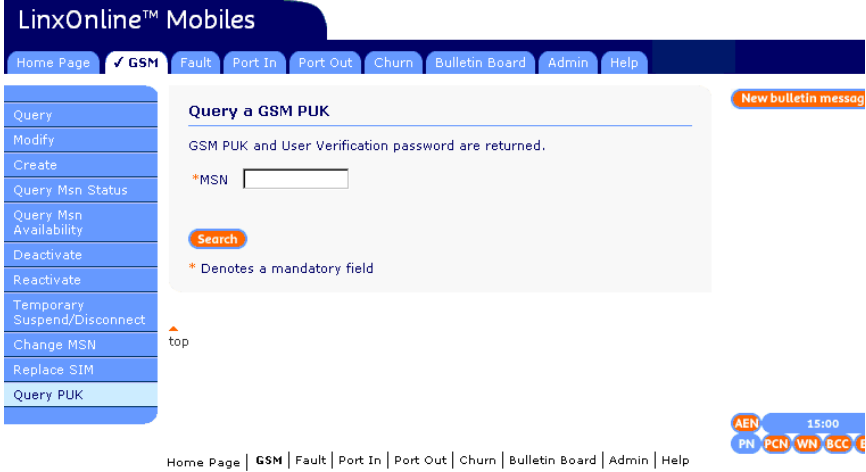
Step	Action
1.	From the GSM page, select Replace SIM from the menu on the left. You will see the Replace GSM MSN page. 
2.	Enter the MSN of the SIM to be replaced.
3.	Click on Submit .
4.	Enter the new SIM and the reason from the drop down list. 
5.	Click Submit .
6.	A pop-up window will confirm the SIM replacement and provide the new SIM details. 

Step	Action
7.	Click OK . You will be returned to the Home Page.

Query PUK

You can query a PUK if the customer has been locked out of their GSM handset; that is, they have entered an invalid GSM PIN 3 times. The User Verification Code is also returned on the query which allows you to verify the identity of the customer.

The following table lists the steps to query the PUK of a GSM service.

Step	Action
1.	From the GSM page, select Query PUK from the menu on the left. You will see the Query a GSM PUK page. 
2.	Enter the MSN of the GSM PUK to be queried.
3.	Click on Search .
4.	You will see the GSM PUK Query Result screen. 

Step	Action
5.	Click OK . You will be returned to the Home Page.

GPRS (Internet, WAP and MMS)

GPRS provides wireless packet data connectivity to Internet, WAP and MMS.

The Telstra Wholesale Handset Compatibility web-site will indicate if a handset is GPRS compatible.

URL: http://telstrawholesale.com/products/docs/mobiles_gsm_compatible.xls

To activate GPRS:

1. Select the required access from the following products:

GPRS_Internet - Access

GPRS_WAP - Access

GPRS_MMS - Access

NOTE: any combination of the above codes is valid.

2. Select a handset from the dropdown list for WAP or MMS access. The dropdown list appears below the product listing on the "create" and "modify" screens.

To bar WAP or MMS access, first remove the GPRS_WAP and GPRS_MMS products, and apply the NO_GPWAP and NO_MMS products. To bar Internet access, firstly remove the GPRS_Internet product, then apply the NO_GPTCM product. Also apply the NO_WAP product, as this bars any circuit switched data activity.

If GPRS products are not available to activate, please consult your Telstra Wholesale Account Manager for information.

Premium SMS

Premium SMS is a product extension available in connection with the Telstra Wholesale GSM Post-paid product. It allows customers' end users to formally access services from Telstra's Premium SMS Content Service Providers.

Premium rate short message services (SMS) allow businesses to offer value-added services to mobile phone consumers such as specialist weather information, competition entry, ring-tones and wallpapers using shorter, more memorable numbers.

For some time, Telstra Wholesale GSM Post-paid Resale customers' end users have had access to limited Premium SMS services available on an informal basis. The Premium SMS product extension will allow your customers to access a greater range of Premium SMS services.

Premium SMS is provisioned by adding a spend limit code to the end-users service in LOLM. There is an option to have Telstra Wholesale automatically apply these products to each new service. The Premium SMS spend limit codes are listed in the appendix. Please note that these products are mutually exclusive to each other. For example if you wish to bar Premium SMS you will need to ensure that any existing spend limit codes are removed when adding the barring code. This can be done in a single LOLM transaction.

If the Premium SMS products are not available to activate, please consult your Telstra Wholesale Account Manager.

Adult Content

Premium SMS – Age Restricted Content is adult content that is rated MA15+ or R18+ and is available from numbers prefixed with 195 or 196 and supplied via premium messaging services. Age Restricted Content can only be accessed by customers on the Telstra GSM networks who have opted-in to receive, and who have the Age Restricted Content product code (RECONAC) provisioned on their mobile service.

The Premium Services Determination released by the ACA on 30 June 2005 imposes obligations on service providers in regard to the provision of mobile content services via premium SMS/MMS and proprietary network services (mobile carrier portals) and provides a framework for application of appropriate community safeguards in respect to age restricted content. Service Providers are required to have age verification, an opt in process and systems in place prior to accepting opt in requests from customers over the age of 18 years, for access to age restricted content delivered via Premium SMS

Topic 3 –Fault Service Request

Overview

For potential faults associated with an MSN, a fault report can be created. This report can be monitored on its progress and any additional notes can also be added using the modify function.

Fault Service Request

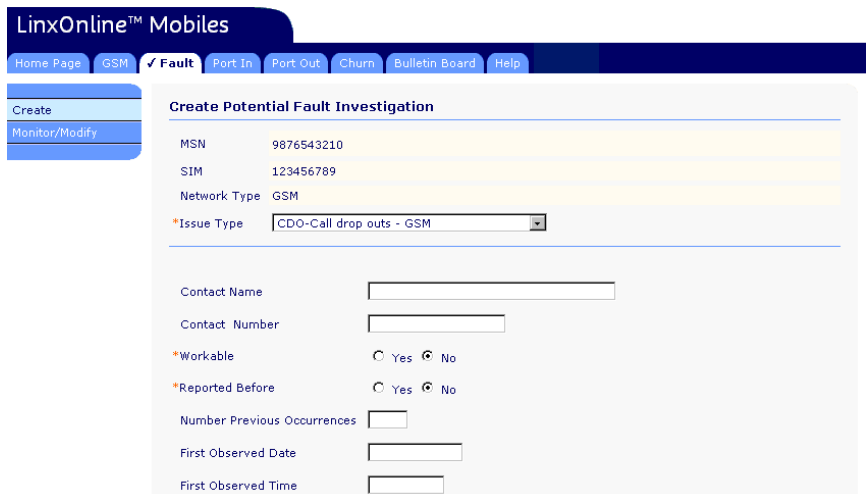
To perform any of these events, you first need to select Fault from the menu-bar across the top of the home page. You will see the Fault page.

Create

If you suspect that there's a potential fault occurring associated with an MSN, a fault report can be created to commence further investigations.

Create Potential Fault Investigations

The following table lists the steps to create a potential fault report.

Step	Action
1.	From the menu-bar across the top of the LOLM page, click on Fault. You will see the Create Potential Fault Investigation page. 
2.	Enter the appropriate service and fault details for the potential fault to be created.

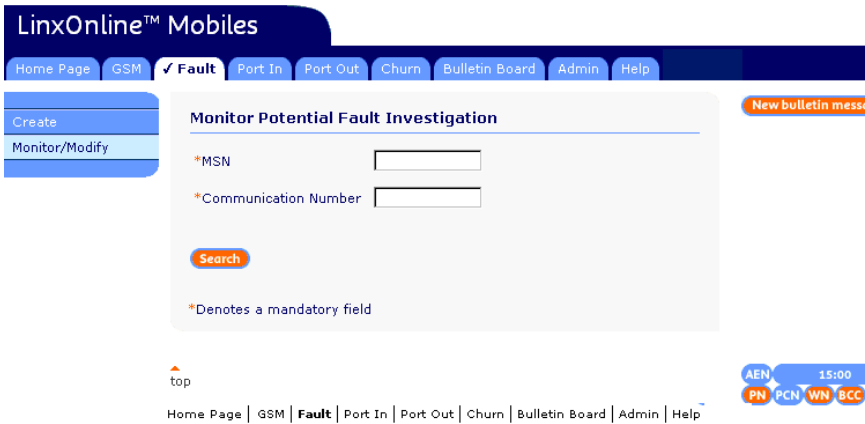
Step	Action
3.	Click on Submit. You will see the acknowledgment page including your communication number. You must record this number to have future access to the investigation. Click OK. You will be returned to the home page. 

Monitor/Modify Fault

After you have created a potential fault request, you can monitor the status of the investigation.

When you are monitoring the status of a potential fault request, you can add additional notes to the details of the report.

The following table lists the steps to monitor a potential fault status.

Step	Action
1.	From the Fault page, click on Monitor/Modify. You will see the Monitor Potential Fault Investigation page. 
2.	Enter the MSN and Communication Number to search for a fault report on that service.

Step	Action
3.	Click on Search. If there's a current report, you will see the Potential Fault Investigation Details page displaying the status of the fault.  You can modify the details of the fault report by clicking on the Modify button (see next page).

The following table lists the steps to modify a potential fault report.

Step	Action
1.	From the Potential Fault Investigation Details page (see page 59), click on the Modify button. You will see the Modify Potential Fault Investigation page. 
2.	Enter any Additional Note Text to be added to the fault report. <i>Note: You can only add to existing text.</i>
3.	Click on Submit. <i>Note: When the modification is successfully processed, you will return to the home page.</i>

Topic 4 – Wholesale Port/Churn In

Overview

Porting or Churning?

So you've got a customer who wants their mobile number to be with your company, making you the GCSP. But will it be a Port In, or a Churn In?

To specify as a Port In, there needs to be a change of Mobile Carrier when a number is transferred. For example, if the customer's MSN is currently on Optus' network (and the CSP could be Optus or one of their resellers), and they want to transfer their MSN to Telstra's network (with Telstra or one of their resellers as the CSP), the MSN would be Ported In.

Churning on the other hand is when there's no change of carrier network. e.g Transfer from a TW Reseller to Telstra Retail or vice versa.

Porting / Churning In tasks if you're the GCSP

If you're the GCSP, the Port/Churn In process commences when a customer requests to have their existing service transferred to your company.

The tasks you can perform as a GCSP are:

- instigating a request to port/churn a service (this involves validating if the service can be ported/churned)
- proceeding with (or cancelling) a Port Notification
- actioning a Port Cutover Notification and commence creating a GSM service
- withdrawing a Port Notification to stop the port/churn in process
- examine the port/churn history of the MSN.

Port/Churn In for GCSPs

Introduction

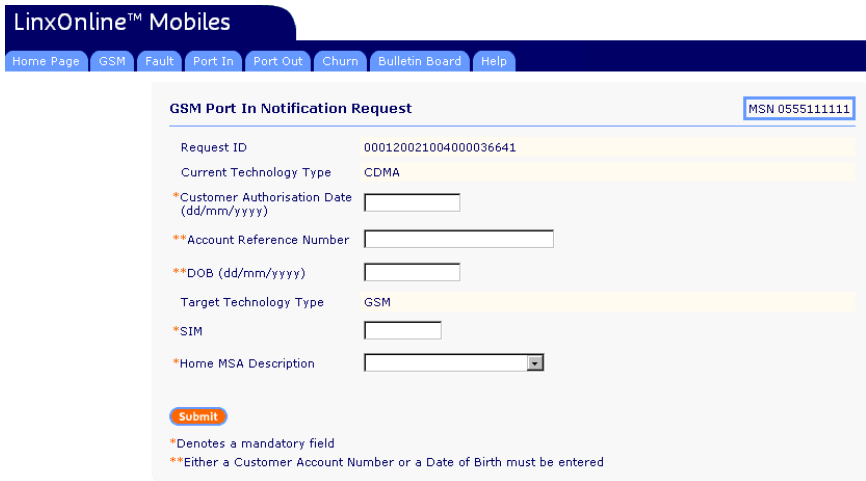
To port/churn in a GSM service requires a customer to ask you for their service to be ported to your company (the GCSP).

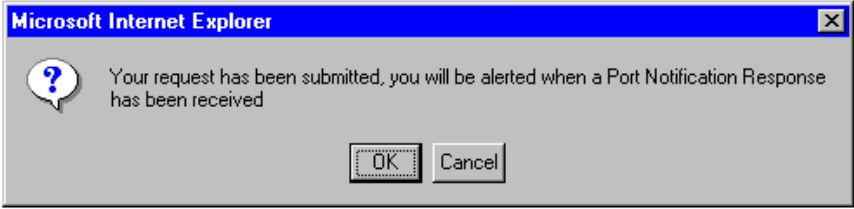
The main steps for the Port/Churn In are:

- requesting for the service to be ported (the service first needs to be validated as a service that can ported/churned)
- acknowledging a Port Notification
- proceeding with the port/churn in after validating the details of the service.

Requesting to Port/Churn in a Service

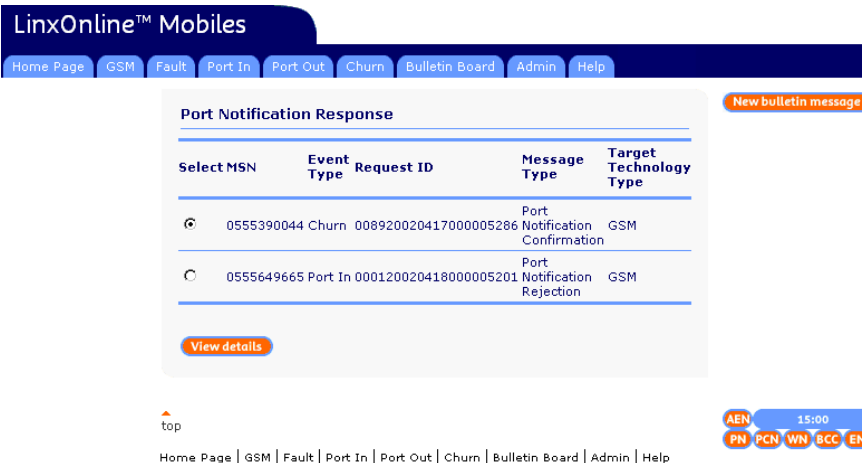
The following table lists the steps to request to Port/Churn In a GSM service.

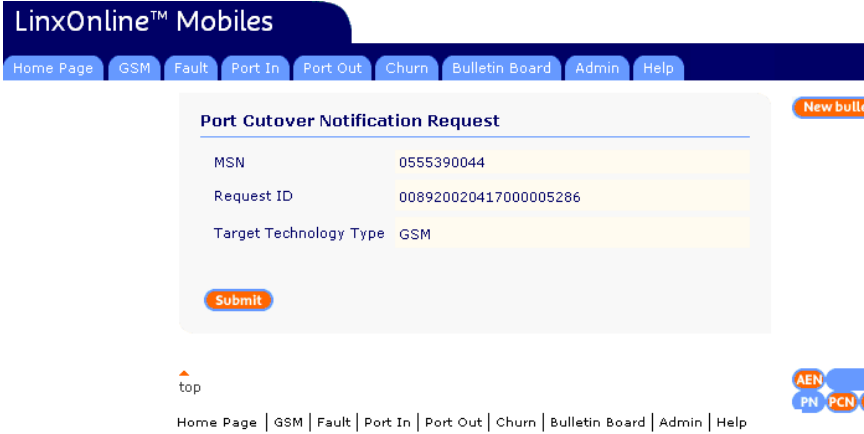
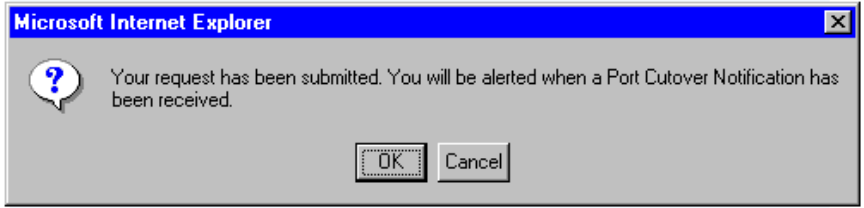
Step	Action
1.	From the GSM page, click on the Query MSN Status button.
2.	Type in the customer's MSN that they want to port/churn in.
3.	Click on Search. You will see the MSN Status page.  <i>Note: If the service can be ported/churned, the Port/Churn Request button will be enabled.</i>
4.	Click on the Port/Churn Request button. You will see the Port Notification Request page.  <i>Note: Each Port Notification Request will have its own individual Request ID allocated to it (generated by the Telstra Systems). This unique identifier will be used in all subsequent porting transactions associated with the MSN.</i> You must record the Request ID for future reference.
5.	Enter the Customer Authorisation Date in the appropriate field. This will usually be the date that the customer makes the request.

6.	Enter either the: • LCSP's Account Reference Number (for post-paid); or the • Customer's DOB or Enquiry Password (for pre-paid)
7.	Then enter: • the new* SIM of the mobile. • The Home MSA Location * A new SIM Card is required for all Port/Churn in for GCSPs
8.	Click on Submit. You will see a pop-up message explaining that you should receive a Port Notification from the LCSP when they respond to the request. 
9.	Click on OK. You will be returned to the home page.

Receiving a Port Notification

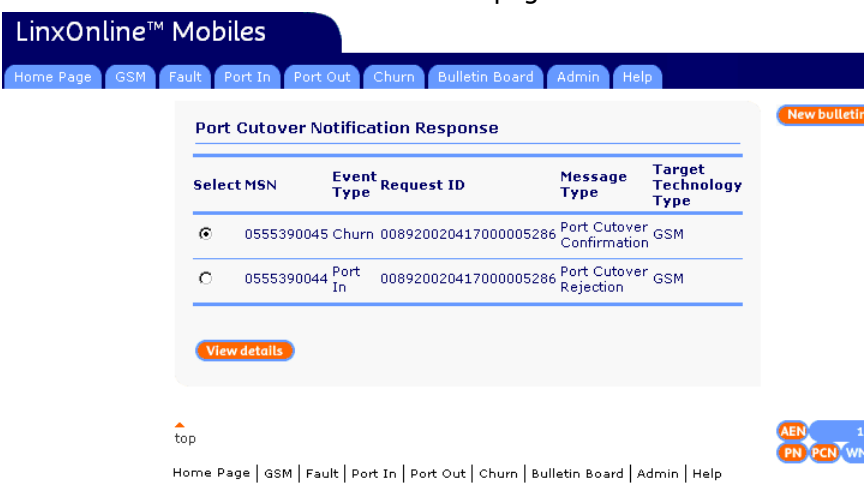
The following table lists the steps to Port/Churn In a GSM service after receiving a Port Notification (PN) response from the LCSP.

Step	Action
1.	On the Home page, examine the Porting Flags to identify if you've received a PN flag. You'll know if you've received a PN Response when the PN flag colour turns to red. 
2.	Click on the PN flag. You will see the Port Notification Response page. 
3.	Select the appropriate PN to view the response details.

	Click on View Details. You will see the Port Notification Confirmation/Rejection page.  Note: If the PN shows a rejection by the LCSP, some of the buttons will not be enabled. This page provides three options you can take with this PN. You can: • proceed with the port/churn in (see the next step) • withdraw the port/churn in request • return to previous list (allows you to select a new PN from the Port Notification page.).
	Click on Proceed to continue with the port/churn in. You will see the Port Cutover Notification Request page. 
4.	Click on Submit. You will see the Port Cutover Notification confirmation message. 
5.	Click on OK. You will be returned to the home page.

Receiving a Port Cutover Notification

The following table lists the steps to Port/Churn In a GSM service after receiving a Port Cutover Notification (PCN) from the LCSP.

Step	Action
1.	On the Home page, examine the Porting Flags to identify if you've received a PCN flag . You'll know if you've received a PCN when the flag colour turns to red.
2.	Click on the PCN flag. You will see the Port Cutover Notification page. 
3.	Select the appropriate PCN to continue the port/churn in process.

4.

Click on **View Details**.

You will see the Port Cutover Confirmation page.

Note: If the PCN shows a rejection, some of the buttons will not be enabled.

This page provides two options you can take with this PCN.

You can:

- proceed with the Port/Churn In and create a GSM service (see the next step)
- return to previous list (this will take you back to the Port Cutover Notification page to re-select the PCN).

5.

Click on **Create GSM**.

You will see the Create GSM Service page (see topic **Error! Reference source not found.** on page 14 for GSM).

Note: When the GSM service is ported/churned in, the LCSP and other mobile Carriers will receive a Broadcast Cutover Completion flag so that they can update their own database/records.

Withdrawing a Port Notification

Another function the GCSP can perform during the Port/Churn In process is to withdraw the Port/Churn Notification. Reversals can also be withdrawn.

A withdrawal can occur when there's been an error in porting an MSN by the GCSP, or when a customer asks the GCSP/LCSP to stop the port.

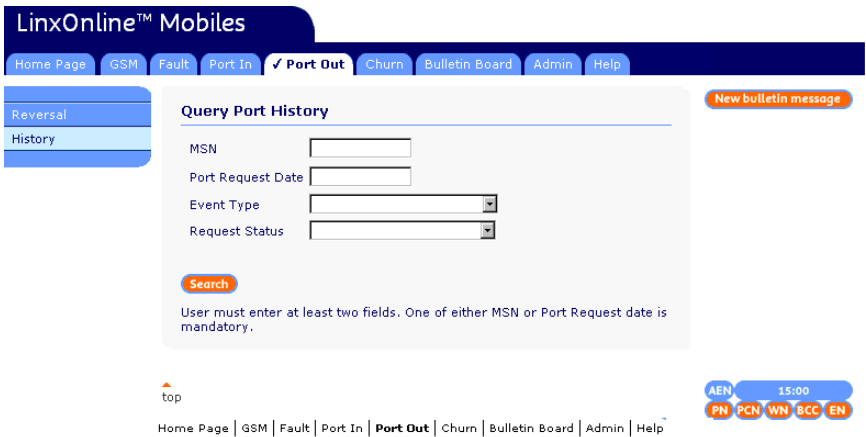
The following table lists the steps to withdraw a Port/Churn Notification (PN).

Step	Action
1.	On the Home page, click on the PN flag. You will see the Port Notification Response page. 
2.	Select the appropriate PN to be withdrawn.
3.	Click on View Details. You will see the Port Notification Confirmation/Rejection page. 
4.	Click on Withdraw. You will be returned to the home page. <i>Note: The LCSP will receive a Withdrawal Notification (WN) flag indicating that the Port/Churn In request has been withdrawn</i>

Examining the port/churn history of an MSN

The CSP can examine the port/churn history of a particular MSN or Port Request Date that they are involved with. i.e. you can only see an event's history if you were the GCSP or the LCSP. When the Port Request Date is used a maximum of 8 port/churns for the specified date will be displayed.

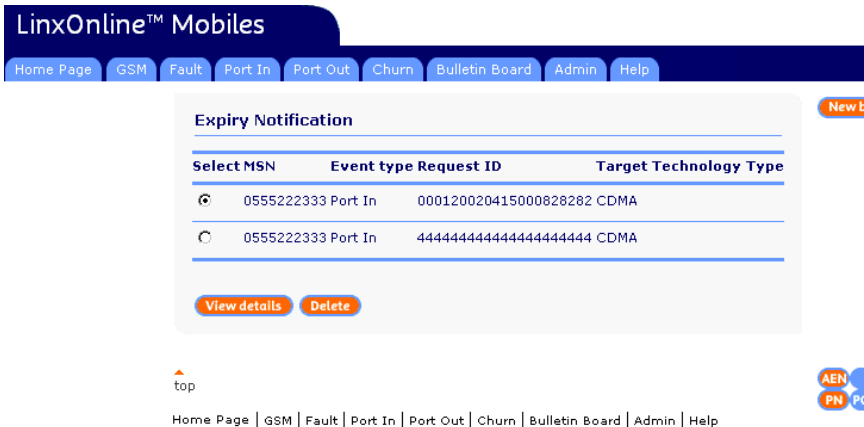
The following table lists the steps to examine the Port/Churn history details for a specific MSN or Port Request Date.

Step	Action
1.	On the Home page, select either Port In, Port Out or Churn from the menu-bar across the top of the page. If you selected Port Out or Churn, you also need to select History from the menu on the left. You will see the Query Port Details page. 
2.	Enter the required details including: • MSN (mandatory, if Port Request Date not input) • Port Request Date (mandatory, if MSN not input) • Event type (e.g. port in, optional) • Request Status (optional)

Responding to an Expiry Notification

You will receive an Expiry Notification (EN) when the timeframe to proceed with a Port/Churn has expired. A Port Notification is valid for 30 calendar days from the customer authorisation date.

The following table lists the steps to respond to an EN.

Step	Action
1.	On the Home page, examine the Porting Flags to identify if you've received an EN flag . You'll know if you've received an EN when the flag colour turns to red.
2.	Click on the EN flag. You will see the Expiry Notification list page. 
3.	Click on View Details. You will see the Expiry Notification page. 
4.	Click on Delete to remove the expiry notification and port notification from the system. You will be returned to the Expiry Notification list page.

Step	Action																																				
5.	Click on Search. You will see the Port History Results page. LinxOnline™ Mobiles Home Page GSM Fault ✓ Port In Port Out Churn Bulletin Board Admin Help History Port History Results <table><thead><tr><th>Select</th><th>Request ID</th><th>MSN</th><th>Port Request Date/Time</th><th>Event Type</th><th>Request Status</th></tr></thead><tbody><tr><td>☒</td><td>0004567890</td><td>0555123456</td><td>09/08/2001 12:00</td><td>Port Out</td><td>ACTIVE</td></tr><tr><td>☐</td><td>0004567891</td><td>0555123456</td><td>11/08/2001 12:00</td><td>Port Out</td><td>ACTIVE</td></tr><tr><td>☐</td><td>0004567892</td><td>0555123456</td><td>12/08/2001 12:00</td><td>Port In</td><td>ACTIVE</td></tr><tr><td>☐</td><td>0004567893</td><td>0555123456</td><td>13/08/2001 12:00</td><td>Port Out</td><td>ACTIVE</td></tr><tr><td>☐</td><td>0004567894</td><td>0555123456</td><td>14/08/2001 12:00</td><td>Port In</td><td>ACTIVE</td></tr></tbody></table> View details top Home Page GSM Fault Port In Port Out Churn Bulletin Board Admin Help AEN 15:00 PN PCN WN BCC	Select	Request ID	MSN	Port Request Date/Time	Event Type	Request Status	☒	0004567890	0555123456	09/08/2001 12:00	Port Out	ACTIVE	☐	0004567891	0555123456	11/08/2001 12:00	Port Out	ACTIVE	☐	0004567892	0555123456	12/08/2001 12:00	Port In	ACTIVE	☐	0004567893	0555123456	13/08/2001 12:00	Port Out	ACTIVE	☐	0004567894	0555123456	14/08/2001 12:00	Port In	ACTIVE
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6.	Select the required event, and click on View Details. You will see the Port History Details page. LinxOnline™ Mobiles Home Page GSM Fault ✓ Port In Port Out Churn Bulletin Board Admin Help History Port History Details MSN 0555123456 <table><tbody><tr><td>Request ID</td><td>0004567890</td></tr><tr><td>Port Request Date/Time</td><td>09/08/2001 12:00</td></tr><tr><td>Event Type</td><td>Port Out</td></tr><tr><td>Request Status</td><td>ACTIVE</td></tr></tbody></table> Port History <table><tbody><tr><td>Request Status Date/Time</td><td>08/08/2001 14:00</td></tr><tr><td>Gaining CSP</td><td>0089 - Austar United Broadband</td></tr><tr><td>Reject CSP</td><td></td></tr><tr><td>Gaining MC</td><td>0003 - Cellular One</td></tr><tr><td>Reject MC</td><td></td></tr></tbody></table> New bulletin m	Request ID	0004567890	Port Request Date/Time	09/08/2001 12:00	Event Type	Port Out	Request Status	ACTIVE	Request Status Date/Time	08/08/2001 14:00	Gaining CSP	0089 - Austar United Broadband	Reject CSP		Gaining MC	0003 - Cellular One	Reject MC																			
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Gaining MC	0003 - Cellular One																																				
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	This page displays the historical details of the selected event. The details on this page can only be examined and not acted upon. Click on Return to list to return to Port History Results page																																				

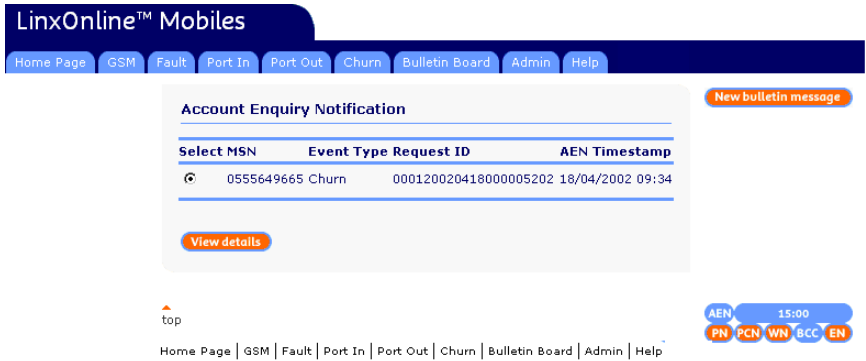
Topic 5 – Wholesale Port/Churn Out

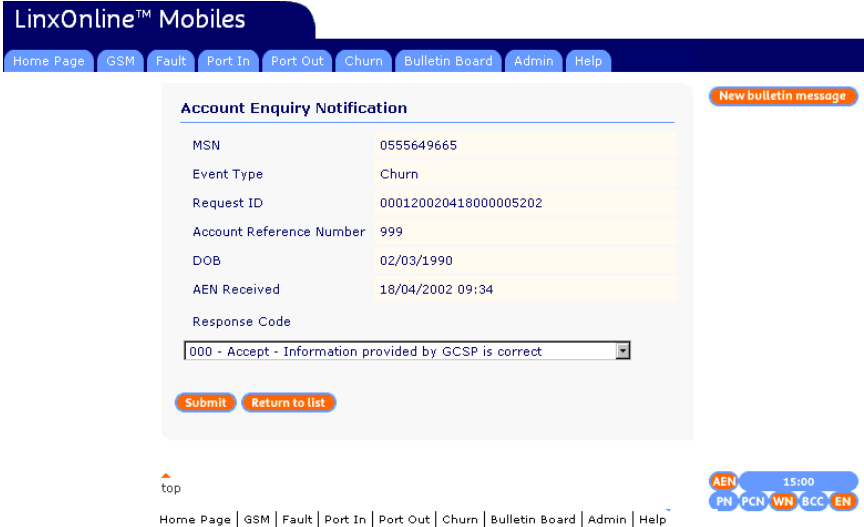
If you're the LCSP, the port/churn out process commences when you receive a request to have a customer's existing MSN transferred from your company.

The tasks you can perform as a LCSP are:

- responding to an Account Enquiry Notification (AEN)
- responding to a Broadcast Cutover Completion notice
- responding to an Expiry Notification
- actioning a reversal of a port/churn out

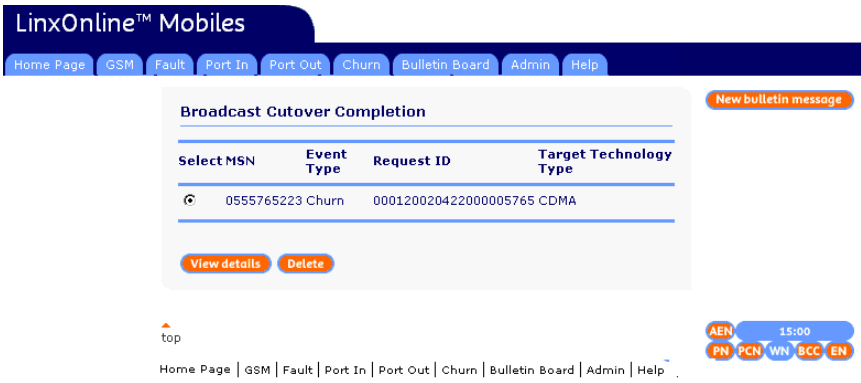
The following table lists the steps to respond to an Account Enquiry Notification (AEN).

Step	Action
1.	The first indication that you've received an AEN flag is when you have an AEN pop-up message appear on the screen. Click on the Acknowledge button to confirm receiving an AEN. <i>Note: This will only occur if you have alarm access to LOLM.</i> This will clear the pop-up box from the screen. Important Note: Another indication that you'll get when you receive an AEN is the AEN Flag colour will turn red. The time you have to respond to the AEN is displayed on the top row of the Port Flags, and this is updated at set intervals. Important Note: The intervals are at the 15, 10, 5, 4, 3, 2, and 1 minute marks, and are displayed in orange. If the LCSP receives more than one AEN at a time before responding to them, the time displayed will show the AEN with least amount of time to respond to. Once the first AEN has been actioned, the time will revert to the amount left for the next AEN. If the LCSP doesn't respond to the AEN at the end of the 15 minute period, the time will display "0.00" and change to red. The time will remain on "0.00" until the AEN is actioned.
2.	Click on the AEN flag. You will see the Account Enquiry Notification page. 
3.	Select the required notification to respond to.

Step	Action
4.	Click on View Details. You will see the Account Enquiry Notification page. When an AEN is actioned no other user can access the account until the Telstra systems have responded. 
5.	After confirming the details of the Port/Churn, select from the drop down menu the required response code (i.e. accept or reject the request).
6.	Click on Submit. You will see a confirmation that the response was submitted, and you'll receive a Broadcast Cutover Completion notice when the port/churn out has been actioned. 
7.	Click on OK. You will be returned to the home page.

Responding to a Broadcast Cutover Completion

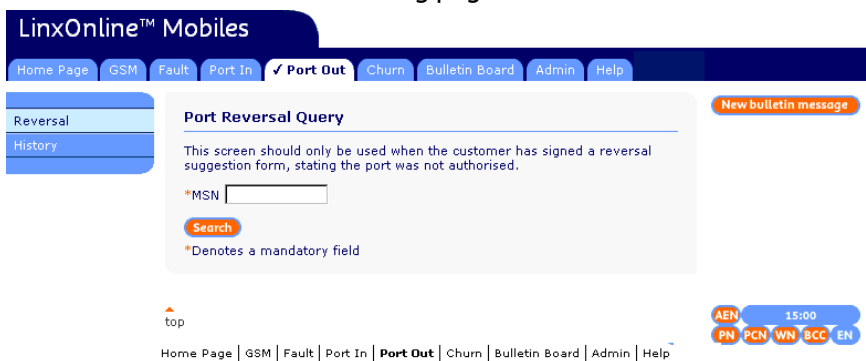
The following table lists the steps to respond to a Broadcast Cutover Completion (BCC) notice.

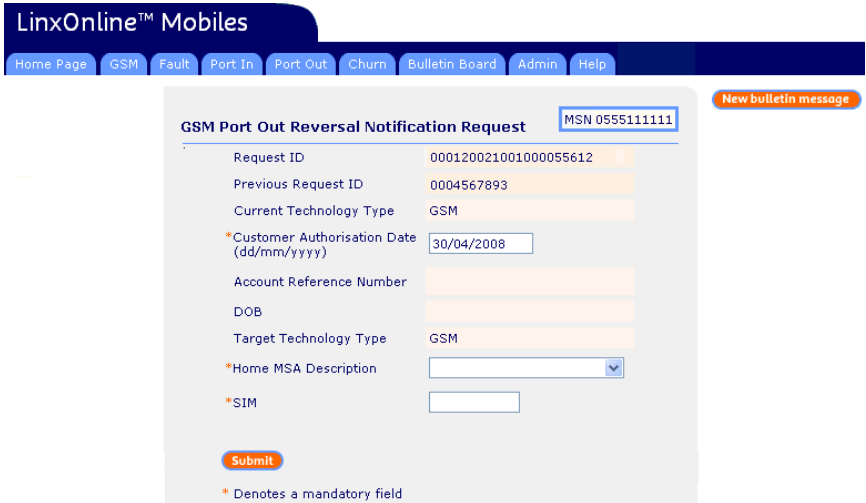
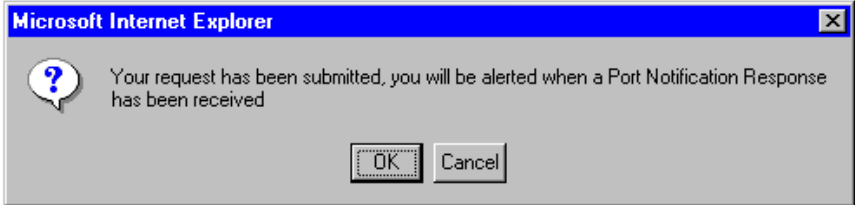
Step	Action
1.	On the Home page, examine the Porting Flags to identify if you've received a BCC flag . You'll know if you've received a BCC when the flag colour turns to red.
2.	Click on the BCC flag. You will see the Broadcast Cutover Completion page. 
3.	Select the required MSN to view details of the port/churn out.
4.	Click on View Details. You will see the Broadcast Cutover Completion page. 
5.	Record the necessary information for your database/system requirements, and click on Delete. You will be returned to the home page.

Reversing a Port Out

When a customer comes to you demonstrating that the port of their MSN was unauthorised and they want to retain their MSN with your company, you can instigate a reversal of the port out.

The following table lists the steps to reverse a port out.

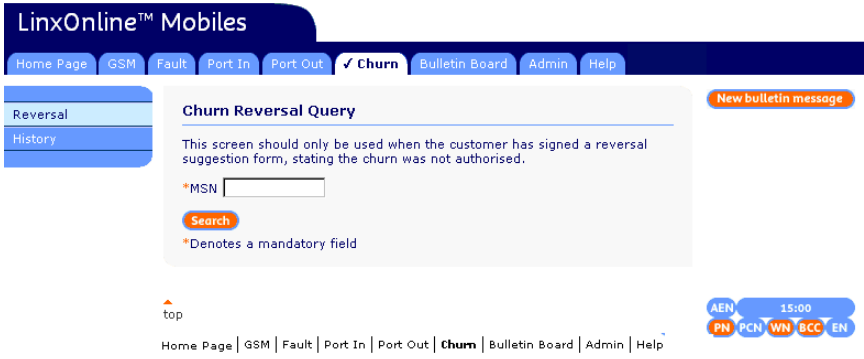
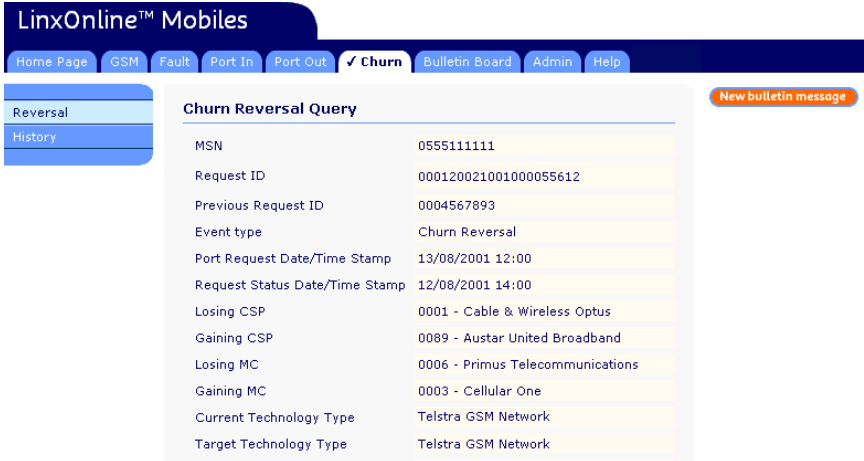
Step	Action
1.	On the Home page, select Port Out from the menu-bar across the top of the page. You will see the Port Reversal Query page. 
2.	Enter the MSN to be queried.
3.	Click on Search. You will see the Port Reversal Query page. 

Step	Action
4.	To continue the port out reversal, click on Proceed. You will see the Port Out Reversal Notification Request page. 
5.	Enter the Customer Authorisation Date .
6.	Then enter: - the Home MSA Description - the SIM
7.	Click on Submit. You will see a pop-up message explaining that you should receive a Port Notification Response from the LCSP (who was the GCSP before the reversal) when they respond to the request. 
8.	The process to reverse the port is now the same as when you are the GCSP porting in a MSN. You need to: - initiate a PCN - create a GSM service
9.	Click on OK. You will be returned to the Home Page.

Reversing a Churn Out

The Churn Out Reversal process is very similar to the Port Out Reversal process, the only difference being the starting point. The customer still needs to instigate the reversal of the churn out. This must be done in writing.

The following table lists the steps to reverse a churn out.

Step	Action
1.	On the Home page, select Churn from the menu-bar across the top of the page. You will see the Churn Reversal Query page. 
2.	Enter the MSN to be queried.
3.	Click on Search. You will see the Churn Reversal Query page. 
4.	The steps from here are the same as for a port out reversal

Topic 6 – Bulletin Board

Query Message

The Bulletin Board is a broadcast tool that allows the Wholesale Customer Transfer (WCT) group to communicate to all Telstra SPs.

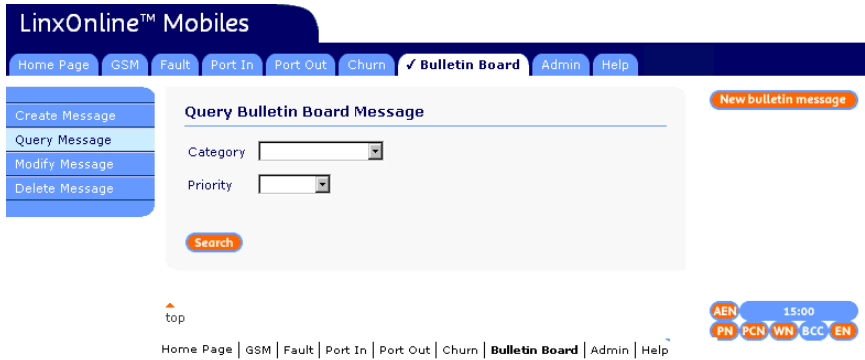
Communications will be of a general nature, such as:

- Network outages (e.g. GSM base station is down)
- System outages
- Memos
- Updates to procedures or operating conditions

SPs will **not** be able to create messages for the bulletin board or communicate to other SPs via the bulletin board.

Querying a Bulletin Board message allows you to read any messages that have been created by the WCT group for general communication to Telstra GSM SPs.

The following table lists the steps to access a bulletin board message.

Step	Action
1.	From the Bulletin Board page, click on Query Message. You will see the Query Bulletin Board Message page. 
2.	Select the required group of messages to access by selecting the: • category • priority

Step	Action
3.	Click on Search. You will see the Select Bulletin Board Message page. LinxOnline™ Mobiles Home Page GSM Fault Port In Port Out Churn ✓ Bulletin Board Admin Help Create Message Query Message Modify Message Delete Message Select Bulletin Board Message Memo Medium LOLM housekeeping Telstra Unread Memo Medium Create GSM service - diversion two part workaround Cable & Wireless Optus Unread Memo Medium Modified Regression testing WRAP in netscape. Cable & Wireless Optus Read View details Modify Delete top AEN 15:00 PN PCN WN BCC EN Home Page GSM Fault Port In Port Out Churn Bulletin Board Admin Help
4.	Select the required message and click on the View Details button. You will see the Access Bulletin Board Message page. LinxOnline™ Mobiles Home Page GSM Fault Port In Port Out Churn ✓ Bulletin Board Admin Help Create Message Query Message Modify Message Delete Message Access Bulletin Board Message Message ID 535 Message A recent report has shown a number of MNP transactions which haven't been cleared from LOLM. These include old BCCs, ENs, WCs etc. Could you please clear these redundant transactions ASAP Category Memo Priority Medium Subject Title LOLM housekeeping Contact Name John Smith Contact Phone Number 4444444444 Expiry Date 30/10/2002 Posted By Telstra New bulletin message AEN 15:00 PN PCN WN BCC EN Home Page GSM Fault Port In Port Out Churn Bulletin Board Admin Help

Topic 7 – LOLM Support

Overview

As a user of LOLM, you will be able to access the following for support:

- LOLM Online Help
- Your system administrator (Primary Certificate Holder) to report problems that occur with LOLM.

Your System Administrator will then contact the following areas depending on the type of problem that has been reported;

- If the problem is Business Related then the System Administrator will contact the Wholesale Customer Transfers in Adelaide on (08) 8308 3000.
- If the problem is Information Technology Related then the System Administrator will contact the Telstra Helpdesk on 1300 654 033 Option 2.

Glossary of Terms

The following table lists descriptions of terms used throughout this document.

Term	Description
ACA	Australian Communications Authority
ACCC	Australian Competition and Consumer Commission
ACIF	Australian Communications Industry Forum (aka Comms Alliance)
AEN	Account Enquiry Notification
BCC	Broadcast Cutover Completion
CSP	Carriage Service Provider
EN	Expiry Notification
GCSP	Gaining Carriage Service Provider
GPRS	General Packet Radio Services
GSM	Global System for Mobiles
LCSP	Losing Carriage Service Provider
LOLM	Linx OnLine Mobiles
MMS	Multimedia Messaging Service
MNP	Mobile Number Portability
MSA	Mobile Service Area
MSN	Mobile Service Number
PCN	Port Cutover Notification
PIN	Personal Identification Number
PN	Port Notification
PUK	Personal Unblocking Key
SIM	Subscriber Identity Module
SP	Service Provider
SSL	Secure Sockets Layer
WAP	Wireless Application Protocol
WCTA	Wholesale Customer Transfers Adelaide
WN	Withdrawal Notification

Attachment 1 – LOLM Reference Data

Reference Data

Attachment 1 lists the reference data that is used in the various drop-down menus in LOLM.

Product Codes

Product codes are used when you query, create or modify a GSM service via the GSM menu item. The following table lists all the product codes valid for use in LOLM. Each SP will only have access to product codes that are valid for them. NOTE: Premium SMS products listed in a separate table below.

CODE	DESCRIPTION
CLIB	Calling Line Permanent Block
CNSDIS2	Disable Callback Notification Service
CNSTMR30	Callback Notification Timer – 30 secs.
GPRS - Internet	Internet access using packet data (GPRS)
GPRS - MMS	MMS access using packet data (GPRS)
GPRS - WAP	WAP access using packet data (GPRS)
MSG_RVA	RVA Notification For Messagebank
MSGWRPIN	Messagebank PIN reset
NOCND	No Calling Number Display
NO_0011	Allow 16-digit Call Forward number
NO_CONF	Opt Out Of Conference Call
NO_GPTCM	Bar GPRS Internet
NO_GPWAP	Bar GPRS WAP
NO_MMS	Bar GPRS MMS
NO_MOSMS	Bar outgoing SMS
NO_MTSMS	Bar incoming SMS
NO_VOICE	Bar Voice (for data only services)
NO_WAP	Bar WAP (Circuit Switched GSM)
VMLWS1	Wholesale Voice Mail
WSIROAM	International Roaming

Premium SMS Product Codes

The following table lists all the Premium SMS product codes valid for use in LOLM. Each SP will only have access to product codes that are valid for them.

CODE	DESCRIPTION
MCOMW020	Premium SMS \$20 spend limit
MCOMW050	Premium SMS \$50 spend limit
MCOMW100	Premium SMS \$100 spend limit
MCOMW150	Premium SMS \$150 spend limit
MCOMW300	Premium SMS \$300 spend limit
MCOMW500	Premium SMS \$500 spend limit
PRSMSBAR	Premium barring product
RECONAC	Opt in Age Restricted Content

NOTE: These products are all mutually exclusive to each other. This means that a single service (end-user) may only contain one of these products at a given point in time.

Feature Codes for Service Details

The Feature codes are used when you query, create or modify a GSM Service Details via the GSM menu item. The following table lists the valid Feature codes used in LOLM.

FEATURE	CHARACTERISTIC	CODE	DESCRIPTION
Normal Call Barring	NCBA Code	0	Unrestricted
		1	Operator (redundant code)
		2	Bar IDD
		3	Bar STD, IDD
		7	Bar Value Added Services
		9	Local Only
		10	Special only TD (Bar Outgoing Voice & SMS)
		12	Bar 190, Value Added & IDD
Alternate Call Barring	NOTE: Whilst the ACBA field is available in LOLM, the actual setting is no longer a feature of the Telstra GSM Network, so changing the level will have no impact on the service.		
	ACBA Code	0	Unrestricted
		1	Operator (redundant code)
		2	Bar IDD
		3	Bar STD, IDD
		7	Bar Value Added Services
		9	Local Only
		10	Special only TD (Bar Outgoing Voice & SMS)
		12	Bar 190, Value Added & IDD

Feature Codes for Network Settings

The Feature codes are used when you query, create or modify a GSM Network Settings via the GSM menu item. The following table lists the valid Feature codes used in LOLM.

FEATURE	CHARACTERISTIC	CODE	DESCRIPTION
Call Forward No Reply	Provisioned	0	Not Provisioned
		1	Provisioned
Call Forward Busy	Provisioned	0	Not Provisioned
		1	Provisioned
Call Forward Unconditional	Provisioned	0	Not Provisioned
		1	Provisioned

Service Type and Status

Service Type and Status codes are used when you query a GSM service via the GSM menu item. The following table lists the codes used in LOLM.

CHARACTER	CODE	DESCRIPTION
Service Type	NORM	Normal Service
Service Status (if you're the CSP)	AC	Active
	TS	Temporarily Suspended
	TD	Temporarily Disconnected
	DE	Deactivated
Service Status (if you're not the CSP)	ACT	Active on network (available to Churn)
	UNAV	Currently unavailable
	AV	Available (available to create New Service)
	NONET	Doesn't exist on the network (available to Port)

Deactivation Reason Codes

Deactivation Reason Codes are used when you deactivate a GSM service via the GSM menu item. The following table lists the valid reason codes used in LOLM.

CODE	DESCRIPTION
DENR	No Longer Required
DEER	Activated In Error

Temporary Disconnect / Suspend Reason Codes

Temporary Disconnection/Suspension Reason Codes are used when you temporary disconnect/suspend a GSM service via the GSM menu item. The following table lists the valid reason codes used in LOLM.

CODE	DESCRIPTION
TSCR	Temporary Suspension Customer Requested
TSLS	Temporary Suspension Lost or Stolen

Reactivate Reason Codes

Reactivation Reason Codes are used when you reactivate a GSM service from temporary disconnection/suspension via the GSM menu item. Reactivation from Deactivation (DE) can also occur within 30 days of the DE. The following table lists the valid reason codes used in LOLM.

CODE	DESCRIPTION
RSCR	Reconnect Temporary Suspension Customer Request
RSNP	Reconnect Temporary Suspension New/Replacement Handset
RSPR	Reconnect Temporary Suspension Phone Recovered
RDJD	Reconnect Temporary Disconnection Business Judge
REER	Reconnect from deactivation – operator error
RECR	Reconnect from Deactivation – within 30 days (Customer Request)

GSM SIM Codes

SIM codes are used for managing GSM SIMs via the GSM menu item. The following table lists the valid SIM codes used in LOLM.

TYPE	CODE	DESCRIPTION
Replacement Reason	DCHP	Damaged Chip
	DPLS	Damaged Plastic
	ELFR	Early Life Failure Replacement
	FAIL	Failed Card
	LOST	Lost Card/Handset
	STLN	Stolen Card/Handset

Potential Fault Codes

Potential Fault codes are used when creating, monitoring and modifying potential fault requests via the Fault menu item. The following table lists the codes used in LOLM.

TYPE	CODE	DESCRIPTION
Issue Status	P	Pending
	C	Cleared
	R	Resolved
Issue Type	CDO	Call drop outs
	COV	Coverage
	MES	MESSAGEBANK PROBLEM
	MOC	Mobile originated call problem
	MTC	Mobile terminated call problem
	NET	Network enquiry
	NPB	No progress both ways
	OTH	Other
	POT	Poor transmission
	SIG	No signal/service
	VAL	Validation
	DATA	Internet or MMS fault (GPRS)
	WAPN	WAP error (GPRS)

Event Type Codes

Event Type Codes are used when you Port/Churn a GSM service. The following table lists the valid codes used by LOLM.

CODE	DESCRIPTION
PTI	Port In
PTIR	Port In Reversal
PTO	Port Out
PTOR	Port Out Reversal
CHN	Churn
CHNR	Churn Reversal

Message Type Codes

Message Type Codes are used when you Port/Churn a GSM service. The following table lists the valid codes used by LOLM.

CODE	DESCRIPTION
PCC	Port Cutover Confirmation
PCN	Port Cutover Rejection
AEN	Account Enquiry Notification
BCC	Broadcast Completion Confirmation
EN	Expiry Notification
PN	Port Notification
PNC	Port Notification Confirmation
PN	Port Notification Rejection
WN	Withdrawal Notification
WC	Withdrawal Confirmation
WR	Withdrawal Rejection
PAE	Port Account Enquiry
PHE	Port History Enquiry
LSR	Losing Service Provider Response

AEN Response Codes

AEN Response Codes are used when you, as a LCSP, respond to an AEN. The following table lists the codes used by LOLM.

CODE	DESCRIPTION
000	Accept - Account/Reference Number or DOB provided by GCSP is correct
017	Reject - MSN not associated with Account/Reference Number
058	Reject - Account/Reference Number or DOB not held
070	Reject - MSN not associated with DOB

Port Request Status

Port Request Status are used for Port History queries. The following table lists the codes used by LOLM.

CODE
COMPLETED
WITHDRAWN
REJECTED
ACTIVE
EXPIRED
RECEIVED**
NOTIFICATION CONFIRMED**
CUTOVER CONFIRMED**

**** These three codes are stages of the "ACTIVE" status, and will be returned in the LOLM response.**

Port Movement Transaction Codes

Port Movement Transaction codes are used for Port History queries. The following table lists the codes used by LOLM.

CODE
PORT NOTIFICATION
PORT CUTOVER NOTIFICATION
PORT WITHDRAWAL NOTIFICATION
PORT EXPIRY NOTIFICATION
BROADCAST PORT CUTOVER NOTIFICATION
GIVEBACK NOTIFICATION
BROADCAST GIVEBACK NOTIFICATION

Port Reject Codes

Port Reject Codes are used to indicate why a port/churn has been rejected. The following table lists the codes used by LOLM.

CODE	DESCRIPTION
001	Not an MSN
003	MSN not Issued
008	Port in progress
013	MSN not allocated to a Mobile Carrier
014	Recipient Mobile Carrier is the Donor Mobile Carrier
016	MSN not held
017	MSN not associated with Account/Reference Number
020	Data attributes do not conform to Data Definitions
035	Request ID not confirmed and active
038	MSN active on Network
041	Request ID not Active
048	Request ID not valid for Reversal
052	Service is currently with the Gaining Mobile Carrier
058	Accnt/Refrnc Number or Date of Birth not held
059	Port Message Type out of sequence
067	Invalid CA Authorisation Date
070	MSN not associated with Date of Birth
071	MSN not associated with Previous Request ID
077	Request ID not unique
078	MSN not Ported
079	Incorrect Destination Party
080	Port Reversal is greater than six months

Bulletin Board Codes

Bulletin Board codes are used when interpreting Bulletin Board messages via the Bulletin Board menu item. The following table lists the codes used in LOLM.

TYPE	CODE	DESCRIPTION
Category	ALL	All
	MEM	Memo
	SO	System Outage
	NO	Network Outage
	UPD	Updates
Priority	L	Low
	M	Medium
	H	High

Attachment 2 – LOLM Error Messages

ERROR MESSAGE	ACTION THAT CAUSED ERROR
A PIN barring password is required.	Create Service
A Port/Churn is already in progress for this service.	Port Notification
A SIM is required.	Create Service
A concurrent update has been attempted. Please cancel the operation and retry.	
Adjustment not found.	Monitor Potential Fault Investigation
An MSN or SIM is required.	Query MSN Status
An error has occurred because network settings were added when the service was created. Please employ the two step process to progress.	Query Service, Modify Service
An error has occurred in Telstra's Mobile Management System.	A generic error message. Contact WCTA for further investigation
An input value exceeds its limits.	Create Service
An invalid action has been attempted.	
Cannot reactivate, service must be a primary service.	Reactivate Service
Cannot update service when status is "CL" "DE" or "RN".	
Clearance must be obsoleted before changes can be made.	Create/Modify Potential Fault Investigation
Concurrent action on service in progress. Please re-commence this action again in 30 seconds.	Reactivate Service Temporary Suspend/Disconnect Service
DE can not occur due to pending MNP event type = 'POC' or 'PCC'.	Deactivate Service
Deactivated GSM Service must be manually released and then recreated, with a new SIM, as service has remained deactivated for more than 30 days.	Reactivate Service
Deadline for Resolution of the fault has elapsed.	Create/Modify Potential Fault Investigation
Dealer Premises not found.	Create Service
A product can not be deleted as the dependent product <PRODUCT_CODE> must also be deleted.	Modify Service
MSA not found.	Create Service Query MSN Availability Reactivate Service
MSN associated to the SIM is in Quarantine.	Replace GSM SIM Validate ESN/SIM
MSN is already active.	Create Service
MSN is not available for use.	Create Service
Messagebank service not found.	
Must enter password if any call barring features set.	Modify Service
Network type does not support Service ID.	
Network types do not match.	Change MSN Create Service
Please resubmit product details.	
Product not available for SP.	Modify Service
Primary Mobile NR does not match Supply Mobile NR	Incorrect SIM. SIM cannot be re-used
Reason Code is not valid for entered status.	Modify Handset
Response timeout.	A generic error message. Contact WCTA for

ERROR MESSAGE	ACTION THAT CAUSED ERROR
	further investigation
Service ID Pool Allocation priority not found.	Create Service
Service ID movement message exists.	
SIM cannot be reused.	Validate SIM
SIM not found.	Validate SIM
SIM not reusable. MSNs do not match.	Validate SIM
SIM not found.	Create Service
The <PRODUCT_CODE2> can not be provisioned on activation. Modify products after activation.	Create Service
The account service status must be Active or Temporarily Suspended.	Change MSN Deactivate Service Temporary Suspend/Disconnect Service
The Account Service Status must be Pending.	
The allocated MSN already exists.	
The dependent product <PRODUCT_CODE> must be selected.	Modify Service
The MSN cannot have any outstanding network requests to Cancel.	Deactivate Service
The MSN status is not available.	Query MSN Availability
The network product is already provisioned.	Modify Service
The new MSN must be HELD.	Change MSN
The port movement process was not completed.	Create Service
The product <PRODUCT_CODE> has a mutually exclusive relationship with other products selected.	Create Service Modify Service
The Product has been withdrawn on the requested date.	Modify Service
The reseller does not support this network type.	Query MSN Availability
The selected product features are not compatible.	Modify Service
The service status reason must be TDPP.	Temporary Suspend/Disconnect Service
The specified account service product features already exist.	
The specified network characteristic values are not permitted.	
The specified service status reason was not found.	Deactivate Service Reactivate Service Temporary Suspend/Disconnect Service
The specified user was not found.	
This MSN is already on hold.	Query MSN Availability
This SIM is already in use.	
This is not a valid Account.	
This is not a valid SIM.	
This is not a valid Issue Type.	Monitor Potential Fault Investigation
This is not a valid MSN.	Query MSN Availability
This is not a valid Mobile Service Area home location register.	
This is not a valid Mobile Service Area.	Modify Service
This is not a valid Port/Churn.	
This is not a valid port request ID.	Port Cutover Notification Port Notification Withdrawal Notification
This service is not in the correct state to complete the Port/Churn.	Create Service
Too many matches returned. Please refine your	

ERROR MESSAGE	ACTION THAT CAUSED ERROR
search.	
Update was unsuccessful. Please attempt modification again.	
Wildcards may only be used as the last character or as a single character in positions 5 to 10 of the search criteria.	Query MSN Availability
You have selected multiple products, which have conflicting network classifications.	Modify Service

Attachment 3 – Registration & Enrolment

Overview

Introduction

Service Provider staff members need to have an understanding of the LOLM Registration and Enrolment (R&E) process including how to set up access to LinxOnline Mobiles. This section provides:

- A brief overview of the R&E process.
- An explanation of digital certificates.

What is the Registration and Enrolment Process?

The Registration and Enrolment process:

- Ensures only authorised users can lodge their work requests using LinxOnline Mobiles
- Maximises security by encrypting work requests sent over the Internet.

Service Providers must register for authorisation to use LinxOnline Mobiles.

What are Digital Certificates?

A digital certificate is a means of enhancing security on the Internet. Work requests are encrypted by the Digital Certificate before being sent over the Internet.

The Digital Certificate authenticates the user so that they can access LinxOnline Mobiles. Only users with a valid Digital Certificate can authorise requests. Each Digital Certificate comes with a PIN code for authentication.

What are Primary Digital Certificates?

A Primary Digital Certificate is a piece of software with a PIN code that authenticates Service Provider access to LinxOnline Mobiles.

Each Service Provider will be provided with a Primary Digital Certificate.

What are Secondary Digital Certificates?

A Secondary Digital Certificate is a piece of software that authenticates SP user access to LinxOnline Mobiles. *Every* Service Provider user will require their own Secondary Digital Certificate.

What is the Registration and Enrolment Process?

The Telstra LOLM System Administrator is responsible for coordinating the registration of Service Providers

Following registration, the Telstra LOLM System Administrator will create a Service Provider profile.

The Service Provider LOLM System Administrator will coordinate the creation and download of secondary digital certificates for each Service Provider user.

What are the types of users?

Service Provider users may be assigned to one or more of the following user roles:

- SP LOLM User
- SP Alarm user

Service Provider staff who are assigned to the Alarm user role have the additional access level that displays Porting Alarm data on the bottom right of the LOLM screen.

What is encryption?

To ensure data security between Telstra Wholesale and its customers, Telstra utilises Secure Sockets Layer (SSL) technology. SSL encrypts messages sent between browsers and web servers and is the standard that most secure web sites are built upon today.

In order to encrypt, decrypt and authenticate the data, a key is used. These keys are either 40 bits or 128 bits long and are packaged into a piece of software known as a digital certificate. There are two types of digital certificates. Root Certificates that are installed on the user's browser. Server Certificates which are stored on the Web Server.

Telstra uses a 128-bit key and asymmetric encryption to ensure the highest level of protection is given to our customers' information. Currently, 128-bit encryption is the strongest commercially available encryption tool.

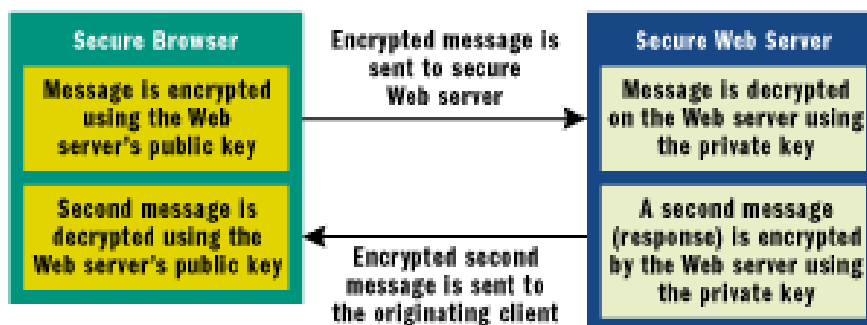
The asymmetric encryption/decryption process works like this:

- The user goes to a secure Web site;
- The user's SSL secured session is started and a unique public key is created by the Server Certificate on the Web server, this public key is transmitted to the user's browser;
- A message is encrypted using the public key and then sent from the browser to the web server.
- The message is received by the Web server and is decrypted using the server's private key.
- Once the session is finished the keys, both public and private are discarded – just to be on the safe side.

The use of two separate keys means that even if the public key is intercepted over the Internet the message cannot be decrypted because the private key is never transmitted over the web.

Diagram of the Encryption process

The following diagram demonstrates the encryption process.



How do you obtain a Root Certificate?

In order to obtain a Root Certificate you need to submit a request to a certificate authority. In Telstra's case the certificate authority is associated to an application known as **Registration and Enrolment** (R&E).

Telstra understands that some of its customers want the ability to be able to create and delete their own certificates instead of having to contact Telstra each time they need a certificate created or revoked. For this reason each customer is provided with a single Primary certificate which has the ability to create, maintain and revoke secondary certificates. Each secondary certificate is a root certificate in its own right and can access any available Telstra Wholesale Online System that the Primary holder allows them to.

Creating Secondary Certificates

Stage 1 – Registration

The Service Provider System Administrator performs this process. It registers the SP user as a Telstra On-Line Channel Client and allows the user to download a digital certificate.

Step	Action
1	Access the URL: Telstra Registration
2	Ensure you select the primary digital certificate when prompted.
3	Your Telstra Online Services Profile screen is displayed.
4	Click on Manage Secondary Users or Create and Manage Secondary Users .
5	The Secondary User Management screen is displayed.
6	Click on Create New User .
7	Enter the details for the new user: • First Name • Last Name • Daytime Phone No • Unique Identifier NB. If the situation arises whereby you are required to re-create a new secondary certificate DO NOT delete the previous entry and re-create them. Go into the user's enrolment details by clicking on their name on the Secondary User Management screen and then click on Create an Additional Certificate in the Secondary User Information screen.
8	Click on Submit .
9	The Create New Secondary User screen is displayed.
10	You will be presented with the details for the Digital Certificate ID and PIN. Make a note of the PIN.
11	Click on OK .

Stage 2 – Download

Either the user or the system administrator/Primary Certificate Holder can perform these steps. In the case of the system administrator downloading the certificate it must be conveyed to the user subsequent to download, this process can be performed by exporting the certificate to either a floppy disk or onto a server to which the intended user has access to.

Step	Action
1	Access the URL: https://register.telstra.com.au/online/reg.html
2	Enter the following details on the Telstra Online Services – Registration Step 3 screen: • Certificate ID (AKA Account Number) • Your PIN • Certificate Name eg: LOLM (and then user's initials)
3	Click on Submit .
4	The Private Key Container pop-up box is displayed, click on Set Security Level .
5	Select the Low radio button then click on Next .
6	Click on Finish .
7	Click on Ok .
8	Enter the following details on the Telstra Online Services – Registration Step 4 screen: • Type Yes in the 'Do you accept the above terms and conditions' field • Daytime Phone Number • Email Address
9	Click on Submit .
10	The VBScript: Credentials Registration pop up box is displayed, click on Ok .
11	If you have more than one certificate installed on your browser the Client Authentication pop up box will be displayed. Select the name of the certificate you are downloading from the list and click on Ok .
12	Enter the following details on the Telstra Online Services – Registration Step 5 screen: • Secret Question • Secret Answer • Your Date of birth OR your drivers license number • Click on Next.

Stage 3 – Enrolment

The System Administrator/Primary Certificate Holder must perform this set of steps. As Telstra Wholesale have a number of Online systems it is necessary for Telstra to know which wholesale systems the user is to be allowed access to. At the end of this process the user will be able to access LOLM successfully.

Step	Action
1	Access the URL: https://shopfront.telstra.com.au/online
2	The Client Authentication pop up box will be displayed. Select your primary certificate and click on Ok .
3	Your Telstra Online Services Profile screen is displayed. Click on Manage Secondary Users or Create and Manage Secondary Users .
4	The Secondary User Management screen is displayed.
5	Click on the hyperlink of the user.
6	The Secondary User Information screen is displayed.
7	Click on Service Enrolments .
8	The Update Service Enrolments screen is displayed.
9	Click on the tick box adjacent to the LOLM User label.
10	Click on the tick box adjacent to the LOLM GSM User label.
11	Click on the tick box adjacent to the LOLM Alarm User label
12	Click on Submit

Revoking Secondary Certificates

Occasionally you will need to revoke a user's secondary digital certificate, either because they are no longer in a role that requires access to LOLM or any other Telstra Wholesale Online system or because they have left your company. The Service Provider System Administrator/Primary Certificate Holder must then perform the following steps.

Step	Action
1	Access the URL: https://shopfront.telstra.com.au/online
2	The Client Authentication pop up box will be displayed. Select your primary certificate and click on Ok .
3	Your Telstra Online Services Profile screen is displayed. Click on Manage Secondary Users or Create and Manage Secondary Users .
4	The Secondary User Management screen is displayed.
5	Click on the hyperlink of the user.
6	The Secondary User Information screen is displayed. Click on the  icon.
7	A pop up box is displayed asking you to confirm the revocation action. Selecting the delete user button will not only revoke the users certificate but also remove their name from the Secondary User Management screen.
8	Click Ok .

Internet Browsers and SSL

Because R&E utilises a 128-bit key only certain newer versions of Internet Explorer and Netscape can successfully function with Registration and Enrolment. The following tables indicate which browsers and versions are compatible with R&E and LOLM.

Internet Explorer

Version Number	Product Name	Compliance
4.40.308	Internet Explorer 1.0 (Plus!)	Unsupported
4.40.520	Internet Explorer 2.0	Unsupported
4.70.1155	Internet Explorer 3.0	Unsupported
4.70.1158	Internet Explorer 3.01	Unsupported
4.70.1300	Internet Explorer 4.0 Platform Preview 1.0 (PP1)	Unsupported
4.71.1008.3	Internet Explorer 4.0 Platform Preview 2.0 (PP2)	Unsupported
4.71.1712.6	Internet Explorer 4.0	Unsupported
4.72.2106.8	Internet Explorer 4.01	Unsupported
4.72.3110.8	Internet Explorer 4.01 Service Pack 1 (SP1)	Unsupported
4.72.3612.1713	Internet Explorer 4.01 Service Pack 2 (SP2)	Unsupported
5.00.0518.10	Internet Explorer 5 Developer Preview (Beta 1)	Unsupported
5.00.0910.1309	Internet Explorer Beta (Beta 2)	Unsupported
5.00.2014.0216	Internet Explorer 5	Compliant
5.00.2314.1003	Internet Explorer 5 (Office 2000)	Compliant
5.00.2614.3500	Internet Explorer 5 (Windows 98 Second Edition)	Compliant
5.00.2516.1900	Internet Explorer 5.01 (Windows 2000 Beta 3, build 5.00.2031)	Unsupported
5.00.2919.800	Internet Explorer 5.01 (Windows 2000 RC1, build 5.00.2072)	Testing Pending
5.00.2919.3800	Internet Explorer 5.01 (Windows 2000 RC2, build 5.00.2128)	Testing Pending
5.00.2919.6307	Internet Explorer 5.01	Compliant
5.00.2920.0000	Internet Explorer 5.01 (Windows 2000, build 5.00.2195)	Testing Pending
5.00.3103.1000	Internet Explorer 5.01 SP1 (Windows 2000)	Testing Pending
5.00.3105.0106	Internet Explorer 5.01 SP1 (Windows 95/98 and Windows NT 4.0)	Compliant
5.00.3314.2101	Internet Explorer 5.01 SP2 (Windows 95/98 and Windows NT 4.0)	Compliant
5.00.3315.1000	Internet Explorer 5.01 SP2 (Windows 2000)	Testing Pending
5.50.3825.1300	Internet Explorer 5.5 Developer Preview (Beta)	Unsupported
5.50.4030.2400	Internet Explorer 5.5 & Internet Tools Beta	Unsupported
5.50.4134.0100	Internet Explorer 5.5 (Windows Me 4.90.3000)	Testing Pending

Version Number	Product Name	Compliance
5.50.4134.0600	Internet Explorer 5.5	Compliant with Minor Issues
5.50.4308.2900	Internet Explorer 5.5 Advanced Security Privacy Beta	Unsupported
5.50.4522.1800	Internet Explorer 5.5 Service Pack 1	Testing Pending
6.00.2462.0000	Internet Explorer 6 Public Preview (Beta)	Unsupported

Netscape

Product Name & Version	Compliance
Navigator 2.01	Unsupported
Navigator 2.02	Unsupported
Navigator Gold 2.02	Unsupported
Navigator 3.0	Unsupported
Navigator Gold 3.0	Unsupported
Navigator 3.01	Unsupported
Navigator Gold 3.01	Unsupported
Navigator Gold 3.01b1	Unsupported
Navigator 3.02	Unsupported
Navigator Gold 3.02	Unsupported
Navigator 3.03	Unsupported
Navigator Gold 3.03	Unsupported
Navigator 3.04	Unsupported
Navigator Gold 3.04	Unsupported
Communicator 4.03	Unsupported
Navigator 4.03	Compliant with minor issues
Communicator 4.04	Unsupported
Navigator 4.04	Compliant with minor issues
Communicator 4.05	Unsupported
Navigator 4.05	Unsupported
Communicator 4.06	Unsupported
Navigator 4.06	Unsupported
Communicator 4.07	Unsupported
Navigator 4.07	Unsupported
Communicator 4.08	Compliant with minor issues
Navigator 4.08	Unsupported
Communicator 4.5	Unsupported
Communicator 4.51	Compliant with minor issues

Product Name & Version	Compliance
Navigator 4.51	Unsupported
Communicator 4.6	Unsupported
Communicator 4.61	Compliant with minor issues
Communicator 4.7	Compliant with minor issues
Communicator 4.7 (UK)	Unsupported
Communicator 4.72	Compliant with minor issues
Communicator 4.73	Compliant with minor issues
Communicator 4.74	Compliant with minor issues
Communicator 4.75	Compliant with minor issues
Communicator 6.0	Testing Pending
Communicator 6.01	Testing Pending

What do the compliance statements mean?

Compliant: Indicates the browser meets Telstra's requirements. The Browser may require a prerequisite patch.

Compliant with minor issues: Indicates the browser largely meets Telstra's requirements. There are some "minor" outstanding issues that have no fix but may be "worked around".

Testing Pending: Indicates that the browser is still undergoing testing by Telstra for compliance or is yet to be tested. Telstra will not guarantee normal functionality on this browser.

Unsupported: The browser is not supported either because it does not meet Telstra's requirements or because Telstra cannot guarantee compatibility with R&E or LOLO.

What about earlier versions of Internet Explorer?

Some of the earlier versions of Internet Explorer will require specific patches in order to allow 128-bit encryption.

To ensure the proper operation of R&E and SSL sessions the following settings should be in place on each operator's browser and operating system. In some cases where desktop policies are restrictive it may be necessary for IT system administrators to change certain settings for their users. If these settings are not in place the proper operation of R&E and LOLM cannot be guaranteed.

Browser Independent Settings

These settings are independent of which browser family you are running, Netscape or Internet Explorer

Active Desktop needs to be disabled

Some components of an active desktop may use SSL sessions. If the active desktop setting is activated this may interfere with the proper operation of Telstra's SSL reliant systems.

How many browsers can be open at a time?

Only have one browser open at a time while conducting transactions in an SSL reliant site (LOLM or R&E).

Some SSL reliant applications will not re-query your browser for the private key if you already have another SSL session already open. This may interfere with the proper operation of Telstra's SSL reliant systems.

Internet Explorer later than 5.01

When running an Internet explorer Browser with a version of 5.01 or higher you need to ensure that your PC has more than 32Mb of RAM, otherwise you will be unable to run browsers in separate processes. As a system administrator you will need to run separate processes in order to create and download secondary certificates successfully.

Browser Settings

As well as ensuring you have the correct browser version, you should also ensure that the browser settings are correct, as shown in the following table.

Setting name	Applicable browsers	Location of setting	Set this to
Launch Browser in a separate process	Internet Explorer 5.0.	Internet Options -> advanced options -> browsing	Enable
Run ActiveX controls and plug-ins	Internet Explorer 5.0, 5.01, 5.01sp1, 5.01sp2, 5.5 & 5.5sp1.	Internet options -> security -> custom -> ActiveX controls and plug-ins	Enable
Script ActiveX controls marked safe for scripting	Internet Explorer 5.0, 5.01, 5.01sp1, 5.01sp2, 5.5 & 5.5sp1.	Internet options -> security -> custom -> ActiveX controls and plug-ins	Enable
Active Scripting	Internet Explorer 5.0, 5.01, 5.01sp1, 5.01sp2, 5.5 & 5.5sp1.	Internet options -> security -> custom -> scripting	Enable
Use HTTP 1.1	Internet Explorer 5.0, 5.01, 5.01sp1, 5.01sp2, 5.5 & 5.5sp1.	Internet options -> advanced options -> HTTP 1.1 settings	Enable
Use SSL 3.0	Internet Explorer 5.0, 5.01, 5.01sp1, 5.01sp2, 5.5 & 5.5sp1.	Internet options -> advanced options -> security	Enable
Warn about invalid site certificates	Internet Explorer 5.0, 5.01, 5.01sp1, 5.01sp2, 5.5 & 5.5sp1.	Internet options -> advanced options -> security	Enable
Enable Javascript	Navigator 4.03, 4.04, Communicator 4.08, 4.51, 4.61, 4.7, 4.72, 4.73, 4.74, 4.75.	Edit -> Preferences -> Advanced	Enable
Certificate to identify you to a web site	Navigator 4.03, 4.04, Communicator 4.08, 4.51, 4.61, 4.7, 4.72, 4.73, 4.74, 4.75.	Tools -> Security Info -> Navigator	Ask every time
Enable SSL (Secure Sockets Layer) v3	Navigator 4.03, 4.04, Communicator 4.08, 4.51, 4.61, 4.7, 4.72, 4.73, 4.74, 4.75.	Tools -> Security Info -> Navigator -> Advanced Security (SSL) Configuration	Enable
RC4 encryption with a 40 bit key and an MD5 MAC	Navigator 4.03, 4.04, Communicator 4.08, 4.51, 4.61, 4.7, 4.72, 4.73, 4.74, 4.75.	Tools -> Security Info -> Navigator -> Advanced Security (SSL) Configuration -> Enable SSL (Secure Sockets Layer) v3	Enable
RC2 encryption with a 40 bit key and an MD5 MAC	Navigator 4.03, 4.04, Communicator 4.08, 4.51, 4.61, 4.7, 4.72, 4.73, 4.74, 4.75.	Tools -> Security Info -> Navigator -> Advanced Security (SSL) Configuration -> Enable SSL (Secure Sockets Layer) v2	Disable
No encryption with an MD5 MAC	Navigator 4.03, 4.04, Communicator 4.08, 4.51, 4.61, 4.7, 4.72, 4.73, 4.74, 4.75.	Tools -> Security Info -> Navigator -> Advanced Security (SSL) Configuration -> Enable SSL (Secure Sockets Layer) v2	Disable

Attachment 4 – Home Region and MSA table

NOTE: Northern Territory = Adelaide HR; Tasmania = Melbourne HR; ACT = Sydney HR

Mobile Service Area	Home Region	Network Type	Description
ADELAIDE	ADE	GSM	ADELAIDE
ALBANY	PER	GSM	PERTH
ALBURY	SYD	GSM	SYDNEY
ALICE SPRINGS	ADE	GSM	ADELAIDE
ARATULA	BRI	GSM	BRISBANE
ARMIDALE	SYD	GSM	SYDNEY
ATHERTON	BRI	GSM	BRISBANE
AYR	BRI	GSM	BRISBANE
BAIRNSDALE	MEL	GSM	MELBOURNE
BALLARAT	MEL	GSM	MELBOURNE
BALRANALD	SYD	GSM	SYDNEY
BAROSSA	ADE	GSM	ADELAIDE
BATEMANS BAY	SYD	GSM	SYDNEY
BEAUDESERT	BRI	GSM	BRISBANE
BEGA	SYD	GSM	SYDNEY
BENDIGO	MEL	GSM	MELBOURNE
BERRI	ADE	GSM	ADELAIDE
BILOELA	BRI	GSM	BRISBANE
BLACKWATER	BRI	GSM	BRISBANE
BOURKE	SYD	GSM	SYDNEY
BOWEN	BRI	GSM	BRISBANE
BRISBANE	BRI	GSM	BRISBANE
BROKEN HILL	ADE	GSM	ADELAIDE
BROOME	PER	GSM	PERTH
BUNBURY	PER	GSM	PERTH
BUNDABERG	BRI	GSM	BRISBANE
BUSSELTON	PER	GSM	PERTH
CAIRNS	BRI	GSM	BRISBANE
CAMPBELLTOWN	SYD	GSM	SYDNEY
CAMPERDOWN	MEL	GSM	MELBOURNE
CANBERRA	SYD	GSM	SYDNEY
CARNARVON	PER	GSM	PERTH

Mobile Service Area	Home Region	Network Type	Description
CEDUNA	ADE	GSM	ADELAIDE
CENTRAL NORTH	MEL	GSM	MELBOURNE
CHARLEVILLE	BRI	GSM	BRISBANE
CHARTERS TOWERS	BRI	GSM	BRISBANE
CHILDERS	BRI	GSM	BRISBANE
CHINCHILLA	BRI	GSM	BRISBANE
CHRISTMAS IS	PER	GSM	PERTH
CLARE	ADE	GSM	ADELAIDE
CLERMONT	BRI	GSM	BRISBANE
CLONCURRY	BRI	GSM	BRISBANE
COBAR	SYD	GSM	SYDNEY
COCOS ISLAND	PER	GSM	PERTH
COFFS	SYD	GSM	SYDNEY
COLAC	MEL	GSM	MELBOURNE
COLLIE	PER	GSM	PERTH
COOBER PEDY	ADE	GSM	ADELAIDE
COOKTOWN	BRI	GSM	BRISBANE
COOMA	SYD	GSM	SYDNEY
COONABARABRAN	SYD	GSM	SYDNEY
COONAMBLE	SYD	GSM	SYDNEY
CORRYONG	MEL	GSM	MELBOURNE
COWRA	SYD	GSM	SYDNEY
CROOKWELL	SYD	GSM	SYDNEY
CUNNAMULLA	BRI	GSM	BRISBANE
DALBY	BRI	GSM	BRISBANE
DARWIN	ADE	GSM	ADELAIDE
DENILQUIN	SYD	GSM	SYDNEY
DERBY	PER	GSM	PERTH
DUBBO/WELLINGTON	SYD	GSM	SYDNEY
EAST TIMOR	PER	GSM	PERTH
ECHUCA	MEL	GSM	MELBOURNE
EILDON	MEL	GSM	MELBOURNE
EMERALD	BRI	GSM	BRISBANE
ESPERANCE	PER	GSM	PERTH
GAYNDAH	BRI	GSM	BRISBANE
GEELONG	MEL	GSM	MELBOURNE
GERALDTON	PER	GSM	PERTH

Mobile Service Area	Home Region	Network Type	Description
GINGIN	PER	GSM	PERTH
GLADSTONE	BRI	GSM	BRISBANE
GLEN INNES	SYD	GSM	SYDNEY
GOLD COAST	BRI	GSM	BRISBANE
GOONDIWINDI	BRI	GSM	BRISBANE
GOSFORD	SYD	GSM	SYDNEY
GOULBURN	SYD	GSM	SYDNEY
GRAFTON	SYD	GSM	SYDNEY
GRIFFITH	SYD	GSM	SYDNEY
GUNDAGAI	SYD	GSM	SYDNEY
GYMPIE	BRI	GSM	BRISBANE
HAMILTON	MEL	GSM	MELBOURNE
HAY	SYD	GSM	SYDNEY
HEALESVILLE	MEL	GSM	MELBOURNE
HEDLAND	PER	GSM	PERTH
HOBART	MEL	GSM	MELBOURNE
HORSHAM	MEL	GSM	MELBOURNE
INGHAM	BRI	GSM	BRISBANE
INGLEWOOD	BRI	GSM	BRISBANE
INNISFAIL	BRI	GSM	BRISBANE
INVERELL	SYD	GSM	SYDNEY
IRON TRIANGLE	ADE	GSM	ADELAIDE
JABIRU	ADE	GSM	ADELAIDE
JERILDERIE	SYD	GSM	SYDNEY
KADINA	ADE	GSM	ADELAIDE
KALGOORLIE	PER	GSM	PERTH
KAMBALDA	PER	GSM	PERTH
KARRATHA	PER	GSM	PERTH
KATANNING	PER	GSM	PERTH
KATHERINE	ADE	GSM	ADELAIDE
KATOOMBA	SYD	GSM	SYDNEY
KEITH	ADE	GSM	ADELAIDE
KEMPSEY	SYD	GSM	SYDNEY
KERANG	MEL	GSM	MELBOURNE
KINGAROY	BRI	GSM	BRISBANE
KUNUNURRA	PER	GSM	PERTH
LAMEROO	ADE	GSM	ADELAIDE

Mobile Service Area	Home Region	Network Type	Description
LANCELIN	PER	GSM	PERTH
LAUNCESTON	MEL	GSM	MELBOURNE
LIGHTNING RIDGE	SYD	GSM	SYDNEY
LISMORE	SYD	GSM	SYDNEY
LITHGOW/BATHURST	SYD	GSM	SYDNEY
LONGREACH	BRI	GSM	BRISBANE
LOWOOD	BRI	GSM	BRISBANE
MACKAY	BRI	GSM	BRISBANE
MANDURAH	PER	GSM	PERTH
MANJIMUP	PER	GSM	PERTH
MARGARET RIVER	PER	GSM	PERTH
MARYBOROUGH	BRI	GSM	BRISBANE
MELBOURNE	MEL	GSM	MELBOURNE
MENINDEE	SYD	GSM	SYDNEY
MERREDIN	PER	GSM	PERTH
MIDLANDS	PER	GSM	PERTH
MILDURA	MEL	GSM	MELBOURNE
MILES	BRI	GSM	BRISBANE
MILLMERRAN	BRI	GSM	BRISBANE
MITTAGONG	SYD	GSM	SYDNEY
MONTO	BRI	GSM	BRISBANE
MORANBAH	BRI	GSM	BRISBANE
MOREE	SYD	GSM	SYDNEY
MORNINGTON PENINSULA	MEL	GSM	MELBOURNE
MORWELL	MEL	GSM	MELBOURNE
MOUNT ISA	BRI	GSM	BRISBANE
MT GAMBIER	ADE	GSM	ADELAIDE
MUDGEE	SYD	GSM	SYDNEY
MURCHISON	PER	GSM	PERTH
MURGON	BRI	GSM	BRISBANE
MURRAY BRIDGE	ADE	GSM	ADELAIDE
MURWILLUMBAH	SYD	GSM	SYDNEY
MUSWELLBROOK	SYD	GSM	SYDNEY
NARACOORTE	ADE	GSM	ADELAIDE
NARRABRI	SYD	GSM	SYDNEY
NARRANDERA	SYD	GSM	SYDNEY
NARROGIN	PER	GSM	PERTH

Mobile Service Area	Home Region	Network Type	Description
NEWCASTLE	SYD	GSM	SYDNEY
NEWMAN	PER	GSM	PERTH
NHULUNBUY	ADE	GSM	ADELAIDE
NORSEMAN	PER	GSM	PERTH
NORTH EAST	MEL	GSM	MELBOURNE
NORTH WEST	MEL	GSM	MELBOURNE
NORTHAM	PER	GSM	PERTH
NOWRA	SYD	GSM	SYDNEY
NYNGAN	SYD	GSM	SYDNEY
ORANGE	SYD	GSM	SYDNEY
ORBOST	MEL	GSM	MELBOURNE
OUSE	MEL	GSM	MELBOURNE
PARKES	SYD	GSM	SYDNEY
PENRITH	SYD	GSM	SYDNEY
PERTH	PER	GSM	PERTH
PORT DOUGLAS	BRI	GSM	BRISBANE
PORT LINCOLN	ADE	GSM	ADELAIDE
PORT MACQUARIE	SYD	GSM	SYDNEY
PORTLAND	MEL	GSM	MELBOURNE
PYRENEES	MEL	GSM	MELBOURNE
QUEENSTOWN	MEL	GSM	MELBOURNE
ROCKHAMPTON	BRI	GSM	BRISBANE
ROMA	BRI	GSM	BRISBANE
ROXBY DOWNS	ADE	GSM	ADELAIDE
SALE	MEL	GSM	MELBOURNE
SEYMOUR	MEL	GSM	MELBOURNE
SHEPPARTON	MEL	GSM	MELBOURNE
SINGLETON	SYD	GSM	SYDNEY
SMITHTON	MEL	GSM	MELBOURNE
SNOWFIELDS	MEL	GSM	MELBOURNE
SOUTH GIPPSLAND	MEL	GSM	MELBOURNE
ST ARNAUD	MEL	GSM	MELBOURNE
ST GEORGE	BRI	GSM	BRISBANE
ST LAWRENCE	BRI	GSM	BRISBANE
STAWELL	MEL	GSM	MELBOURNE
STH MIDLAND HWY	MEL	GSM	MELBOURNE
SUNSHINE COAST	BRI	GSM	BRISBANE

Mobile Service Area	Home Region	Network Type	Description
SWAN HILL	MEL	GSM	MELBOURNE
SYDNEY	SYD	GSM	SYDNEY
TAMWORTH	SYD	GSM	SYDNEY
TAREE	SYD	GSM	SYDNEY
TENNANT CREEK	ADE	GSM	ADELAIDE
TOM PRICE	PER	GSM	PERTH
TOOGOOLAWAH	BRI	GSM	BRISBANE
TOOWOOMBA	BRI	GSM	BRISBANE
TOWNSVILLE	BRI	GSM	BRISBANE
TULLY	BRI	GSM	BRISBANE
VICTOR HARBOR	ADE	GSM	ADELAIDE
WAGGA WAGGA	SYD	GSM	SYDNEY
WAGIN	PER	GSM	PERTH
WAIKERIE	ADE	GSM	ADELAIDE
WANGARATTA	MEL	GSM	MELBOURNE
WARRAGUL	MEL	GSM	MELBOURNE
WARRNAMBOOL	MEL	GSM	MELBOURNE
WARWICK	BRI	GSM	BRISBANE
WHITSUNDAYS	BRI	GSM	BRISBANE
WHYALLA	ADE	GSM	ADELAIDE
WINDSOR	SYD	GSM	SYDNEY
WOLLONGONG	SYD	GSM	SYDNEY
WOODEND	MEL	GSM	MELBOURNE
WOOMERA	ADE	GSM	ADELAIDE
WYALONG	SYD	GSM	SYDNEY
YASS	MEL	GSM	MELBOURNE
YORKE PENINSULA	ADE	GSM	ADELAIDE
YOUNG	SYD	GSM	SYDNEY

BOLD TYPE signifies a non alignment of state location of MSA and Home Region

Attachment 4 – REPORTING FAULTS – Information checklist

FAULT DESCRIPTION	INFORMATION REQUIRED	WHY THIS INFORMATION IS IMPORTANT
COVERAGE / INTERFERENCE / CALLS DROP OUT / BROKEN SPEECH COMPLAINTS/GPRS	Location, Street names, map reference if possible	To determine what Radio Base Station (RBS) might service the area.
	Signal strength if possible	To determine if the problem is on the uplink (Phone to RBS) or downlink (RBS to Phone)
	When did it start happening; how long?	To determine if it is related to a change Telstra have made
	Date and time of occurrence	Enables check of RBS stats at that time.
	Symptom	Exact description of the problem.
	Handset make and model. Is it dual band?	To isolate if a particular model has a problem
RVA (Recorded Voice Announcement)	Exact RVA and trailer	Trailer/RVA indicates where the call failed and why.
	Location, Street names, map reference if possible	To determine what RBS' might service the area. Different RBSs use different data.
	A (calling party) & B (called party) numbers	Enables simulation of the same call
	Date & Time of occurrence	Enables check of call logs
	Do any calls work? eg. were other numbers tried	To determine if its related to a number range or network product
	Is it intermittent?	May involve testing multiple routes/switches.
	Symptom	Exact description of the problem
	No outgoing call - ask customer to dial 12722123 to check number	Determine if the phone is transmitting the correct info.

FAULT DESCRIPTION	INFORMATION REQUIRED	WHY THIS INFORMATION IS IMPORTANT
VOICEMAIL	Date and Time of occurrence Symptom Type of notification if relevant	Enables check of call logs Exact description of the problem To determine what system to check
SMS	Date and time of occurrence Mobile phone make & model A (calling party) & B (called party) numbers	Enables check of call logs To isolate if a particular model has a problem Enables check of both parties
ONE WAY SPEECH	Location: Street names, Map reference if possible A & B party numbers Is it intermittent? Date & Time of occurrence	To determine what RBSs/Echo cancellers service the area Enables call simulation If yes, enables test of multiple routes / switches / echo cancellers Enables check of call logs