



ZOAK
SOLUTIONS

ACMA Numbering Business Rules

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Classification

Public

Introduction

In 2014, ZOAK Solutions was awarded by the Australian Communication and Media Authority (ACMA) a seven-year contract to be the new national numbering provider. ZOAK Solutions has a delegation from ACMA and has built and managed the technology for Australia's register of telephone numbers.

Housed on one of Australia's leading private cloud platforms operated by ZOAK Solutions, the new Numbering system delivers a more streamlined service to numbering clients, introduces more automated transactions and provides greater interoperability. ZOAK Solutions also provides agile and continuous development processes to take account of any future regulatory or legislative changes, an element which is of great importance to the ACMA.

This new solution has rationalized three existing systems "NUMB", "INMS" and "smartnumber auction" and has delivered all the delegated functions defined in *Telecommunications Numbering Plan 2015*.

Purpose

This business rule document provides the details about the Numbering system and the processes and the methodology used to provide each of the Numbering services.

This document acts as the one true source of the rules which the Numbering system follows and will be maintained and updated during each major release of the software.

This business rules document provides background and context of the solution and encompasses the following areas:

- The Business rules for the administration and allocation of telephone numbers
- The types of numbers that are for use in connection with carriage services for example: Freephone, Local Rate, Premium rate numbers, Geographic, Mobile and Other types of numbers
- Rules about the allocation of the different number types
- Transfer, surrender and withdrawal of numbers using the Numbering system
- Providing public register for all numbers and Enhanced rights of use

- The ACMA's responsibility for the determination and collection of charges payable under the *Telecommunications (Numbering Charges) Act 1997* and the *Australian Communications and Media Authority Act 2005*

Scope

For the purpose of this business rule document the overall solution is broken down to feature level to suit different user groups and different Number types.

Each of the features will be explained in detail in the document with help of process diagrams and corresponding business rules.

1. Account management
2. Freephone, Local rate and Premium rate numbers (FLRPRN)
3. Smartnumbers
4. Finance
5. Mobile numbers
6. Geographic numbers
7. Other numbers
8. Number planning
9. Register of Numbers
10. Annual numbering charge (ANC)

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1 Account management

Each individual or organisation requires an account to access to the Numbering system. The Numbering system will provide the following account type:

Carriage service provider (CSP) – A person or organisation is a carriage service provider if they meet the definition in section 87 of the Telecommunications Act 1997, which generally requires the person to supply or propose to supply telecommunication services to the public.

A CSP can use the Numbering system to:

- Submit applications for the allocations and surrender of the numbers
- View and pay invoices
- Propose of accept transfer of numbers to or from other CSPs
- Access to public registers
- By registering as CSP will provide the permission to do all actions related to smartnumbers

Smartnumber client – A person or organisation who is not a CSP and wants to buy a smartnumber needs to register as smartnumber user in the Numbering system.

A smartnumber user can use the Numbering system to:

- Buy smartnumbers
- Trade enhanced rights of use of smartnumbers
- Return smartnumbers
- Access the public registers

Registered inquirers – A person or organization who is neither a CSP nor a smartnumber user but wants to receive emails from the ACMA alerting them to certain changes to numbers can register themselves as registered inquirer. These alerts are infrequent and include releasing a new number prefix for use (e.g. 05xx when the existing 04xx mobile numbers are exhausted). Anyone can become a Registered Inquirer and there is no charge.

ACMA users – A group of ACMA users need access to the system to perform the regulatory actions like:

- Withdrawal of numbers
- Regulator transfer
- Special allocation audit
- Access to banking report

ZOAK users – A group of people from ZOAK will need access to the system so that they can respond to any query from the users in a timely manner. ZOAK users will use the system to perform:

- Upload bank statements
- Access the refund reports and unmatched reports
- Create users on behalf of client accounts
- Reset passwords, etc.

1.1 Apply for a CSP account

This process explains the steps and the validation rules associated with creation of a CSP account.

Note that process diagrams throughout this section have a few activities and those activities are explained with business rules in the table following each diagram.

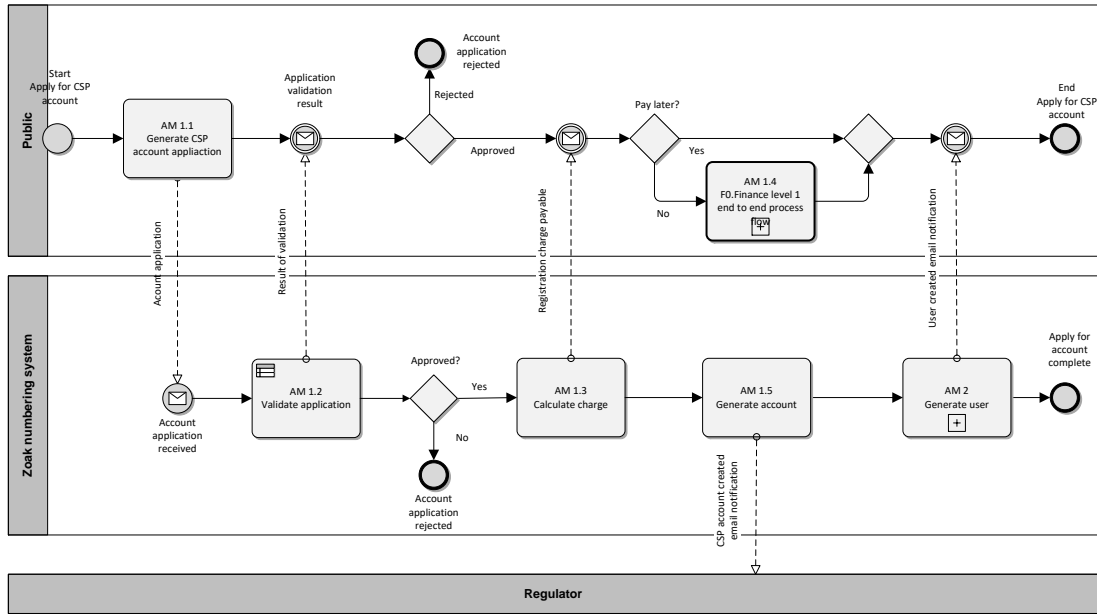


Figure 1.1: Apply for CSP account

Activity name	Business rules
Generate CSP account application	<p>The following information is collected from the applicant:</p> <ul style="list-style-type: none"> ▪ Industry Type <ul style="list-style-type: none"> ▫ Commonwealth Department, Other Commonwealth Agency, State Government, Local Government, Company, Community or Volunteer Group, Person, Partnership or Trust, Sole Trader, Other Entity. ▪ Industry Classification: <ul style="list-style-type: none"> ▫ Accounting, Administration, Advert/Media/Entertainment, Banking & Finance. Services, Call Centre/Customer Service, Community & Sport, Construction, Consulting & Corp. Strategy, Education & Training, Engineering, Government/Defence, HealthCare & Medical, Hospitality & Tourism, HR & Recruitment, IT & T, Insurance & Superannuation, Legal, Manufacturing/Operations, Mining, Oil & Gas, Primary Industry, Real Estate & Property, Retail & Consumer Prods, Sales & marketing, Science & Technology, Self-Employment, Trades & Services, Transport & logistics, Other ▪ ABN ▪ ACN/ARBN ▪ Entity name (read-only, populated from the ABR lookup using the supplied ABN) ▪ Trading name (read-only, populated from the ABR lookup using the supplied ABN) ▪ CA EPID MNP 4-digit code – CA EPID PSD 3 alpha-character code – Business (physical) address is comprised of: <ul style="list-style-type: none"> ▫ Street number, name, type ▫ Suburb ▫ State

	<ul style="list-style-type: none"> ▫ Postcode ▫ Country (default to AU) ▪ Postal address: <ul style="list-style-type: none"> ▫ Street Address (consisting of Street number, name, type OR Postal delivery type, delivery number (e.g., PO Box 123)) ▫ Suburb ▫ State ▫ Postcode ▫ Country (defaults to AU)
<p>Validate application</p>	<p>The following mandatory information has been provided:</p> <ul style="list-style-type: none"> ▪ ABN (mandatory of all industry types except for individual, sole traders, community and volunteer groups) ▪ Business and postal addresses ▪ The following user information is required: <ul style="list-style-type: none"> ▫ First name ▫ Surname ▫ Primary contact phone number (can be geographic or mobile) ▫ Email address ▫ Secret Question ▫ Secret Answer <p>The following validations occur: (Depending on the industry type either ABN or ACN or both are required)</p> <ul style="list-style-type: none"> ▪ At least one of ABN or ACN is mandatory: <ul style="list-style-type: none"> ▫ Company ▪ Both ABN and ACN are optional: <ul style="list-style-type: none"> ▫ Personal ▫ Sole trade ▪ ABN is mandatory: <ul style="list-style-type: none"> ▫ Commonwealth Department ▫ Other Commonwealth Agency ▫ State government ▫ Local government ▫ Partnership or trust ▫ Other entity ▫ Community or Volunteer Group ▪ Companies must provide either a valid ABN (confirmed via lookup to the ABR) or an ACN. ▪ There is a check digit verification (http://asic.gov.au/for-business/starting-a-company/how-to-start-a-company/australian-company-numbers/australian-company-number-digit-check) that could be performed on an ACN to verify the entered numbers forms a valid ACN ▪ When an ACN is entered and a lookup is performed against the Australian Business Register (ABR). If results are found, ABN, ACN, entity and trading names are updated with the results from the ABR as per current behaviour. ▪ When an ACN is entered and no results are returned, no changes to ABN, ACN, entity and trading names are made. We will assume the provided ACN is correct. The user will need to enter an entity name (mandatory) and a trading name (optional). ▪ When ABN and ACN are entered and a lookup is performed against the ABR using the ABN, if results are found, ABN, ACN, entity and trading names are updated with the results from the ABR. ▪ The supplied ABN and ACN must identify the same business entity, verified from the ABR. ▪ Verify the provided business and postal addresses are valid addresses (Refer address validation in 'Number Planning <p>Number planning is the specification and assignment of numbers and establishes the</p>

relationships between service types, number definitions, prefixes, standard zone units and numbers.

Prefix definitions are maintained through the number planning functions within the Numbering system. As changes to prefix definitions are infrequent the number planning functions have been scaled back to provide minimal features to support update, release and withdraw prefix definitions as well as to support adding and removing SZUs from local service prefixes.

The major differences between the NUMB and the Numbering system are summarised below:

- No hierarchical relationship between prefix definitions or service type definitions is maintained. Updating a parent prefix definition or service type definition will not cascade down to the child prefixes.
- When assigning a service type to a prefix definition the service types definition are used as a template to assign initial values to the prefix definition.
- Prefix definitions can be updated provided the prefix has not been released. The exception to this rule is the 'Annual numbering charge applies' attribute can be updated at any time.
- When a prefix definition is released the Numbering system determines whether there is sufficient space within the Register of Numbers:
 - No overlapping number ranges can exist.
 - At least one allocation of the standard unit size can be made.
- A prefix can be withdrawn when the entire number range is spare.

1.2 Update Service Type

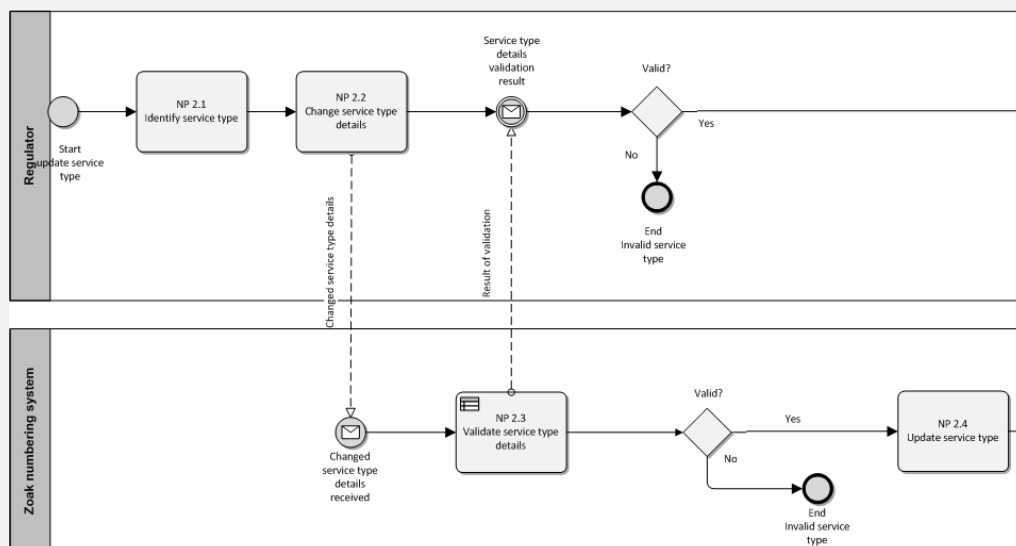


Figure 5.1: Update service type

Activity name	Business rules
Identify service type	Find a service type to modify.

Change service type details	The following attributes of a service type can be modified: <ul style="list-style-type: none"> Geographical service – set to Y if service type is local service, otherwise set to N Number length (mandatory) integer 4 to 15 Standard unit size (mandatory) – one of 1, 10, 100, 1000, 10000, 100000 Reduced unit size – mandatory for geographical and mobile service type Annual numbering charge applies – Y/N (mandatory)
Validate service type details	The following validations are applied: <ul style="list-style-type: none"> A service type can only be created by a Regulator account user that has been granted the number planning role. All mandatory fields are supplied. Reduced unit size is required only for geographic service types. The value provided must be less than the standard unit size.
Update service types	The service type is updated in the Numbering system with the supplied values. Updating a service type will not alter any prefix definitions or allocations associated with the service type.

1.3 Update Prefix

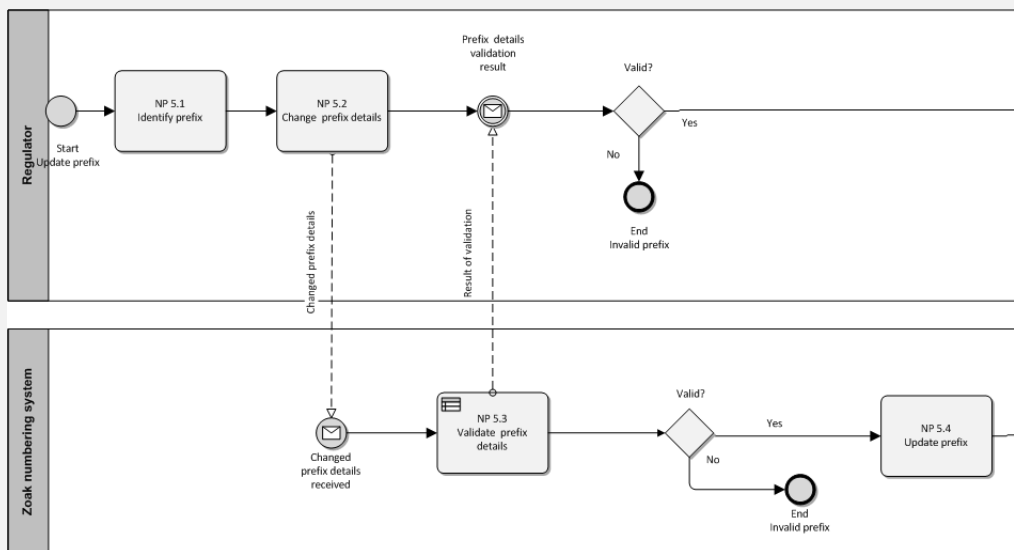


Figure 5.2: Update prefix

Activity name	Business rules
Identify prefix	Find a prefix to modify.
Change prefix details	The following attributes can be modified based on the prefix's status: <ul style="list-style-type: none"> "Not released" status <ul style="list-style-type: none"> Service type Number length Standard unit size Reduced unit size (geographic service types only) Annual numbering charge applies "Released" status <ul style="list-style-type: none"> Annual numbering charge applies <p>The following metrics are to be reported for each prefix:</p> <ul style="list-style-type: none"> Quantity (total quantity numbers released)

	<ul style="list-style-type: none"> ▪ Spare ▪ Allocated <p>The totals will include child prefixes i.e., 03 includes 0388 etc.</p> <p>NOTES: Standard unit sizes are unlikely to change in the future. This change will require an update to the Numbering plan. The ACMA will raise a change request as existing allocations using the previous standard unit size will need to be supported.</p>	
<p>Validate prefix details</p>	<p>The following validations are applied:</p> <ul style="list-style-type: none"> ▪ Standard Unit Size – one of 1, 10, 100, 1000, 10000, 100000. ▪ The number range must have enough available numbers to satisfy the of the standard unit size (see below). ▪ Reduced unit size is required only for local (geographic) service types. provided must be less than the standard unit size. ▪ Annual numbering charge applies (Y/N) (mandatory). <p>Number range</p> <p>The following rules are applied to calculate the number range based on the er number length:</p> <ul style="list-style-type: none"> ▪ The start of the range is the prefix followed by one or more zeros to p number out to its number length. ▪ The end of the range is the prefix followed by one or more nines to pa number out to its number length. ▪ For example, prefix 0388 has a number length of 10. Therefore, the nu for prefix 0388 is 0388 000000 to 0388 999999. <p>Within a prefix definition, number ranges are permitted to overlap, thus supp parent-child relationship where smaller child prefix’s number ranges can exist parent's prefix’s number range. For example, see the prefix definition for inco international service "12" and operator service "124" and "125" as well as Reg Numbers, to demonstrate how the parent prefixes number ranges fills the nu outside the child prefixes number ranges.</p>	
<p>Update prefix</p>	<ul style="list-style-type: none"> ▪ The prefix is updated within the Numbering system. ▪ The status of the prefix is not altered. 	
<h2>1.4 Release Prefix</h2>		

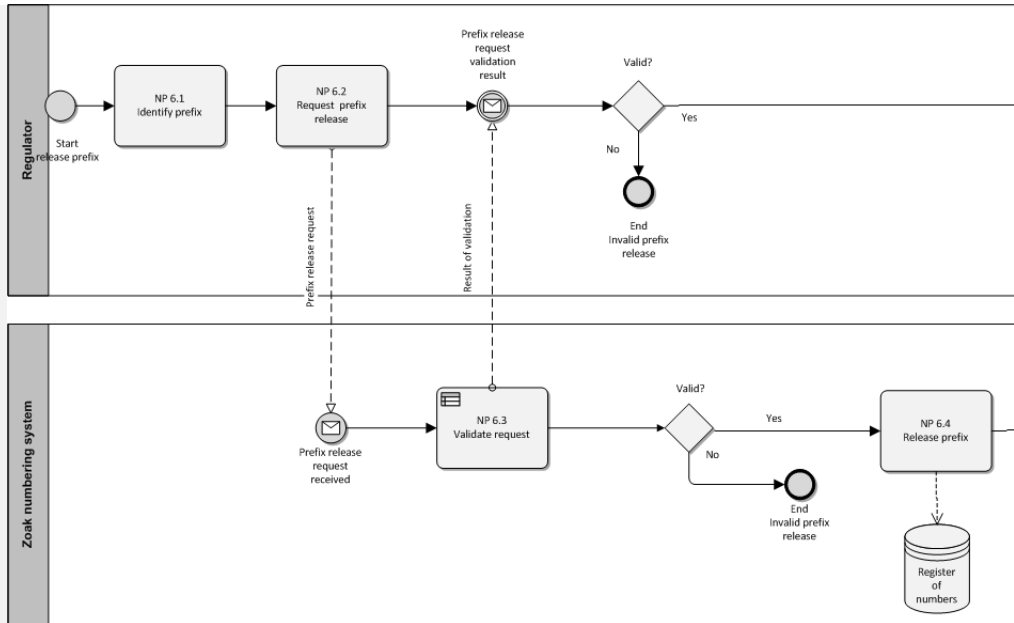


Figure 5.3: Release prefix

Activity name	Business rules
Identify prefix	Find/list the prefix to release.
Request prefix release	Request the selected prefix be released for allocation.
Validate request	<p>To release a prefix the following criteria needs to be satisfied:</p> <ul style="list-style-type: none"> A prefix can only be released by a Regulator account user that has been the Number planning role. Status of the prefix is "Not released". For a geographical service type, at least one SZU is assigned to the prefix. The number range contained in the prefix definition can be created in the Register of Numbers according to the number range rules below. <p>Number ranges rules</p> <ul style="list-style-type: none"> For a prefix that is a parent prefix: <ul style="list-style-type: none"> The prefix's number range completely contains any child prefixes number ranges (eg can't split a child prefix number range in half). Parent prefix number ranges are created (interleaved) around the child number ranges. For each parent prefix number range the created number ranges cover at least a single stand unit size allocation. Number range must be spare. For prefix that is child prefix: <ul style="list-style-type: none"> Fully contained within the parent prefixes number range. Numbers must be spare. <p>NOTES: Prefixes at the same level in the hierarchy cannot have overlapping number ranges. Although prefix definitions overlap the Register of Numbers interprets the definitions to determine number ranges available for allocation, ensuring no number ranges overlap.</p> <p>Parent prefixes numbers are made available in the number ranges not used by child prefixes. For example, examine the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers to demonstrate how the parent prefixes number ranges fills the number ranges not used by child prefixes number ranges.</p>

Release prefix	<p>The prefix is released in the Numbering system and the following occurs:</p> <ul style="list-style-type: none"> ▪ The status of the prefix is set to "Released". ▪ The prefix is added to the Register of Numbers. ▪ The released prefix number range(s) is marked as spare in the Register of Numbers. ▪ The released prefix number range(s) is available for allocation through the applicable allocation process. 	
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1.5 Withdraw Prefix

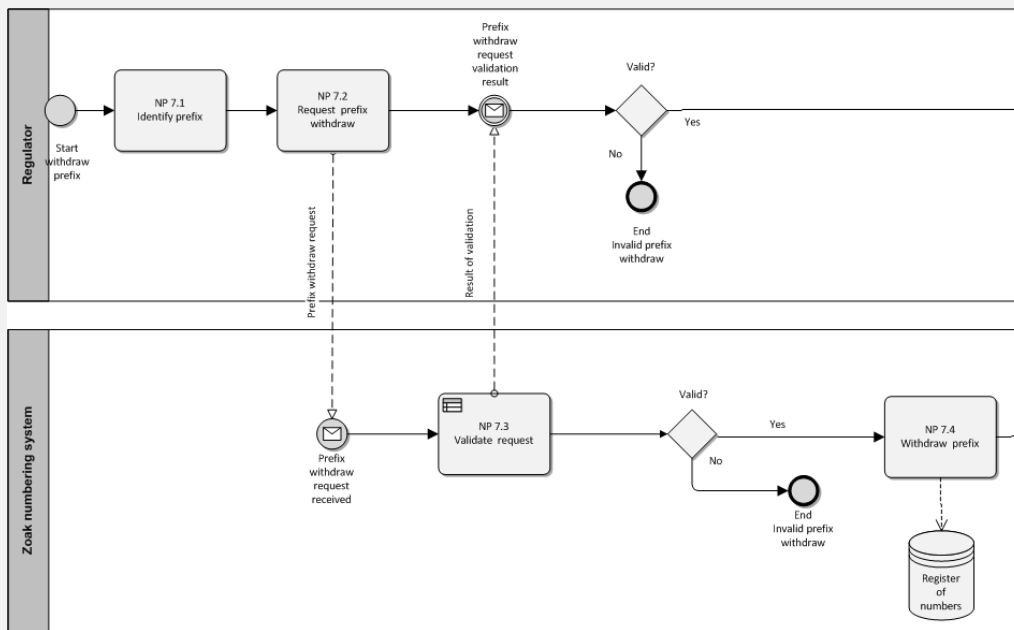


Figure 5.4: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a released prefix to withdraw
Request prefix withdraw	Select the released prefix to be withdrawn.
Validate request	<p>A released prefix can be withdrawn when the following criteria is satisfied:</p> <ul style="list-style-type: none"> ▪ A prefix can be withdrawn by a Regulator account user that has been assigned a Number planning role. ▪ All numbers for the prefix are spare. ▪ Status of the prefix is "Released".
Withdraw prefix	<p>The released prefix is withdrawn and the following occurs:</p> <ul style="list-style-type: none"> ▪ The status of the prefix is set to "Not released". ▪ The prefix number range is removed from the Register of Numbers. ▪ The withdrawn prefix number range is not shown in the Register of Numbers. ▪ The withdrawn prefix number range is not available for allocation through the applicable allocation process.

1.6 Add SZU to a Local Service Prefix

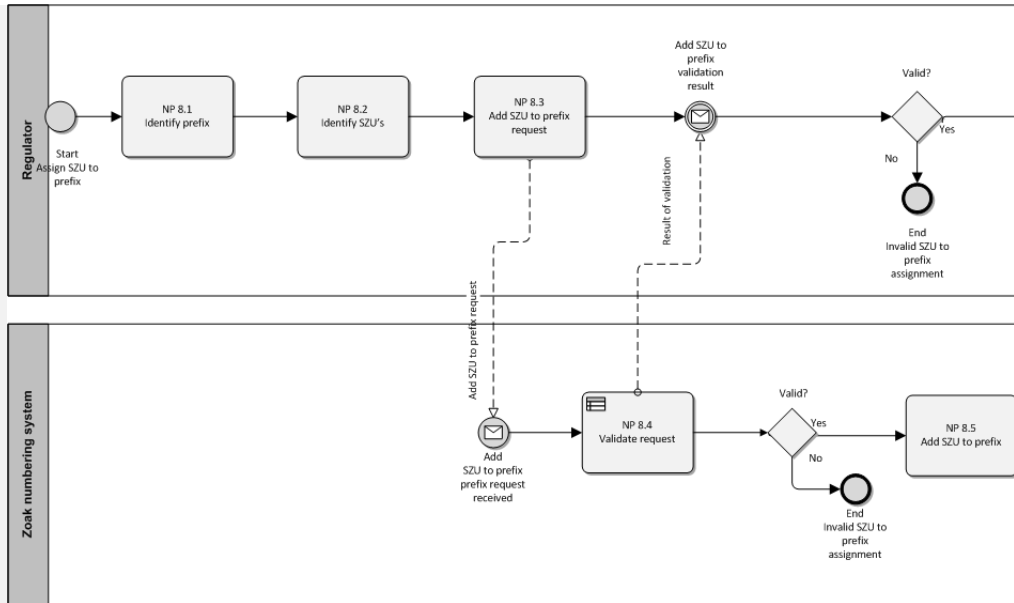


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to add SZUs.
Identify SZUs	Find an SZU to add to the selected prefix.
Add SZU to prefix request	Add one or more selected SZUs to the selected prefix with local (geographic) service type.
Validate request	<p>To add an SZU to a prefix defined with local (geographic) service the following are applied:</p> <ul style="list-style-type: none"> SZU can be added to a prefix by a Regulator account user that has been assigned the number planning role. SZUs can only be added to a prefix that has been assigned a local (geographic) service type. SZUs can be added to a prefix regardless of the prefix's status. The same SZU cannot be added twice. A prefix can have multiple SZUs (conversely a SZU can be assigned multiple prefixes). <p>NOTE: Moving a released prefix to another SZU.</p> <p>On occasion the Regulator may move a prefix from a SZU to another SZU. When a prefix has been allocated to the original SZU the existing allocations will continue to be allocated to the original SZU. All further allocations will indicate allocation to the new SZU.</p>
Add SZU to prefix	<ul style="list-style-type: none"> Link the selected SZUs to the prefix. Numbers can be allocated from the added SZUs.

1.7 Remove SZU from Local Service Prefix

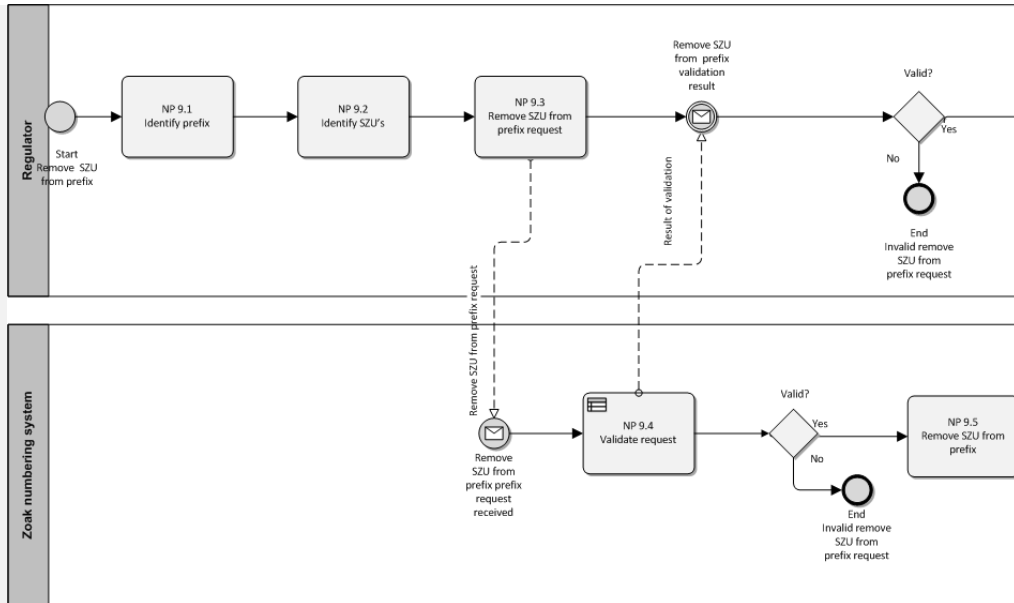


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to remove SZUs.
Identify SZUs	Identify one or more SZUs to remove from the identified prefix.
Remove SZU from prefix request	Request to remove one or more selected SZUs from the selected prefix.
Validate request	<p>To remove a SZU from a prefix definition with local (geographic) service the following validations are applied:</p> <ul style="list-style-type: none"> ▪ SZU can be removed from a prefix by a Regulator account user that has granted the number planning role. ▪ SZUs can be removed from a prefix that has been defined as a local (geographic) service type. ▪ SZUs can be removed from a prefix regardless of the prefix's status. ▪ A released prefix must have at least one SZU. <p>NOTE: Moving a released prefix to another SZU. On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the SZU the existing allocations will continue to show the allocation made in the old SZU. All further allocations will indicate the allocation was made to the new SZU.</p>
Remove SZU from prefix	<ul style="list-style-type: none"> ▪ Remove the selected SZUs from the prefix. ▪ Numbers cannot be allocated from the removed SZUs.

1.8 Number planning report

Activity name	Business rules
Generate number planning report	<p>ACMA users will be able to access the number planning report which allows them to determine whether a certain prefix belonging to a service type or an entire service type is close to running out of numbers.</p> <p>The report can be generated for a single service type or an individual prefix.</p> <p>The report allows the ACMA to decide when to release more numbers in a certain service type based on the quantity of spare numbers and spare ratio.</p>

View number planning report	<p>The number planning report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the number planning report include:</p> <ul style="list-style-type: none"> ▪ Service Type ▪ Number prefix ▪ Quantity of allocated numbers ▪ Allocation ratio (%) ▪ Quantity of spare numbers (%) ▪ Spare ratio (%)
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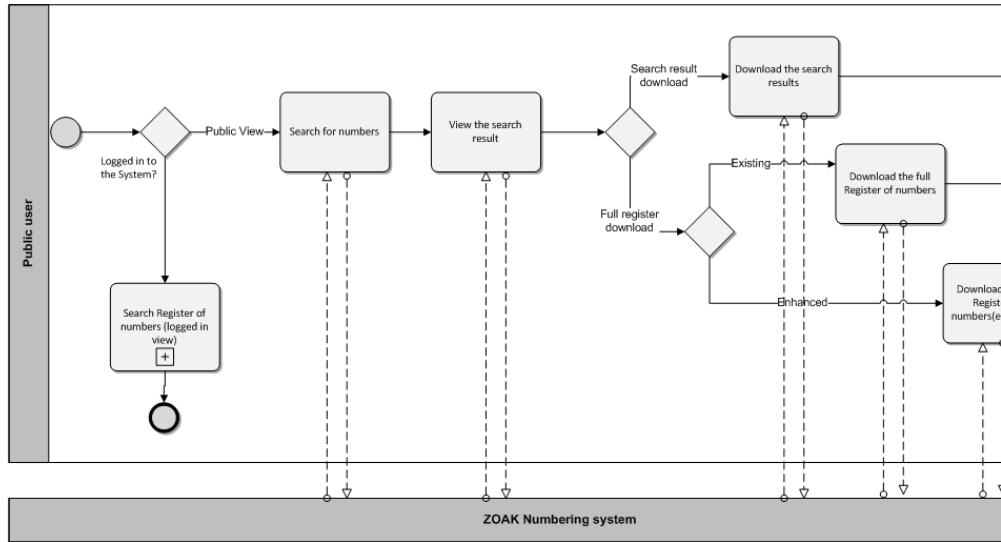
1.9 Geographic numbers planning report

Activity name	Business rules
Generate geographic number report	<p>ACMA users will be able to access the geographic number report which allows determine when a certain Standard zone unit (SZU) is close to running out of based on the total prefixes assigned to a specific SZU.</p> <p>The report can be generated for a single SZU or any number of prefixes. Specific prefix will produce a report containing all SZU's that the prefix is assigned to a other prefixes assigned to the same matching SZU.</p> <p>The calculation collects the number of available numbers for a prefix and divides the numbers that have been allocated in the last 10 years from the date the report is generated. This avoids skewing the results from old allocation patterns and take-up from numbering systems.</p> <p>The report allows the ACMA to decide when to release more numbers in a certain SZU based on the expected run out, measured in years.</p>
View geographic number report	<p>The geographic number report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the geographic number report include:</p> <ul style="list-style-type: none"> ▪ Number prefixes ▪ Standard Zone Unit (SZU) ▪ Expected prefix run out (years)

2 Register of Numbers

The Numbering system is required by legislation to provide two public registers; The Register of Numbers and Register of smartnumbers (Register of Enhanced Rights of Use). The Register of Numbers shows the availability of all numbers as well as transaction history. The Register of smartnumbers tracks the enhanced rights of use (EROU) holder for a smartnumber.

2.1 Search Register of Numbers (public view)



Note : The register of numbers provides the search facility to search for all numbers to the public user. If the user is logged in to the Zoak numbering system then depends on the permission level they have access to an advanced search.
This Register of number also includes the Smartnumber but Register of Smartnumber provides the facility to search for the Smartnumber with reserved price etc.

Figure 6.1: Search Register of Numbers (Public)

Activity name	Business rules
Search for numbers	<ul style="list-style-type: none"> ▪ The search page will be available to the public. ▪ The Register of Numbers will contain all numbers except 'Quarantined' numbers. ▪ A user can search for a number using the following criteria: <ul style="list-style-type: none"> ▫ Number ▫ Number range ▫ Allocation date to/from date range ▫ Number status (Allocated or Spare) ▫ Service type ▫ Allocatee ▫ Current Holder ▫ EROU holder
View the search result	<ul style="list-style-type: none"> ▪ Lists the numbers matching the entered search criteria in the previous step. ▪ The following fields will be shown for each number returned: <ul style="list-style-type: none"> ▫ Service type ▫ Prefix ▫ Number length ▫ Number range (from) ▫ Number range (to) ▫ Number status (refer to "Number status translation" worksheet) ▫ Quantity ▫ Allocatee ▫ Allocation date ▫ Current holder ▫ Latest transfer date ▫ SZU (only populated for local service numbers) ▫ Current EROU holder ▫ EROU assignment date <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers:

		<ul style="list-style-type: none"> ▫ Assigned smartnumbers are not aggregated. This permits the EROU holder information to be accessible. ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add SZU. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated.
	Download the results	Not implemented
	Download the full Register of Numbers	<p>The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers in the same format as the ACMA's NUMB system accessible by the public. The Register of Numbers full download will be kept the exactly same format as provided by the ACMA's NUMB system to maintain backward compatibility with CSP systems. The file name of the download will be "InquiryFullDownload.csv".</p> <p>The columns contained in the download are listed below:</p> <ul style="list-style-type: none"> ▪ Service type ▪ Prefix ▪ Number length ▪ From ▪ To ▪ Quantity ▪ Allocatee ▪ Allocation date ▪ Latest holder ▪ Latest transfer date ▪ Numbering area ▪ Allocatee's exchange service area ▪ IP use ▪ Nomadicity ▪ Declaration <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add Numbering area and Allocatee's exchange service area. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated.
	Download the full Register of Numbers (Enhanced)	<p>The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers that is accessible by the public.</p> <p>The columns contained in the download are listed below:</p> <ul style="list-style-type: none"> ▪ Service type ▪ Prefix ▪ Number length ▪ Number range (from) ▪ Number range (to) ▪ Number status (refer to "Number status translation" worksheet)

- Quantity
- Allocatee
- Allocation date
- Latest holder
- Latest transfer date
- Current EROU holder
- EROU assignment date

2.2 View Allocation History (public view)

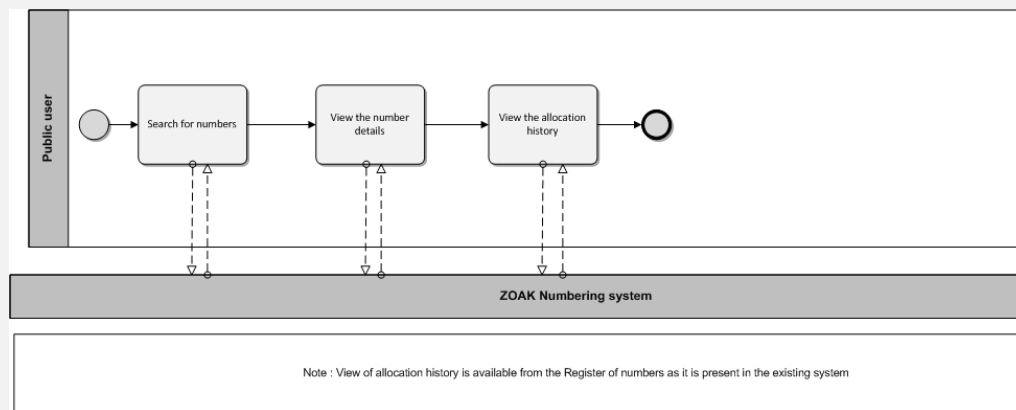


Figure 6.2: View Allocation History (Public)

Activity name	Business rules
Search for numbers	As described in the Search Register of Numbers (public view) "Search for num activity.
View the search result	As described in the Search Register of Numbers (public view) "View the search activity.
View the allocation history	<p>The allocation history of numbers must be available to all public users.</p> <p>When a number is selected to view the allocation history, the following detail number will be shown:</p> <ul style="list-style-type: none"> ▪ Number/Number Range ▪ Quantity ▪ Service type ▪ Prefix/ Length ▪ Current EROU holder (populated only in case of smartnumbers) <p>Transaction history has the following details:</p> <ul style="list-style-type: none"> ▪ Transaction (the list of transaction actions is provided below). ▪ Transaction date (date of the transaction not including time). ▪ Allocatee (the initial CSP to whom a number was allocated – this will be the current holder when the number is surrendered). ▪ Current holder (CSP holding the number now. In case of initial allocation, Allocatee and the current holder will be the same, only in case of transaction, current holder will be different to the allocatee). <p>The transaction history will list all the following actions:</p> <ul style="list-style-type: none"> ▪ Allocation (including allocation of FLRPRN with Withheld/extended, Reserve/Extended and allocation without reservation and smartnumbers to CSP). ▪ Transfer (transfer of FLRPRN and smartnumbers between CSPs). ▪ Surrender (surrender if FLRPRN/smartnumber by CSP).

- Withdraw (regulator Withdraw of a FLRPRN/smartnumber from a CSP).
- If the number is a smartnumber then the allocation history will keep track of initial CSP allocation and immediate surrender.
- Excludes smartnumber EROU assignment, EROU waived and system cancellation of EROU (no active service).

2.3 Search Register of Smartnumbers (public view)

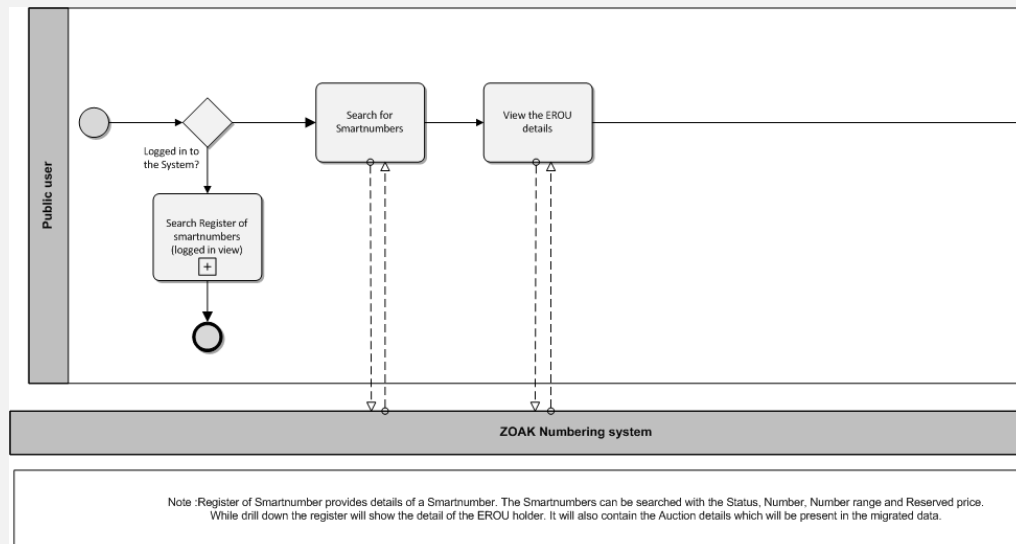


Figure 6.3: Search Register of Smartnumbers (public)

Activity name	Business rules
Search for smartnumbers	<p>A public user will be able to access the Register of smartnumbers (public view search for the smartnumbers with the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber ▪ Price – All, \$0 -\$250, \$251 - \$1,000, \$1,001 - \$15,000 and > \$15,001 <p>The search result will contain the following details:</p> <ul style="list-style-type: none"> ▪ Number ▪ Status ▪ Price ▪ Current EROU holder ▪ EROU assignment date
Check the EROU holder details	<p>From the Register of smartnumbers, a public user can access the following information about a smartnumber:</p> <ul style="list-style-type: none"> ▪ Number ▪ Price (reserved price) ▪ Status ▪ EROU Holder details (the EROU holder can control allowances on the

register):

- Name of EROU Holder
- Australian Business Number
- Australian Company Number/Australian Registered Body Number (ACN/ARBN)
- Assignment details:
 - Type – Auction, Over the counter
 - Date
 - Winning Bidder (Name of account that purchased the number through the ACMA’s smartnumber auction system)
 - Winning Amount (the amount the winning bidder paid to acquire the EROU through the ACMA’s smartnumber auction system)
 - Initial Allocatee

2.4 Search Register of Numbers (logged in view)

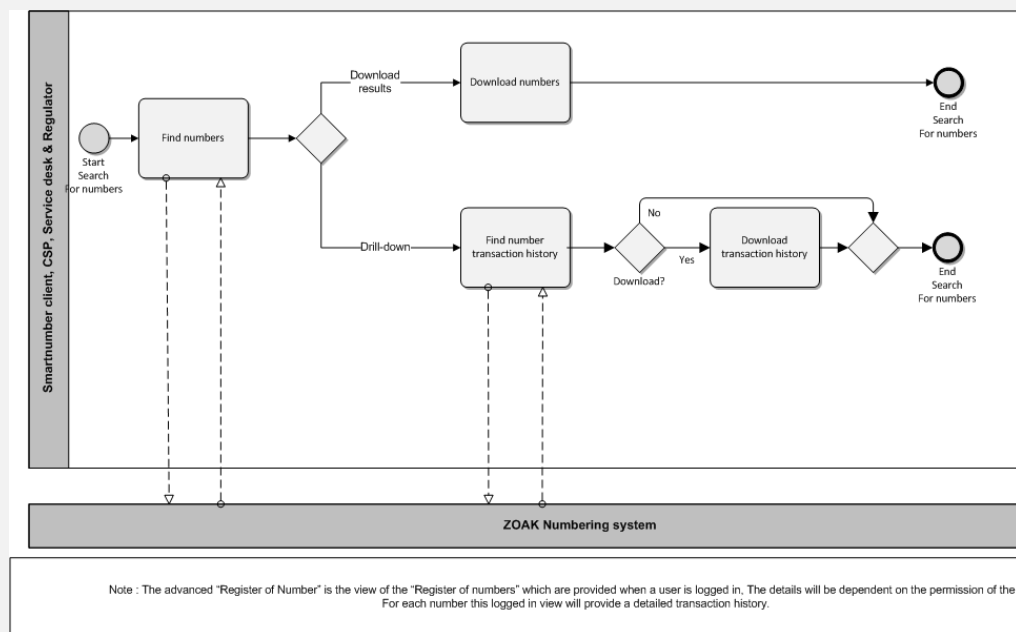


Figure 6.4: Search Register of Numbers (Logged In)

Activity name	Business rules
Find numbers	<p>Can be accessed by a user that is associated with one of either: smartnumber, Service Desk or Regulator account.</p> <p>The following search criteria is to be provided:</p> <ul style="list-style-type: none"> ▪ Number ▪ Number range To/From ▪ Service type ▪ Allocatee ▪ Current Holder ▪ Allocation date from ▪ Allocation date to ▪ EROU holder ▪ Status: <ul style="list-style-type: none"> ▫ Available

		<ul style="list-style-type: none"> ▫ Withheld ▫ Withheld Extended ▫ Reserved ▫ Reserve Extended ▫ Allocated ▫ Quarantined ▫ Available smartnumber ▫ Assigned smartnumber ▫ Allocated smartnumber ▫ Unavailable <p>A user will be able to search for and view number's with a status of Quarantined or Unavailable if the user has been granted the Advanced number search including quarantined numbers.</p> <p>The columns shown in the search results is same as the Register of Numbers (public view).</p>	
	Download the numbers	<p>In the Register of Numbers (logged-in view) three download options will be accessible:</p> <ul style="list-style-type: none"> ▪ Download search result – download the results returned by search into a CSV formatted file. ▪ The full download – the full download will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers"). ▪ The full download enhanced – the full download enhanced will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers (Enhanced)"). 	
	Find number transaction history	<p>Transaction history is a more detailed version of Allocation history and is similar to existing Transaction history provided by INMS system. The transaction history will show any numbering transaction (e.g., allocation) that modifies an attribute (e.g., status) of the number.</p> <p>The following information is recorded for each numbering transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account and username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>The transaction history can be filtered with following criteria:</p> <ul style="list-style-type: none"> ▪ Number ▪ Number range ▪ Service type ▪ Transaction type ▪ Transaction date range (to/from) ▪ EROU Holder ▪ Initiating account (this search filter is available when the user has been granted the Service desk transaction history or Regulator transaction history role) <p>The following information is shown for each transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account ▪ Initiating username ▪ Result status ▪ Holder ▪ EROU Holder 	

	<ul style="list-style-type: none"> ▪ SZU <p>Due to privacy, the initiating username is populated for the Regulator, Service Desk and to the users of the account the initiating username belongs too.</p>
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.

2.5 Search Register of smartnumbers (logged in view)

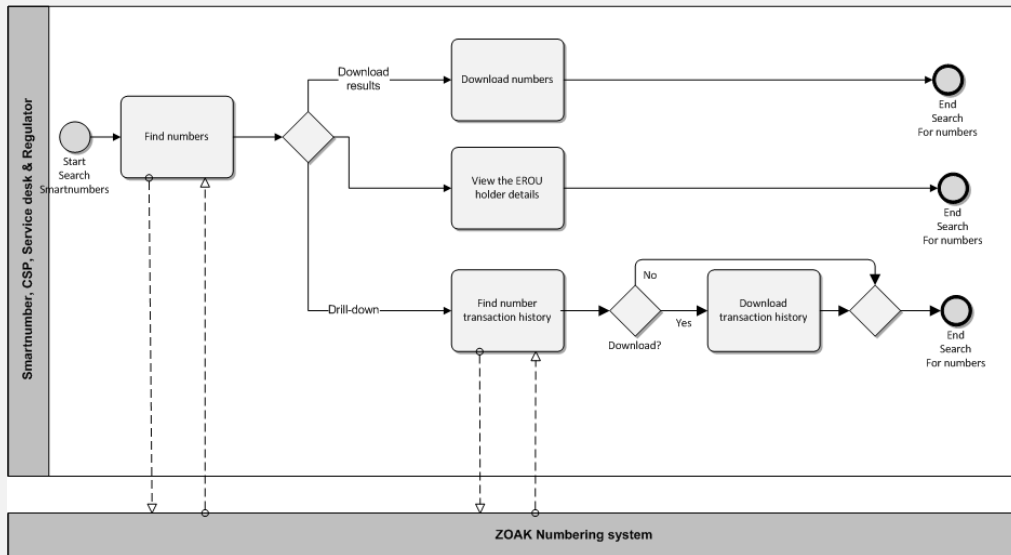


Figure 6.5: Search Register of smartnumbers (Logged In)

Activity name	Business rules
Find numbers	<p>An authenticated user belonging to Smartnumber, CSP, Service Desk or Regulator will be able to access the Register of Smartnumbers (logged-in view). smartnumbers can be searched for using the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber, Unavailable. ▪ Price – All, \$0-250, \$251-1,000, \$1,001-15,000 and > \$15,001 <p>The “Include quarantined numbers” role is to be granted to a user to view “Unavailable” smartnumbers.</p> <p>The search result will contain the following details</p> <ul style="list-style-type: none"> ▪ Number ▪ Status ▪ Price ▪ Current EROU holder ▪ EROU assignment date
Download the numbers	An authenticated user belonging to a smartnumber, CSP, Service Desk or Regulator account can download search results from the Register of smartnumbers to a formatted file.
Find number transaction history	The transaction history will be exactly the same as it is captured in "Search Register of Smartnumbers (Logged in view)" ("Find number transaction history").

Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.
View the EROU holder details	<p>From the Register of smartnumbers, a public user can access the following information about a smartnumber:</p> <ul style="list-style-type: none"> ▪ Number ▪ Price (reserved price) ▪ Status ▪ EROU Holder details (the EROU Holder can control allowance on the public register): <ul style="list-style-type: none"> ▫ Name of EROU holder ▫ Australian Business Number ▫ Australian Company Number/Australian Registered Body Number (ACN/ARBN) ▫ Trading name ▫ Industry type ▫ Industry classification ▪ Assignment details: <ul style="list-style-type: none"> ▫ Type - Auction, Over the counter ▫ Date ▫ Winning Bidder (name of the account that purchased the number through the ACMA's smartnumber auction system) ▫ Winning Amount (the amount the winning bidder paid to acquire the EROU through the ACMA's smartnumber auction system) ▫ Initial Allocatee

2.6 Reference

2.6.1 Number status mapping for Register of Numbers

Internal number status	Register of Numbers (public view)	Register of Numbers (logged in view)
Available	SPARE	Available
Withheld	ALLOCATED	Withheld
Withheld Extended	ALLOCATED	Withheld Extended
Reserved	ALLOCATED	Reserved
Reserve Extended	ALLOCATED	Reserve Extended
Allocated	ALLOCATED	Allocated
Quarantined	Not shown in Register of Numbers	Quarantined
Available EROU unassigned	SPARE	Available EROU unassigned
Pending Payment	SPARE	Pending Payment
Assigned Allocated	ALLOCATED	Assigned Allocated
Assigned Unallocated	SPARE	Assigned Unallocated
Unavailable Unassigned Unallocated	Not shown in Register of Numbers	Unavailable Unassigned Unallocated

2.6.2 Transaction mapping for transaction history

Transaction	Appears in transaction history (public view)	Name of transaction as shown in transaction history (public view)
Allocation	Yes	Allocation
Allocation with withheld	Yes	Allocation
Allocation with withheld extended	Yes	Allocation
Allocation with Reserve	Yes	Allocation
Allocation with Reserve extended	Yes	Allocation
Surrender	Yes	Surrender
Automatic system withdraw(for FLRPRN expiring Withheld/Reserve)	Yes	Withdraw
Allocation under special circumstances	Yes	Allocation
System release from quarantine	No	
Transfer	Yes	Transfer
Regulator Withdraw	Yes	Withdraw
EROU allocation	No	
EROU trade	No	
Waiver of EROU	No	
Regulator-cancellation of EROU (False statement)	No	
Cancellation of EROU-no active service	No	

Annual Numbering Charge

The Numbering System assists the ACMA in its requirement to annually collect a set amount of revenue from carriage service providers that hold certain types of telephone numbers. This charge is known as the Annual Numbering Charge (ANC).

The following business processes and the rules provide further details about how the Numbering system supports the ANC process.

Set the ANC Billing Year

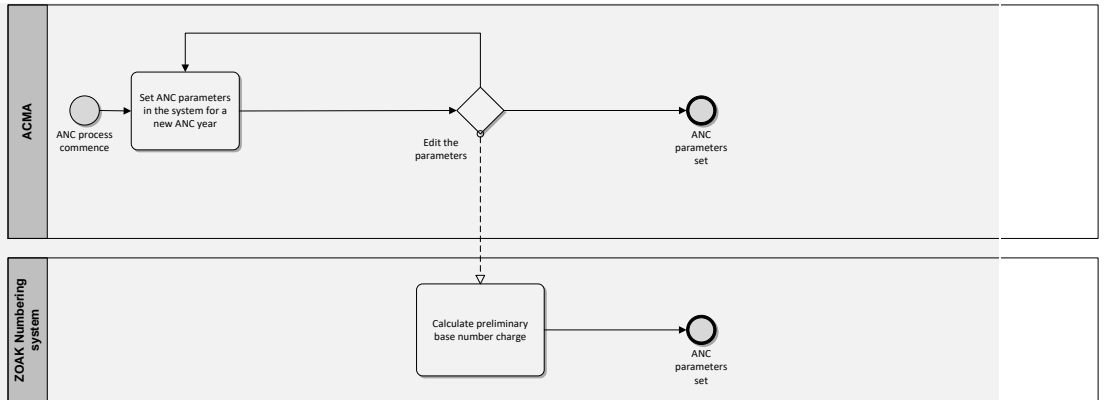


Figure 10.1: Set the ANC Billing Year

Activity name	Business rules
Set ANC parameters in the system for a new ANC year	<p>ACMA will be able to set the following parameters when creating the ANC bill</p> <ul style="list-style-type: none"> ▪ Billing year ▪ Census date ▪ Pay by date ▪ Maximum charge ▪ Target revenue <p>Billing year status - the possible values are:</p> <ul style="list-style-type: none"> ▪ New <ul style="list-style-type: none"> ○ Once a billing year has been created it is set to 'New' status the billing year can be updated. ▪ Published <ul style="list-style-type: none"> ○ A billing year must be set to 'Published' status before the BNC is calculated as the system will use the billing year details to calculate the Census date. ○ To update the details of a billing year after it is published, you must first unpublish the billing year to revert back to 'New' status. A CSP must make the required changes before changing the status back to 'Published'. ○ A billing year cannot be unpublished once the Census date has been reached as the BNC is calculated at this point. ▪ Closed <ul style="list-style-type: none"> ○ Setting the billing year to 'Closed' status triggers the generation of final ANC Statements and invoices. ○ CSPs are notified that ANC Statements and invoices are available.

Generate the draft ANC statements and distribution report

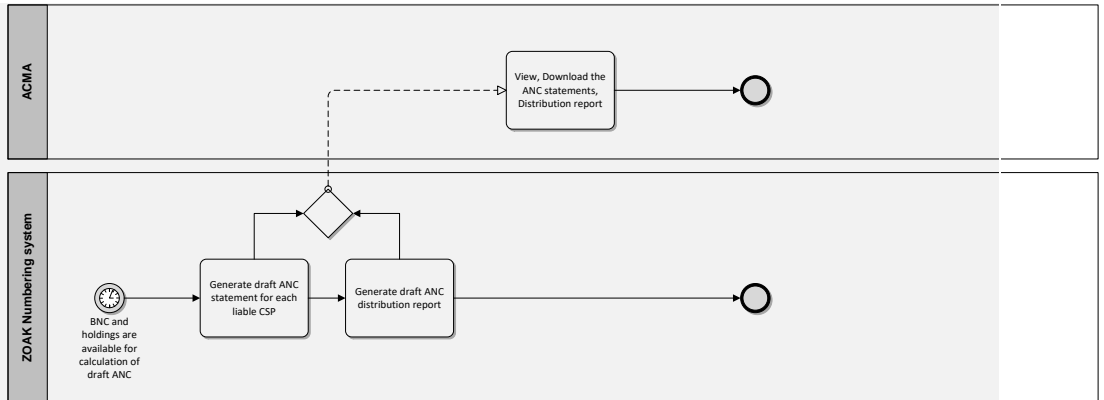


Figure 10.2: Generate the draft ANC statements and distribution report

Activity name	Business rules
Generate draft ANC statement for each liable CSP	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft statements are made available to ACMA and ZOAK.</p> <p>Basic details include:</p> <ul style="list-style-type: none"> ANC Billing year Issue date Due date Total ANC charge <p>The ANC Summary details provide a breakdown of the total ANC for a CSP by :</p> <p>The detailed ANC Statement includes:</p> <ul style="list-style-type: none"> Service Type Prefix Charges – Quantity of numbers in a prefix and price per number Total - Total cost of numbers within a prefix
Generate draft ANC distribution report	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft distribution report is made available to ACMA and ZOAK.</p> <p>The distribution report contains:</p> <ul style="list-style-type: none"> Report generated date Report generated by user ANC Billing year <p>The columns in the distribution report include:</p> <ul style="list-style-type: none"> Holder Service Type Liability (%) Liability amount (AUD) Total Liability of the holder (AUD)
View, Download the ANC statements, Distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to view and download the Draft Statements and Distribution report. Draft ANC Statements and Distribution reports reflect the current state Register of Numbers in real time. After midnight on the Census date, only the Port out report and Charge redistribution reports will change the distribution of ANC between CSI

Reconcile and finalise the dataset

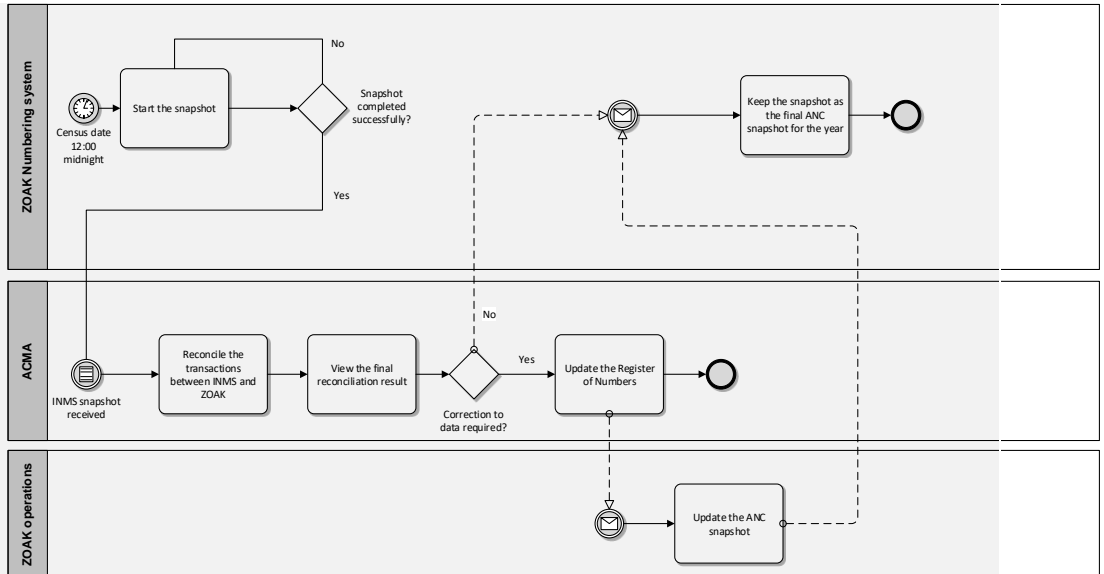


Figure 10.3: Reconcile and finalise the dataset

Activity name	Business rules
Start the snapshot	<p>At 12:00AM Midnight on the Census date, the system takes a snapshot of the Register of Numbers which is used to calculate ANC.</p> <ul style="list-style-type: none"> The snapshot includes the state of all numbers at exactly midnight on the Census date. Transactions completed after midnight on the Census date will not be included in the snapshot. There is no embargo period, the system will remain online while the snapshot is taken. Each year's snapshot is stored in the database indefinitely.
Reconcile the transactions between INMS and ZOAK	<ul style="list-style-type: none"> INMS will make available the reconciliation file taken at 01:00AM on the census date. The daily reconciliation file from INMS (taken on the census date) is used for the reconciliation. CMA must upload the reconciliation file to the ZOAK system.
View the final reconciliation result	<ul style="list-style-type: none"> The reconciliation results will display any inconsistencies between ZOAK and INMS.
Update the Register of Numbers and ANC snapshot	<p>If any discrepancies are found which need to be corrected for the year's final ANC snapshot, ACMA will inform ZOAK and advise ZOAK about the changes required to the Register of Numbers.</p> <ul style="list-style-type: none"> To update the production database the "Regulator update" function will be used by the ACMA to update the Register of Numbers. ZOAK operations will prepare a script to update the snapshot to reflect the updates made by the ACMA.
Keep the snapshot as the final ANC snapshot for the year	<ul style="list-style-type: none"> This will be treated as the "Final ANC snapshot". ZOAK Operations can provide the ANC snapshot to the ACMA on request.

Upload Port out and Charges redistribution reports

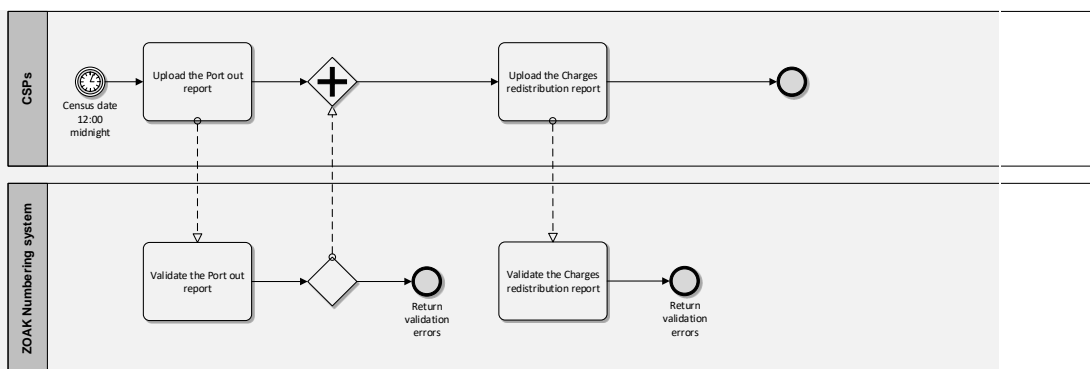


Figure 10.4: Upload Port out and Charges redistribution reports

Activity name	Business rules
Upload the Port out report	<p>A CSP has 17 calendar days from midnight on the Census date to upload the Port out report</p> <ul style="list-style-type: none"> Can be uploaded from midnight on the Census date until midnight on day. A Port out report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>
Validate Port out report	<p>The file must be in CSV format and include a header row.</p> <p>Each column heading must be labelled with the heading given in bold and be in the following order:</p> <ul style="list-style-type: none"> Allocated Prefix - Column 1 - the five digit prefix that numbers have been allocated to. Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers. Held Quantity - Column 3 - the quantity of numbers which have been allocated to the CSP. The quantity must be at least 1 and not exceed either 100,000 or the total number of numbers held by the CSP in the Allocated Prefix. Reporter - Column 4 - the MNP code of the CSP submitting the report. Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name. Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none"> Each validation error corresponds to the line number in the report. For example, if the first row of data is invalid, the error message will refer to Row 2, as Row 1 is the header row. Additional information is returned to assist the CSP in correcting the report.
Upload Charges redistribution report	<p>A CSP has 3 days from the end of the 17th day from the Census date to upload the Charges redistribution report.</p> <ul style="list-style-type: none"> A Charges redistribution report can only be uploaded after the period for uploading the Port out report has ended. Can be uploaded from midnight of the 17th day until midnight of the 20th day from the Census date. A Charges redistribution report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>

Validate Charges redistribution report

The file must be in CSV format and include a header row.
Each column heading must be labelled with the heading given in bold and be in the order listed.

- Allocated Prefix - Column 1 - the five-digit prefix that numbers have been ported out from.
- Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers.
- Held Quantity - Column 3 - the quantity of numbers which have been ported out. The quantity must be at least 1 and not exceed either 100,000 or the total count of numbers held by the CSP in the Allocated Prefix, taking into consideration port out reports.
- Reporter - Column 4 - the MNP code of the CSP submitting the report.
- Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name.
- Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name.

Validation results are displayed on screen to assist the CSP in correcting the report.

- Each validation error corresponds to the line number in the report. Row 2 for example is the first row of data considering that Row 1 is the header row.
- Additional information is returned to assist the CSP in correcting their report.

View Portability report and Mobile number holdings statement

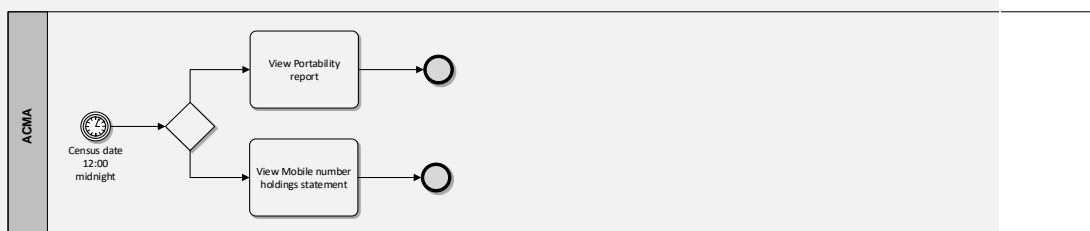


Figure 10.5: View the Portability report and Mobile number holdings statement

Activity name	Business rules
View Portability report	<ul style="list-style-type: none"> ▪ ZOAK Operations and ACMA are able to download the Portability report ▪ The Portability report is a combined list of all Port out and Charges redistribution reports that have been uploaded by CSP's. ▪ Viewing the report allows the ACMA to determine those CSP's who have distributed their mobile number holdings to other CSP's and their respective MNP codes. ▪ The Portability report is updated in real time based on CSP activity during the upload period of the Port out and Charges redistribution reports. ▪ The portability report is considered final when the upload period for Port out and Charges redistribution reports has ended. The portability is then considered as final.
View Mobile number holdings statement	<ul style="list-style-type: none"> ▪ ZOAK Operations, ACMA and CSP's are able to download the Mobile number holdings statement. ▪ The Mobile number holdings statement reflects the state of all held mobile numbers in the system as of midnight on the Census date.

Close the ANC billing year

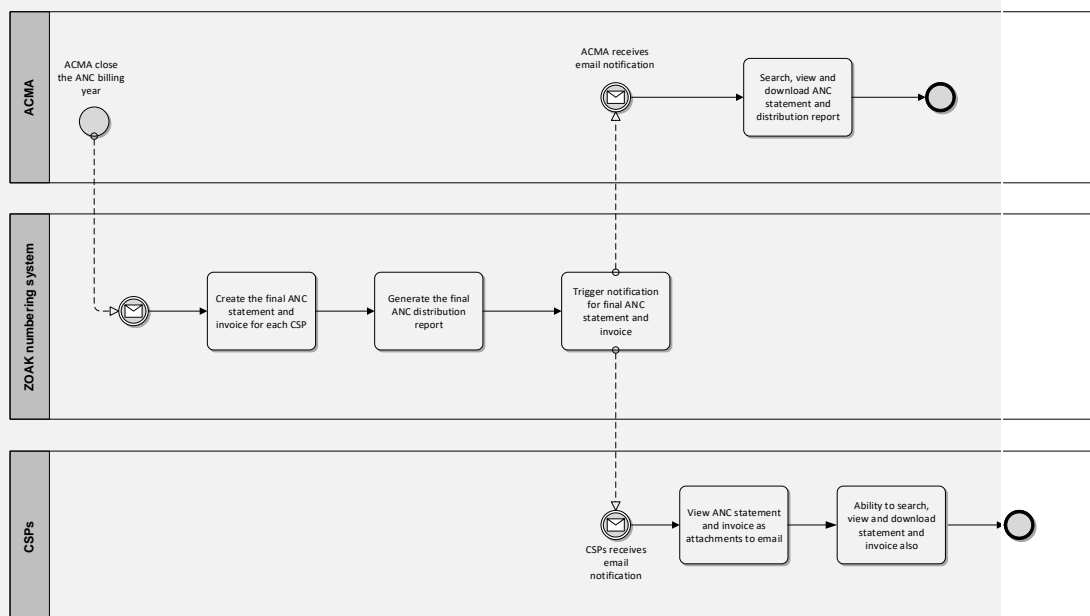


Figure 10.6: Close the ANC Billing Year

Activity name	Business rules
ACMA close the ANC billing year	<p>Setting the billing year to 'Closed' status triggers the generation of the final ANC Statements and distribution report.</p> <p>Only ACMA can perform this action.</p> <p>CSPs liable for the charge are provided an email with the ANC Statement and invoices attached. The email includes other important ANC information.</p>
Create the final ANC statement for each CSP	<p>The system generates the final ANC statement for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and applies adjustments from the Port out and Charges redistribution reports.</p>
Generate Final ANC distribution report	<p>The system generates the final distribution report for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and applies adjustments from the Port out and Charges redistribution reports.</p>
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that "View my ANC statements" permission checkbox selected) with the ANC Statement and ANC invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements and ANC invoices have been issued by the system and ACMA can access these.</p>
View ANC statement and distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to download the final ANC Statement and Distribution report.
CSP view ANC statement	<ul style="list-style-type: none"> CSPs are able to download their final ANC Statement from the ANC portal if they have the required permissions

Create final ANC invoice

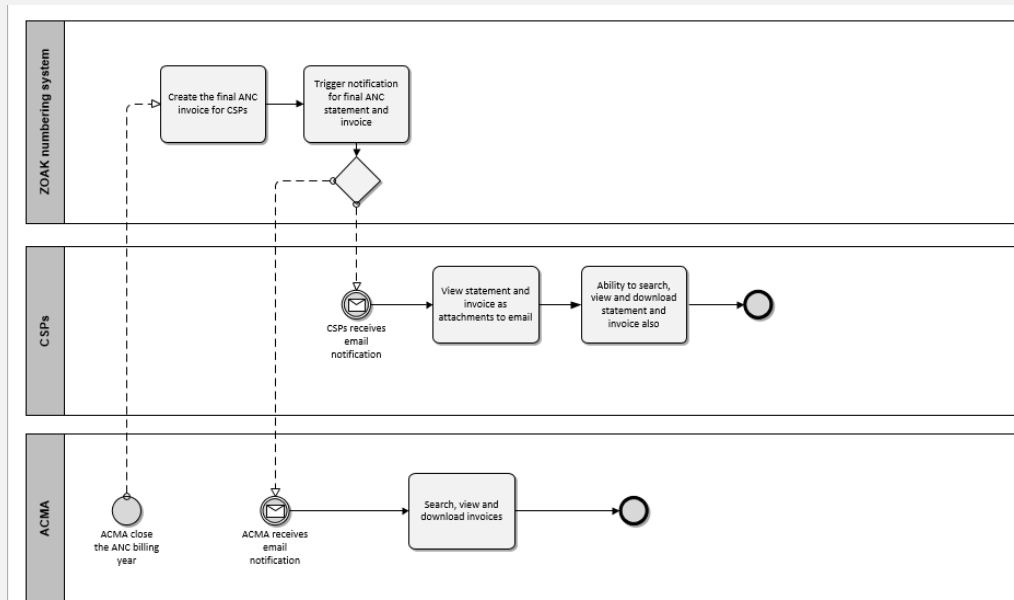


Figure 10.7: Create final ANC invoice

Activity name	Business rules
Create the final ANC invoice for CSPs	<p>Setting the billing year to 'Closed' status triggers the generation of the final ANC invoice.</p> <ul style="list-style-type: none"> The invoice due date will be either the default pay by date as configured when creating the billing year, or 30 calendar days from the day invoice is generated (whichever is greater).
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that have the "View my ANC statements" permission checkbox selected) with the final ANC statements and invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements and invoices have been issued by the system and ACMA can access these.</p>
Search, view and download invoices	<ul style="list-style-type: none"> ACMA and ZOAK Finance will be able to identify the ANC invoices by the 'Annual Numbering Charge' and the creation date. CSPs will be able to view and download their own ANC invoice.

Record payment against ANC invoices

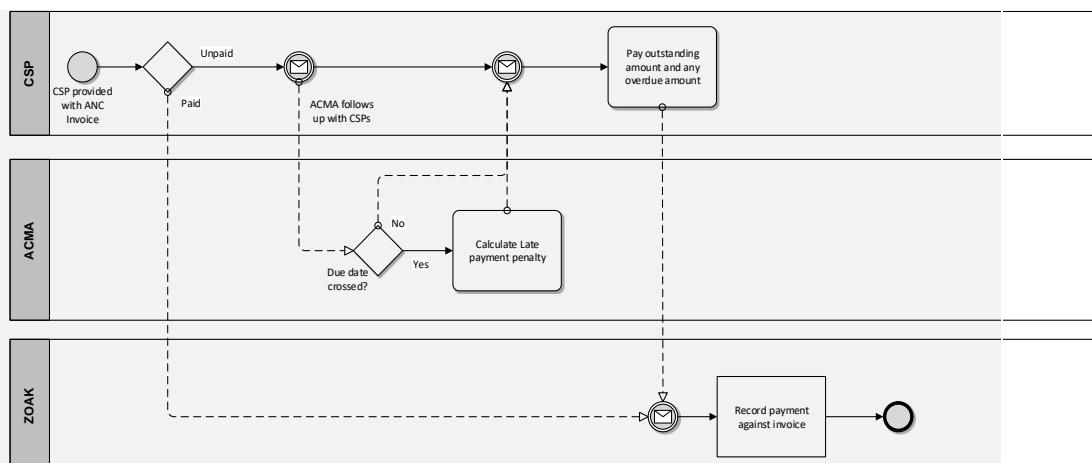


Figure 10.8: Record payment against ANC invoices

Activity name	Business rules
Record payment against invoice	ZOAK Finance will record the payment against each individual ANC invoice when the payment is received. The late payment penalty is not captured against the invoice in the system.
Capture late payment penalty	Calculation of the late payment penalty is handled by ACMA outside of the system. ZOAK Finance will identify the late payment penalty as an unmatched transaction and reconcile it with ACMA.
Restrict allocation to CSPs when ANC is unpaid	If any CSP account has an overdue ANC invoice (Only after 3 months from the invoice date) then ACMA can set an allocation override on the account to prevent the CSP from allocating numbers. The CSP is provided with a message upon login to the system to indicate that they have been blocked from applying for allocations of numbers.

- Appendix A').
- Valid email address. (RFC2822 <https://tools.ietf.org/html/rfc2822>).
- Valid phone and/or mobile numbers (if provided) must be 10 digits including area code.
- Do not create accounts where the ABN/ACN has been supplied for an existing active numbering client account (Ignore closed accounts).

Calculate charge	Calculate the CSP account registration charge. The CSP account registration charge is configurable and currently configured as \$57.00. Create an invoice provided a registration charge was generated for the applicant to pay through the upfront payment gateway.
F0.Finance level 1 end to end process flow	Pay CSP account registration charge invoice through the upfront payment gateway. If payment isn't made at the time of application, the applicant will receive their account and user credentials to login to the Numbering system. Whilst the CSP account has an outstanding CSP registration the account will not be permitted to perform any numbering operation (e.g. allocation, transfer, and surrender).
Generate account	Using the information contained in the CSP account application a CSP account is created within the Numbering system. An email notification is sent to Regulator on the creation of a CSP account.
Generate user	The generate user process is described below in 'Generate user'.

3.9 Generate user

The next sub-process, generate user, is described below with process diagram and the business rules.

The following sub-process will be used part of each end-to-end account creation processes.

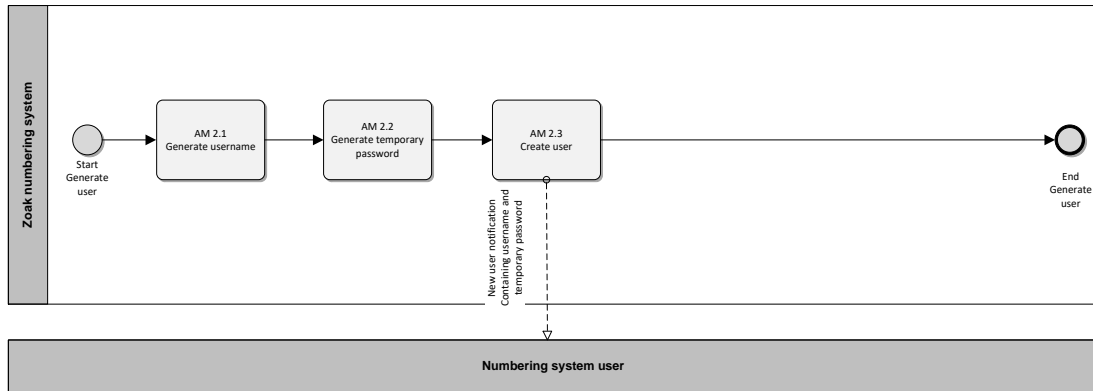


Figure 1.2: Generate user

Activity name	Business rules
Generate username	<p>Usernames will be created using the following rules:</p> <ul style="list-style-type: none"> ▪ First four letters of their surname. ▪ First letter from their first name. ▪ Final four digits is a random system generated number. ▪ In cases where the length of the surname and first name combined is less than five digits, extra digits are to be added to make length of the username nine characters long. ▪ For example: <ul style="list-style-type: none"> ▫ John Smith and random number 2344 would create a username SMITJ2344. ▫ Alex Ng and random 567890 would create username NGA567890. <p>The username generated must be unique within the Numbering system.</p>
Generate temporary password	<p>The temporary password must meet the criteria specified in Control 0421 in the Australian Government Information Security Manual Controls – August 2013.</p> <p>The password complies with the following criteria:</p> <ul style="list-style-type: none"> ▪ A minimum length of nine characters, consisting of at least 3 of the following character sets: <ul style="list-style-type: none"> ▪ Lowercase alphabetic characters (a–z) ▪ Uppercase alphabetic characters (A–Z) ▪ Numeric characters (0–9) ▪ Special characters <p>The user will be forced to change their password on the first login to the Numbering system.</p>
Create user	<p>Create the user in the Numbering system using the information provided in the account application linking the user to the CSP account.</p> <p>The user created will be configured as the Account Administrator and given access to Numbering system functions that the account is entitled to use.</p> <p>An email notification is sent to user's email address containing the username and temporary password.</p>

3.10 Apply for a smartnumber client account

This process describes the registration process of the smartnumber users.

The smartnumber registration can be done part of buying smartnumber process or standalone registration process.

The following business process describes the steps to register a smartnumber account standalone.

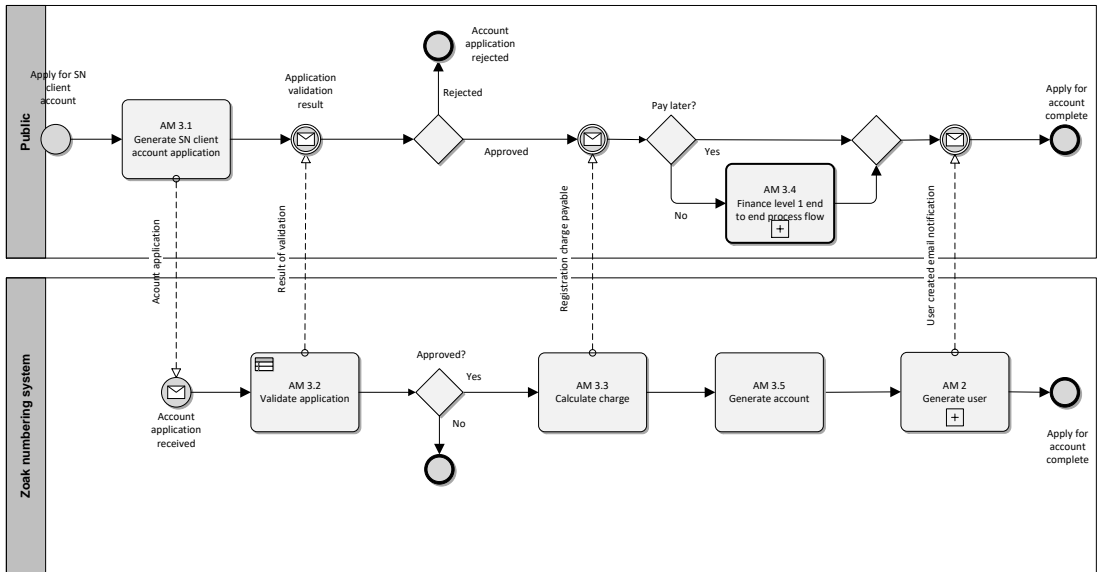


Figure 1.3: Apply for smartnumber client account

Activity name	Business rules
Generate SN client account application	<p>The following information is collected from the applicant:</p> <ul style="list-style-type: none"> ▪ Industry Type: <ul style="list-style-type: none"> ▫ Commonwealth Department, Other Commonwealth Agency, State Government, Local Government, Company, Community or Volunteer Group, Person, Partnership or Trust, Sole Trader, Other Entity. ▪ Industry Classification: <ul style="list-style-type: none"> ▫ Accounting, Administration, Advert/Media/Entertainment, Banking & Financial Services, Call Centre/Customer Service, Community & Sport, Construction, Consulting & Corporate Strategy, Education & Training, Engineering, Government/Defence, HealthCare & Medical, Hospitality & Tourism, HR & Recruitment, IT & T, Insurance & Superannuation, Legal, Manufacturing/Operations, Mining, Oil & Gas, Primary Industry, Real Estate & Property, Retail & Consumer Products, Sales & marketing, Science & Technology, Self-Employment, Trades & Services, Transport & logistics, and Other ▪ ABN ▪ ACN/ARBN ▪ Entity name (read-only, populated from the ABR lookup using the supplied ABN) ▪ Trading name (read-only, populated from the ABR lookup using the supplied ABN) ▪ Business (physical) address: <ul style="list-style-type: none"> ▫ Street number, name, type ▫ Suburb ▫ State

	<ul style="list-style-type: none">▫ Postcode▫ Country (default to AU)▪ Postal address:<ul style="list-style-type: none">▫ Street Address (consisting of Street number, name, type OR Postal delivery type, delivery number, e.g., PO Box 123)▫ Suburb▫ State▫ Postcode▫ Country (default to AU) <p>Details for the creation of the account administrator user</p> <ul style="list-style-type: none">▪ Title▪ First name▪ Surname▪ Email address▪ Alternate email address▪ Primary contact phone number▪ Alternate contact phone number▪ Secret Question▪ Secret Answer <p>Accepted the following terms and conditions:</p> <ul style="list-style-type: none">▪ Standard T&Cs▪ Specific declarations relating to use of smartnumbers.
Validate application	<p>The following mandatory information has been provided:</p> <ul style="list-style-type: none">▪ ABN (mandatory of all industry types except for individual, sole traders, community and volunteer groups).▪ Business and postal addresses.▪ The following user information is required:<ul style="list-style-type: none">▫ First name▫ Surname▫ Primary contact phone number (can be geo-graphic or mobile)▫ Email address▫ Secret Question▫ Secret Answer <p>The following validations occur:</p> <ul style="list-style-type: none">▪ Depending on the industry type either ABN or ACN or both required (at least one of ABN or ACN is mandatory):<ul style="list-style-type: none">▫ Company▪ Both ABN and ACN are optional:<ul style="list-style-type: none">▫ Personal▫ Sole trade▪ ABN is mandatory:<ul style="list-style-type: none">▫ Commonwealth Department▫ Other Commonwealth Agency▫ State government▫ Local government▫ Partnership or trust▫ Other entity▫ Community or Volunteer Group▪ Companies must provide either a valid ABN (confirmed via lookup to the ABR) or an ACN.▪ There is a (check digit verification: http://asic.gov.au/for-business/starting-a-company/how-to-start-a-company/australian-company-numbers/australian-company-number-digit-check) that could be performed on an ACN to verify the entered numbers forms a valid CAN.

- When an ACN is entered and a lookup is performed against the Australian Business Register (ABR). If results are found, ABN, ACN, entity and trading names are updated with the results from the ABR as per current behaviour.
- When an ACN is entered and no results are returned, no changes to ABN, ACN, entity and trading names are made. We will assume the provided ACN is correct. The user will need to enter an entity name (mandatory) and a trading name (optional).
- When an ABN and ACN is entered and a lookup is performed against the ABR using the ABN, if results are found, ABN, ACN, entity and trading names are updated with the results from the ABR.
- The supplied ABN and ACN must identify the same business entity, verified from the ABR.
- Verify the provided business and postal addresses are valid addresses (Refer address validation in 'Number Planning

Number planning is the specification and assignment of numbers and establishes the relationships between service types, number definitions, prefixes, standard zone units and numbers.

Prefix definitions are maintained through the number planning functions within the Numbering system. As changes to prefix definitions are infrequent the number planning functions have been scaled back to provide minimal features to support update, release and withdraw prefix definitions as well as to support adding and removing SZUs from local service prefixes.

The major differences between the NUMB and the Numbering system are summarised below:

- No hierarchical relationship between prefix definitions or service type definitions is maintained. Updating a parent prefix definition or service type definition will not cascade down to the child prefixes.
- When assigning a service type to a prefix definition the service types definition are used as a template to assign initial values to the prefix definition.
- Prefix definitions can be updated provided the prefix has not been released. The exception to this rule is the 'Annual numbering charge applies' attribute can be updated at any time.
- When a prefix definition is released the Numbering system determines whether there is sufficient space within the Register of Numbers:
 - No overlapping number ranges can exist.
 - At least one allocation of the standard unit size can be made.
- A prefix can be withdrawn when the entire number range is spare.

3.11 Update Service Type

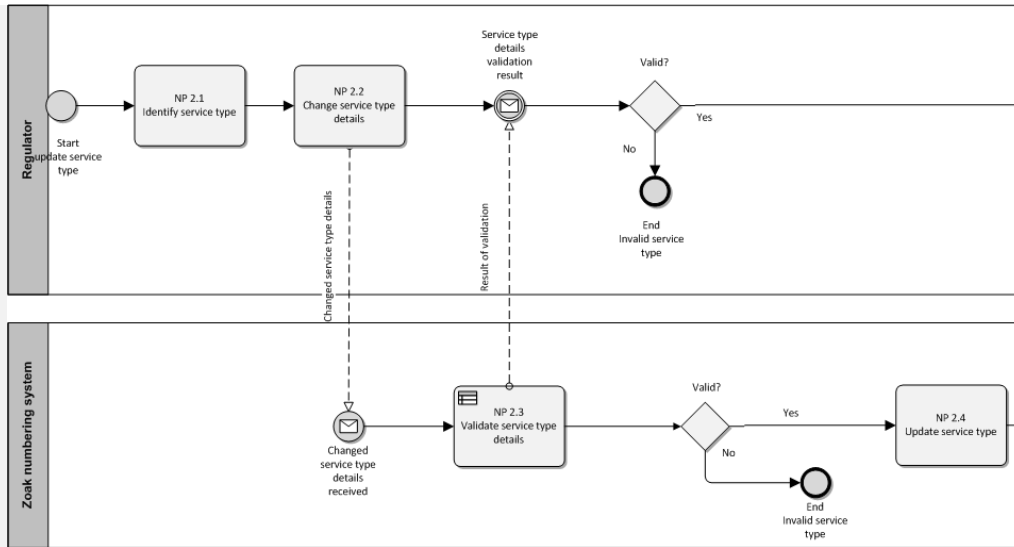


Figure 5.1: Update service type

Activity name	Business rules
Identify service type	Find a service type to modify.
Change service type details	<p>The following attributes of a service type can be modified:</p> <ul style="list-style-type: none"> Geographical service – set to Y if service type is local service, otherwise Number length (mandatory) integer 4 to 15 Standard unit size (mandatory) – one of 1, 10, 100, 1000, 10000, 100000 Reduced unit size – mandatory for geographical and mobile service types Annual numbering charge applies – Y/N (mandatory)
Validate service type details	<p>The following validations are applied:</p> <ul style="list-style-type: none"> A service type can only be created by a Regulator account user that has been granted the number planning role. All mandatory fields are supplied. Reduced unit size is required only for geographic service types. The value provided must be less than the standard unit size.
Update service types	<p>The service type is updated in the Numbering system with the supplied values. Updating a service type will not alter any prefix definitions or allocations associated with the service type.</p>

3.12 Update Prefix

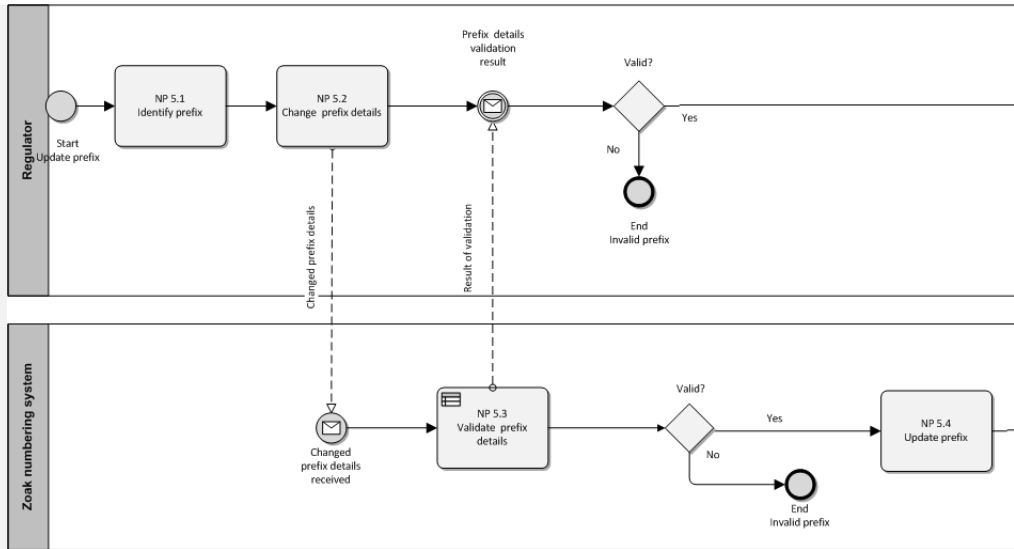


Figure 5.2: Update prefix

Activity name	Business rules
Identify prefix	Find a prefix to modify.
Change prefix details	<p>The following attributes can be modified based on the prefix's status:</p> <ul style="list-style-type: none"> ▪ "Not released" status <ul style="list-style-type: none"> ▫ Service type ▫ Number length ▫ Standard unit size ▫ Reduced unit size (geographic service types only) ▫ Annual numbering charge applies ▪ "Released" status <ul style="list-style-type: none"> ▫ Annual numbering charge applies <p>The following metrics are to be reported for each prefix:</p> <ul style="list-style-type: none"> ▪ Quantity (total quantity numbers released) ▪ Spare ▪ Allocated <p>The totals will include child prefixes i.e., 03 includes 0388 etc.</p> <p>NOTES: Standard unit sizes are unlikely to change in the future. This change will be an update to the Numbering plan. The ACMA will raise a change request as existing allocations using the previous standard unit size will need to be supported.</p>
Validate prefix details	<p>The following validations are applied:</p> <ul style="list-style-type: none"> ▪ Standard Unit Size – one of 1, 10, 100, 1000, 10000, 100000. ▪ The number range must have enough available numbers to satisfy the requirements of the standard unit size (see below). ▪ Reduced unit size is required only for local (geographic) service types. The reduced unit size provided must be less than the standard unit size. ▪ Annual numbering charge applies (Y/N) (mandatory). <p>Number range</p> <p>The following rules are applied to calculate the number range based on the entered number length:</p> <ul style="list-style-type: none"> ▪ The start of the range is the prefix followed by one or more zeros to pad the number out to its number length. ▪ The end of the range is the prefix followed by one or more nines to pad the number out to its number length.

	<p>number out to its number length.</p> <ul style="list-style-type: none"> For example, prefix 0388 has a number length of 10. Therefore, the number range for prefix 0388 is 0388 000000 to 0388 999999. <p>Within a prefix definition, number ranges are permitted to overlap, thus supporting a parent-child relationship where smaller child prefix's number ranges can exist within a parent's prefix's number range. For example, see the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.</p>	
Update prefix	<ul style="list-style-type: none"> The prefix is updated within the Numbering system. The status of the prefix is not altered. 	

3.13 Release Prefix

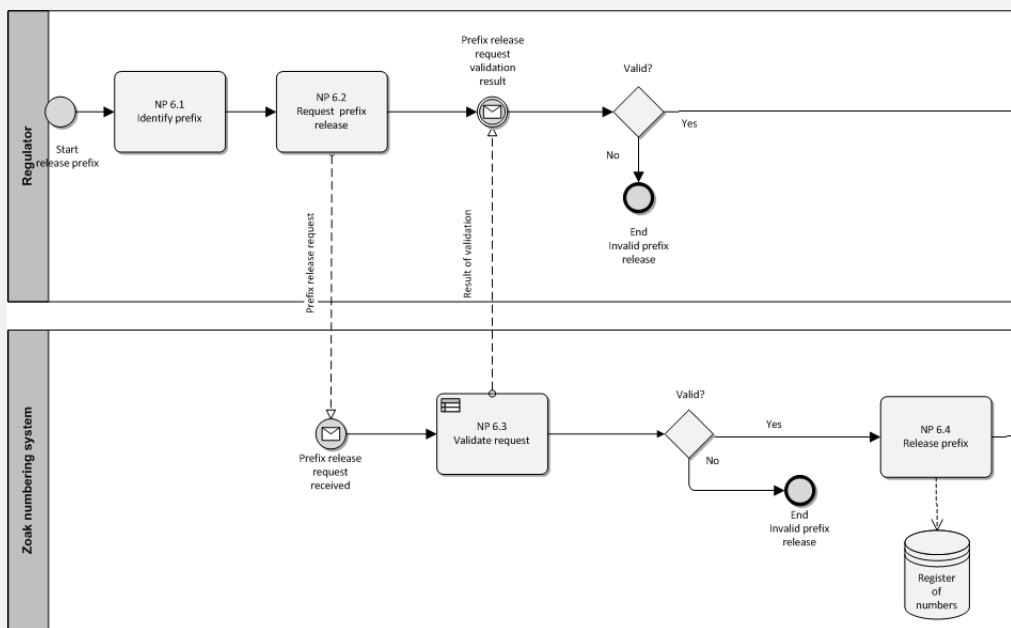


Figure 5.3: Release prefix

Activity name	Business rules
Identify prefix	Find/list the prefix to release.
Request prefix release	Request the selected prefix be released for allocation.
Validate request	<p>To release a prefix the following criteria needs to be satisfied:</p> <ul style="list-style-type: none"> A prefix can only be released by a Regulator account user that has been the Number planning role. Status of the prefix is "Not released". For a geographical service type, at least one SZU is assigned to the pre The number range contained in the prefix definition can be created in of Numbers according to the number range rules below. <p>Number ranges rules</p> <ul style="list-style-type: none"> For a prefix that is a parent prefix: <ul style="list-style-type: none"> The prefix's number range completely contains any child prefixes i ranges (eg can't split a child prefix number range in half). Parent prefix number ranges are created (interleaved) around the number ranges.

	<ul style="list-style-type: none"> ▫ For each parent prefix number range the created number ranges can allocate at least a single stand unit size allocation. ▫ Number range must be spare. ▪ For prefix that is child prefix: <ul style="list-style-type: none"> ▫ Fully contained within the parent prefixes number range. ▫ Numbers must be spare. <p>NOTES: Prefixes at the same level in the hierarchy cannot have overlapping number ranges Although prefix definitions overlap the Register of Numbers interpret the prefix definitions to determine number ranges available for allocation, ensuring none of the number ranges overlap.</p> <p>Parent prefixes numbers are made available in the number ranges not used by the child prefixes. For example, examine the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.</p>
Release prefix	<p>The prefix is released in the Numbering system and the following occurs:</p> <ul style="list-style-type: none"> ▪ The status of the prefix is set to "Released". ▪ The prefix is added to the Register of Numbers. ▪ The released prefix number range(s) is marked as spare in the Register of Numbers. ▪ The released prefix number range(s) is available for allocation through the applicable allocation process.

3.14 Withdraw Prefix

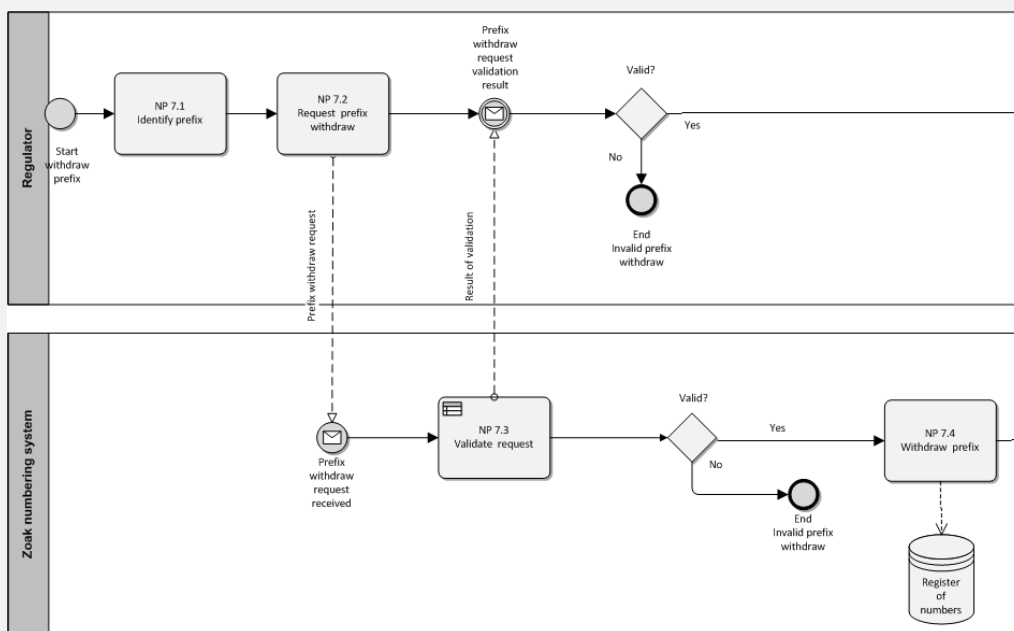


Figure 5.4: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a released prefix to withdraw
Request prefix withdraw	Select the released prefix to be withdrawn.

Validate request	<p>A released prefix can be withdrawn when the following criteria is satisfied:</p> <ul style="list-style-type: none"> A prefix can be withdrawn by a Regulator account user that has been granted the Number planning role. All numbers for the prefix are spare. Status of the prefix is "Released".
Withdraw prefix	<p>The released prefix is withdrawn and the following occurs:</p> <ul style="list-style-type: none"> The status of the prefix is set to "Not released". The prefix number range is removed from the Register of Numbers. The withdrawn prefix number range is not shown in the Register of Numbers. The withdrawn prefix number range is not available for allocation through the applicable allocation process.

3.15 Add SZU to a Local Service Prefix

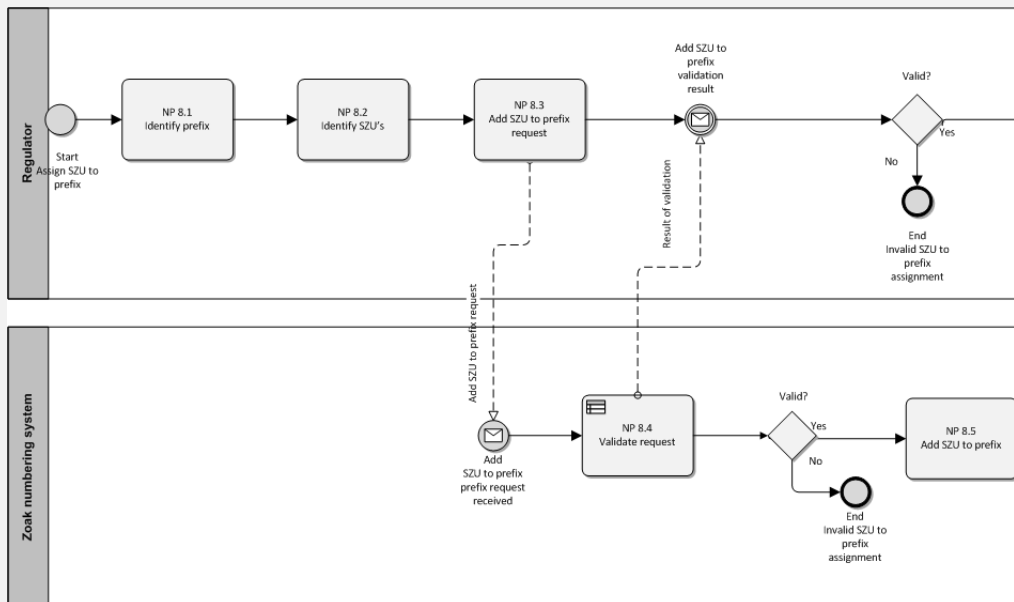


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to add SZUs.
Identify SZUs	Find an SZU to add to the selected prefix.
Add SZU to prefix request	Add one or more selected SZUs to the selected prefix with local (geographic) service type.
Validate request	<p>To add an SZU to a prefix defined with local (geographic) service the following are applied:</p> <ul style="list-style-type: none"> SZU can be added to a prefix by a Regulator account user that has been granted the number planning role. SZUs can only be added to prefix that has been assigned a local (geographic) service type. SZUs can be added to a prefix regardless of the prefix's status. The same SZU cannot be added twice. A prefix can have multiple SZUs (conversely a SZU can be assigned multiple prefixes). <p>NOTE: Moving a released prefix to another SZU.</p>

	On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation to the original SZU. All further allocations will indicate allocation to the new SZU.
Add SZU to prefix	<ul style="list-style-type: none"> ▪ Link the selected SZUs to the prefix. ▪ Numbers can be allocated from the added SZUs.

3.16 Remove SZU from Local Service Prefix

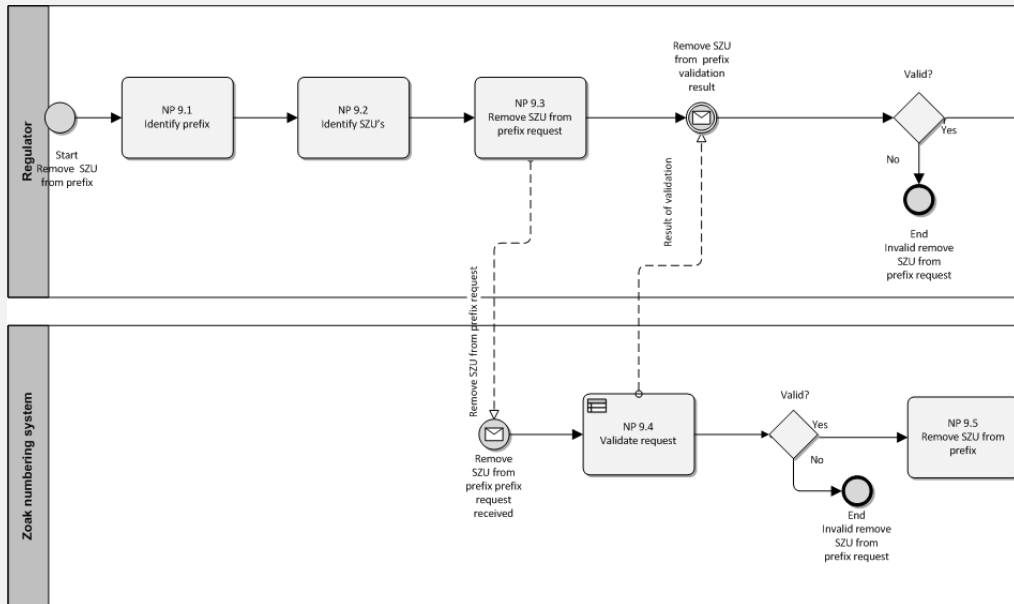


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to remove SZUs.
Identify SZUs	Identify one or more SZUs to remove from the identified prefix.
Remove SZU from prefix request	Request to remove one or more selected SZUs from the selected prefix.
Validate request	<p>To remove a SZU from a prefix definition with local (geographic) service the following validations are applied:</p> <ul style="list-style-type: none"> ▪ SZU can be removed from a prefix by a Regulator account user that has granted the number planning role. ▪ SZUs can be removed from a prefix that has been defined as a local (geographic) service type. ▪ SZUs can be removed from a prefix regardless of the prefix's status. ▪ A released prefix must have at least one SZU. <p>NOTE: Moving a released prefix to another SZU. On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation made in the original SZU. All further allocations will indicate the allocation was made to the new SZU.</p>
Remove SZU from prefix	<ul style="list-style-type: none"> ▪ Remove the selected SZUs from the prefix. ▪ Numbers cannot be allocated from the prefix in the removed SZUs.

3.17 Number planning report

Activity name	Business rules
Generate number planning report	<p>ACMA users will be able to access the number planning report which allows A determine whether a certain prefix belonging to a service type or an entire se close to running out of numbers.</p> <p>The report can be generated for a single service type or an individual prefix.</p> <p>The report allows the ACMA to decide when to release more numbers in a cer type based on the quantity of spare numbers and spare ratio.</p>
View number planning report	<p>The number planning report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the number planning report include:</p> <ul style="list-style-type: none"> ▪ Service Type ▪ Number prefix ▪ Quantity of allocated numbers ▪ Allocation ratio (%) ▪ Quantity of spare numbers (%) ▪ Spare ratio (%)

3.18 Geographic numbers planning report

Activity name	Business rules
Generate geographic number report	<p>ACMA users will be able to access the geographic number report which allows determine when a certain Standard zone unit (SZU) is close to running out of based on the total prefixes assigned to a specific SZU.</p> <p>The report can be generated for a single SZU or any number of prefixes. Speci prefix will produce a report containing all SZU's that the prefix is assigned to a other prefixes assigned to the same matching SZU.</p> <p>The calculation collects the number of available numbers for a prefix and divid the numbers that have been allocated in the last 10 years from the date the r This avoids skewing the results from old allocation patterns and take-up from numbering systems.</p> <p>The report allows the ACMA to decide when to release more numbers in a cer based on the expected run out, measured in years.</p>
View geographic number report	<p>The geographic number report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the geographic number report include:</p> <ul style="list-style-type: none"> ▪ Number prefixes ▪ Standard Zone Unit (SZU) ▪ Expected prefix run out (years)

4 Register of Numbers

The Numbering system is required by legislation to provide two public registers; The Register of Numbers and Register of smartnumbers (Register of Enhanced Rights of Use). The Register of Numbers shows the availability of all numbers as well as transaction history. The Register of smartnumbers tracks the enhanced rights of use (EROU) holder for a smartnumber.

4.1 Search Register of Numbers (public view)

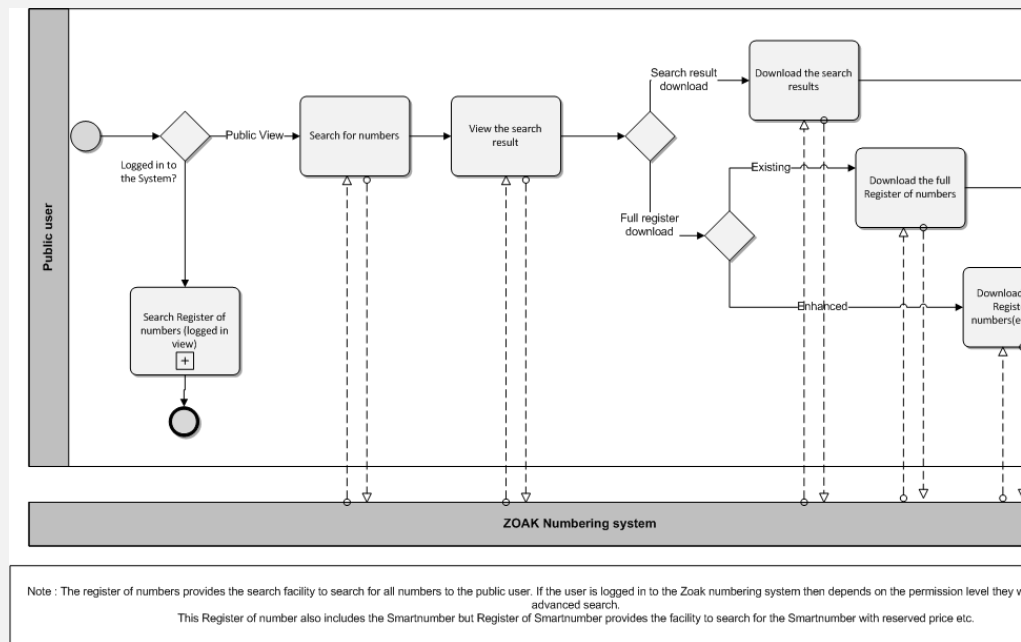


Figure 6.1: Search Register of Numbers (Public)

Activity name	Business rules
Search for numbers	<ul style="list-style-type: none"> ▪ The search page will be available to the public. ▪ The Register of Numbers will contain all numbers except 'Quarantined' numbers. ▪ A user can search for a number using the following criteria: <ul style="list-style-type: none"> ▫ Number ▫ Number range ▫ Allocation date to/from date range ▫ Number status (Allocated or Spare) ▫ Service type ▫ Allocatee ▫ Current Holder ▫ EROU holder
View the search result	<ul style="list-style-type: none"> ▪ Lists the numbers matching the entered search criteria in the previous step. ▪ The following fields will be shown for each number returned: <ul style="list-style-type: none"> ▫ Service type ▫ Prefix ▫ Number length ▫ Number range (from) ▫ Number range (to) ▫ Number status (refer to "Number status translation" worksheet) ▫ Quantity

		<ul style="list-style-type: none"> ▫ Allocatee ▫ Allocation date ▫ Current holder ▫ Latest transfer date ▫ SZU (only populated for local service numbers) ▫ Current EROU holder ▫ EROU assignment date <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ Assigned smartnumbers are not aggregated. This permits the EROU holder information to be accessible. ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add SZU. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated. 	
	Download the results	Not implemented	
	Download the full Register of Numbers	<p>The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers in the same format as the ACMA's NUMB system accessible by the public. The Register of Numbers full download will be kept the exactly same format as provided by the ACMA's NUMB system to maintain backward compatibility with CSP systems. The file name of the download will be "InquiryFullDownload.csv".</p> <p>The columns contained in the download are listed below:</p> <ul style="list-style-type: none"> ▪ Service type ▪ Prefix ▪ Number length ▪ From ▪ To ▪ Quantity ▪ Allocatee ▪ Allocation date ▪ Latest holder ▪ Latest transfer date ▪ Numbering area ▪ Allocatee's exchange service area ▪ IP use ▪ Nomadicity ▪ Declaration <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add Numbering area and Allocatee's exchange service area. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated. 	

Download the full Register of Numbers (Enhanced)

The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers that is accessible by the public. The columns contained in the download are listed below:

- Service type
- Prefix
- Number length
- Number range (from)
- Number range (to)
- Number status (refer to "Number status translation" worksheet)
- Quantity
- Allocatee
- Allocation date
- Latest holder
- Latest transfer date
- Current EROU holder
- EROU assignment date

4.2 View Allocation History (public view)

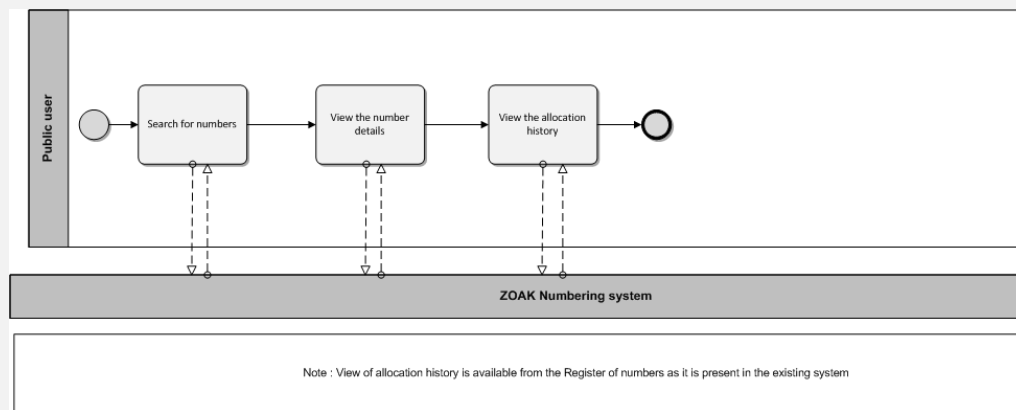


Figure 6.2: View Allocation History (Public)

Activity name	Business rules
Search for numbers	As described in the Search Register of Numbers (public view) "Search for num activity.
View the search result	As described in the Search Register of Numbers (public view) "View the search activity.
View the allocation history	<p>The allocation history of numbers must be available to all public users. When a number is selected to view the allocation history, the following detail number will be shown:</p> <ul style="list-style-type: none"> ▪ Number/Number Range ▪ Quantity ▪ Service type ▪ Prefix/ Length ▪ Current EROU holder (populated only in case of smartnumbers) <p>Transaction history has the following details:</p> <ul style="list-style-type: none"> ▪ Transaction (the list of transaction actions is provided below). ▪ Transaction date (date of the transaction not including time). ▪ Allocatee (the initial CSP to whom a number was allocated – this will t

when the number is surrendered).

- Current holder (CSP holding the number now. In case of initial allocation the Allocatee and the current holder will be the same, only in case of transfer the current holder will be different to the allocatee).

The transaction history will list all the following actions:

- Allocation (including allocation of FLRPRN with Withheld/extended, Reserve/Extended and allocation without reservation and smartnumber allocation to CSP).
- Transfer (transfer of FLRPRN and smartnumbers between CSPs).
- Surrender (surrender if FLRPRN/smartnumber by CSP).
- Withdraw (regulator Withdraw of a FLRPRN/smartnumber from a CSP).
- If the number is a smartnumber then the allocation history will keep track of initial CSP allocation and immediate surrender.
- Excludes smartnumber EROU assignment, EROU waived and system cancellation of EROU (no active service).

4.3 Search Register of Smartnumbers (public view)

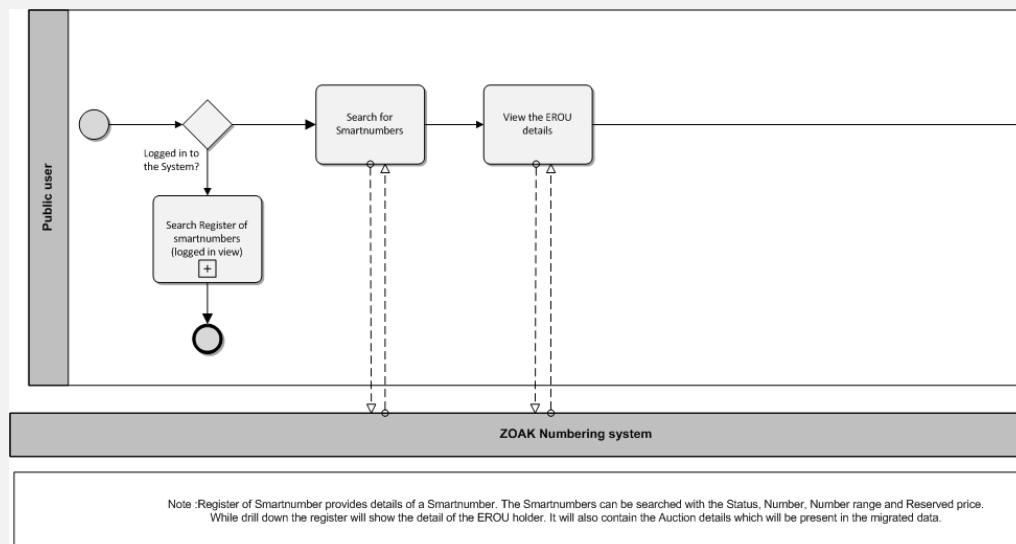


Figure 6.3: Search Register of Smartnumbers (public)

Activity name	Business rules
Search for smartnumbers	<p>A public user will be able to access the Register of smartnumbers (public view search for the smartnumbers with the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber ▪ Price – All, \$0 -\$250, \$251 - \$1,000, \$1,001 - \$15,000 and > \$15,001 <p>The search result will contain the following details:</p> <ul style="list-style-type: none"> ▪ Number ▪ Status ▪ Price ▪ Current EROU holder

- EROU assignment date

Check the EROU holder details

From the Register of smartnumbers, a public user can access the following information about a smartnumber:

- Number
- Price (reserved price)
- Status
- EROU Holder details (the EROU holder can control allowances on the register):
 - Name of EROU Holder
 - Australian Business Number
 - Australian Company Number/Australian Registered Body Number (ACN/ARBN)
- Assignment details:
 - Type – Auction, Over the counter
 - Date
 - Winning Bidder (Name of account that purchased the number through ACMA’s smartnumber auction system)
 - Winning Amount (the amount the winning bidder paid to acquire through the ACMA’s smartnumber auction system)
 - Initial Allocatee

4.4 Search Register of Numbers (logged in view)

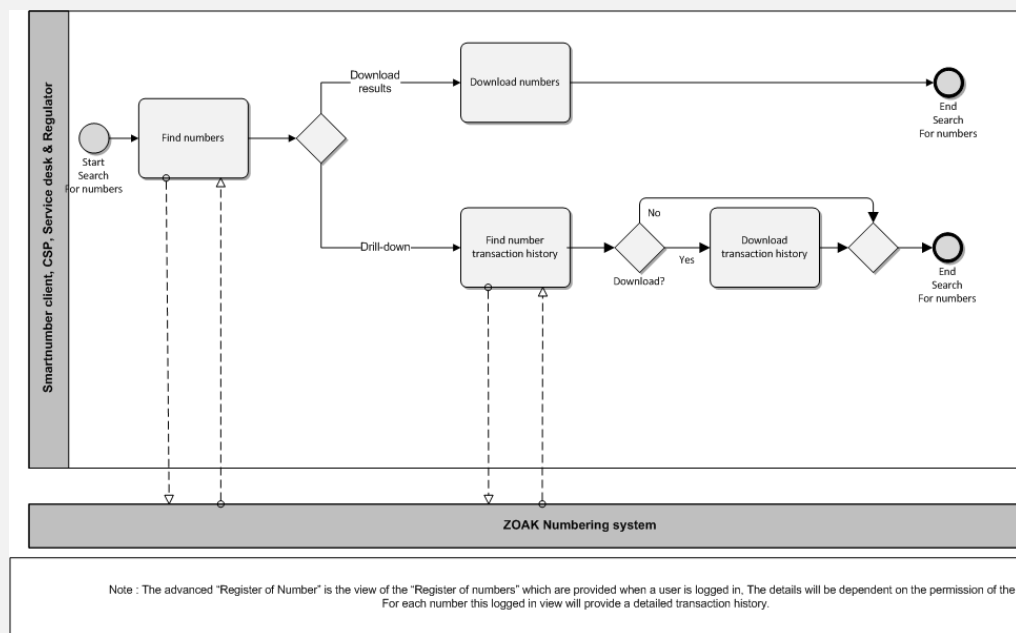


Figure 6.4: Search Register of Numbers (Logged In)

Activity name	Business rules
Find numbers	<p>Can be accessed by a user that is associated with one of either: smartnumber, Service Desk or Regulator account.</p> <p>The following search criteria is to be provided:</p> <ul style="list-style-type: none"> ▪ Number

		<ul style="list-style-type: none"> ▪ Number range To/From ▪ Service type ▪ Allocatee ▪ Current Holder ▪ Allocation date from ▪ Allocation date to ▪ EROU holder ▪ Status: <ul style="list-style-type: none"> ▫ Available ▫ Withheld ▫ Withheld Extended ▫ Reserved ▫ Reserve Extended ▫ Allocated ▫ Quarantined ▫ Available smartnumber ▫ Assigned smartnumber ▫ Allocated smartnumber ▫ Unavailable <p>A user will be able to search for and view number's with a status of Quarantined or Unavailable if the user has been granted the Advanced number search including quarantined numbers.</p> <p>The columns shown in the search results is same as the Register of Numbers (public view).</p>
	Download the numbers	<p>In the Register of Numbers (logged-in view) three download options will be accessible:</p> <ul style="list-style-type: none"> ▪ Download search result – download the results returned by search into a CSV formatted file. ▪ The full download – the full download will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers"). ▪ The full download enhanced – the full download enhanced will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers (Enhanced)").
	Find number transaction history	<p>Transaction history is a more detailed version of Allocation history and is similar to existing Transaction history provided by INMS system. The transaction history will show any numbering transaction (e.g., allocation) that modifies an attribute (e.g., status) of the number.</p> <p>The following information is recorded for each numbering transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account and username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>The transaction history can be filtered with following criteria:</p> <ul style="list-style-type: none"> ▪ Number ▪ Number range ▪ Service type ▪ Transaction type ▪ Transaction date range (to/from) ▪ EROU Holder ▪ Initiating account (this search filter is available when the user has been granted

	<p>the Service desk transaction history or Regulator transaction history role)</p> <p>The following information is shown for each transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account ▪ Initiating username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>Due to privacy, the initiating username is populated for the Regulator, Service Desk and to the users of the account the initiating username belongs to.</p>
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.

4.5 Search Register of smartnumbers (logged in view)

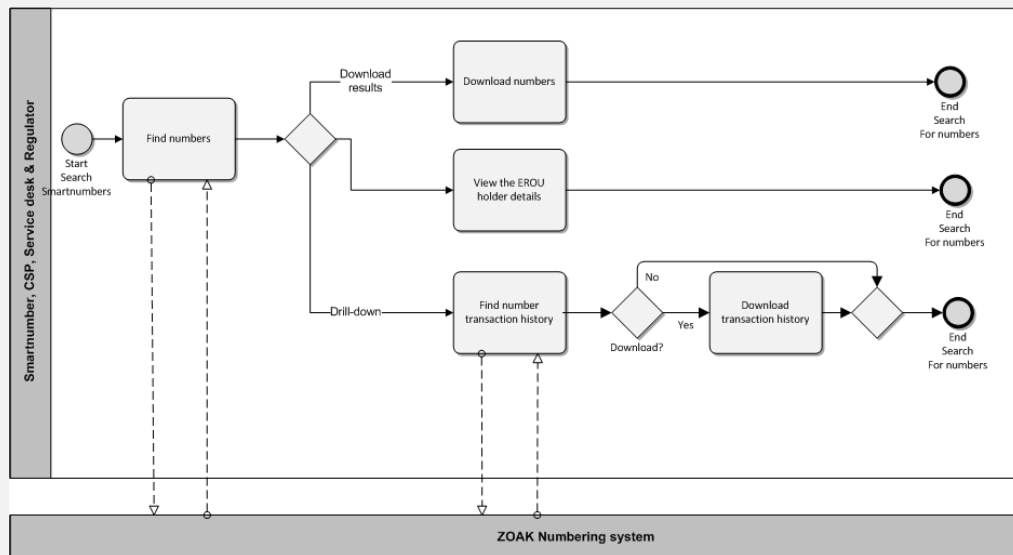


Figure 6.5: Search Register of smartnumbers (Logged In)

Activity name	Business rules
Find numbers	<p>An authenticated user belonging to Smartnumber, CSP, Service Desk or Regulator will be able to access the Register of Smartnumbers (logged-in view). smartnumbers can searched for using the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber, Unavailable. ▪ Price – All, \$0-250, \$251-1,000, \$1,001-15,000 and > \$15,001 <p>The “Include quarantined numbers” role is to be granted to permit a user to view “Unavailable” smartnumbers.</p> <p>The search result will contain the following details</p> <ul style="list-style-type: none"> ▪ Number

	<ul style="list-style-type: none"> ▪ Status ▪ Price ▪ Current EROU holder ▪ EROU assignment date 	
Download the numbers	An authenticated user belonging to a smartnumber, CSP, Service Desk or Regulator account can download search results from the Register of smartnumbers to a CSV formatted file.	
Find number transaction history	The transaction history will be exactly the same as it is captured in "Search Register of Numbers (Logged in view)" ("Find number transaction history").	
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.	
View the EROU holder details	<p>From the Register of smartnumbers, a public user can access the following information about a smartnumber:</p> <ul style="list-style-type: none"> ▪ Number ▪ Price (reserved price) ▪ Status ▪ EROU Holder details (the EROU Holder can control allowance on the public register): <ul style="list-style-type: none"> ▫ Name of EROU holder ▫ Australian Business Number ▫ Australian Company Number/Australian Registered Body Number (ACN/ARBN) ▫ Trading name ▫ Industry type ▫ Industry classification ▪ Assignment details: <ul style="list-style-type: none"> ▫ Type - Auction, Over the counter ▫ Date ▫ Winning Bidder (name of the account that purchased the number through the ACMA's smartnumber auction system) ▫ Winning Amount (the amount the winning bidder paid to acquire the EROU through the ACMA's smartnumber auction system) ▫ Initial Allocatee 	

4.6 Reference

4.6.1 Number status mapping for Register of Numbers

Internal number status	Register of Numbers (public view)	Register of Numbers (logged in view)
Available	SPARE	Available
Withheld	ALLOCATED	Withheld
Withheld Extended	ALLOCATED	Withheld Extended
Reserved	ALLOCATED	Reserved
Reserve Extended	ALLOCATED	Reserve Extended
Allocated	ALLOCATED	Allocated
Quarantined	Not shown in Register of Numbers	Quarantined

Available EROU unassigned	SPARE	Available EROU unassigned
Pending Payment	SPARE	Pending Payment
Assigned Allocated	ALLOCATED	Assigned Allocated
Assigned Unallocated	SPARE	Assigned Unallocated
Unavailable Unassigned Unallocated	Not shown in Register of Numbers	Unavailable Unassigned Unallocated

4.6.2 Transaction mapping for transaction history

Transaction	Appears in transaction history (public view)	Name of transaction as shown in transaction history (public view)
Allocation	Yes	Allocation
Allocation with withheld	Yes	Allocation
Allocation with withheld extended	Yes	Allocation
Allocation with Reserve	Yes	Allocation
Allocation with Reserve extended	Yes	Allocation
Surrender	Yes	Surrender
Automatic system withdraw(for FLRPRN expiring Withheld/Reserve)	Yes	Withdraw
Allocation under special circumstances	Yes	Allocation
System release from quarantine	No	
Transfer	Yes	Transfer
Regulator Withdraw	Yes	Withdraw
EROU allocation	No	
EROU trade	No	
Waiver of EROU	No	
Regulator-cancellation of EROU (False statement)	No	
Cancellation of EROU-no active service	No	

Annual Numbering Charge

The Numbering System assists the ACMA in its requirement to annually collect a set amount of revenue from carriage service providers that hold certain types of telephone numbers. This charge is known as the Annual Numbering Charge (ANC).

The following business processes and the rules provide further details about how the Numbering system supports the ANC process.

Set the ANC Billing Year

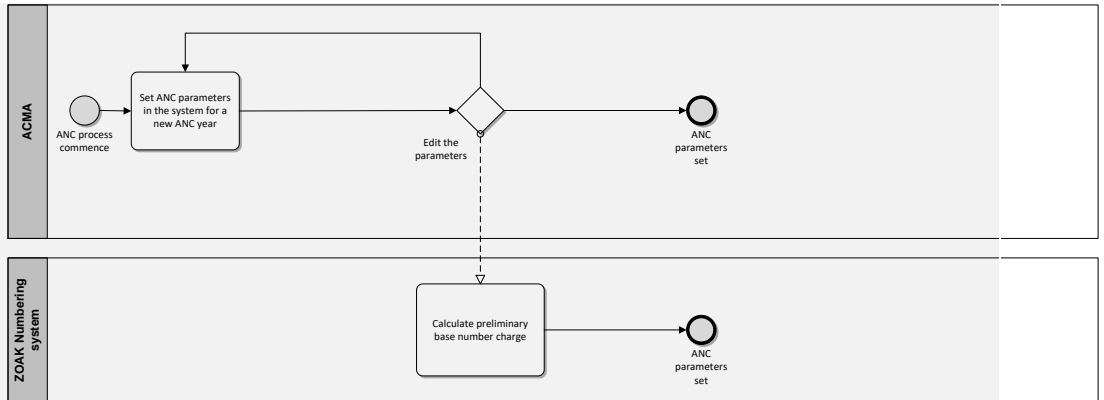


Figure 10.1: Set the ANC Billing Year

Activity name	Business rules
Set ANC parameters in the system for a new ANC year	<p>ACMA will be able to set the following parameters when creating the ANC bill</p> <ul style="list-style-type: none"> ▪ Billing year ▪ Census date ▪ Pay by date ▪ Maximum charge ▪ Target revenue <p>Billing year status - the possible values are:</p> <ul style="list-style-type: none"> ▪ New <ul style="list-style-type: none"> ○ Once a billing year has been created it is set to 'New' status the billing year can be updated. ▪ Published <ul style="list-style-type: none"> ○ A billing year must be set to 'Published' status before the BNC is calculated as the system will use the billing year details to calculate the Census date. ○ To update the details of a billing year after it is published, you must first unpublish the billing year to revert back to 'New' status. A CSP must make the required changes before changing the status back to 'Published'. ○ A billing year cannot be unpublished once the Census date has been reached as the BNC is calculated at this point. ▪ Closed <ul style="list-style-type: none"> ○ Setting the billing year to 'Closed' status triggers the generation of final ANC Statements and invoices. ○ CSPs are notified that ANC Statements and invoices are available.

Generate the draft ANC statements and distribution report

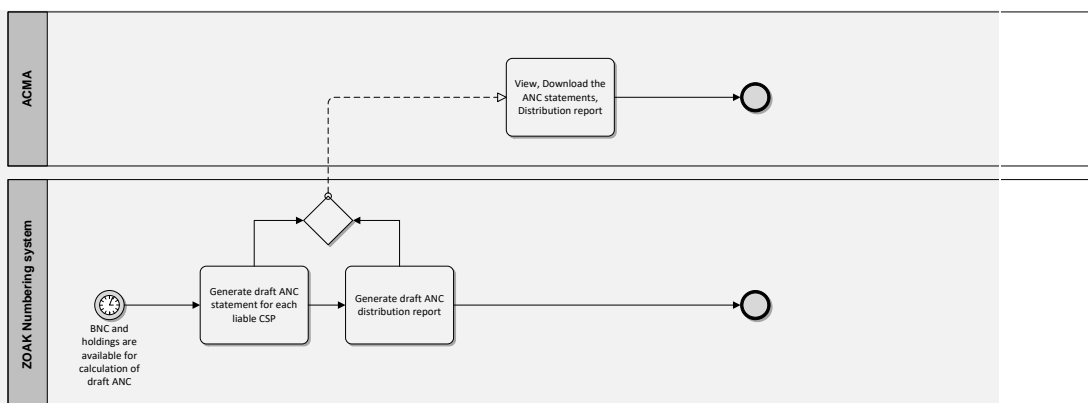


Figure 10.2: Generate the draft ANC statements and distribution report

Activity name	Business rules
Generate draft ANC statement for each liable CSP	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft statements are made available to ACMA and ZOAK.</p> <p>Basic details include:</p> <ul style="list-style-type: none"> ANC Billing year Issue date Due date Total ANC charge <p>The ANC Summary details provide a breakdown of the total ANC for a CSP by :</p> <p>The detailed ANC Statement includes:</p> <ul style="list-style-type: none"> Service Type Prefix Charges – Quantity of numbers in a prefix and price per number Total - Total cost of numbers within a prefix
Generate draft ANC distribution report	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft distribution report is made available to ACMA and ZOAK.</p> <p>The distribution report contains:</p> <ul style="list-style-type: none"> Report generated date Report generated by user ANC Billing year <p>The columns in the distribution report include:</p> <ul style="list-style-type: none"> Holder Service Type Liability (%) Liability amount (AUD) Total Liability of the holder (AUD)
View, Download the ANC statements, Distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to view and download the Draft Statements and Distribution report. Draft ANC Statements and Distribution reports reflect the current state Register of Numbers in real time. After midnight on the Census date, only the Port out report and Charge redistribution reports will change the distribution of ANC between CSI

Reconcile and finalise the dataset

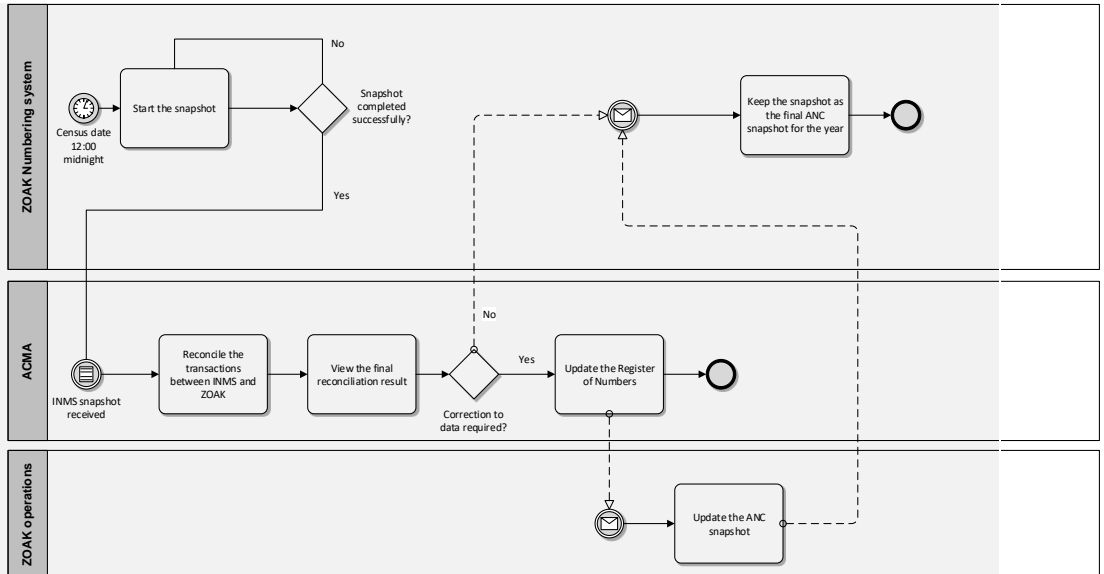


Figure 10.3: Reconcile and finalise the dataset

Activity name	Business rules
Start the snapshot	<p>At 12:00AM Midnight on the Census date, the system takes a snapshot of the Register of Numbers which is used to calculate ANC.</p> <ul style="list-style-type: none"> The snapshot includes the state of all numbers at exactly midnight on the Census date. Transactions completed after midnight on the Census date will not be included in the snapshot. There is no embargo period, the system will remain online while the snapshot is taken. Each year's snapshot is stored in the database indefinitely.
Reconcile the transactions between INMS and ZOAK	<ul style="list-style-type: none"> INMS will make available the reconciliation file taken at 01:00AM on the census date. The daily reconciliation file from INMS (taken on the census date) is used for the reconciliation. CMA must upload the reconciliation file to the ZOAK system.
View the final reconciliation result	<ul style="list-style-type: none"> The reconciliation results will display any inconsistencies between ZOAK and INMS.
Update the Register of Numbers and ANC snapshot	<p>If any discrepancies are found which need to be corrected for the year's final ANC snapshot, ACMA will inform ZOAK and advise ZOAK about the changes required to the Register of Numbers.</p> <ul style="list-style-type: none"> To update the production database the "Regulator update" function will be used by the ACMA to update the Register of Numbers. ZOAK operations will prepare a script to update the snapshot to reflect the updates made by the ACMA.
Keep the snapshot as the final ANC snapshot for the year	<ul style="list-style-type: none"> This will be treated as the "Final ANC snapshot". ZOAK Operations can provide the ANC snapshot to the ACMA on request.

Upload Port out and Charges redistribution reports

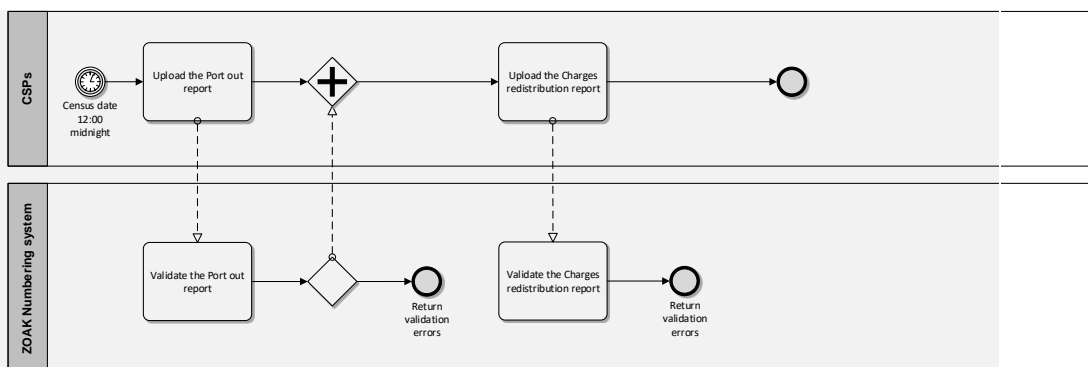


Figure 10.4: Upload Port out and Charges redistribution reports

Activity name	Business rules
Upload the Port out report	<p>A CSP has 17 calendar days from midnight on the Census date to upload the Port out report</p> <ul style="list-style-type: none"> Can be uploaded from midnight on the Census date until midnight on day. A Port out report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>
Validate Port out report	<p>The file must be in CSV format and include a header row.</p> <p>Each column heading must be labelled with the heading given in bold and be in the following order:</p> <ul style="list-style-type: none"> Allocated Prefix - Column 1 - the five digit prefix that numbers have been allocated to. Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers. Held Quantity - Column 3 - the quantity of numbers which have been allocated to the CSP. The quantity must be at least 1 and not exceed either 100,000 or the total quantity of numbers held by the CSP in the Allocated Prefix. Reporter - Column 4 - the MNP code of the CSP submitting the report. Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name. Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none"> Each validation error corresponds to the line number in the report. For example, if the first error is 'Invalid Allocated Prefix', this means the first row of data (excluding the header) is invalid. Additional information is returned to assist the CSP in correcting the report.
Upload Charges redistribution report	<p>A CSP has 3 days from the end of the 17th day from the Census date to upload the Charges redistribution report.</p> <ul style="list-style-type: none"> A Charges redistribution report can only be uploaded after the period for uploading the Port out report has ended. Can be uploaded from midnight of the 17th day until midnight of the 20th day from the Census date. A Charges redistribution report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>

Validate Charges redistribution report

The file must be in CSV format and include a header row.
Each column heading must be labelled with the heading given in bold and be in the order listed.

- Allocated Prefix - Column 1 - the five-digit prefix that numbers have been ported out from.
- Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers.
- Held Quantity - Column 3 - the quantity of numbers which have been ported out. The quantity must be at least 1 and not exceed either 100,000 or the total count of numbers held by the CSP in the Allocated Prefix, taking into consideration port out reports.
- Reporter - Column 4 - the MNP code of the CSP submitting the report.
- Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name.
- Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name.

Validation results are displayed on screen to assist the CSP in correcting the report.

- Each validation error corresponds to the line number in the report. Row 2 for example is the first row of data considering that Row 1 is the header row.
- Additional information is returned to assist the CSP in correcting their report.

View Portability report and Mobile number holdings statement

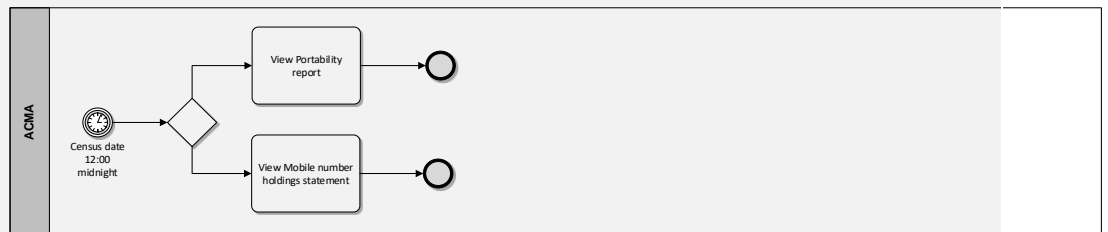


Figure 10.5: View the Portability report and Mobile number holdings statement

Activity name	Business rules
View Portability report	<ul style="list-style-type: none"> ▪ ZOAK Operations and ACMA are able to download the Portability report ▪ The Portability report is a combined list of all Port out and Charges redistribution reports that have been uploaded by CSP's. ▪ Viewing the report allows the ACMA to determine those CSP's who have distributed their mobile number holdings to other CSP's and their respective MNP codes. ▪ The Portability report is updated in real time based on CSP activity during the upload period of the Port out and Charges redistribution reports. ▪ The portability report is considered final when the upload period for Port out and Charges redistribution reports has ended. The portability is then considered as final.
View Mobile number holdings statement	<ul style="list-style-type: none"> ▪ ZOAK Operations, ACMA and CSP's are able to download the Mobile number holdings statement. ▪ The Mobile number holdings statement reflects the state of all held mobile numbers in the system as of midnight on the Census date.

Close the ANC billing year

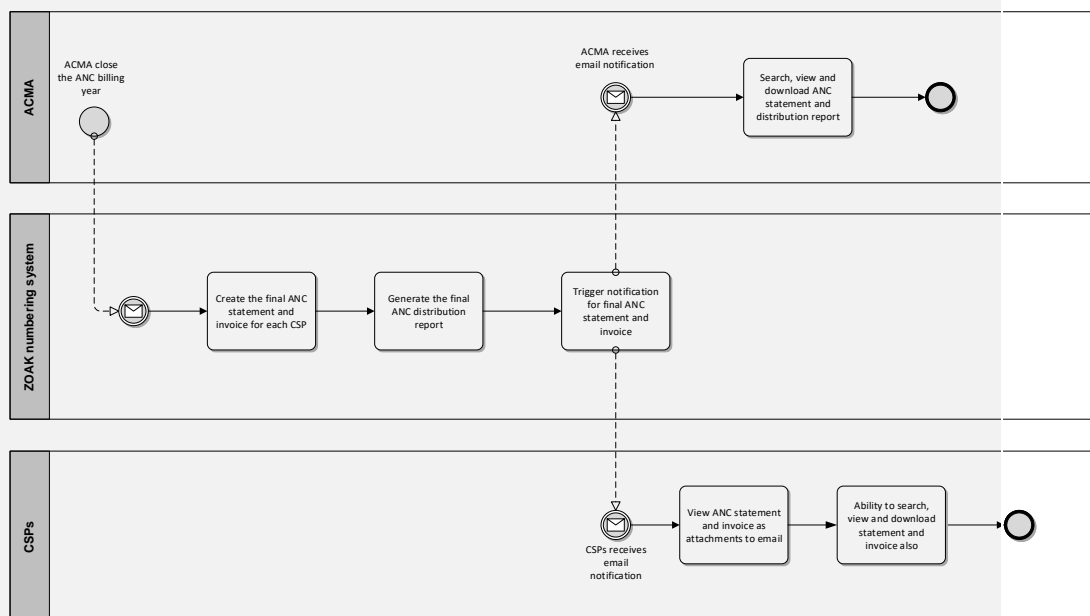


Figure 10.6: Close the ANC Billing Year

Activity name	Business rules
ACMA close the ANC billing year	<p>Setting the billing year to 'Closed' status triggers the generation of the final ANC Statements and distribution report.</p> <p>Only ACMA can perform this action.</p> <p>CSPs liable for the charge are provided an email with the ANC Statement and invoices attached. The email includes other important ANC information.</p>
Create the final ANC statement for each CSP	<p>The system generates the final ANC statement for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and applies adjustments from the Port out and Charges redistribution reports.</p>
Generate Final ANC distribution report	<p>The system generates the final distribution report for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and applies adjustments from the Port out and Charges redistribution reports.</p>
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that "View my ANC statements" permission checkbox selected) with the ANC Statement and ANC invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements and ANC invoices have been issued by the system and ACMA can access these.</p>
View ANC statement and distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to download the final ANC Statement and Distribution report.
CSP view ANC statement	<ul style="list-style-type: none"> CSPs are able to download their final ANC Statement from the ANC portal if they have the required permissions

Create final ANC invoice

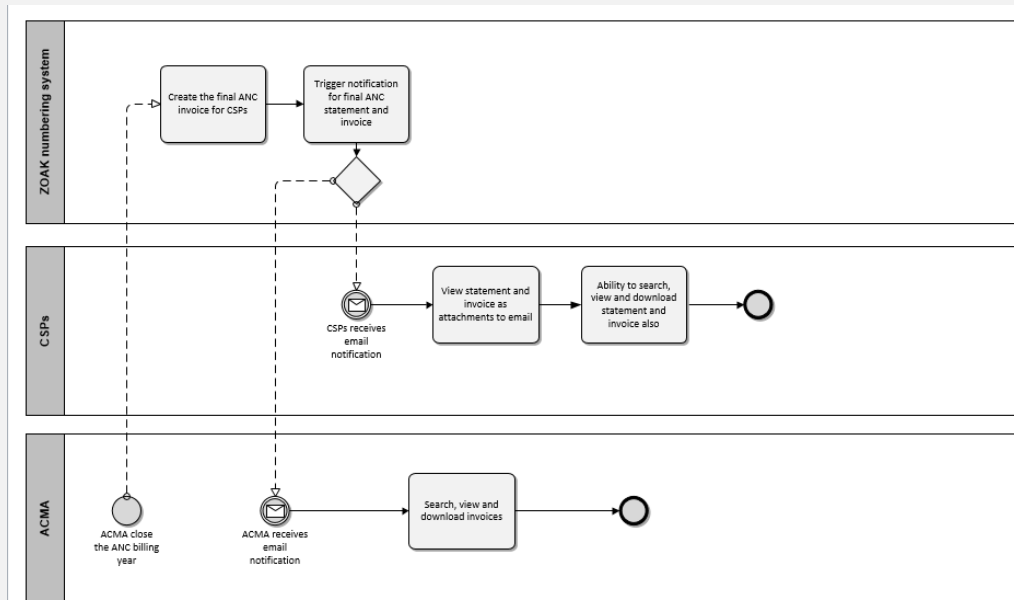


Figure 10.7: Create final ANC invoice

Activity name	Business rules
Create the final ANC invoice for CSPs	<p>Setting the billing year to 'Closed' status triggers the generation of the final ANC invoice.</p> <ul style="list-style-type: none"> The invoice due date will be either the default pay by date as configured when creating the billing year, or 30 calendar days from the day invoice is generated (whichever is greater).
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that have the "View my ANC statements" permission checkbox selected) with the ANC Statement and ANC invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements and ANC invoices have been issued by the system and ACMA can access these.</p>
Search, view and download invoices	<ul style="list-style-type: none"> ACMA and ZOAK Finance will be able to identify the ANC invoices by the 'Annual Numbering Charge' and the creation date. CSPs will be able to view and download their own ANC invoice.

Record payment against ANC invoices

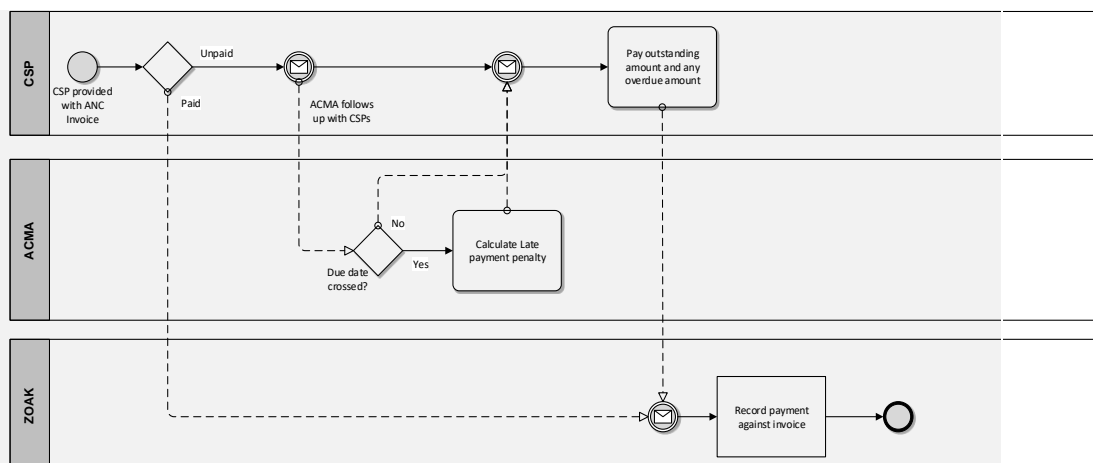


Figure 10.8: Record payment against ANC invoices

Activity name	Business rules
Record payment against invoice	ZOAK Finance will record the payment against each individual ANC invoice when the late payment penalty is not captured against the invoice in the system.
Capture late payment penalty	Calculation of the late payment penalty is handled by ACMA outside of the system. ZOAK Finance will identify the late payment penalty as an unmatched transaction reconciled with ACMA.
Restrict allocation to CSPs when ANC is unpaid	If any CSP account has an overdue ANC invoice (Only after 3 months from the invoice date then ACMA can set an allocation override on the account to prevent the CSP from allocating numbers. The CSP is provided with a message upon login to the system to indicate the account has been blocked from applying for allocations of numbers.

- Appendix A').
- Valid email address. (RFC2822 <https://tools.ietf.org/html/rfc2822>)
- Valid phone and/or mobile numbers (if provided) must be 10 digits including area code.
- Do not create accounts where the ABN/ACN has been supplied for an existing active numbering client account (ignore closed accounts).

Calculate charge	<ul style="list-style-type: none"> ▪ Calculate the smartnumber account registration charge. The smartnumber account registration charge is configurable and currently configured as \$57.00. ▪ Create an invoice provided a registration charge was generated for the applicant to pay through the upfront payment gateway.
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F0.Finance level 1 end to end process flow	<p>Pay CSP account registration charge invoice through the upfront payment gateway.</p> <p>If payment isn't made at the time of application, the applicant will receive their account and user credentials to login to the Numbering system.</p> <p>Whilst the CSP account has an outstanding CSP registration the account will not be permitted to perform any numbering operation (e.g., allocation, transfer, and surrender).</p>
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Generate account	<p>Using the information contained in the CSP account application a CSP account is created within the Numbering system.</p> <p>An email notification is sent to Regulator on the creation of a CSP account.</p>
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Generate user	This process and rules are exactly same as explained in Generate user.
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5.9 Apply for a registered inquirer

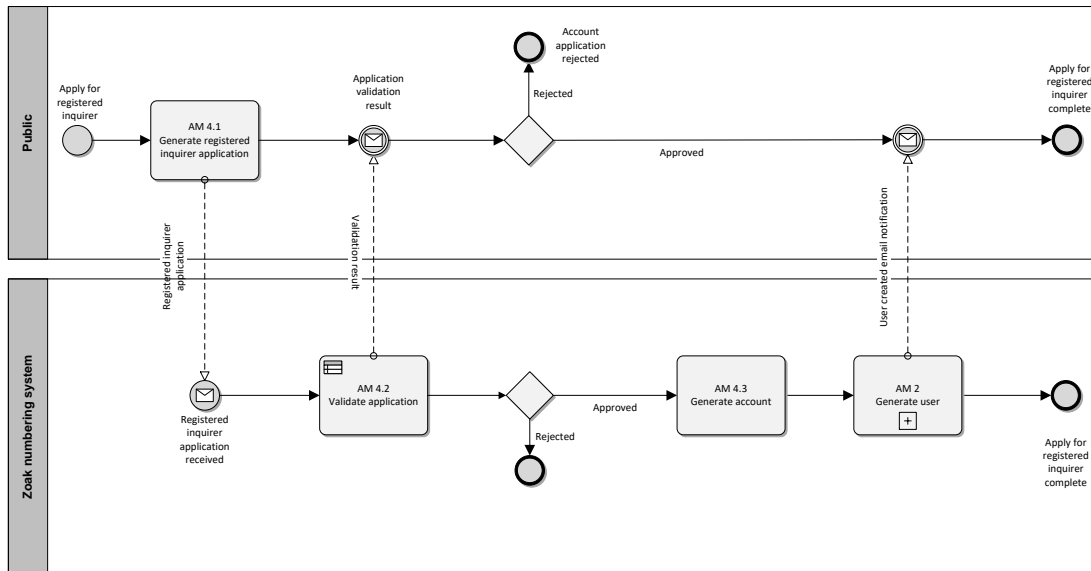


Figure 4: Apply for a registered inquirer

Activity name	Business rules
Generate Registered inquirer application	<p>The following information is collected from the applicant:</p> <ul style="list-style-type: none"> ▪ Industry Type: <ul style="list-style-type: none"> ▫ Commonwealth Department, Other Commonwealth Agency, State Government, Local Government, Company, Community or Volunteer Group, Person, Partnership or Trust, Sole Trader, and Other Entity. ▪ Industry Classification: <ul style="list-style-type: none"> ▫ Accounting, Administration, Advertising/Media/Entertainment, Banking & Financial Services, Call Centre/Customer Service, Community & Sport, Construction, Consulting & Corporate Strategy, Education & Training, Engineering, Government/Defence, HealthCare & Medical, Hospitality & Tourism, HR & Recruitment, IT & T, Insurance & Superannuation, Legal, Manufacturing/Operations, Mining, Oil & Gas, Primary Industry, Real Estate & Property, Retail & Consumer Products, Sales & marketing, Science & Technology, Self-Employment, Trades & Services, Transport & logistics and Other ▪ Business (physical) address: <ul style="list-style-type: none"> ▫ Street number, name, type ▫ Suburb ▫ State ▫ Postcode ▫ Country (default to AU) ▪ Postal address: <ul style="list-style-type: none"> ▫ Street Address consisting of Street number, name, type OR Postal delivery type, delivery number e.g. PO Box 123 ▫ Suburb ▫ State ▫ Postcode ▫ Country (default to AU) <p>Details for the creation of the account administrator user:</p>

	<ul style="list-style-type: none"> ▪ Title ▪ First name ▪ Surname ▪ Email address ▪ Alternate email address ▪ Primary contact phone number ▪ Alternate contact phone number ▪ Secret Question ▪ Secret Answer <p>Accepted the following terms and conditions:</p> <ul style="list-style-type: none"> ▪ Standard T&Cs
<p>Validate application</p>	<p>The following mandatory information has been provided:</p> <ul style="list-style-type: none"> ▪ Industry type ▪ Industry category ▪ Business and postal addresses ▪ The following user information is required: <ul style="list-style-type: none"> ▫ First name ▫ Surname ▫ Primary contact phone number (can be geo-graphic or mobile) ▫ Email address ▫ Secret Question ▫ Secret Answer <p>The following validations occur:</p> <ul style="list-style-type: none"> ▪ Verify the provided business and postal addresses are valid addresses (Refer address validation in 'Number Planning <p>Number planning is the specification and assignment of numbers and establishes the relationships between service types, number definitions, prefixes, standard zone units and numbers.</p> <p>Prefix definitions are maintained through the number planning functions within the Numbering system. As changes to prefix definitions are infrequent the number planning functions have been scaled back to provide minimal features to support update, release and withdraw prefix definitions as well as to support adding and removing SZUs from local service prefixes.</p> <p>The major differences between the NUMB and the Numbering system are summarised below:</p> <ul style="list-style-type: none"> ▪ No hierarchical relationship between prefix definitions or service type definitions is maintained. Updating a parent prefix definition or service type definition will not cascade down to the child prefixes. ▪ When assigning a service type to a prefix definition the service types definition are used as a template to assign initial values to the prefix definition. ▪ Prefix definitions can be updated provided the prefix has not been released. The exception to this rule is the 'Annual numbering charge applies' attribute can be updated at any time. ▪ When a prefix definition is released the Numbering system determines whether there is sufficient space within the Register of Numbers: <ul style="list-style-type: none"> ▫ No overlapping number ranges can exist. ▫ At least one allocation of the standard unit size can be made.

- A prefix can be withdrawn when the entire number range is spare.

5.10 Update Service Type

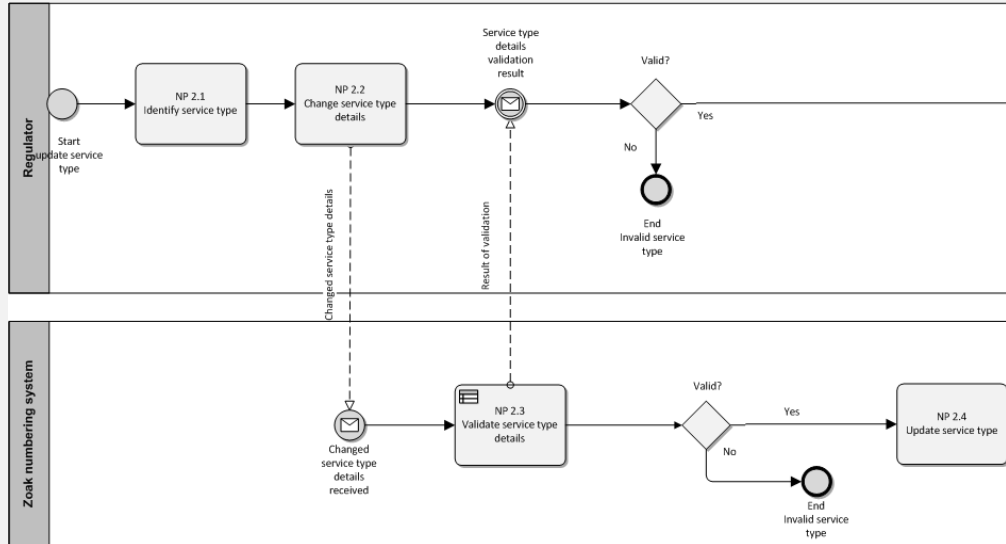


Figure 5.1: Update service type

Activity name	Business rules
Identify service type	Find a service type to modify.
Change service type details	The following attributes of a service type can be modified: <ul style="list-style-type: none"> ▪ Geographical service – set to Y if service type is local service, otherwise N ▪ Number length (mandatory) integer 4 to 15 ▪ Standard unit size (mandatory) – one of 1, 10, 100, 1000, 10000, 100000 ▪ Reduced unit size – mandatory for geographical and mobile service types. The value provided must be less than the standard unit size. ▪ Annual numbering charge applies – Y/N (mandatory)
Validate service type details	The following validations are applied: <ul style="list-style-type: none"> ▪ A service type can only be created by a Regulator account user that has been granted the number planning role. ▪ All mandatory fields are supplied. ▪ Reduced unit size is required only for geographic service types. The value provided must be less than the standard unit size.
Update service types	The service type is updated in the Numbering system with the supplied values. Updating a service type will not alter any prefix definitions or allocations associated with the service type.

5.11 Update Prefix

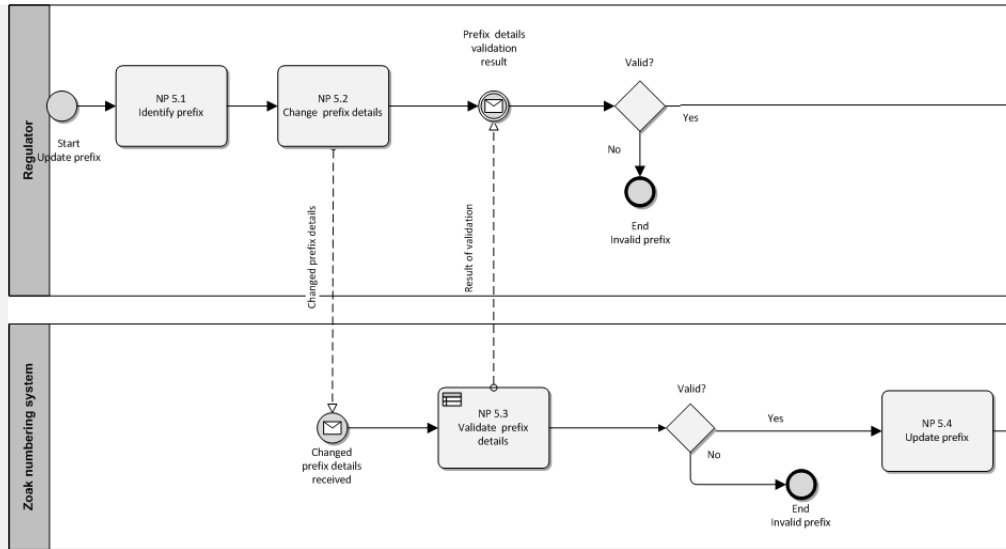


Figure 5.2: Update prefix

Activity name	Business rules
Identify prefix	Find a prefix to modify.
Change prefix details	<p>The following attributes can be modified based on the prefix's status:</p> <ul style="list-style-type: none"> ▪ "Not released" status <ul style="list-style-type: none"> ▫ Service type ▫ Number length ▫ Standard unit size ▫ Reduced unit size (geographic service types only) ▫ Annual numbering charge applies ▪ "Released" status <ul style="list-style-type: none"> ▫ Annual numbering charge applies <p>The following metrics are to be reported for each prefix:</p> <ul style="list-style-type: none"> ▪ Quantity (total quantity numbers released) ▪ Spare ▪ Allocated <p>The totals will include child prefixes i.e., 03 includes 0388 etc.</p> <p>NOTES: Standard unit sizes are unlikely to change in the future. This change will require an update to the Numbering plan. The ACMA will raise a change request as any future allocations using the previous standard unit size will need to be supported.</p>
Validate prefix details	<p>The following validations are applied:</p> <ul style="list-style-type: none"> ▪ Standard Unit Size – one of 1, 10, 100, 1000, 10000, 100000. ▪ The number range must have enough available numbers to satisfy the requirements of the standard unit size (see below). ▪ Reduced unit size is required only for local (geographic) service types provided must be less than the standard unit size. ▪ Annual numbering charge applies (Y/N) (mandatory). <p>Number range</p> <p>The following rules are applied to calculate the number range based on the prefix and number length:</p> <ul style="list-style-type: none"> ▪ The start of the range is the prefix followed by one or more zeros to the required number out to its number length. ▪ The end of the range is the prefix followed by one or more nines to the required number length.

	<p>number out to its number length.</p> <ul style="list-style-type: none"> For example, prefix 0388 has a number length of 10. Therefore, the number range for prefix 0388 is 0388 000000 to 0388 999999. <p>Within a prefix definition, number ranges are permitted to overlap, thus supporting a parent-child relationship where smaller child prefix's number ranges can exist within a parent's prefix's number range. For example, see the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.</p>	
Update prefix	<ul style="list-style-type: none"> The prefix is updated within the Numbering system. The status of the prefix is not altered. 	

5.12 Release Prefix

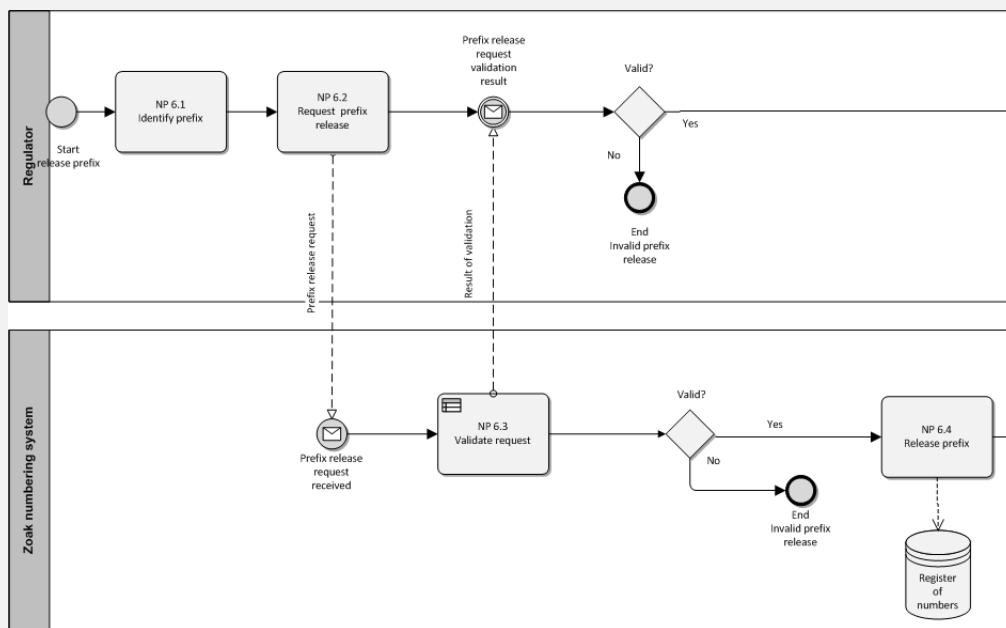


Figure 5.3: Release prefix

Activity name	Business rules
Identify prefix	Find/list the prefix to release.
Request prefix release	Request the selected prefix be released for allocation.
Validate request	<p>To release a prefix the following criteria needs to be satisfied:</p> <ul style="list-style-type: none"> A prefix can only be released by a Regulator account user that has been the Number planning role. Status of the prefix is "Not released". For a geographical service type, at least one SZU is assigned to the prefix. The number range contained in the prefix definition can be created in the Register of Numbers according to the number range rules below. <p>Number ranges rules</p> <ul style="list-style-type: none"> For a prefix that is a parent prefix: <ul style="list-style-type: none"> The prefix's number range completely contains any child prefixes number ranges (eg can't split a child prefix number range in half). Parent prefix number ranges are created (interleaved) around the child prefixes number ranges.

	<ul style="list-style-type: none"> ▫ For each parent prefix number range the created number ranges can allocate at least a single stand unit size allocation. ▫ Number range must be spare. ▪ For prefix that is child prefix: <ul style="list-style-type: none"> ▫ Fully contained within the parent prefixes number range. ▫ Numbers must be spare. <p>NOTES: Prefixes at the same level in the hierarchy cannot have overlapping number ranges Although prefix definitions overlap the Register of Numbers interpret the prefix definitions to determine number ranges available for allocation, ensuring none of the number ranges overlap.</p> <p>Parent prefixes numbers are made available in the number ranges not used by the child prefixes. For example, examine the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.</p>
Release prefix	<p>The prefix is released in the Numbering system and the following occurs:</p> <ul style="list-style-type: none"> ▪ The status of the prefix is set to "Released". ▪ The prefix is added to the Register of Numbers. ▪ The released prefix number range(s) is marked as spare in the Register of Numbers. ▪ The released prefix number range(s) is available for allocation through the applicable allocation process.

5.13 Withdraw Prefix

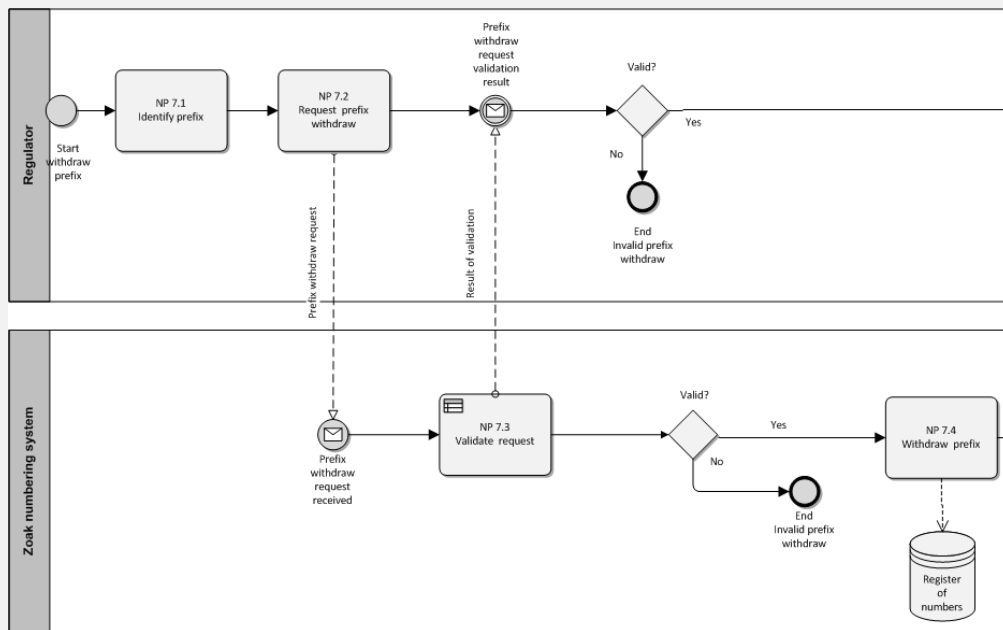


Figure 5.4: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a released prefix to withdraw
Request prefix withdraw	Select the released prefix to be withdrawn.

Validate request	A released prefix can be withdrawn when the following criteria is satisfied: <ul style="list-style-type: none"> A prefix can be withdrawn by a Regulator account user that has been granted the Number planning role. All numbers for the prefix are spare. Status of the prefix is "Released". 	
Withdraw prefix	The released prefix is withdrawn and the following occurs: <ul style="list-style-type: none"> The status of the prefix is set to "Not released". The prefix number range is removed from the Register of Numbers. The withdrawn prefix number range is not shown in the Register of Numbers. The withdrawn prefix number range is not available for allocation through the applicable allocation process. 	

5.14 Add SZU to a Local Service Prefix

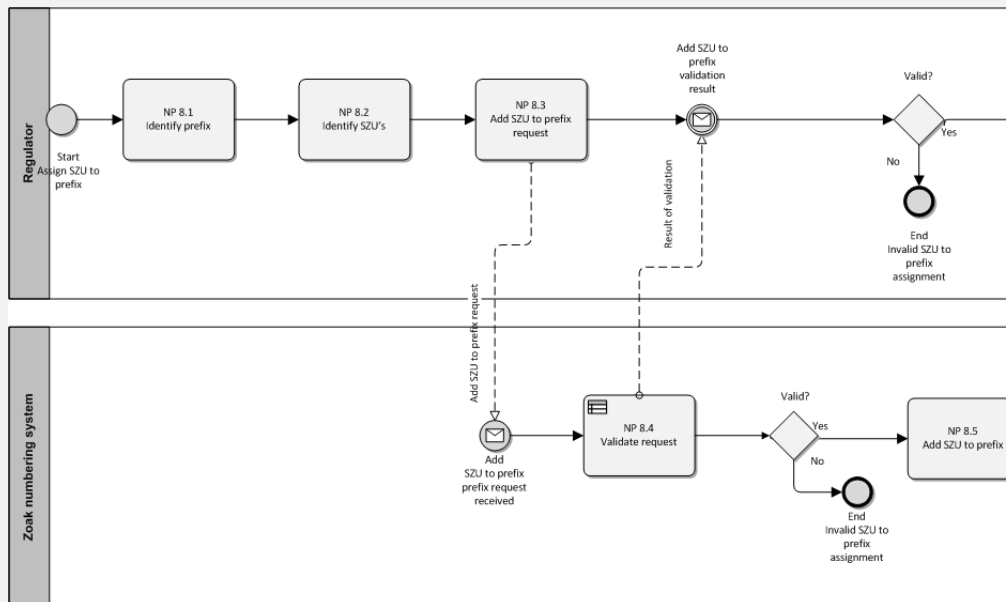


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to add SZUs.
Identify SZUs	Find an SZU to add to the selected prefix.
Add SZU to prefix request	Add one or more selected SZUs to the selected prefix with local (geographic)
Validate request	To add an SZU to a prefix defined with local (geographic) service the following are applied: <ul style="list-style-type: none"> SZU can be added to a prefix by a Regulator account user that has been granted the number planning role. SZUs can only be added to a prefix that has been assigned a local (geographic) service type. SZUs can be added to a prefix regardless of the prefix's status. The same SZU cannot be added twice. A prefix can have multiple SZUs (conversely a SZU can be assigned multiple prefixes). <p>NOTE: Moving a released prefix to another SZU.</p>

	On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation to the original SZU. All further allocations will indicate allocation to the new SZU.
Add SZU to prefix	<ul style="list-style-type: none"> Link the selected SZUs to the prefix. Numbers can be allocated from the added SZUs.

5.15 Remove SZU from Local Service Prefix

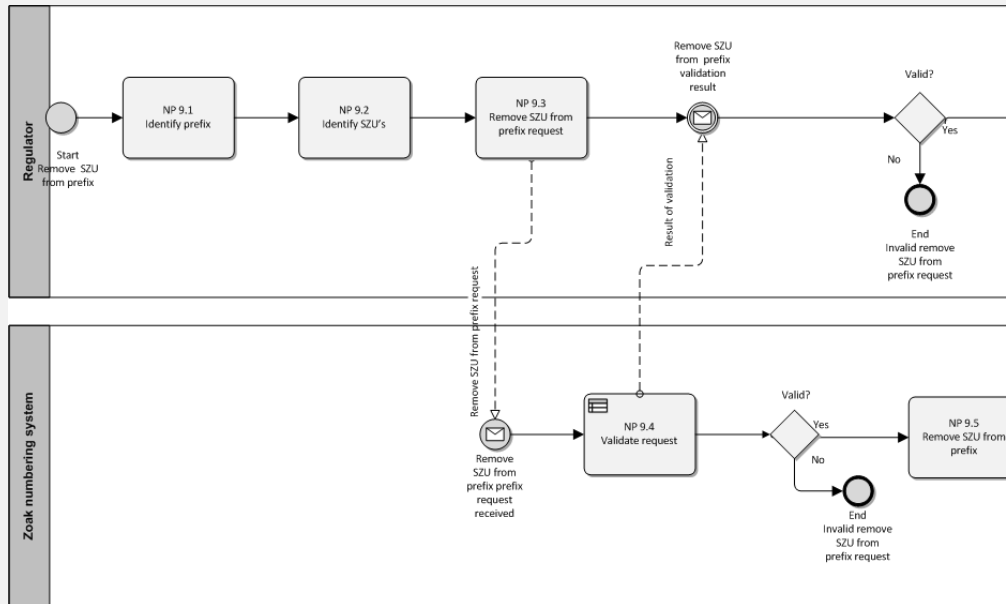


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to remove SZUs.
Identify SZUs	Identify one or more SZUs to remove from the identified prefix.
Remove SZU from prefix request	Request to remove one or more selected SZUs from the selected prefix.
Validate request	<p>To remove a SZU from a prefix definition with local (geographic) service the following validations are applied:</p> <ul style="list-style-type: none"> SZU can be removed from a prefix by a Regulator account user that has been granted the number planning role. SZUs can be removed from a prefix that has been defined as a local (geographic) service type. SZUs can be removed from a prefix regardless of the prefix's status. A released prefix must have at least one SZU. <p>NOTE: Moving a released prefix to another SZU. On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation made in the original SZU. All further allocations will indicate the allocation was made to the new SZU.</p>
Remove SZU from prefix	<ul style="list-style-type: none"> Remove the selected SZUs from the prefix. Numbers cannot be allocated from the prefix in the removed SZUs.

5.16 Number planning report

Activity name	Business rules
Generate number planning report	<p>ACMA users will be able to access the number planning report which allows / determine whether a certain prefix belonging to a service type or an entire s close to running out of numbers.</p> <p>The report can be generated for a single service type or an individual prefix.</p> <p>The report allows the ACMA to decide when to release more numbers in a ce type based on the quantity of spare numbers and spare ratio.</p>
View number planning report	<p>The number planning report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the number planning report include:</p> <ul style="list-style-type: none"> ▪ Service Type ▪ Number prefix ▪ Quantity of allocated numbers ▪ Allocation ratio (%) ▪ Quantity of spare numbers (%) ▪ Spare ratio (%)

5.17 Geographic numbers planning report

Activity name	Business rules
Generate geographic number report	<p>ACMA users will be able to access the geographic number report which allow determine when a certain Standard zone unit (SZU) is close to running out of based on the total prefixes assigned to a specific SZU.</p> <p>The report can be generated for a single SZU or any number of prefixes. Spec prefix will produce a report containing all SZU's that the prefix is assigned to other prefixes assigned to the same matching SZU.</p> <p>The calculation collects the number of available numbers for a prefix and divi the numbers that have been allocated in the last 10 years from the date the i This avoids skewing the results from old allocation patterns and take-up from numbering systems.</p> <p>The report allows the ACMA to decide when to release more numbers in a ce based on the expected run out, measured in years.</p>
View geographic number report	<p>The geographic number report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the geographic number report include:</p> <ul style="list-style-type: none"> ▪ Number prefixes ▪ Standard Zone Unit (SZU) ▪ Expected prefix run out (years)

6 Register of Numbers

The Numbering system is required by legislation to provide two public registers; The Register of Numbers and Register of smartnumbers (Register of Enhanced Rights of Use). The Register of Numbers shows the availability of all numbers as well as transaction history. The Register of smartnumbers tracks the enhanced rights of use (EROU) holder for a smartnumber.

6.1 Search Register of Numbers (public view)

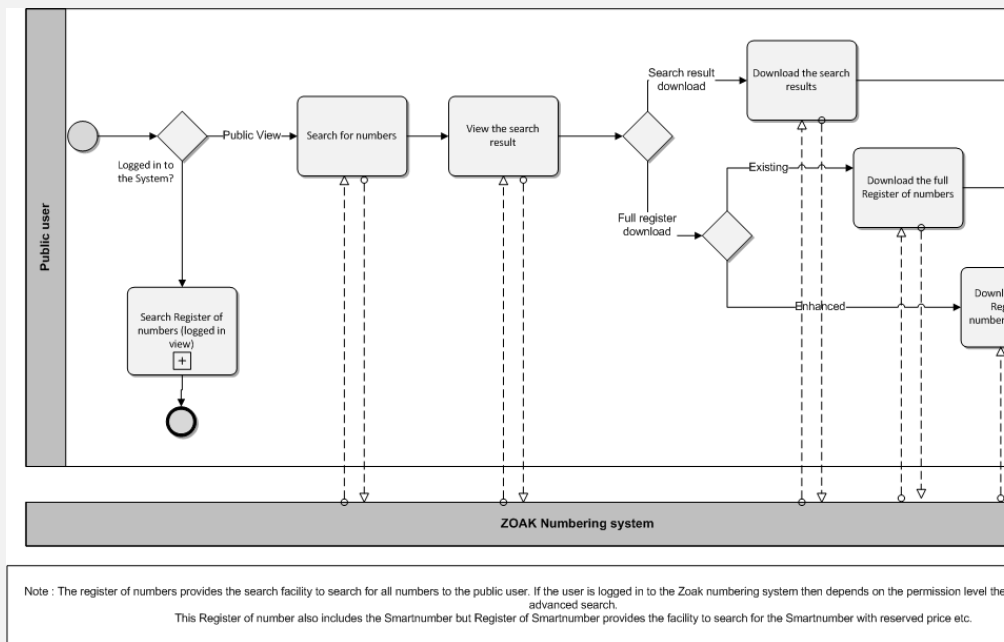


Figure 6.1: Search Register of Numbers (Public)

Activity name	Business rules
Search for numbers	<ul style="list-style-type: none"> ▪ The search page will be available to the public. ▪ The Register of Numbers will contain all numbers except 'Quarantine ▪ A user can search for a number using the following criteria: <ul style="list-style-type: none"> ▫ Number ▫ Number range ▫ Allocation date to/from date range ▫ Number status (Allocated or Spare) ▫ Service type ▫ Allocatee ▫ Current Holder ▫ EROU holder
View the search result	<ul style="list-style-type: none"> ▪ Lists the numbers matching the entered search criteria in the previous ▪ The following fields will be shown for each number returned: <ul style="list-style-type: none"> ▫ Service type ▫ Prefix ▫ Number length ▫ Number range (from) ▫ Number range (to) ▫ Number status (refer to "Number status translation" worksheet) ▫ Quantity

	<ul style="list-style-type: none"> ▫ Allocatee ▫ Allocation date ▫ Current holder ▫ Latest transfer date ▫ SZU (only populated for local service numbers) ▫ Current EROU holder ▫ EROU assignment date <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ Assigned smartnumbers are not aggregated. This permits the EROU holder information to be accessible. ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add SZU. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated. 	
Download the results	Not implemented	
Download the full Register of Numbers	<p>The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers in the same format as the ACMA's NUMB system accessible by the public. The Register of Numbers full download will be kept the exactly same format as provided by the ACMA's NUMB system to maintain backward compatibility with CSP systems. The file name of the download will be "InquiryFullDownload.csv".</p> <p>The columns contained in the download are listed below:</p> <ul style="list-style-type: none"> ▪ Service type ▪ Prefix ▪ Number length ▪ From ▪ To ▪ Quantity ▪ Allocatee ▪ Allocation date ▪ Latest holder ▪ Latest transfer date ▪ Numbering area ▪ Allocatee's exchange service area ▪ IP use ▪ Nomadcity ▪ Declaration <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add Numbering area and Allocatee's exchange service area. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated. 	

Download the full Register of Numbers (Enhanced)

The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers that is accessible by the public. The columns contained in the download are listed below:

- Service type
- Prefix
- Number length
- Number range (from)
- Number range (to)
- Number status (refer to "Number status translation" worksheet)
- Quantity
- Allocatee
- Allocation date
- Latest holder
- Latest transfer date
- Current EROU holder
- EROU assignment date

6.2 View Allocation History (public view)

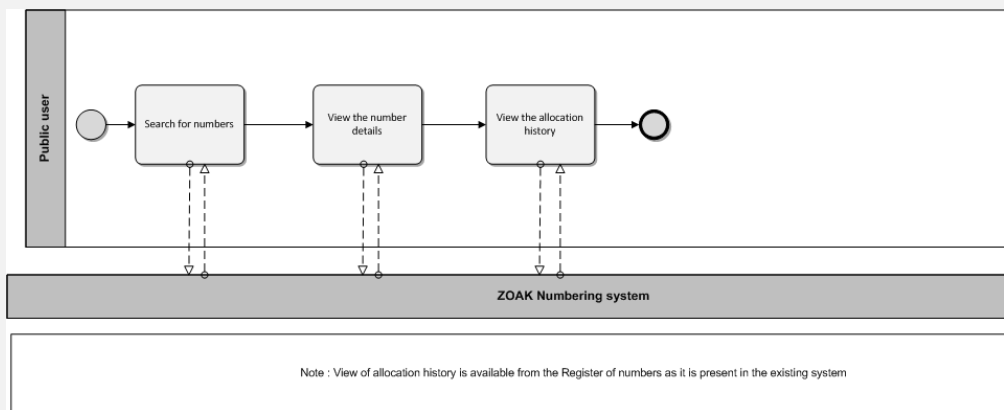


Figure 6.2: View Allocation History (Public)

Activity name	Business rules
Search for numbers	As described in the Search Register of Numbers (public view) "Search for num activity.
View the search result	As described in the Search Register of Numbers (public view) "View the search activity.
View the allocation history	<p>The allocation history of numbers must be available to all public users. When a number is selected to view the allocation history, the following details will be shown:</p> <ul style="list-style-type: none"> ▪ Number/Number Range ▪ Quantity ▪ Service type ▪ Prefix/ Length ▪ Current EROU holder (populated only in case of smartnumbers) <p>Transaction history has the following details:</p> <ul style="list-style-type: none"> ▪ Transaction (the list of transaction actions is provided below). ▪ Transaction date (date of the transaction not including time). ▪ Allocatee (the initial CSP to whom a number was allocated – this will

when the number is surrendered).

- Current holder (CSP holding the number now. In case of initial allocation the Allocatee and the current holder will be the same, only in case of transfer the current holder will be different to the allocatee).

The transaction history will list all the following actions:

- Allocation (including allocation of FLRPRN with Withheld/extended, Reserve/Extended and allocation without reservation and smartnumber allocation to CSP).
- Transfer (transfer of FLRPRN and smartnumbers between CSPs).
- Surrender (surrender if FLRPRN/smartnumber by CSP).
- Withdraw (regulator Withdraw of a FLRPRN/smartnumber from a CSP).
- If the number is a smartnumber then the allocation history will keep track of initial CSP allocation and immediate surrender.
- Excludes smartnumber EROU assignment, EROU waived and system cancellation of EROU (no active service).

6.3 Search Register of Smartnumbers (public view)

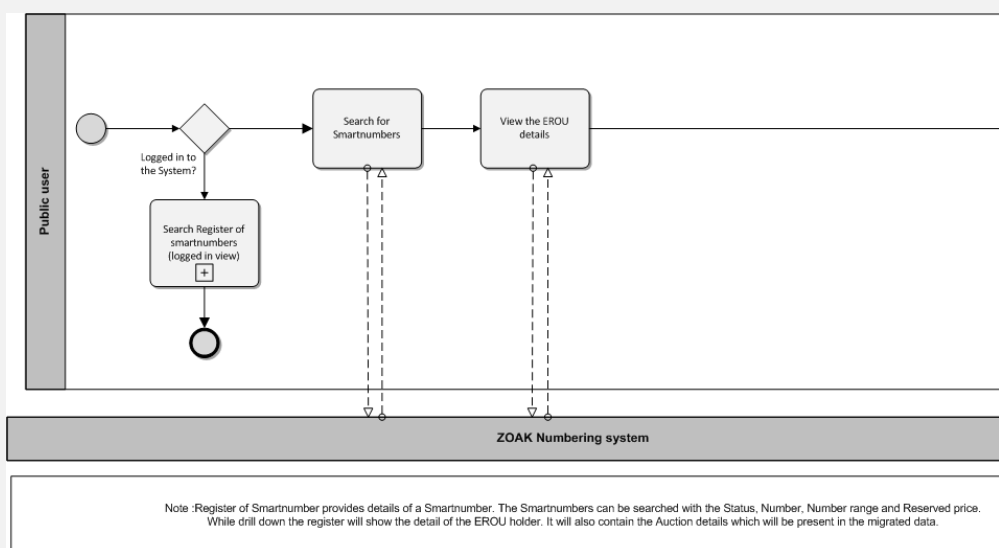


Figure 6.3: Search Register of Smartnumbers (public)

Activity name	Business rules
Search for smartnumbers	<p>A public user will be able to access the Register of smartnumbers (public view) search for the smartnumbers with the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber ▪ Price – All, \$0 - \$250, \$251 - \$1,000, \$1,001 - \$15,000 and > \$15,001 <p>The search result will contain the following details:</p> <ul style="list-style-type: none"> ▪ Number ▪ Status ▪ Price ▪ Current EROU holder

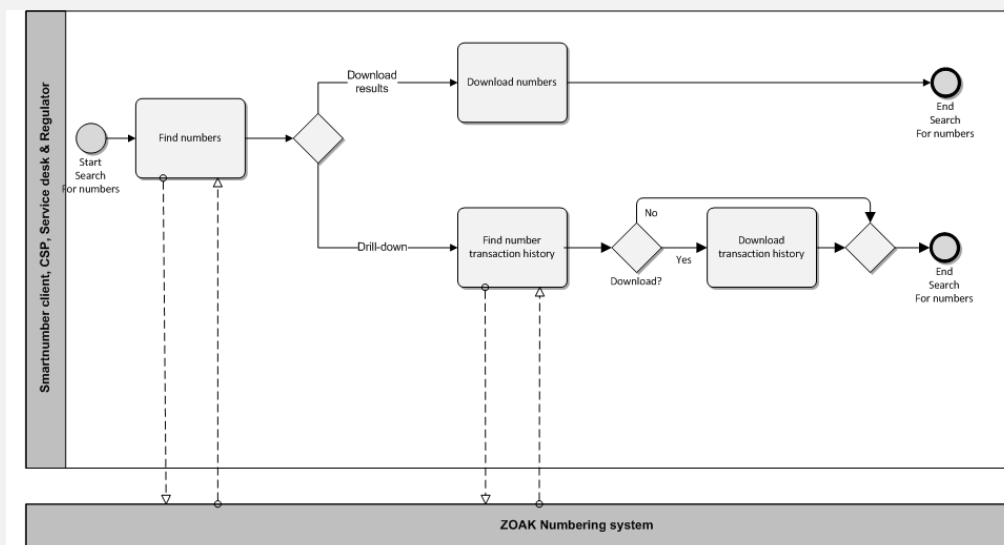
- EROU assignment date

Check the EROU holder details

From the Register of smartnumbers, a public user can access the following information about a smartnumber:

- Number
- Price (reserved price)
- Status
- EROU Holder details (the EROU holder can control allowances on the register):
 - Name of EROU Holder
 - Australian Business Number
 - Australian Company Number/Australian Registered Body Number (ACN/ARBN)
- Assignment details:
 - Type – Auction, Over the counter
 - Date
 - Winning Bidder (Name of account that purchased the number through the ACMA’s smartnumber auction system)
 - Winning Amount (the amount the winning bidder paid to acquire through the ACMA’s smartnumber auction system)
 - Initial Allocatee

6.4 Search Register of Numbers (logged in view)



Note : The advanced "Register of Number" is the view of the "Register of numbers" which are provided when a user is logged in. The details will be dependent on the permission of the user. For each number this logged in view will provide a detailed transaction history.

Figure 6.4: Search Register of Numbers (Logged In)

Activity name	Business rules
Find numbers	<p>Can be accessed by a user that is associated with one of either: smartnumber Service Desk or Regulator account.</p> <p>The following search criteria is to be provided:</p> <ul style="list-style-type: none"> ▪ Number

		<ul style="list-style-type: none"> ▪ Number range To/From ▪ Service type ▪ Allocatee ▪ Current Holder ▪ Allocation date from ▪ Allocation date to ▪ EROU holder ▪ Status: <ul style="list-style-type: none"> ▫ Available ▫ Withheld ▫ Withheld Extended ▫ Reserved ▫ Reserve Extended ▫ Allocated ▫ Quarantined ▫ Available smartnumber ▫ Assigned smartnumber ▫ Allocated smartnumber ▫ Unavailable <p>A user will be able to search for and view number's with a status of Quarantined or Unavailable if the user has been granted the Advanced number search including quarantined numbers.</p> <p>The columns shown in the search results is same as the Register of Numbers (public view).</p>
	Download the numbers	<p>In the Register of Numbers (logged-in view) three download options will be accessible:</p> <ul style="list-style-type: none"> ▪ Download search result – download the results returned by search into a CSV formatted file. ▪ The full download – the full download will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers"). ▪ The full download enhanced – the full download enhanced will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers (Enhanced)").
	Find number transaction history	<p>Transaction history is a more detailed version of Allocation history and is similar to existing Transaction history provided by INMS system. The transaction history will show any numbering transaction (e.g., allocation) that modifies an attribute (e.g., status) of the number.</p> <p>The following information is recorded for each numbering transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account and username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>The transaction history can be filtered with following criteria:</p> <ul style="list-style-type: none"> ▪ Number ▪ Number range ▪ Service type ▪ Transaction type ▪ Transaction date range (to/from) ▪ EROU Holder ▪ Initiating account (this search filter is available when the user has been granted

	<p>the Service desk transaction history or Regulator transaction history role)</p> <p>The following information is shown for each transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account ▪ Initiating username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>Due to privacy, the initiating username is populated for the Regulator, Service Desk and to the users of the account the initiating username belongs too.</p>
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.

6.5 Search Register of smartnumbers (logged in view)

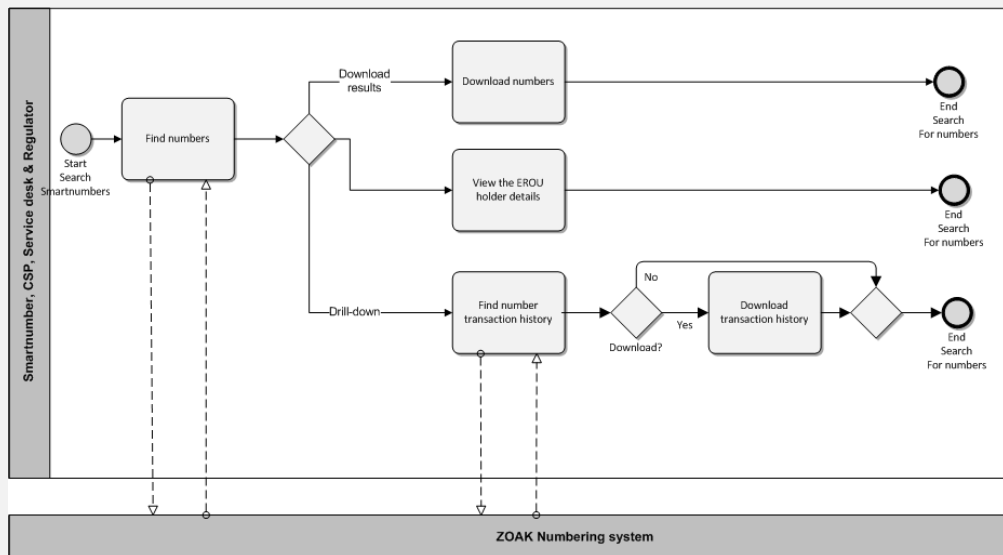


Figure 6.5: Search Register of smartnumbers (Logged In)

Activity name	Business rules
Find numbers	<p>An authenticated user belonging to Smartnumber, CSP, Service Desk or Regu will be able to access the Register of Smartnumbers (logged-in view). smartnumbers can searched for using the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber, Unavailable. ▪ Price – All, \$0-250, \$251-1,000, \$1,001-15,000 and > \$15,001 <p>The “Include quarantined numbers” role is to be granted to permit a user to view “Unavailable” smartnumbers.</p> <p>The search result will contain the following details</p> <ul style="list-style-type: none"> ▪ Number

	<ul style="list-style-type: none"> ▪ Status ▪ Price ▪ Current EROU holder ▪ EROU assignment date 	
Download the numbers	An authenticated user belonging to a smartnumber, CSP, Service Desk or Regulator account can download search results from the Register of smartnumbers to a CSV formatted file.	
Find number transaction history	The transaction history will be exactly the same as it is captured in "Search Register of Numbers (Logged in view)" ("Find number transaction history").	
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.	
View the EROU holder details	<p>From the Register of smartnumbers, a public user can access the following information about a smartnumber:</p> <ul style="list-style-type: none"> ▪ Number ▪ Price (reserved price) ▪ Status ▪ EROU Holder details (the EROU Holder can control allowance on the public register): <ul style="list-style-type: none"> ▫ Name of EROU holder ▫ Australian Business Number ▫ Australian Company Number/Australian Registered Body Number (ACN/ARBN) ▫ Trading name ▫ Industry type ▫ Industry classification ▪ Assignment details: <ul style="list-style-type: none"> ▫ Type - Auction, Over the counter ▫ Date ▫ Winning Bidder (name of the account that purchased the number through the ACMA's smartnumber auction system) ▫ Winning Amount (the amount the winning bidder paid to acquire the EROU through the ACMA's smartnumber auction system) ▫ Initial Allocatee 	

6.6 Reference

6.6.1 Number status mapping for Register of Numbers

Internal number status	Register of Numbers (public view)	Register of Numbers (logged in view)
Available	SPARE	Available
Withheld	ALLOCATED	Withheld
Withheld Extended	ALLOCATED	Withheld Extended
Reserved	ALLOCATED	Reserved
Reserve Extended	ALLOCATED	Reserve Extended
Allocated	ALLOCATED	Allocated
Quarantined	Not shown in Register of Numbers	Quarantined

Available EROU unassigned	SPARE	Available EROU unassigned
Pending Payment	SPARE	Pending Payment
Assigned Allocated	ALLOCATED	Assigned Allocated
Assigned Unallocated	SPARE	Assigned Unallocated
Unavailable Unassigned Unallocated	Not shown in Register of Numbers	Unavailable Unassigned Unallocated

6.6.2 Transaction mapping for transaction history

Transaction	Appears in transaction history (public view)	Name of transaction as shown in transaction history (public view)
Allocation	Yes	Allocation
Allocation with withheld	Yes	Allocation
Allocation with withheld extended	Yes	Allocation
Allocation with Reserve	Yes	Allocation
Allocation with Reserve extended	Yes	Allocation
Surrender	Yes	Surrender
Automatic system withdraw(for FLRPRN expiring Withheld/Reserve)	Yes	Withdraw
Allocation under special circumstances	Yes	Allocation
System release from quarantine	No	
Transfer	Yes	Transfer
Regulator Withdraw	Yes	Withdraw
EROU allocation	No	
EROU trade	No	
Waiver of EROU	No	
Regulator-cancellation of EROU (False statement)	No	
Cancellation of EROU-no active service	No	

Annual Numbering Charge

The Numbering System assists the ACMA in its requirement to annually collect a set amount of revenue from carriage service providers that hold certain types of telephone numbers. This charge is known as the Annual Numbering Charge (ANC).

The following business processes and the rules provide further details about how the Numbering system supports the ANC process.

Set the ANC Billing Year

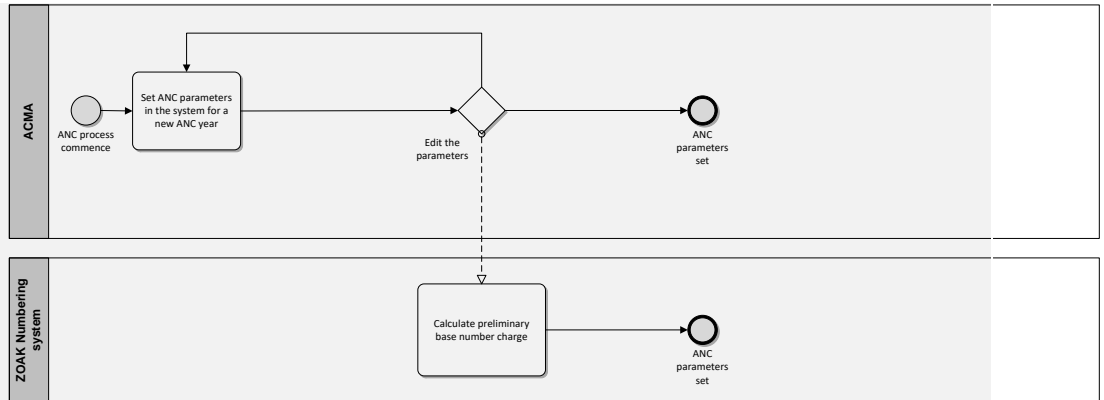


Figure 10.1: Set the ANC Billing Year

Activity name	Business rules
Set ANC parameters in the system for a new ANC year	<p>ACMA will be able to set the following parameters when creating the ANC bi</p> <ul style="list-style-type: none"> ▪ Billing year ▪ Census date ▪ Pay by date ▪ Maximum charge ▪ Target revenue <p>Billing year status - the possible values are:</p> <ul style="list-style-type: none"> ▪ New <ul style="list-style-type: none"> ○ Once a billing year has been created it is set to 'New' stat the billing year can be updated. ▪ Published <ul style="list-style-type: none"> ○ A billing year must be set to 'Published' status before the as the system will use the billing year details to calculate the Census date. ○ To update the details of a billing year after it is published unpublish the billing year to revert back to 'New' status. , make the required changes before changing the status ba 'Published'. ○ A billing year cannot be unpublished once the Census dat reached as the BNC is calculated at this point. ▪ Closed <ul style="list-style-type: none"> ○ Setting the billing year to 'Closed' status triggers the gene final ANC Statements and invoices. ○ CSPs are notified that ANC Statements and invoices are a

Generate the draft ANC statements and distribution report

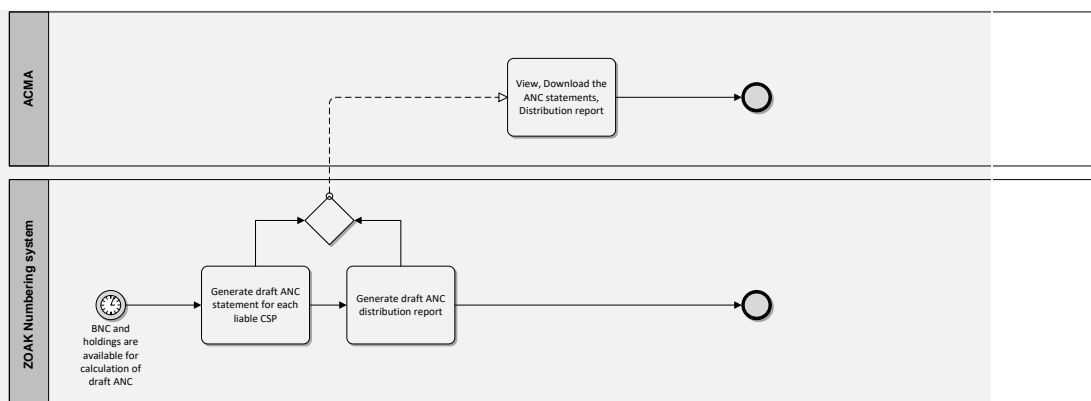


Figure 10.2: Generate the draft ANC statements and distribution report

Activity name	Business rules
Generate draft ANC statement for each liable CSP	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft statements are made available to ACMA and ZOAK.</p> <p>Basic details include:</p> <ul style="list-style-type: none"> ANC Billing year Issue date Due date Total ANC charge <p>The ANC Summary details provide a breakdown of the total ANC for a CSP by</p> <p>The detailed ANC Statement includes:</p> <ul style="list-style-type: none"> Service Type Prefix Charges – Quantity of numbers in a prefix and price per number Total - Total cost of numbers within a prefix
Generate draft ANC distribution report	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft distribution report is made available to ACMA and ZOAK.</p> <p>The distribution report contains:</p> <ul style="list-style-type: none"> Report generated date Report generated by user ANC Billing year <p>The columns in the distribution report include:</p> <ul style="list-style-type: none"> Holder Service Type Liability (%) Liability amount (AUD) Total Liability of the holder (AUD)
View, Download the ANC statements, Distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to view and download the Draft Statements and Distribution report. Draft ANC Statements and Distribution reports reflect the current sta Register of Numbers in real time. After midnight on the Census date, only the Port out report and Char redistribution reports will change the distribution of ANC between CS

Reconcile and finalise the dataset

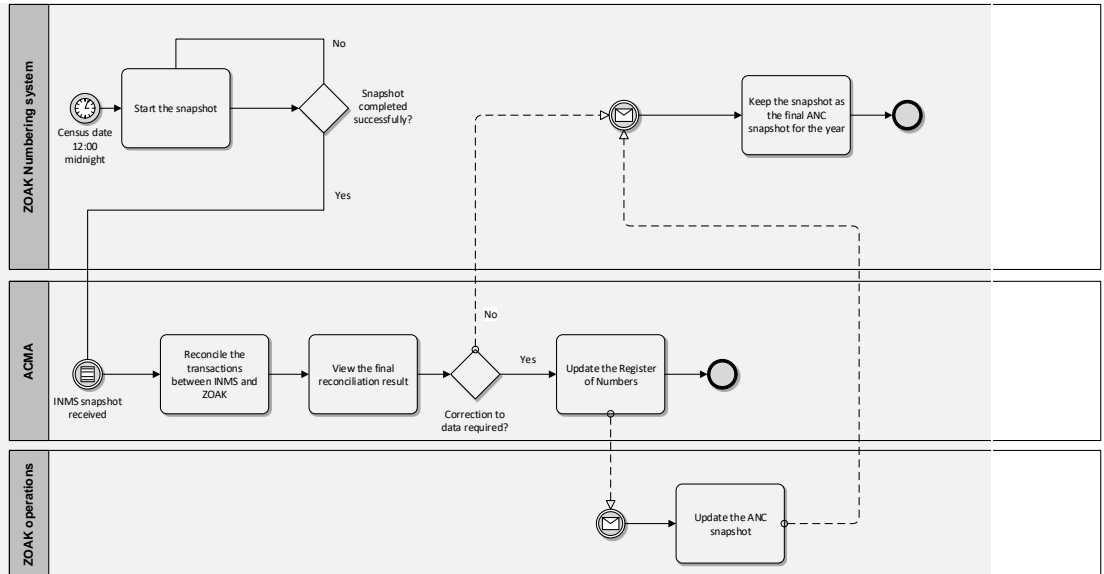


Figure 10.3: Reconcile and finalise the dataset

Activity name	Business rules
Start the snapshot	<p>At 12:00AM Midnight on the Census date, the system takes a snapshot of the Register of Numbers which is used to calculate ANC.</p> <ul style="list-style-type: none"> The snapshot includes the state of all numbers at exactly midnight Census date. Transactions completed after midnight on the Census date will not in the snapshot. There is no embargo period, the system will remain online while the snapshot is taken. Each year's snapshot is stored in the database indefinitely.
Reconcile the transactions between INMS and ZOAK	<ul style="list-style-type: none"> INMS will make available the reconciliation file taken at 01:00AM on the census date. The daily reconciliation file from INMS (taken on the census date) is used for the reconciliation. CMA must upload the reconciliation file to the ZOAK system.
View the final reconciliation result	<ul style="list-style-type: none"> The reconciliation results will display any inconsistencies between the INMS and ZOAK systems.
Update the Register of Numbers and ANC snapshot	<p>If any discrepancies are found which need to be corrected for the year's final ANC snapshot, the ACMA will inform ZOAK and advise ZOAK about the changes required to the Register of Numbers.</p> <ul style="list-style-type: none"> To update the production database the "Regulator update" function is used by the ACMA to update the Register of Numbers. ZOAK operations will prepare a script to update the snapshot to reflect the updates made by the ACMA.
Keep the snapshot as the final ANC snapshot for the year	<ul style="list-style-type: none"> This will be treated as the "Final ANC snapshot". ZOAK Operations can provide the ANC snapshot to the ACMA on request.

Upload Port out and Charges redistribution reports

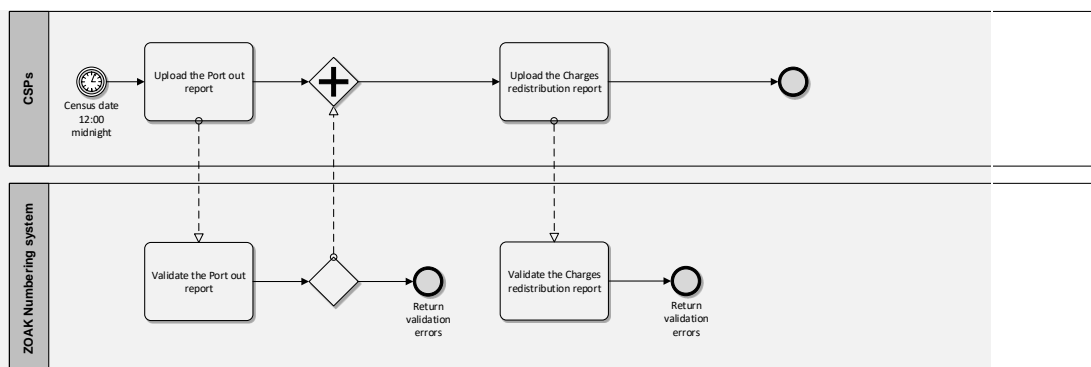


Figure 10.4: Upload Port out and Charges redistribution reports

Activity name	Business rules
Upload the Port out report	<p>A CSP has 17 calendar days from midnight on the Census date to upload the report</p> <ul style="list-style-type: none"> Can be uploaded from midnight on the Census date until midnight or day. A Port out report may be uploaded multiple times, the last uploaded be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>
Validate Port out report	<p>The file must be in CSV format and include a header row.</p> <p>Each column heading must be labelled with the heading given in bold and be listed.</p> <ul style="list-style-type: none"> Allocated Prefix - Column 1 - the five digit prefix that numbers have been allocated to. Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers. Held Quantity - Column 3 - the quantity of numbers which have been allocated to the CSP. The quantity must be at least 1 and not exceed either 100,000 or the total quantity of numbers held by the CSP in the Allocated Prefix. Reporter - Column 4 - the MNP code of the CSP submitting the report. Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name. Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none"> Each validation error corresponds to the line number in the report. For example, the first row of data considering that Row 1 is the header row. Additional information is returned to assist the CSP in correcting the report.
Upload Charges redistribution report	<p>A CSP has 3 days from the end of the 17th day from the Census date to upload the redistribution report.</p> <ul style="list-style-type: none"> A Charges redistribution report can only be uploaded after the period for uploading the Port out report has ended. Can be uploaded from midnight of the 17th day until midnight of the 20th day from the Census date. A Charges redistribution report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>

<p>Validate Charges redistribution report</p>	<p>The file must be in CSV format and include a header row. Each column heading must be labelled with the heading given in bold and be in the order listed.</p> <ul style="list-style-type: none"> ▪ Allocated Prefix - Column 1 - the five-digit prefix that numbers have been ported out from. ▪ Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers. ▪ Held Quantity - Column 3 - the quantity of numbers which have been ported out. The quantity must be at least 1 and not exceed either 100,000 or the total count of numbers held by the CSP in the Allocated Prefix, taking into consideration port out reports. ▪ Reporter - Column 4 - the MNP code of the CSP submitting the report. ▪ Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name. ▪ Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none"> ▪ Each validation error corresponds to the line number in the report. Row 2 for example is the first row of data considering that Row 1 is the header row. ▪ Additional information is returned to assist the CSP in correcting their report.
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View Portability report and Mobile number holdings statement

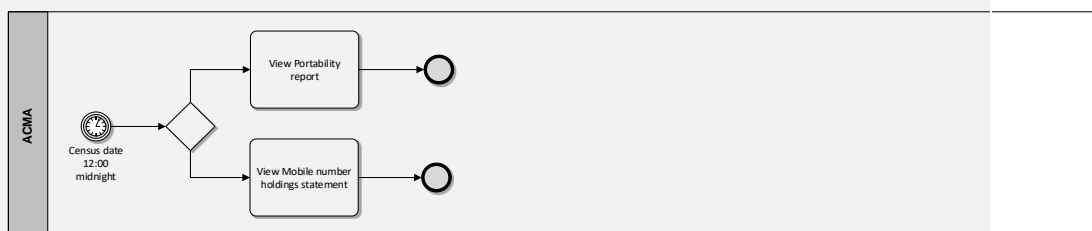


Figure 10.5: View the Portability report and Mobile number holdings statement

Activity name	Business rules
View Portability report	<ul style="list-style-type: none"> ▪ ZOAK Operations and ACMA are able to download the Portability report ▪ The Portability report is a combined list of all Port out and Charges redistribution reports that have been uploaded by CSP's. ▪ Viewing the report allows the ACMA to determine those CSP's who have distributed their mobile number holdings to other CSP's and their resellers. ▪ The Portability report is updated in real time based on CSP activity during the upload period of the Port out and Charges redistribution reports. ▪ The portability report is considered final when the upload period for Port out and Charges redistribution reports have ended. The portability is then considered final.
View Mobile number holdings statement	<ul style="list-style-type: none"> ▪ ZOAK Operations, ACMA and CSP's are able to download the Mobile number holdings statement. ▪ The Mobile number holdings statement reflects the state of all held mobile numbers in the system as of midnight on the Census date.

Close the ANC billing year

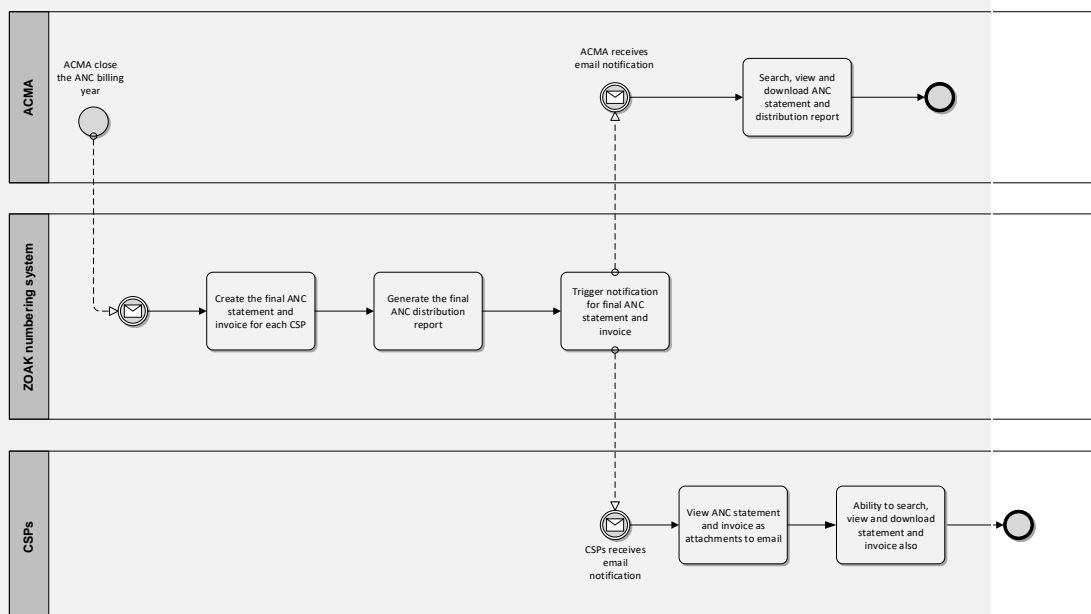


Figure 10.6: Close the ANC Billing Year

Activity name	Business rules
ACMA close the ANC billing year	<p>Setting the billing year to 'Closed' status triggers the generation of the final ANC Statements and distribution report.</p> <p>Only ACMA can perform this action.</p> <p>CSPs liable for the charge are provided an email with the ANC Statement and invoices attached. The email includes other important ANC information.</p>
Create the final ANC statement for each CSP	<p>The system generates the final ANC statement for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and app adjustments from the Port out and Charges redistribution reports.</p>
Generate Final ANC distribution report	<p>The system generates the final distribution report for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and app adjustments from the Port out and Charges redistribution reports.</p>
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that "View my ANC statements" permission checkbox selected) with the ANC Stat ANC invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements ; ANC invoices have been issued by the system and ACMA can access these.</p>
View ANC statement and distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to download the final ANC Stat Distribution report.
CSP view ANC statement	<ul style="list-style-type: none"> CSPs are able to download their final ANC Statement from the ANC ta have the required permissions

Create final ANC invoice

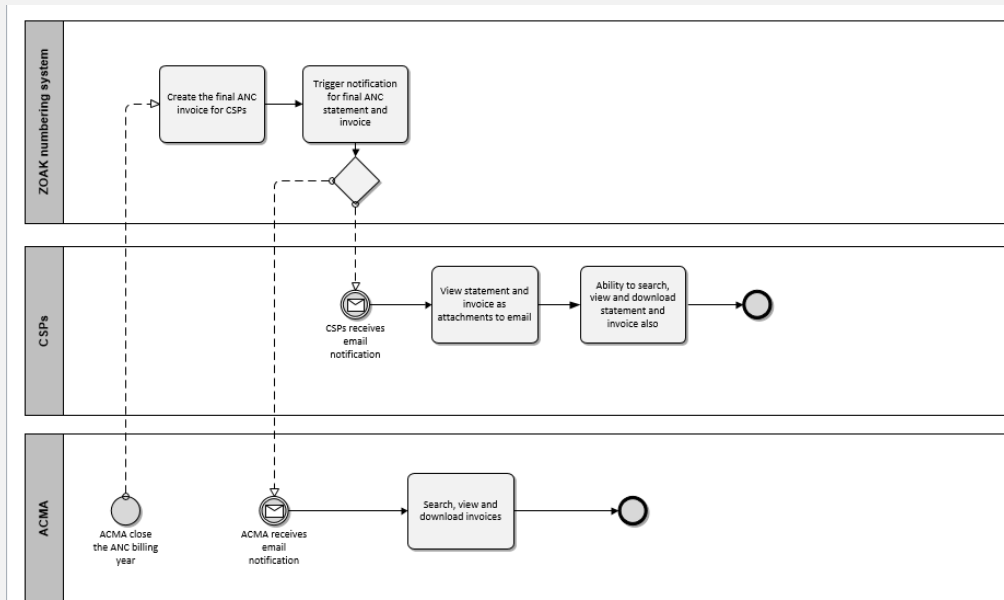


Figure 10.7: Create final ANC invoice

Activity name	Business rules
Create the final ANC invoice for CSPs	Setting the billing year to 'Closed' status triggers the generation of the final ANC invoice. <ul style="list-style-type: none"> The invoice due date will be either the default pay by date as configured in the system, or 30 calendar days from the day invoice is generated (whichever is greater).
Trigger notification for final ANC statement and invoice	An email is sent to all liable CSPs (both account administrators and users that have the "View my ANC statements" permission checkbox selected) with the ANC Statement and ANC invoices attached along with other important information. A similar email is sent to all ACMA users indicating the final ANC statements and invoices have been issued by the system and ACMA can access these.
Search, view and download invoices	<ul style="list-style-type: none"> ACMA and ZOAK Finance will be able to identify the ANC invoices by the 'Annual Numbering Charge' and the creation date. CSPs will be able to view and download their own ANC invoice.

Record payment against ANC invoices

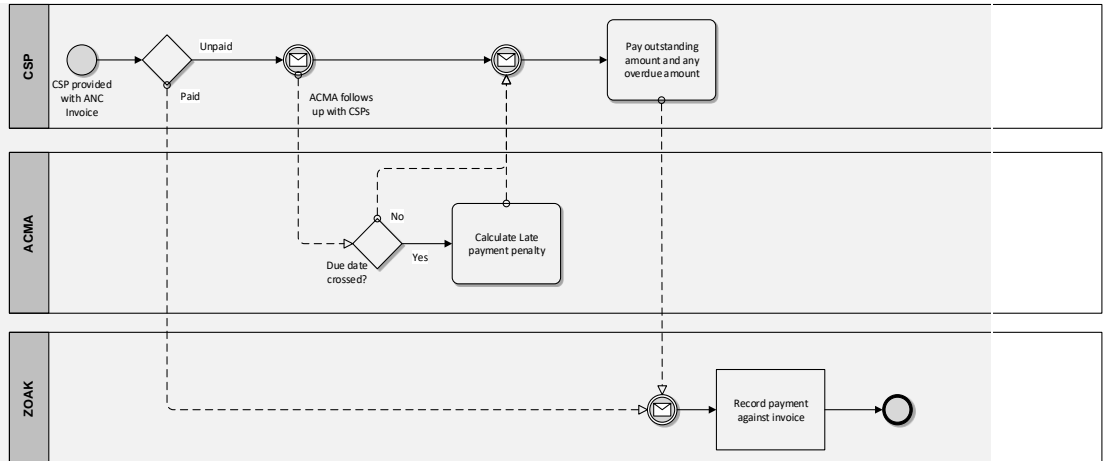


Figure 10.8: Record payment against ANC invoices

Activity name	Business rules
Record payment against invoice	ZOAK Finance will record the payment against each individual ANC invoice with the late payment penalty is not captured against the invoice in the system.
Capture late payment penalty	Calculation of the late payment penalty is handled by ACMA outside of the system. ZOAK Finance will identify the late payment penalty as an unmatched transaction reconciled with ACMA.
Restrict allocation to CSPs when ANC is unpaid	If any CSP account has an overdue ANC invoice (Only after 3 months from the invoice date) then ACMA can set an allocation override on the account to prevent the CSP from allocating numbers. The CSP is provided with a message upon login to the system to indicate they have been blocked from applying for allocations of numbers.

- Appendix A').
- Valid email address (RFC2822 <https://tools.ietf.org/html/rfc2822>).
- Valid phone and/or mobile numbers (if provided) must be 10 digits including area code.

Generate user This process and rules are exactly same as explained in 'Generate user'.

7.9 Update account

Account administrator will be able to update the account details and in case they need help Numbering system help desk will be able to update the account details.

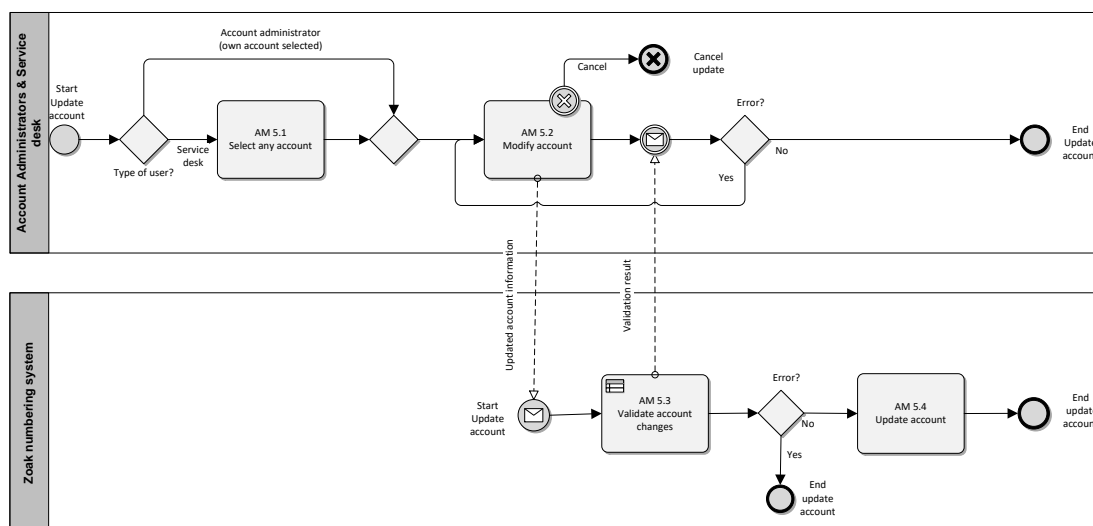


Figure 5: Update account

Activity name	Business rules
Select any account	A service desk user can identify one of an active CSP, smartnumber or registered inquirer account to update.
Modify account	<p>The following users can perform the following:</p> <ul style="list-style-type: none"> Account administrators can change the account information of their own Numbering system account. Service Desk users can update any client account (e.g., CSP, smartnumber or registered inquirer account). <p>The following account details can be updated for all accounts (CSP, smartnumber or registered inquirer account, Service desk and Regulator):</p> <ul style="list-style-type: none"> Address details – business (physical) and postal Select how the account details are shown in the Register of EROU. The following options are available: <ul style="list-style-type: none"> Account name and ABN (default) Full contact details <p>For CSP accounts the following fields can be updated by account administrator and the Service desk:</p> <ul style="list-style-type: none"> CA EPID MNP 4-digit code CA EPID PSD 3 alpha-character code <p>The Service Desk can update the following fields:</p> <ul style="list-style-type: none"> Payment method – upfront or post payment (default to upfront payment).
Validate account changes	Same business rules as applied in the relevant Apply for account – validate application activity.
Update account	Update the selected Numbering system account with changes.

7.10 Regulator override

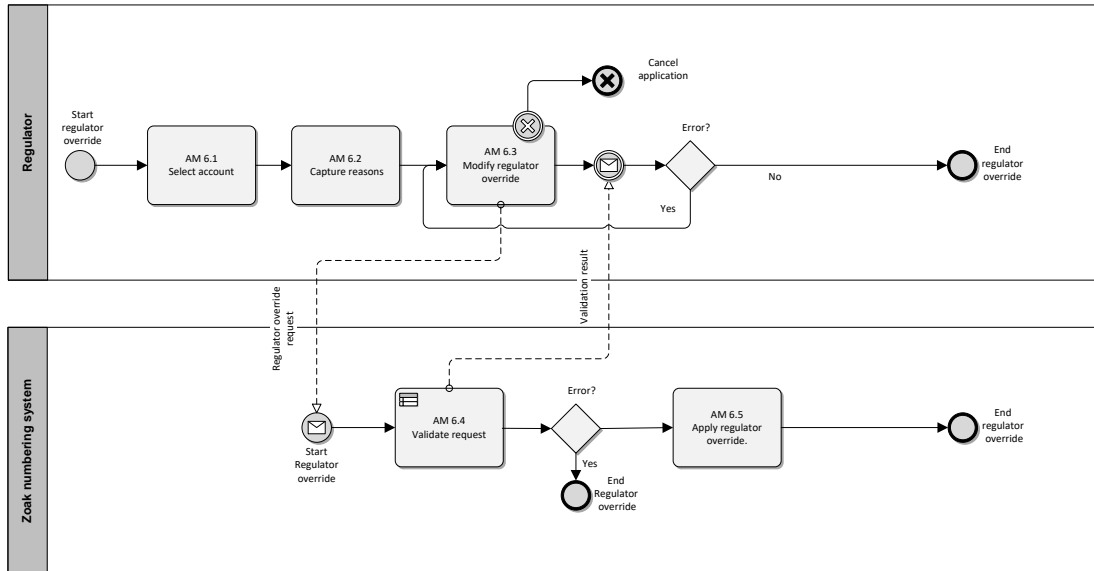


Figure 1.6: Regulator override

Activity name	Business rules
Select account	A Regulator user can identify a single CSP account.
Capture reasons	Capture the reasons why the Regulator is preventing the CSP from being allocated numbers. This information will be useful and will be shown to the CSP and Service Desk to understand why the account permissions to disable number allocations have been overridden. Free Text field.
Modify regulator override	Can be performed by an appropriately privileged Regulator user. Prevent the selected CSP for submitting allocation applications for any type of number.
Validate request	The following validations are performed: <ul style="list-style-type: none"> The requesting user is an appropriately privileged Regulator user. Selected account is a CSP account and the account is active.
Apply regulator override	When regulator override is applied the following occurs: <ul style="list-style-type: none"> The CSP account is not permitted to be allocated numbers. When regulator override is removed the following occurs: <ul style="list-style-type: none"> The CSP account is permitted to be allocated numbers.

7.11 Create user

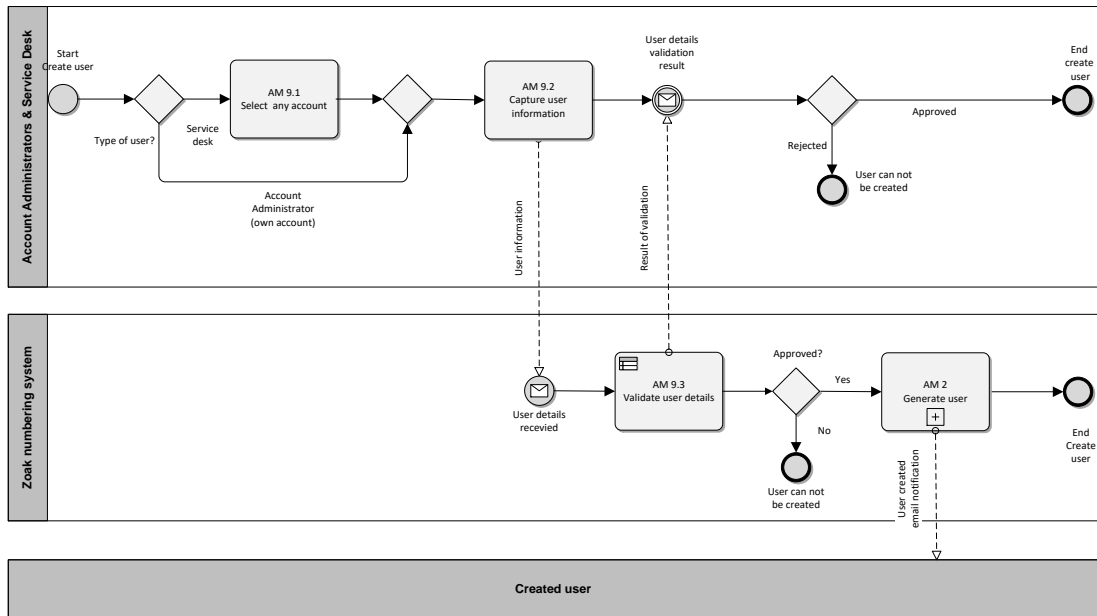


Figure 1.7: Create user

Activity name	Business rules
Select any account	A service desk user can identify one of an active CSP, smartnumber or registered inquirer account to create a user in.
Capture user information	<p>Listed below are the functions each user is permitted to perform:</p> <ul style="list-style-type: none"> Account administrators can create users within their own accounts. Service Users can create users in any Numbering system client account. <p>The following information is required to create a user:</p> <ul style="list-style-type: none"> Title First name Surname Email address Alternate email address Phone number Mobile phone number <p>NOTE: For security reasons, the secret question and answer can be set by the users themselves. Account administrators and Service Desk users cannot view or edit a user's secret question and answer.</p> <p>A special category of user is required to create to allow CSP account to perform numbering activities through the XML Interface. Only Service Desk users are permitted to create these types of users.</p> <p>The fields captured for the XML users:</p> <ul style="list-style-type: none"> Account Username Post back URL ASCII-encoded X.509 certificate used as a trust anchor for outbound requests ASCII-encoded X.509 certificate containing the public key used by the user to sign XML requests and verify responses

	NOTE: Register Inquirer accounts will be a single user only (ie the user created during account application process). No further users can be added to this type of account.
Validate user details	Validate the supplied user details: <ul style="list-style-type: none">▪ Mandatory information provided.▪ Valid email address (RFC2822 https://tools.ietf.org/html/rfc2822).▪ Valid phone and/or mobile numbers (if provided). For XML Interface users: <ul style="list-style-type: none">▪ Service Desk can create XML interface users.▪ CSP accounts can have a single active XML Interface user.
Generate user	This process and rules are exactly same as explained in 'Generate user'.

7.12 Update user

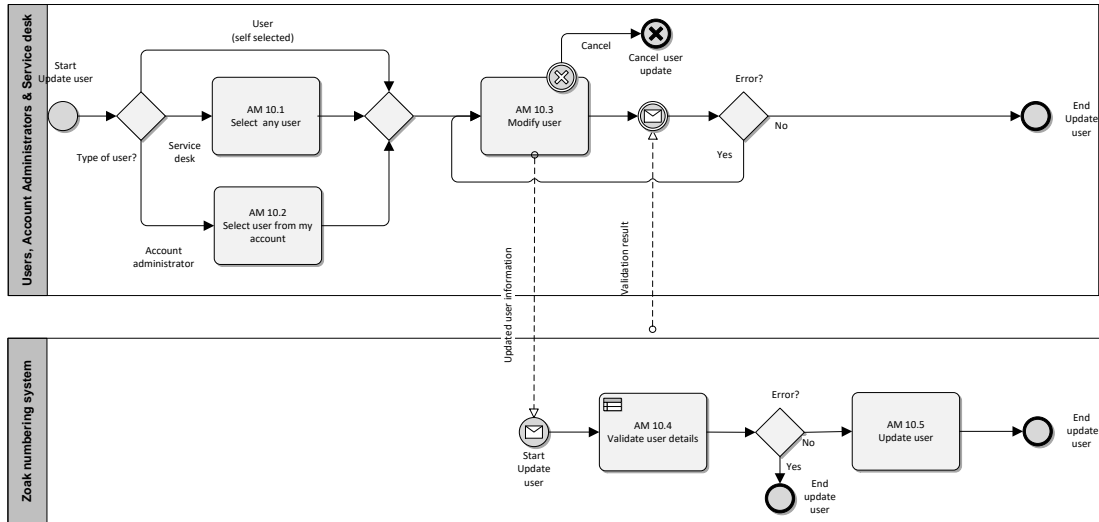


Figure 1.8: Update user

Activity name	Business rules
Select any user	Service Desk users can select to update any active user with a Numbering system client account.
Select user from my account	Account administrators can select to update any user within their account.
Modify user	<p>The following information can be updated by all users:</p> <ul style="list-style-type: none"> ▪ Email address ▪ Alternate email address ▪ Phone number ▪ Mobile phone number <p>The following information can be viewed and updated by the User:</p> <ul style="list-style-type: none"> ▪ Secret Question ▪ Secret Answer <p>The main purpose of the secret question/answer is to recover a password. To reduce the risk of the secret question and answer being compromised only the user themselves can update their secret question and answer.</p>
Validate user details	<p>Validate the supplied user details:</p> <ul style="list-style-type: none"> ▪ Mandatory information provided. ▪ Valid email address (RFC2822 https://tools.ietf.org/html/rfc2822). ▪ Valid phone and/or mobile numbers (if provided).

7.13 Update subscription to inquirer alerts

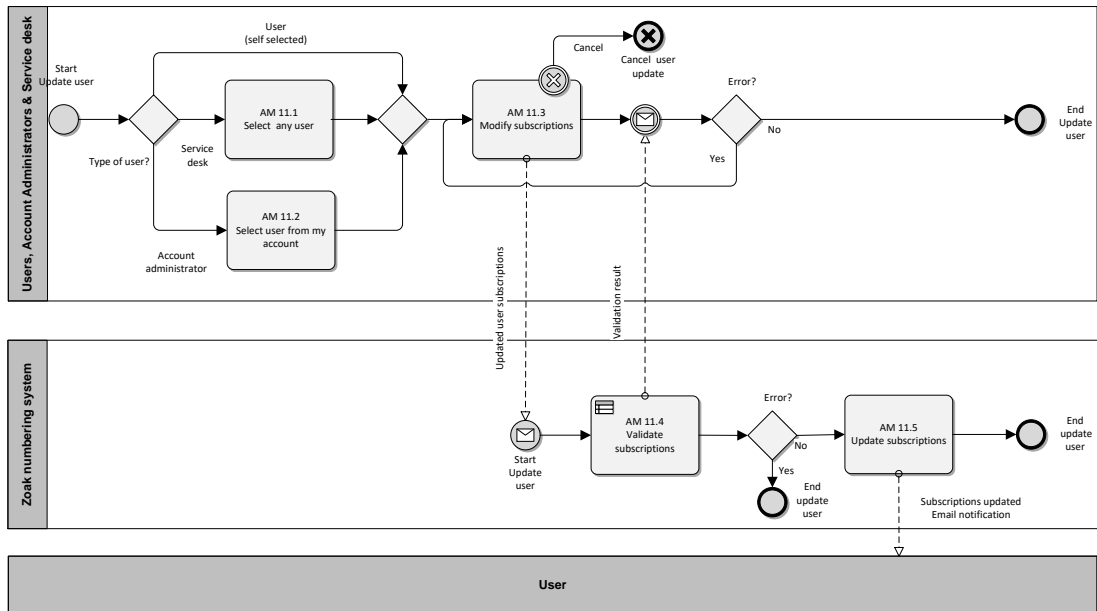


Figure 1.9: Update subscription to inquirer alert

Activity name	Business rules
Select any user	Service Desk users can select to update any active user with a Numbering system client account.
Select user from my account	Account administrators can select to update any user within their account.
Modify subscription	To subscribe or unsubscribe from the following alerts or notifications: <ul style="list-style-type: none"> A new numbering area (e.g., a SZU) is created. A numbering area is removed. A new number prefix is created. A new number prefix is made available for allocation to CSPs. The first allocation of a number range for a prefix is made. The last surrender of a number range for a prefix is made. When a defined set of actions related to a number range occurs. Administrative numbering pool top-ups. <p>NOTE: This will vary based on the type of account (i.e., CSP, registered inquirer, smartnumber).</p>
Validate user subscription	Validate the subscription details: <ul style="list-style-type: none"> Check user has permissions to perform the update. User has valid email address.
Update subscriptions	Update the selected users email subscriptions. If the update was done by an Account administrator or Service desk then send an email notification to the user advising them of the change to their email subscriptions.

7.14 Grant or revoke permissions

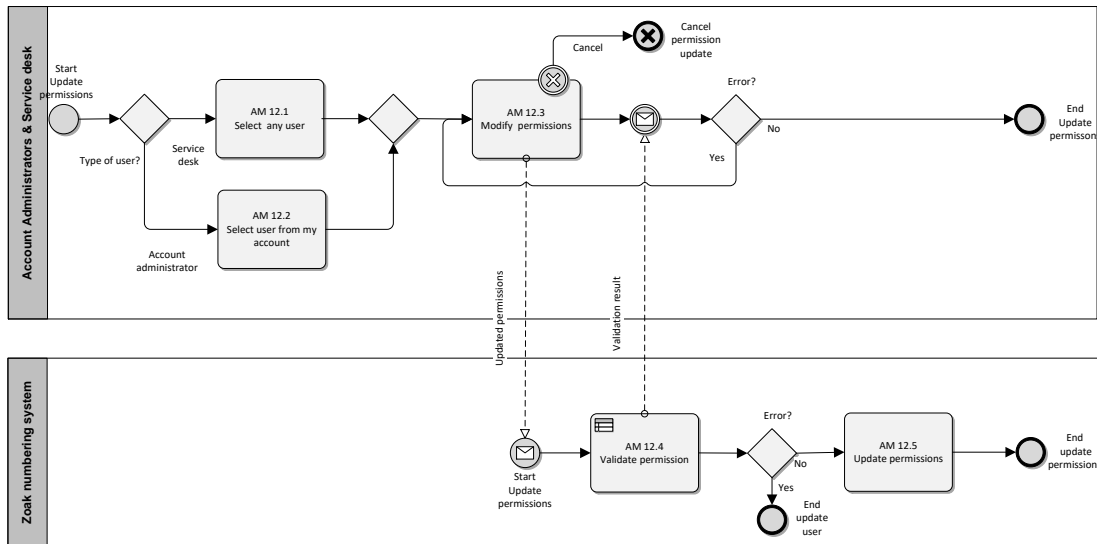


Figure 1.10: Grant or revoke permission

Activity name	Business rules
Select any user	Service Desk users can select to update any user with a Numbering system client account.
Select user from my account	Account administrators can select to update any user within their account.
Modify permissions	<p>Grant or revoke the permissions as required.</p> <p>To aid in the understanding of the proposed permissions/roles/functions an indicative permissions model has been included in this document and can found on the 'Permission matrix' in 'Number Planning</p> <p>Number planning is the specification and assignment of numbers and establishes the relationships between service types, number definitions, prefixes, standard zone units and numbers.</p> <p>Prefix definitions are maintained through the number planning functions within the Numbering system. As changes to prefix definitions are infrequent the number planning functions have been scaled back to provide minimal features to support update, release and withdraw prefix definitions as well as to support adding and removing SZUs from local service prefixes.</p> <p>The major differences between the NUMB and the Numbering system are summarised below:</p> <ul style="list-style-type: none"> ▪ No hierarchical relationship between prefix definitions or service type definitions is maintained. Updating a parent prefix definition or service type definition will not cascade down to the child prefixes. ▪ When assigning a service type to a prefix definition the service types definition are used as a template to assign initial values to the prefix

definition.

- Prefix definitions can be updated provided the prefix has not been released. The exception to this rule is the 'Annual numbering charge applies' attribute can be updated at any time.
- When a prefix definition is released the Numbering system determines whether there is sufficient space within the Register of Numbers:
 - No overlapping number ranges can exist.
 - At least one allocation of the standard unit size can be made.
- A prefix can be withdrawn when the entire number range is spare.

7.15 Update Service Type

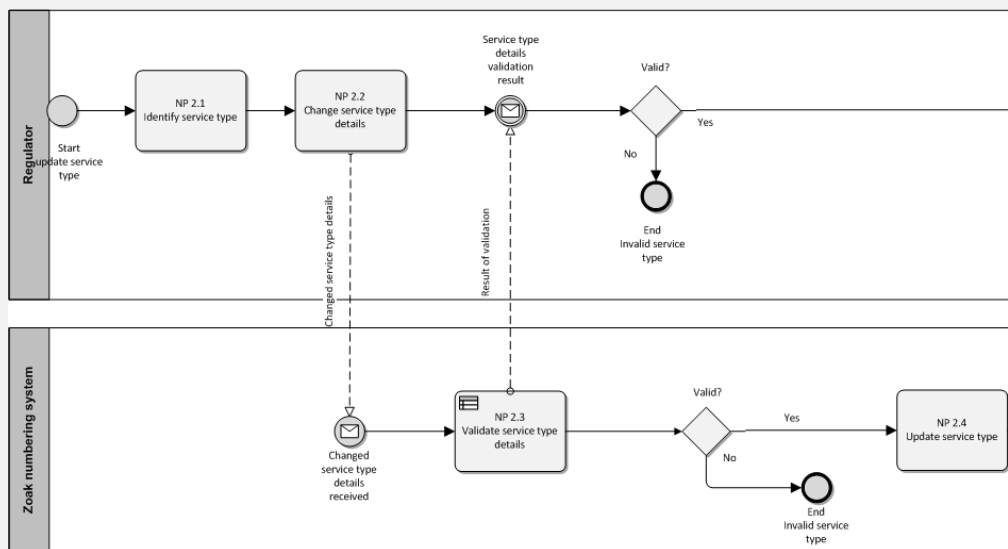


Figure 5.1: Update service type

Activity name	Business rules
Identify service type	Find a service type to modify.
Change service type details	The following attributes of a service type can be modified: <ul style="list-style-type: none"> ▪ Geographical service – set to Y if service type is local service, otherwise N ▪ Number length (mandatory) integer 4 to 15 ▪ Standard unit size (mandatory) – one of 1, 10, 100, 1000, 10000, 100000 ▪ Reduced unit size – mandatory for geographical and mobile service types ▪ Annual numbering charge applies – Y/N (mandatory)
Validate service type details	The following validations are applied: <ul style="list-style-type: none"> ▪ A service type can only be created by a Regulator account user that has been granted the number planning role. ▪ All mandatory fields are supplied. ▪ Reduced unit size is required only for geographic service types. The value provided must be less than the standard unit size.
Update service types	The service type is updated in the Numbering system with the supplied values. Updating a service type will not alter any prefix definitions or allocations associated with the service type.

7.16 Update Prefix

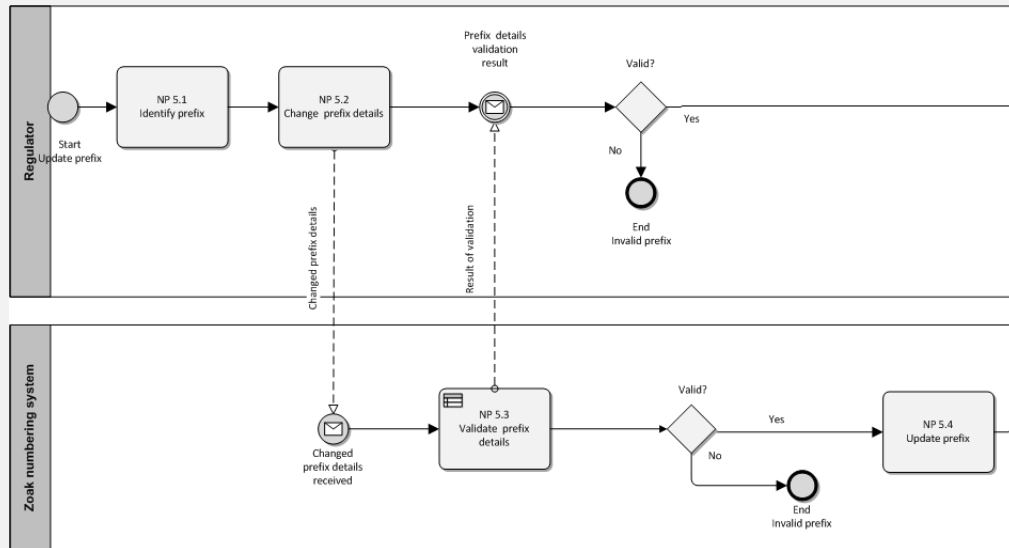


Figure 5.2: Update prefix

Activity name	Business rules
Identify prefix	Find a prefix to modify.
Change prefix details	<p>The following attributes can be modified based on the prefix's status:</p> <ul style="list-style-type: none"> ▪ "Not released" status <ul style="list-style-type: none"> ▫ Service type ▫ Number length ▫ Standard unit size ▫ Reduced unit size (geographic service types only) ▫ Annual numbering charge applies ▪ "Released" status <ul style="list-style-type: none"> ▫ Annual numbering charge applies <p>The following metrics are to be reported for each prefix:</p> <ul style="list-style-type: none"> ▪ Quantity (total quantity numbers released) ▪ Spare ▪ Allocated <p>The totals will include child prefixes i.e., 03 includes 0388 etc.</p> <p>NOTES: Standard unit sizes are unlikely to change in the future. This change v an update to the Numbering plan. The ACMA will raise a change request as e: allocations using the previous standard unit size will need to be supported.</p>
Validate prefix details	<p>The following validations are applied:</p> <ul style="list-style-type: none"> ▪ Standard Unit Size – one of 1, 10, 100, 1000, 10000, 100000. ▪ The number range must have enough available numbers to satisfy the of the standard unit size (see below). ▪ Reduced unit size is required only for local (geographic) service types provided must be less than the standard unit size. ▪ Annual numbering charge applies (Y/N) (mandatory). <p>Number range</p>

	<p>The following rules are applied to calculate the number range based on the entered number length:</p> <ul style="list-style-type: none"> ▪ The start of the range is the prefix followed by one or more zeros to pad the number out to its number length. ▪ The end of the range is the prefix followed by one or more nines to pad the number out to its number length. ▪ For example, prefix 0388 has a number length of 10. Therefore, the number range for prefix 0388 is 0388 000000 to 0388 999999. <p>Within a prefix definition, number ranges are permitted to overlap, thus supporting a parent-child relationship where smaller child prefix's number ranges can exist within a parent's prefix's number range. For example, see the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.</p>
Update prefix	<ul style="list-style-type: none"> ▪ The prefix is updated within the Numbering system. ▪ The status of the prefix is not altered.

7.17 Release Prefix

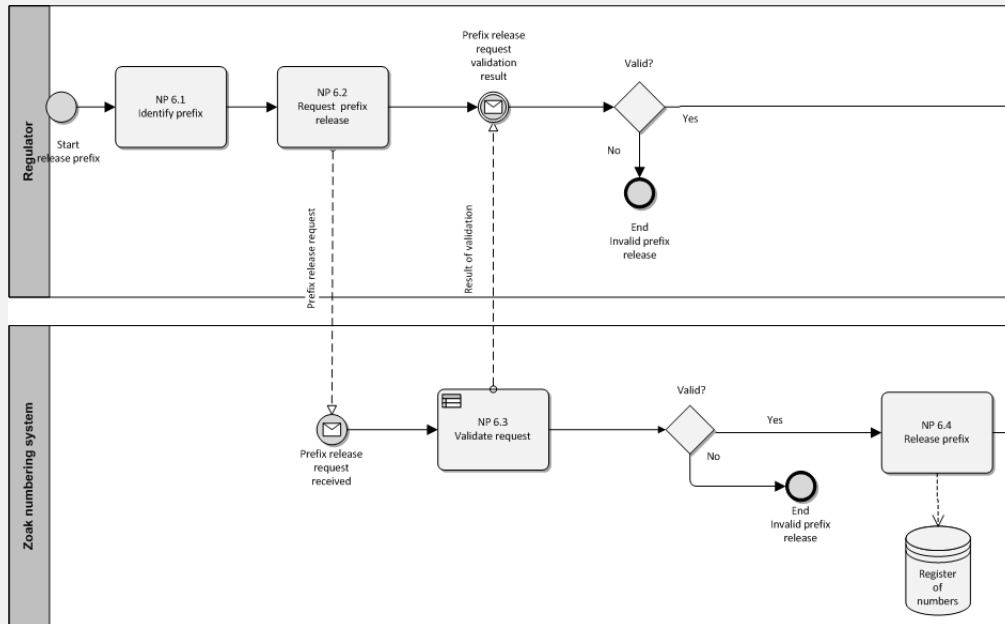


Figure 5.3: Release prefix

Activity name	Business rules
Identify prefix	Find/list the prefix to release.
Request prefix release	Request the selected prefix be released for allocation.
Validate request	<p>To release a prefix the following criteria needs to be satisfied:</p> <ul style="list-style-type: none"> ▪ A prefix can only be released by a Regulator account user that has been assigned the Number planning role. ▪ Status of the prefix is "Not released". ▪ For a geographical service type, at least one SZU is assigned to the prefix. ▪ The number range contained in the prefix definition can be created in the Register of Numbers according to the number range rules below. <p>Number ranges rules</p>

	<ul style="list-style-type: none"> ▪ For a prefix that is a parent prefix: <ul style="list-style-type: none"> ▫ The prefix's number range completely contains any child prefixes number ranges (eg can't split a child prefix number range in half). ▫ Parent prefix number ranges are created (interleaved) around the child prefix number ranges. ▫ For each parent prefix number range the created number ranges can allocate at least a single stand unit size allocation. ▫ Number range must be spare. ▪ For prefix that is child prefix: <ul style="list-style-type: none"> ▫ Fully contained within the parent prefixes number range. ▫ Numbers must be spare. <p>NOTES: Prefixes at the same level in the hierarchy cannot have overlapping number ranges Although prefix definitions overlap the Register of Numbers interpret the prefix definitions to determine number ranges available for allocation, ensuring none of the number ranges overlap.</p> <p>Parent prefixes numbers are made available in the number ranges not used by the child prefixes. For example, examine the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.</p>
Release prefix	<p>The prefix is released in the Numbering system and the following occurs:</p> <ul style="list-style-type: none"> ▪ The status of the prefix is set to "Released". ▪ The prefix is added to the Register of Numbers. ▪ The released prefix number range(s) is marked as spare in the Register of Numbers. ▪ The released prefix number range(s) is available for allocation through the applicable allocation process.

7.18 Withdraw Prefix

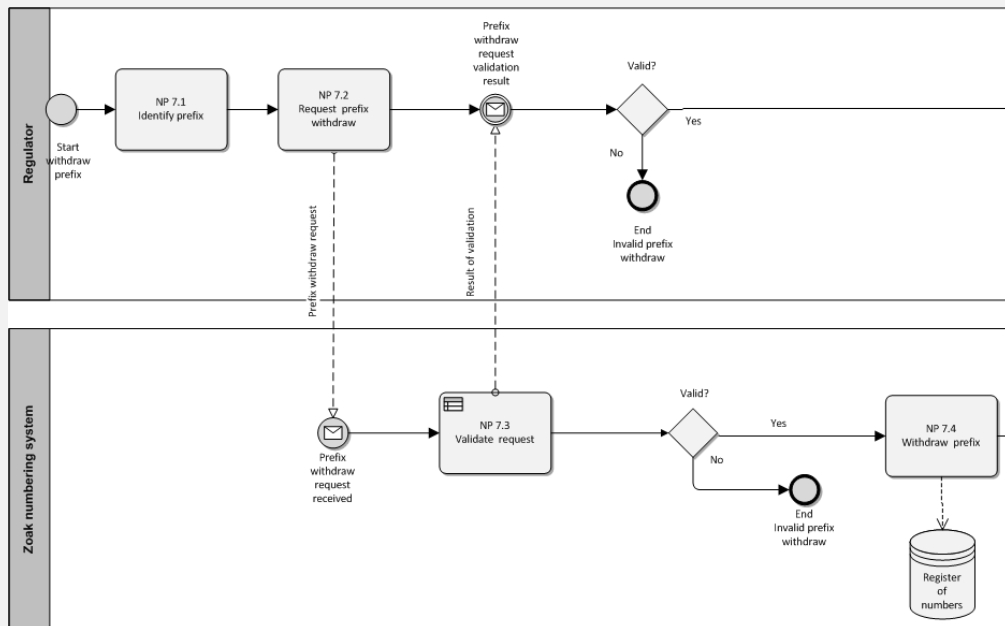


Figure 5.4: Withdraw prefix

Activity name	Business rules
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Identify prefix	Find a released prefix to withdraw	
Request prefix withdraw	Select the released prefix to be withdrawn.	
Validate request	A released prefix can be withdrawn when the following criteria is satisfied: <ul style="list-style-type: none"> ▪ A prefix can be withdrawn by a Regulator account user that has been granted the Number planning role. ▪ All numbers for the prefix are spare. ▪ Status of the prefix is "Released". 	
Withdraw prefix	The released prefix is withdrawn and the following occurs: <ul style="list-style-type: none"> ▪ The status of the prefix is set to "Not released". ▪ The prefix number range is removed from the Register of Numbers. ▪ The withdrawn prefix number range is not shown in the Register of Numbers. ▪ The withdrawn prefix number range is not available for allocation through the applicable allocation process. 	

7.19 Add SZU to a Local Service Prefix

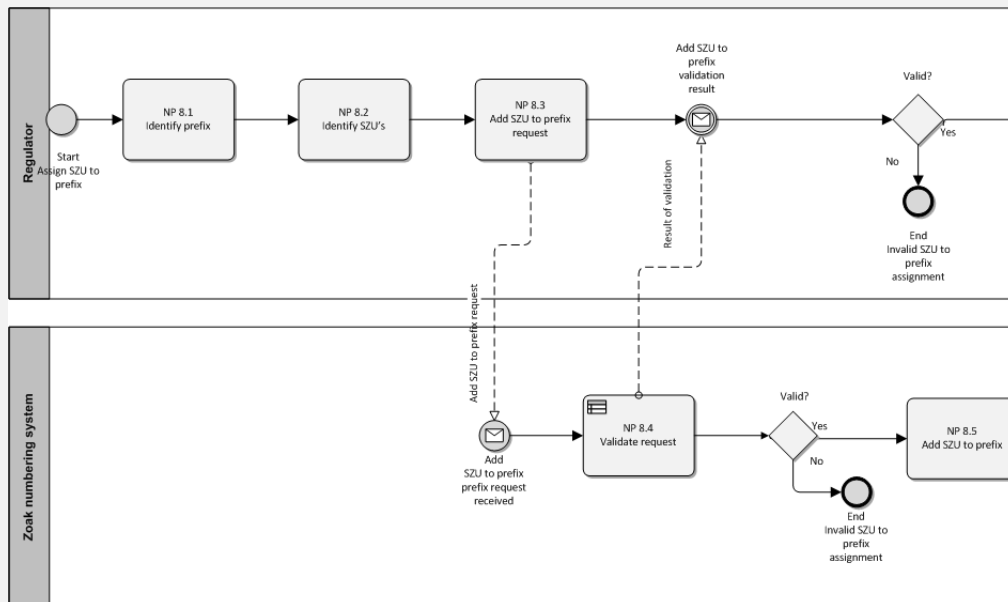


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to add SZUs.
Identify SZUs	Find an SZU to add to the selected prefix.
Add SZU to prefix request	Add one or more selected SZUs to the selected prefix with local (geographic) request
Validate request	To add an SZU to a prefix defined with local (geographic) service the following are applied: <ul style="list-style-type: none"> ▪ SZU can be added to a prefix by a Regulator account user that has been granted the number planning role. ▪ SZUs can only be added to prefix that has been assigned a local (geographic) service type. ▪ SZUs can be added to a prefix regardless of the prefix's status. ▪ The same SZU cannot be added twice.

	<ul style="list-style-type: none"> A prefix can have multiple SZUs (conversely a SZU can be assigned multiple prefixes). <p>NOTE: Moving a released prefix to another SZU.</p> <p>On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation to the original SZU. All further allocations will indicate allocation to the new SZU.</p>
Add SZU to prefix	<ul style="list-style-type: none"> Link the selected SZUs to the prefix. Numbers can be allocated from the added SZUs.

7.20 Remove SZU from Local Service Prefix

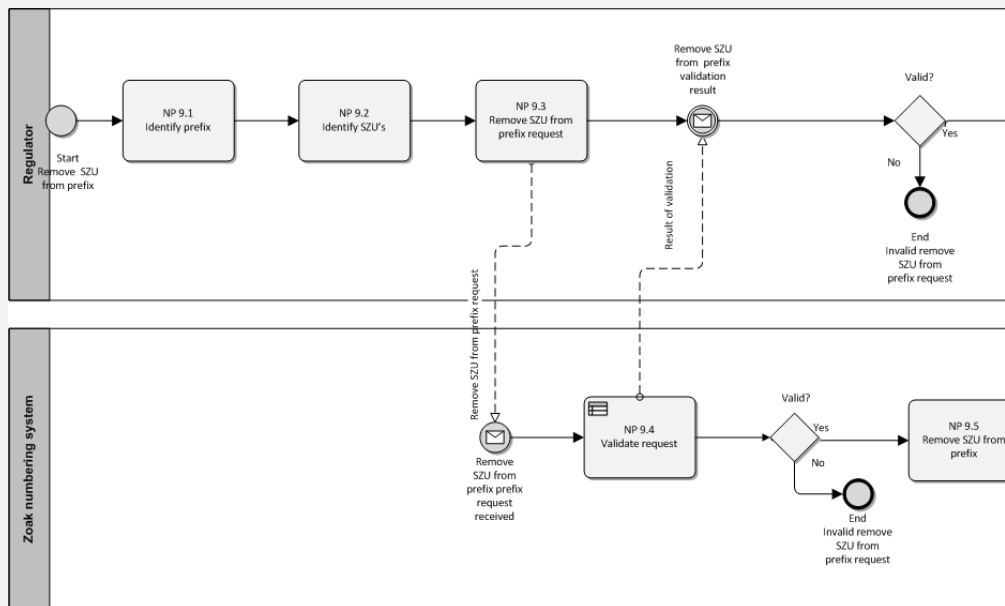


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to remove SZUs.
Identify SZUs	Identify one or more SZUs to remove from the identified prefix.
Remove SZU from prefix request	Request to remove one or more selected SZUs from the selected prefix.
Validate request	<p>To remove a SZU from a prefix definition with local (geographic) service the following validations are applied:</p> <ul style="list-style-type: none"> SZU can be removed from a prefix by a Regulator account user that has been granted the number planning role. SZUs can be removed from a prefix that has been defined as a local (geographic) service type. SZUs can be removed from a prefix regardless of the prefix's status. A released prefix must have at least one SZU. <p>NOTE: Moving a released prefix to another SZU. On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation made in the original SZU. All further allocations will indicate the allocation was made to the new SZU.</p>
Remove SZU from prefix	<ul style="list-style-type: none"> Remove the selected SZUs from the prefix. Numbers cannot be allocated from the prefix in the removed SZUs.

7.21 Number planning report

Activity name	Business rules
Generate number planning report	<p>ACMA users will be able to access the number planning report which allows them to determine whether a certain prefix belonging to a service type or an entire service type is close to running out of numbers.</p> <p>The report can be generated for a single service type or an individual prefix.</p> <p>The report allows the ACMA to decide when to release more numbers in a certain service type based on the quantity of spare numbers and spare ratio.</p>
View number planning report	<p>The number planning report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the number planning report include:</p> <ul style="list-style-type: none"> ▪ Service Type ▪ Number prefix ▪ Quantity of allocated numbers ▪ Allocation ratio (%) ▪ Quantity of spare numbers (%) ▪ Spare ratio (%)

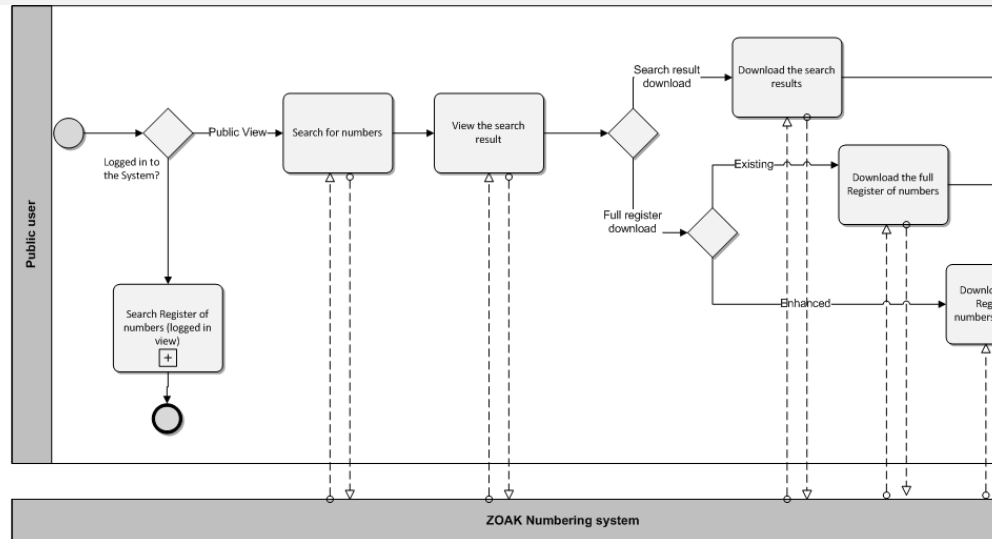
7.22 Geographic numbers planning report

Activity name	Business rules
Generate geographic number report	<p>ACMA users will be able to access the geographic number report which allows them to determine when a certain Standard zone unit (SZU) is close to running out of numbers based on the total prefixes assigned to a specific SZU.</p> <p>The report can be generated for a single SZU or any number of prefixes. Specifying a prefix will produce a report containing all SZU's that the prefix is assigned to, as well as other prefixes assigned to the same matching SZU.</p> <p>The calculation collects the number of available numbers for a prefix and divides this by the numbers that have been allocated in the last 10 years from the date the report is generated. This avoids skewing the results from old allocation patterns and take-up from previous numbering systems.</p> <p>The report allows the ACMA to decide when to release more numbers in a certain service type based on the expected run out, measured in years.</p>
View geographic number report	<p>The geographic number report contains:</p> <ul style="list-style-type: none"> ▪ Report generated date ▪ Report generated by user <p>The columns in the geographic number report include:</p> <ul style="list-style-type: none"> ▪ Number prefixes ▪ Standard Zone Unit (SZU) ▪ Expected prefix run out (years)

8 Register of Numbers

The Numbering system is required by legislation to provide two public registers; The Register of Numbers and Register of smartnumbers (Register of Enhanced Rights of Use). The Register of Numbers shows the availability of all numbers as well as transaction history. The Register of smartnumbers tracks the enhanced rights of use (EROU) holder for a smartnumber.

8.1 Search Register of Numbers (public view)



Note : The register of numbers provides the search facility to search for all numbers to the public user. If the user is logged in to the Zoak numbering system then depends on the permission level they advanced search.
This Register of number also includes the Smartnumber but Register of Smartnumber provides the facility to search for the Smartnumber with reserved price etc.

Figure 6.1: Search Register of Numbers (Public)

Activity name	Business rules
Search for numbers	<ul style="list-style-type: none"> ▪ The search page will be available to the public. ▪ The Register of Numbers will contain all numbers except 'Quarantined'. ▪ A user can search for a number using the following criteria: <ul style="list-style-type: none"> ▫ Number ▫ Number range ▫ Allocation date to/from date range ▫ Number status (Allocated or Spare) ▫ Service type ▫ Allocatee ▫ Current Holder ▫ EROU holder
View the search result	<ul style="list-style-type: none"> ▪ Lists the numbers matching the entered search criteria in the previous activity. ▪ The following fields will be shown for each number returned: <ul style="list-style-type: none"> ▫ Service type ▫ Prefix ▫ Number length ▫ Number range (from) ▫ Number range (to) ▫ Number status (refer to "Number status translation" worksheet) ▫ Quantity

	<ul style="list-style-type: none"> ▫ Allocatee ▫ Allocation date ▫ Current holder ▫ Latest transfer date ▫ SZU (only populated for local service numbers) ▫ Current EROU holder ▫ EROU assignment date <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ Assigned smartnumbers are not aggregated. This permits the EROU holder information to be accessible. ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add SZU. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated. 	
Download the results	Not implemented	
Download the full Register of Numbers	<p>The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers in the same format as the ACMA's NUMB system accessible by the public. The Register of Numbers full download will be kept the exactly same format as provided by the ACMA's NUMB system to maintain backward compatibility with CSP systems. The file name of the download will be "InquiryFullDownload.csv".</p> <p>The columns contained in the download are listed below:</p> <ul style="list-style-type: none"> ▪ Service type ▪ Prefix ▪ Number length ▪ From ▪ To ▪ Quantity ▪ Allocatee ▪ Allocation date ▪ Latest holder ▪ Latest transfer date ▪ Numbering area ▪ Allocatee's exchange service area ▪ IP use ▪ Nomadcity ▪ Declaration <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add Numbering area and Allocatee's exchange service area. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated. 	

Download the full Register of Numbers (Enhanced)

The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers that is accessible by the public. The columns contained in the download are listed below:

- Service type
- Prefix
- Number length
- Number range (from)
- Number range (to)
- Number status (refer to "Number status translation" worksheet)
- Quantity
- Allocatee
- Allocation date
- Latest holder
- Latest transfer date
- Current EROU holder
- EROU assignment date

8.2 View Allocation History (public view)

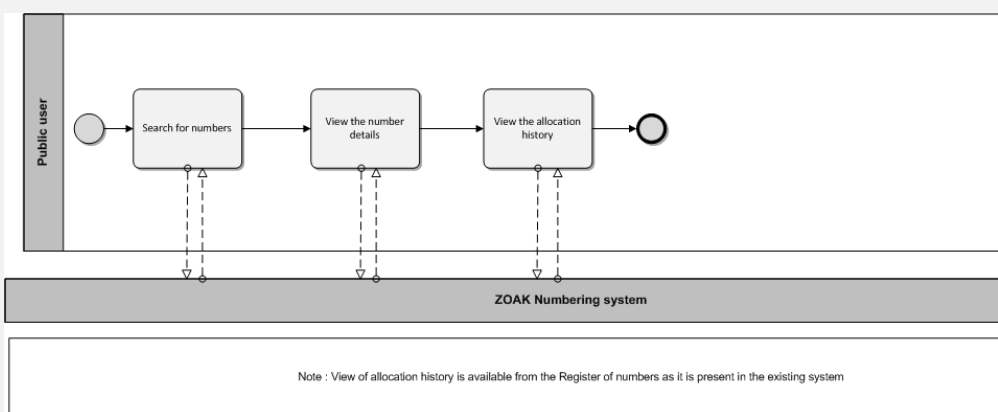


Figure 6.2: View Allocation History (Public)

Activity name	Business rules
Search for numbers	As described in the Search Register of Numbers (public view) "Search for num activity.
View the search result	As described in the Search Register of Numbers (public view) "View the search activity.
View the allocation history	<p>The allocation history of numbers must be available to all public users. When a number is selected to view the allocation history, the following details will be shown:</p> <ul style="list-style-type: none"> ▪ Number/Number Range ▪ Quantity ▪ Service type ▪ Prefix/ Length ▪ Current EROU holder (populated only in case of smartnumbers) <p>Transaction history has the following details:</p> <ul style="list-style-type: none"> ▪ Transaction (the list of transaction actions is provided below). ▪ Transaction date (date of the transaction not including time). ▪ Allocatee (the initial CSP to whom a number was allocated – this will

when the number is surrendered).

- Current holder (CSP holding the number now. In case of initial allocation the Allocatee and the current holder will be the same, only in case of transfer the current holder will be different to the allocatee).

The transaction history will list all the following actions:

- Allocation (including allocation of FLRPRN with Withheld/extended, Reserve/Extended and allocation without reservation and smartnumber allocation to CSP).
- Transfer (transfer of FLRPRN and smartnumbers between CSPs).
- Surrender (surrender if FLRPRN/smartnumber by CSP).
- Withdraw (regulator Withdraw of a FLRPRN/smartnumber from a CSP).
- If the number is a smartnumber then the allocation history will keep track of initial CSP allocation and immediate surrender.
- Excludes smartnumber EROU assignment, EROU waived and system cancellation of EROU (no active service).

8.3 Search Register of Smartnumbers (public view)

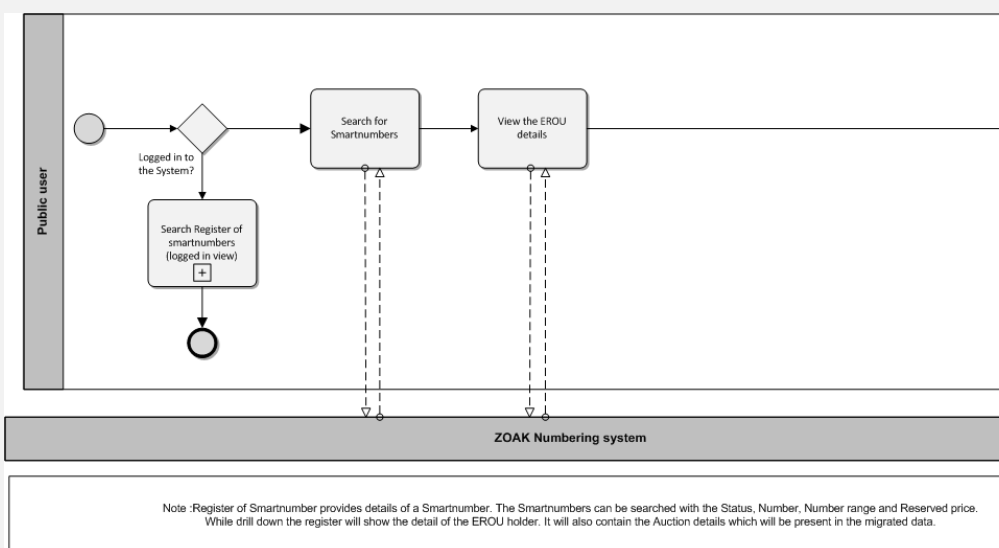


Figure 6.3: Search Register of Smartnumbers (public)

Activity name	Business rules
Search for smartnumbers	<p>A public user will be able to access the Register of smartnumbers (public view) search for the smartnumbers with the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocate smartnumber ▪ Price – All, \$0 - \$250, \$251 - \$1,000, \$1,001 - \$15,000 and > \$15,001 <p>The search result will contain the following details:</p> <ul style="list-style-type: none"> ▪ Number ▪ Status ▪ Price ▪ Current EROU holder

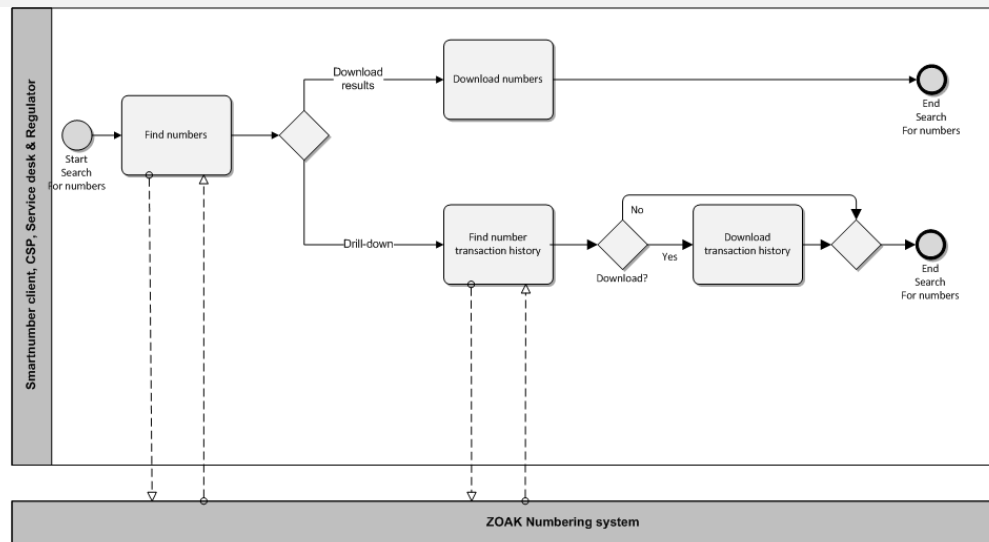
- EROU assignment date

Check the EROU holder details

From the Register of smartnumbers, a public user can access the following information about a smartnumber:

- Number
- Price (reserved price)
- Status
- EROU Holder details (the EROU holder can control allowances on the register):
 - Name of EROU Holder
 - Australian Business Number
 - Australian Company Number/Australian Registered Body Number (ACN/ARBN)
- Assignment details:
 - Type – Auction, Over the counter
 - Date
 - Winning Bidder (Name of account that purchased the number through ACMA’s smartnumber auction system)
 - Winning Amount (the amount the winning bidder paid to acquire through the ACMA’s smartnumber auction system)
 - Initial Allocatee

8.4 Search Register of Numbers (logged in view)



Note : The advanced "Register of Number" is the view of the "Register of numbers" which are provided when a user is logged in. The details will be dependent on the permission of the user. For each number this logged in view will provide a detailed transaction history.

Figure 6.4: Search Register of Numbers (Logged In)

Activity name	Business rules
Find numbers	Can be accessed by a user that is associated with one of either: smartnumber Service Desk or Regulator account. The following search criteria is to be provided: <ul style="list-style-type: none"> ▪ Number

		<ul style="list-style-type: none"> ▪ Number range To/From ▪ Service type ▪ Allocatee ▪ Current Holder ▪ Allocation date from ▪ Allocation date to ▪ EROU holder ▪ Status: <ul style="list-style-type: none"> ▫ Available ▫ Withheld ▫ Withheld Extended ▫ Reserved ▫ Reserve Extended ▫ Allocated ▫ Quarantined ▫ Available smartnumber ▫ Assigned smartnumber ▫ Allocated smartnumber ▫ Unavailable <p>A user will be able to search for and view number's with a status of Quarantined or Unavailable if the user has been granted the Advanced number search including quarantined numbers.</p> <p>The columns shown in the search results is same as the Register of Numbers (public view).</p>
	Download the numbers	<p>In the Register of Numbers (logged-in view) three download options will be accessible:</p> <ul style="list-style-type: none"> ▪ Download search result – download the results returned by search into a CSV formatted file. ▪ The full download – the full download will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers"). ▪ The full download enhanced – the full download enhanced will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers (Enhanced)").
	Find number transaction history	<p>Transaction history is a more detailed version of Allocation history and is similar to existing Transaction history provided by INMS system. The transaction history will show any numbering transaction (e.g., allocation) that modifies an attribute (e.g., status) of the number.</p> <p>The following information is recorded for each numbering transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account and username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>The transaction history can be filtered with following criteria:</p> <ul style="list-style-type: none"> ▪ Number ▪ Number range ▪ Service type ▪ Transaction type ▪ Transaction date range (to/from) ▪ EROU Holder ▪ Initiating account (this search filter is available when the user has been granted

	<p>the Service desk transaction history or Regulator transaction history role)</p> <p>The following information is shown for each transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account ▪ Initiating username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>Due to privacy, the initiating username is populated for the Regulator, Service Desk and to the users of the account the initiating username belongs too.</p>
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.

8.5 Search Register of smartnumbers (logged in view)

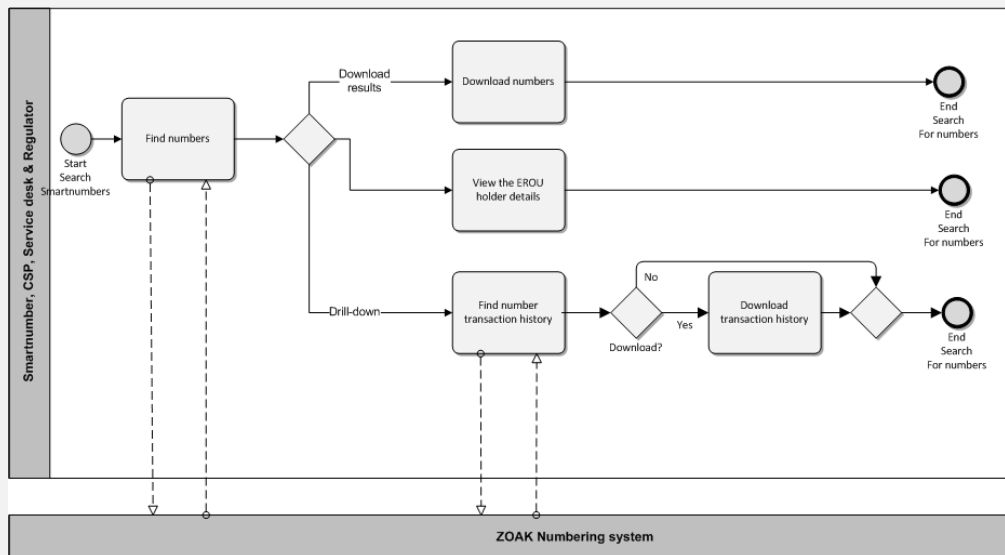


Figure 6.5: Search Register of smartnumbers (Logged In)

Activity name	Business rules
Find numbers	<p>An authenticated user belonging to Smartnumber, CSP, Service Desk or Regulator will be able to access the Register of Smartnumbers (logged-in view). smartnumbers can searched for using the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber, Unavailable. ▪ Price – All, \$0-250, \$251-1,000, \$1,001-15,000 and > \$15,001 <p>The “Include quarantined numbers” role is to be granted to permit a user to view “Unavailable” smartnumbers.</p> <p>The search result will contain the following details</p> <ul style="list-style-type: none"> ▪ Number

	<ul style="list-style-type: none"> ▪ Status ▪ Price ▪ Current EROU holder ▪ EROU assignment date 	
Download the numbers	An authenticated user belonging to a smartnumber, CSP, Service Desk or Regulator account can download search results from the Register of smartnumbers to a CSV formatted file.	
Find number transaction history	The transaction history will be exactly the same as it is captured in "Search Register of Numbers (Logged in view)" ("Find number transaction history").	
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.	
View the EROU holder details	<p>From the Register of smartnumbers, a public user can access the following information about a smartnumber:</p> <ul style="list-style-type: none"> ▪ Number ▪ Price (reserved price) ▪ Status ▪ EROU Holder details (the EROU Holder can control allowance on the public register): <ul style="list-style-type: none"> ▫ Name of EROU holder ▫ Australian Business Number ▫ Australian Company Number/Australian Registered Body Number (ACN/ARBN) ▫ Trading name ▫ Industry type ▫ Industry classification ▪ Assignment details: <ul style="list-style-type: none"> ▫ Type - Auction, Over the counter ▫ Date ▫ Winning Bidder (name of the account that purchased the number through the ACMA's smartnumber auction system) ▫ Winning Amount (the amount the winning bidder paid to acquire the EROU through the ACMA's smartnumber auction system) ▫ Initial Allocatee 	

8.6 Reference

8.6.1 Number status mapping for Register of Numbers

Internal number status	Register of Numbers (public view)	Register of Numbers (logged in view)
Available	SPARE	Available
Withheld	ALLOCATED	Withheld
Withheld Extended	ALLOCATED	Withheld Extended
Reserved	ALLOCATED	Reserved
Reserve Extended	ALLOCATED	Reserve Extended
Allocated	ALLOCATED	Allocated
Quarantined	Not shown in Register of Numbers	Quarantined

Available EROU unassigned	SPARE	Available EROU unassigned
Pending Payment	SPARE	Pending Payment
Assigned Allocated	ALLOCATED	Assigned Allocated
Assigned Unallocated	SPARE	Assigned Unallocated
Unavailable Unassigned Unallocated	Not shown in Register of Numbers	Unavailable Unassigned Unallocated

8.6.2 Transaction mapping for transaction history

Transaction	Appears in transaction history (public view)	Name of transaction as shown in transaction history (public view)
Allocation	Yes	Allocation
Allocation with withheld	Yes	Allocation
Allocation with withheld extended	Yes	Allocation
Allocation with Reserve	Yes	Allocation
Allocation with Reserve extended	Yes	Allocation
Surrender	Yes	Surrender
Automatic system withdraw(for FLPRN expiring Withheld/Reserve)	Yes	Withdraw
Allocation under special circumstances	Yes	Allocation
System release from quarantine	No	
Transfer	Yes	Transfer
Regulator Withdraw	Yes	Withdraw
EROU allocation	No	
EROU trade	No	
Waiver of EROU	No	
Regulator-cancellation of EROU (False statement)	No	
Cancellation of EROU-no active service	No	

Annual Numbering Charge

The Numbering System assists the ACMA in its requirement to annually collect a set amount of revenue from carriage service providers that hold certain types of telephone numbers. This charge is known as the Annual Numbering Charge (ANC).

The following business processes and the rules provide further details about how the Numbering system supports the ANC process.

Set the ANC Billing Year

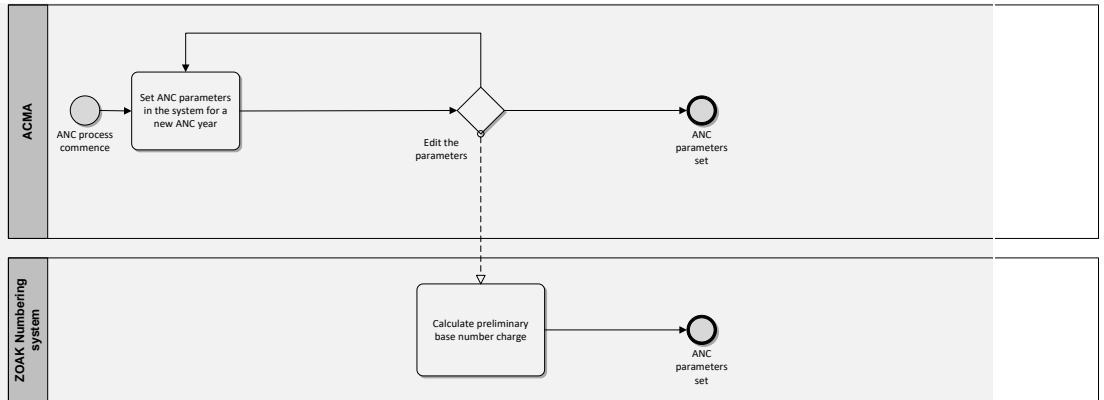


Figure 10.1: Set the ANC Billing Year

Activity name	Business rules
Set ANC parameters in the system for a new ANC year	<p>ACMA will be able to set the following parameters when creating the ANC bi</p> <ul style="list-style-type: none"> ▪ Billing year ▪ Census date ▪ Pay by date ▪ Maximum charge ▪ Target revenue <p>Billing year status - the possible values are:</p> <ul style="list-style-type: none"> ▪ New <ul style="list-style-type: none"> ○ Once a billing year has been created it is set to 'New' stat the billing year can be updated. ▪ Published <ul style="list-style-type: none"> ○ A billing year must be set to 'Published' status before the as the system will use the billing year details to calculate the Census date. ○ To update the details of a billing year after it is published unpublish the billing year to revert back to 'New' status. / make the required changes before changing the status ba 'Published'. ○ A billing year cannot be unpublished once the Census dat reached as the BNC is calculated at this point. ▪ Closed <ul style="list-style-type: none"> ○ Setting the billing year to 'Closed' status triggers the gene final ANC Statements and invoices. ○ CSPs are notified that ANC Statements and invoices are a

Generate the draft ANC statements and distribution report

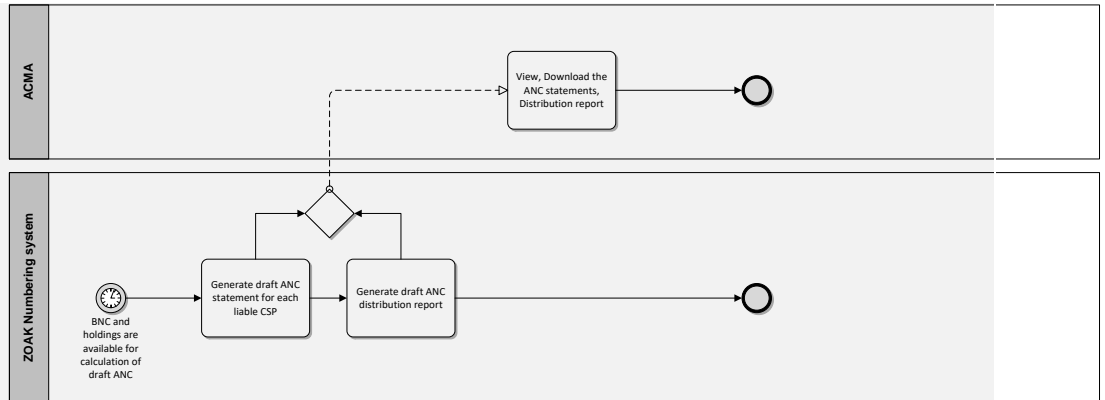


Figure 10.2: Generate the draft ANC statements and distribution report

Activity name	Business rules
Generate draft ANC statement for each liable CSP	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft statements are made available to ACMA and ZOAK.</p> <p>Basic details include:</p> <ul style="list-style-type: none"> ANC Billing year Issue date Due date Total ANC charge <p>The ANC Summary details provide a breakdown of the total ANC for a CSP by</p> <p>The detailed ANC Statement includes:</p> <ul style="list-style-type: none"> Service Type Prefix Charges – Quantity of numbers in a prefix and price per number Total - Total cost of numbers within a prefix
Generate draft ANC distribution report	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft distribution report is made available to ACMA and ZOAK.</p> <p>The distribution report contains:</p> <ul style="list-style-type: none"> Report generated date Report generated by user ANC Billing year <p>The columns in the distribution report include:</p> <ul style="list-style-type: none"> Holder Service Type Liability (%) Liability amount (AUD) Total Liability of the holder (AUD)
View, Download the ANC statements, Distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to view and download the Draft Statements and Distribution report. Draft ANC Statements and Distribution reports reflect the current sta Register of Numbers in real time. After midnight on the Census date, only the Port out report and Char redistribution reports will change the distribution of ANC between CS

Reconcile and finalise the dataset

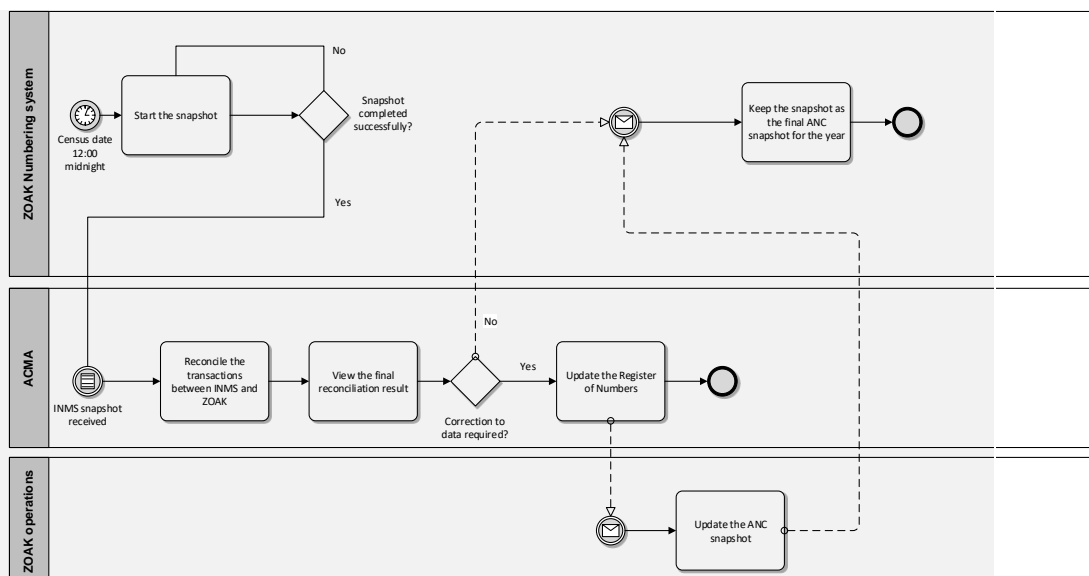


Figure 10.3: Reconcile and finalise the dataset

Activity name	Business rules
Start the snapshot	<p>At 12:00AM Midnight on the Census date, the system takes a snapshot of the Register of Numbers which is used to calculate ANC.</p> <ul style="list-style-type: none"> The snapshot includes the state of all numbers at exactly midnight on the Census date. Transactions completed after midnight on the Census date will not be included in the snapshot. There is no embargo period, the system will remain online while the snapshot is taken. Each year's snapshot is stored in the database indefinitely.
Reconcile the transactions between INMS and ZOAK	<ul style="list-style-type: none"> INMS will make available the reconciliation file taken at 01:00AM on the census date. The daily reconciliation file from INMS (taken on the census date) is used for the reconciliation. CMA must upload the reconciliation file to the ZOAK system.
View the final reconciliation result	<ul style="list-style-type: none"> The reconciliation results will display any inconsistencies between the ZOAK and INMS.
Update the Register of Numbers and ANC snapshot	<p>If any discrepancies are found which need to be corrected for the year's final ANC snapshot, ACMA will inform ZOAK and advise ZOAK about the changes required to the snapshot.</p> <ul style="list-style-type: none"> To update the production database the "Regulator update" function is used by the ACMA to update the Register of Numbers. ZOAK operations will prepare a script to update the snapshot to reflect the updates made by the ACMA.
Keep the snapshot as the final ANC snapshot for the year	<ul style="list-style-type: none"> This will be treated as the "Final ANC snapshot". ZOAK Operations can provide the ANC snapshot to the ACMA on request.

Upload Port out and Charges redistribution reports

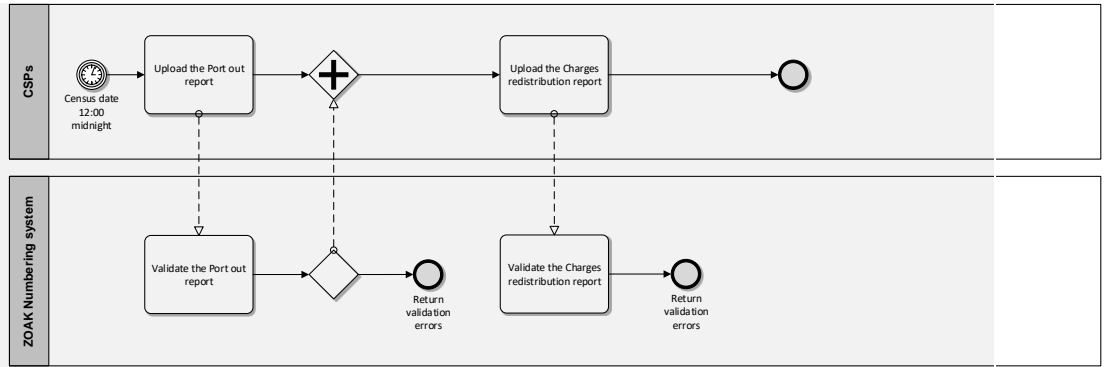


Figure 10.4: Upload Port out and Charges redistribution reports

Activity name	Business rules
Upload the Port out report	<p>A CSP has 17 calendar days from midnight on the Census date to upload the report</p> <ul style="list-style-type: none"> Can be uploaded from midnight on the Census date until midnight on day. A Port out report may be uploaded multiple times, the last uploaded be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>
Validate Port out report	<p>The file must be in CSV format and include a header row.</p> <p>Each column heading must be labelled with the heading given in bold and be listed.</p> <ul style="list-style-type: none"> Allocated Prefix - Column 1 - the five digit prefix that numbers have been allocated to. Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers. Held Quantity - Column 3 - the quantity of numbers which have been allocated to the CSP. The quantity must be at least 1 and not exceed either 100,000 or the total quantity of numbers held by the CSP in the Allocated Prefix. Reporter - Column 4 - the MNP code of the CSP submitting the report Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name. Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none"> Each validation error corresponds to the line number in the report. For example, the first row of data considering that Row 1 is the header row. Additional information is returned to assist the CSP in correcting the report.
Upload Charges redistribution report	<p>A CSP has 3 days from the end of the 17th day from the Census date to upload the redistribution report.</p> <ul style="list-style-type: none"> A Charges redistribution report can only be uploaded after the period for uploading the Port out report has ended. Can be uploaded from midnight of the 17th day until midnight of the 20th day from the Census date. A Charges redistribution report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holding.</p> <p>The report does not change the BNC.</p>

<p>Validate Charges redistribution report</p>	<p>The file must be in CSV format and include a header row.</p> <p>Each column heading must be labelled with the heading given in bold and be in the order listed.</p> <ul style="list-style-type: none"> Allocated Prefix - Column 1 - the five-digit prefix that numbers have been ported out from. Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers. Held Quantity - Column 3 - the quantity of numbers which have been ported out. The quantity must be at least 1 and not exceed either 100,000 or the total count of numbers held by the CSP in the Allocated Prefix, taking into consideration port out reports. Reporter - Column 4 - the MNP code of the CSP submitting the report. Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name. Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none"> Each validation error corresponds to the line number in the report. Row 2 for example is the first row of data considering that Row 1 is the header row. Additional information is returned to assist the CSP in correcting their report.
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View Portability report and Mobile number holdings statement

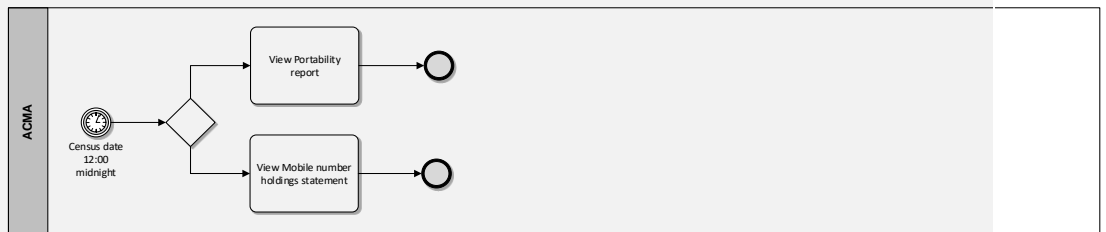


Figure 10.5: View the Portability report and Mobile number holdings statement

Activity name	Business rules
View Portability report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to download the Portability report. The Portability report is a combined list of all Port out and Charges redistribution reports that have been uploaded by CSP's. Viewing the report allows the ACMA to determine those CSP's who have distributed their mobile number holdings to other CSP's and their respective quantities. The Portability report is updated in real time based on CSP activity during the upload period of the Port out and Charges redistribution reports. The portability report is considered final when the upload period for Port out and Charges redistribution reports have ended. The portability is then considered final.
View Mobile number holdings statement	<ul style="list-style-type: none"> ZOAK Operations, ACMA and CSP's are able to download the Mobile number holdings statement. The Mobile number holdings statement reflects the state of all held mobile numbers in the system as of midnight on the Census date.

Close the ANC billing year

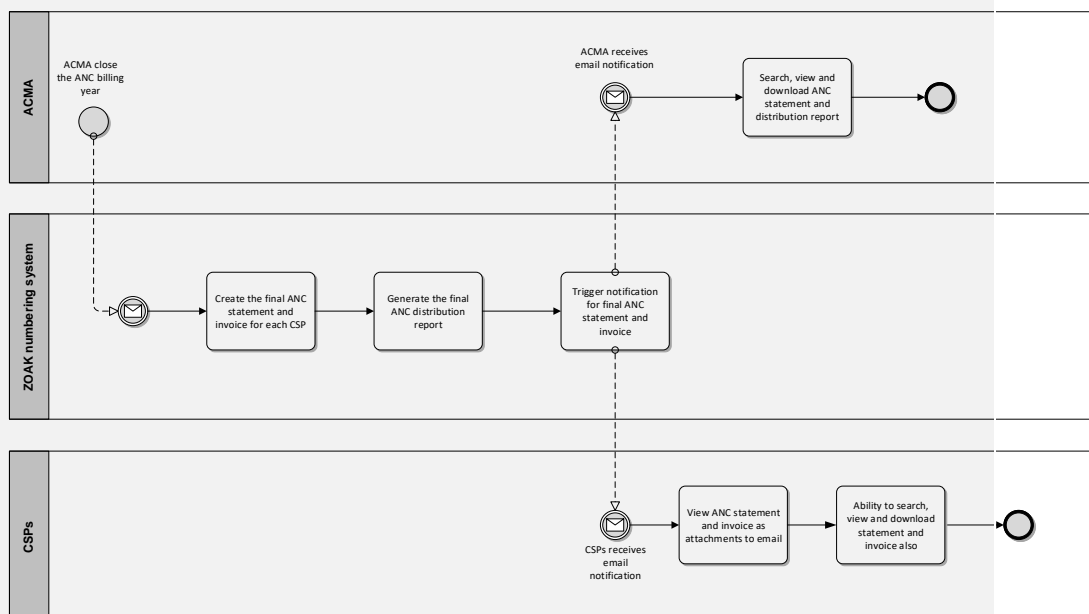


Figure 10.6: Close the ANC Billing Year

Activity name	Business rules
ACMA close the ANC billing year	<p>Setting the billing year to 'Closed' status triggers the generation of the final ANC Statements and distribution report.</p> <p>Only ACMA can perform this action.</p> <p>CSPs liable for the charge are provided an email with the ANC Statement and invoices attached. The email includes other important ANC information.</p>
Create the final ANC statement for each CSP	<p>The system generates the final ANC statement for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and app adjustments from the Port out and Charges redistribution reports.</p>
Generate Final ANC distribution report	<p>The system generates the final distribution report for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and app adjustments from the Port out and Charges redistribution reports.</p>
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that "View my ANC statements" permission checkbox selected) with the ANC Stat ANC invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements and ANC invoices have been issued by the system and ACMA can access these.</p>
View ANC statement and distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to download the final ANC Statement and Distribution report.
CSP view ANC statement	<ul style="list-style-type: none"> CSPs are able to download their final ANC Statement from the ANC tab if they have the required permissions

Create final ANC invoice

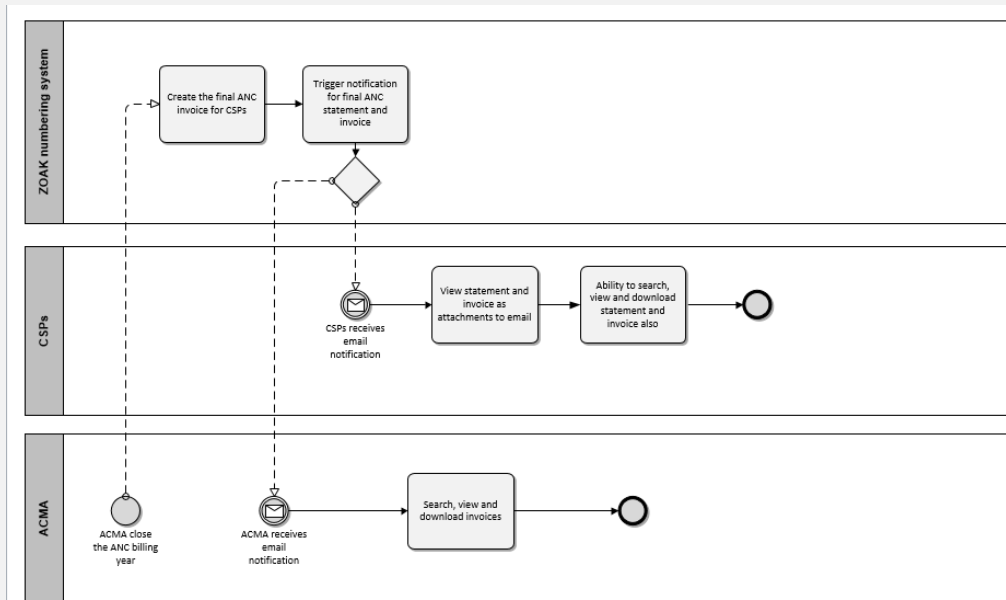


Figure 10.7: Create final ANC invoice

Activity name	Business rules
Create the final ANC invoice for CSPs	Setting the billing year to 'Closed' status triggers the generation of the final ANC invoice. <ul style="list-style-type: none"> The invoice due date will be either the default pay by date as configured for the billing year, or 30 calendar days from the day invoice is generated (whichever is greater).
Trigger notification for final ANC statement and invoice	An email is sent to all liable CSPs (both account administrators and users that have the "View my ANC statements" permission checkbox selected) with the ANC Statement and ANC invoices attached along with other important information. A similar email is sent to all ACMA users indicating the final ANC statements and invoices have been issued by the system and ACMA can access these.
Search, view and download invoices	<ul style="list-style-type: none"> ACMA and ZOAK Finance will be able to identify the ANC invoices by the 'Annual Numbering Charge' and the creation date. CSPs will be able to view and download their own ANC invoice.

Record payment against ANC invoices

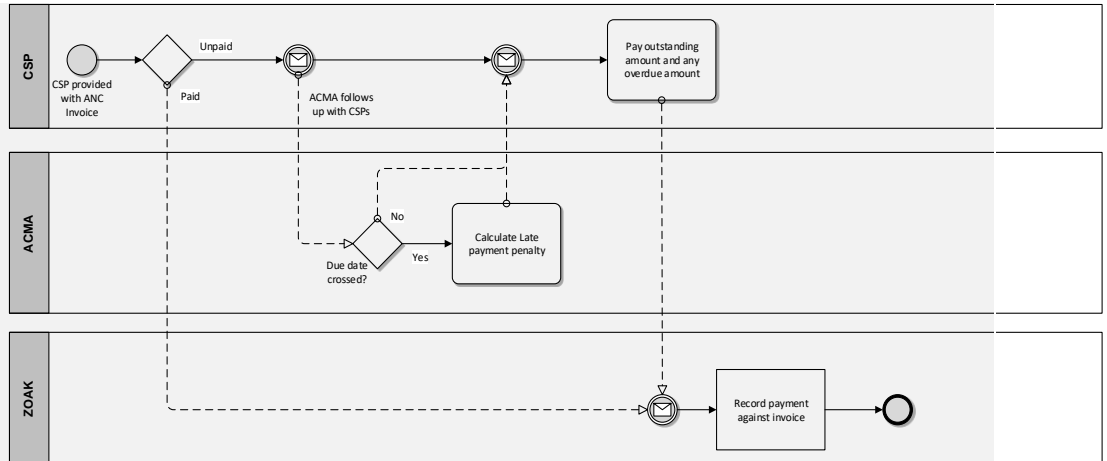


Figure 10.8: Record payment against ANC invoices

Activity name	Business rules
Record payment against invoice	ZOAK Finance will record the payment against each individual ANC invoice with the late payment penalty is not captured against the invoice in the system.
Capture late payment penalty	Calculation of the late payment penalty is handled by ACMA outside of the system. ZOAK Finance will identify the late payment penalty as an unmatched transaction reconciled with ACMA.
Restrict allocation to CSPs when ANC is unpaid	If any CSP account has an overdue ANC invoice (Only after 3 months from the invoice date) then ACMA can set an allocation override on the account to prevent the CSP from allocating numbers. The CSP is provided with a message upon login to the system to indicate that they have been blocked from applying for allocations of numbers.

Appendix A’.

Based on the type of account (ie CSP, smartnumber, Registered inquirer, Service Desk and Regulator) users are assigned one or more roles. Each role is assigned one or more functions.

The account administrator can grant/revoke roles from users within their accounts, including the account administration role.

Once granted a role, a user can perform the functions assigned to the role within the Numbering system.

Registered Inquirer users permissions cannot be updated because registered inquiries are effectively single user accounts with fixed functionality.

Validate permissions	A CSP, smartnumber, Service Desk and Regulator must have at least one user who is an account administrator. The identified username exists and has not been removed.
Update permissions	On updating the user permissions the following occurs: <ul style="list-style-type: none"> Permissions are granted or revoked from the selected user. If permission has been granted the selected user will now be able to execute the granted function. If permission has been revoked the selected user will not be able to execute the revoked function.

9.9 Remove user

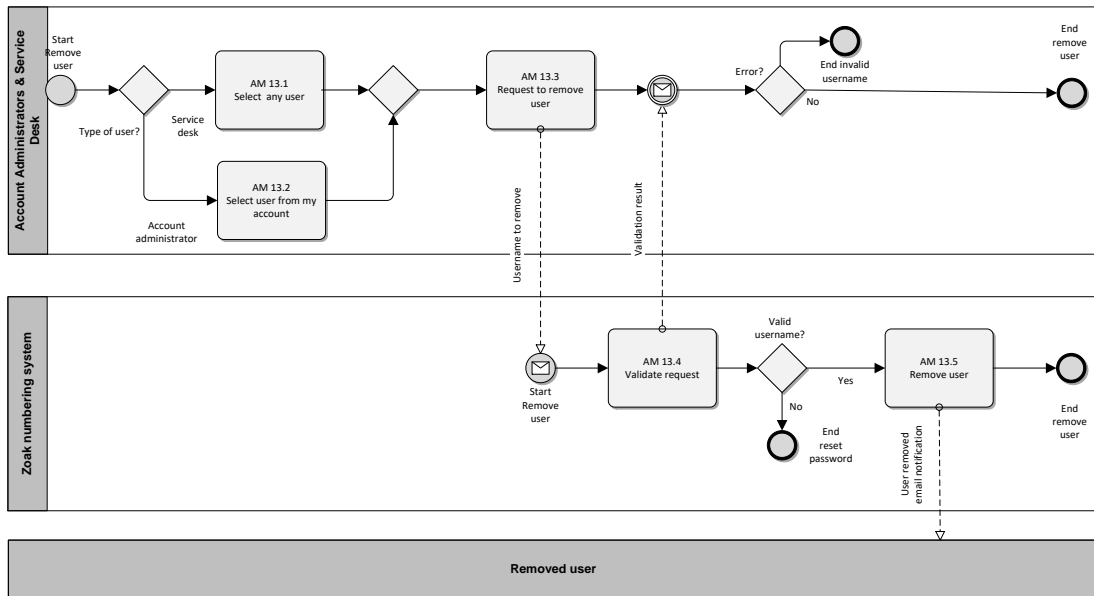


Figure 1.11: Remove user

Activity name	Business rules
Select any user	Service Desk users can select to remove any user with a Numbering system client account.
Select user from my account	Account administrators can select to remove any user within their account.
Request to remove user	Request the Numbering system remove the identified user.
Validate username	A CSP, smartnumber client, Service Desk and Regulator must have at least one user who has been made an account administrator. Users cannot be removed from Registered inquirer accounts. The identified username exists and has not been removed.
Remove user	When removing a user the following occurs: <ul style="list-style-type: none"> The user is deactivated. The user cannot login to the Numbering system. An email notification is sent to the removed user advising them their user has been removed and can no longer access the Numbering system. The user will not receive email notifications from the Numbering system.

9.10 Login via web browser

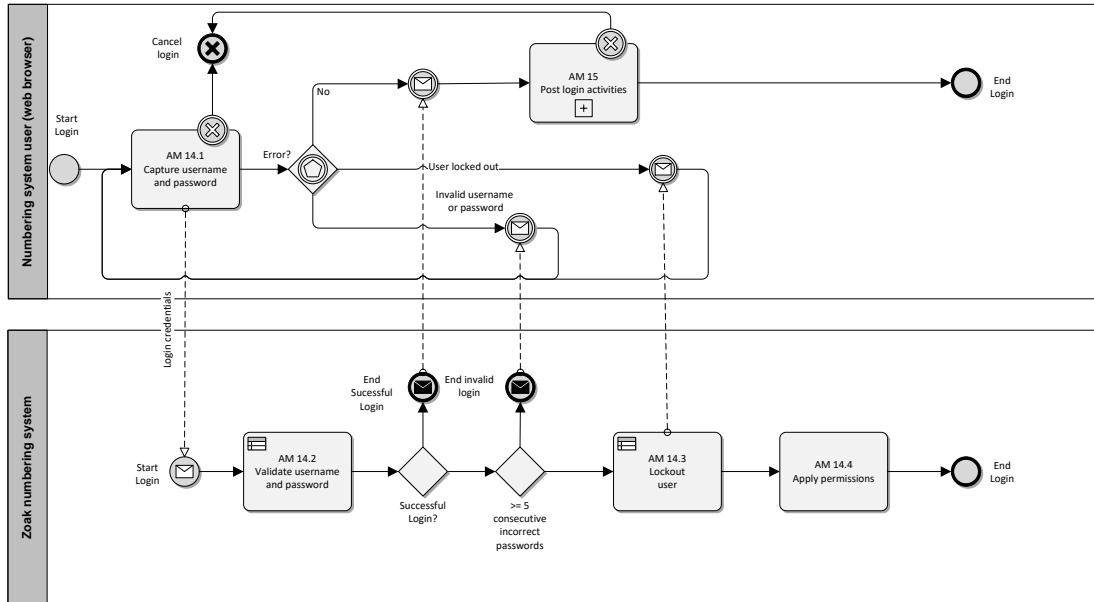


Figure 1.12: Login via web browser

Activity name	Business rules
Capture username and password	Capture the username and password.
Validate username and password	The following validations are performed: <ul style="list-style-type: none"> Check username exists and is active, otherwise return Invalid username or password error. Check password matches, otherwise Invalid username or password error Successful login if above two steps are passed.
Lockout user	As described in Control: 0430 in the <i>Australian Government Information Security Manual Controls – August 2013</i> users are to be locked out (i.e., prevented from accessing the Numbering system) after 5 consecutive failed login attempts. To gain access to the Numbering system a locked out user requires their account administrator or service desk to reset their password.
Apply permissions	Apply the permissions granted to the user, to prevent the user accessing parts of the Numbering system they are not permitted to. If a CSP or smartnumber account has an outstanding account registration fee at the time the user logs in, the user will not be permitted to perform any numbering operation (e.g., allocation, transfer, and surrender).

9.11 Post login activities

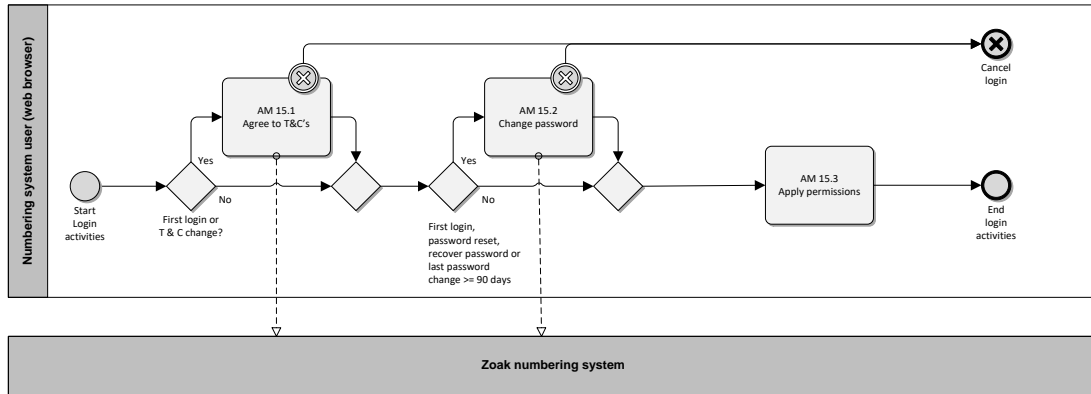


Figure 1.13: Post login activities

Activity name	Business rules
Agree to T&Cs	On first login to the Numbering system or whenever ZOAK or the Regulator issue updated terms and conditions, a user is required to accept the terms and conditions of use. For the newly created users, if a user has not provided the secret Q&A then they need to provide the secret Q&A as well.
Change password	On first login to the Numbering system or after a password reset, recover password or the password has expired; a user is to provide a new password. The new password must comply with the criteria specified in Controls 0421 and 0424 in the <i>Australian Government Information Security Manual Controls – August 2013</i> . New passwords comply with the following criteria: <ul style="list-style-type: none"> ▪ A minimum length of nine characters, consisting of at least three of the following character sets: <ul style="list-style-type: none"> ▫ Lowercase alphabetic characters (a–z) ▫ Uppercase alphabetic characters (A–Z) ▫ Numeric characters (0–9) ▫ Special characters ▪ Does not allow a password to be reused within eight password changes. ▪ Does not permit sequential passwords.
Apply permissions	Apply the permissions granted to the user, to prevent the user accessing parts of the Numbering system they are not permitted. If a CSP or smartnumber account has an outstanding account registration fee at the time the user logs in, the user will not be permitted to perform any numbering operation (e.g., allocation, transfer, and surrender).

9.12 Change password

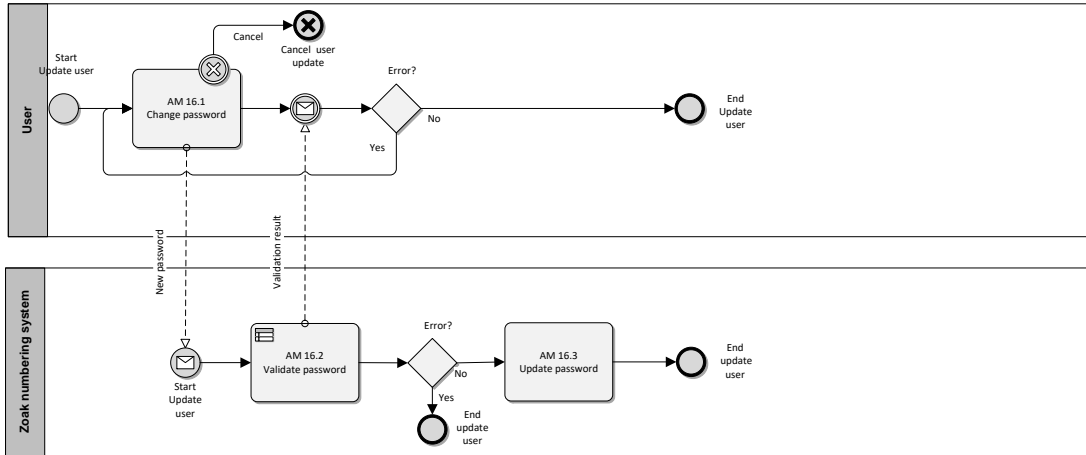


Figure 1.14: Change password

Activity name	Business rules
Change password	<p>Only the authenticated user can change their password through this process.</p> <p>The current password must be supplied along with a new password that meets the password criteria.</p>
Validate password	<p>The current password matches the password stored by the Numbering system.</p> <p>The new password complies with the criteria specified in Controls 0421 and 0424 in the <i>Australian Government Information Security Manual Controls – August 2013</i>.</p> <p>The new password complies with the following criteria:</p> <ul style="list-style-type: none"> ▪ A minimum length of nine characters, consisting of at least three of the following character sets: <ul style="list-style-type: none"> ▫ Lowercase alphabetic characters (a–z) ▫ Uppercase alphabetic characters (A–Z) ▫ Numeric characters (0–9) ▫ Special characters ▪ Does not allow a password to be reused within eight password changes ▪ Does not permit sequential passwords.
Update password	<p>Updates the users with the new password.</p> <p>On next log in to the Numbering system the user must supply the new password to gain access.</p>

9.13 Change secret question

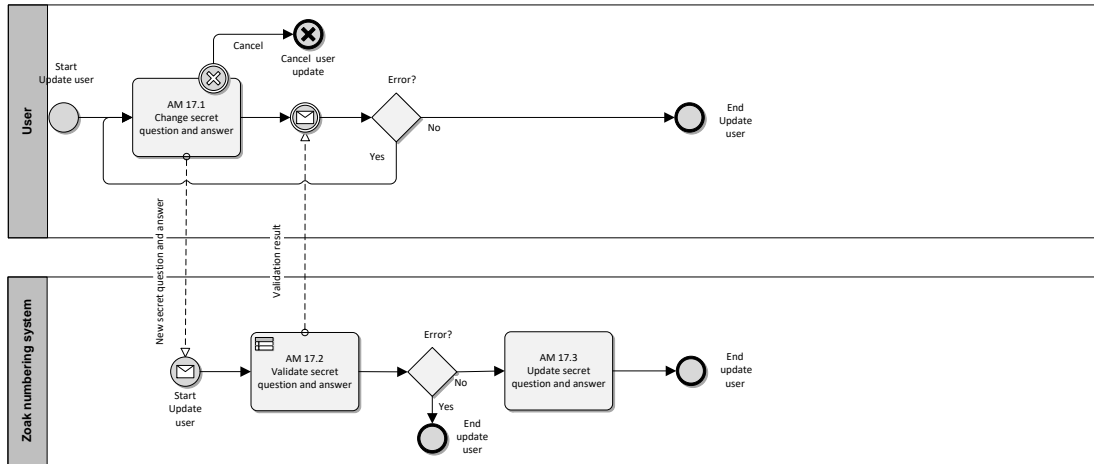


Figure 1.15: Change secret question

Activity name	Business rules
Change secret question and answer	A user can change their secret question and password. Account administrators and Service desk cannot update other user's secret question and answer.
Validate secret question and answer	Secret question and answer have been supplied. The question and answer cannot be blank or empty.
Update secret question and answer	Updates the user's secret question and answer. The secret question and password is not to be stored in the clear. The recover password function will now use the update secret question and answer.

9.14 Recover username

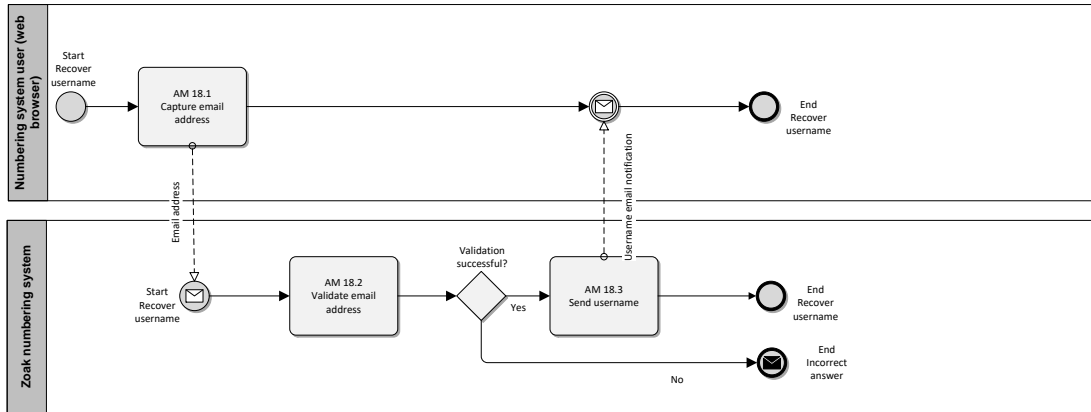


Figure 1.16: Recover username

Activity name	Business rules
Capture email address	The first step of the recover username process is to provide the email address the user supplied to the Numbering system.
Validate email address	The following validations are performed on the email address: <ul style="list-style-type: none"> ▪ The email address is valid. ▪ The valid email address uniquely identifies a user. ▪ The user is active (ie not removed or locked).
Send username	If the unique match is found with the email address then the username is recovered.

9.15 Recover password

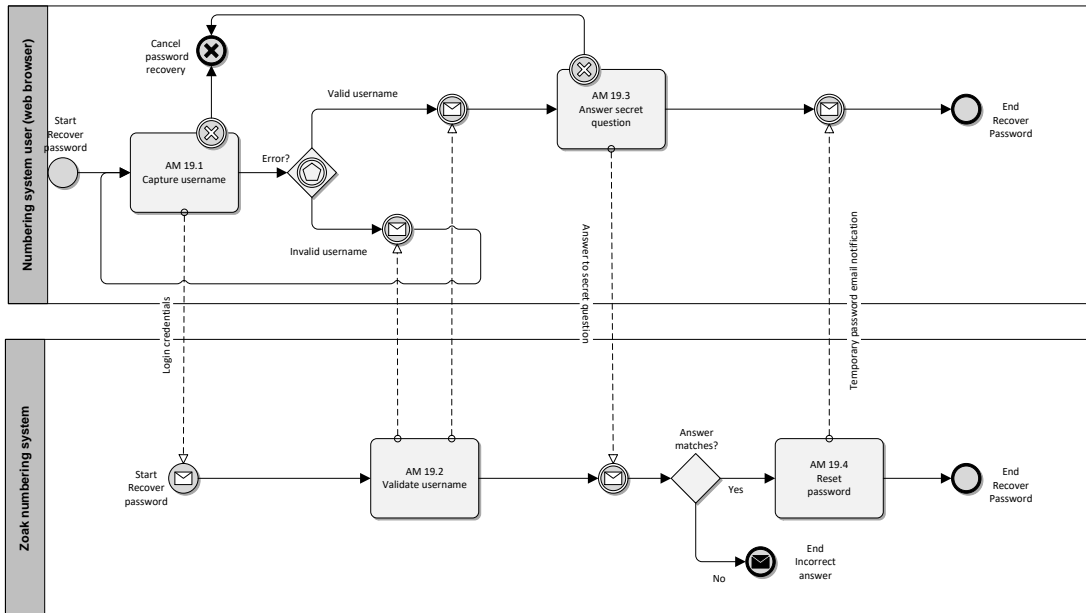


Figure 1.17: Recover password

Activity name	Business rules
Capture username	The first step of the recover password process is for the user to provide their username.
Validate username	The following validations are performed on the username: <ul style="list-style-type: none"> ▪ The username is active. ▪ The username has not been locked out due to five consecutive login failures.
Answer secret question	User is prompted to provide the answer to their secret question.
Reset password	If the answer to the secret question is correct then a temporary password is issued to the user. The temporary password must meet the criteria specified in Control 0421 in the <i>Australian Government Information Security Manual Controls – August 2013</i> . The password complies with the following criteria: <ul style="list-style-type: none"> ▪ A minimum length of nine characters, consisting of at least three of the following character sets: <ul style="list-style-type: none"> ▪ Lowercase alphabetic characters (a–z) ▪ Uppercase alphabetic characters (A–Z) ▪ Numeric characters (0–9) ▪ Special characters The temporary password is sent to the email address specified in the user's contact details. When the user logs in to the Numbering system using the temporary password the user will be forced to change their password.

9.16 Reset password

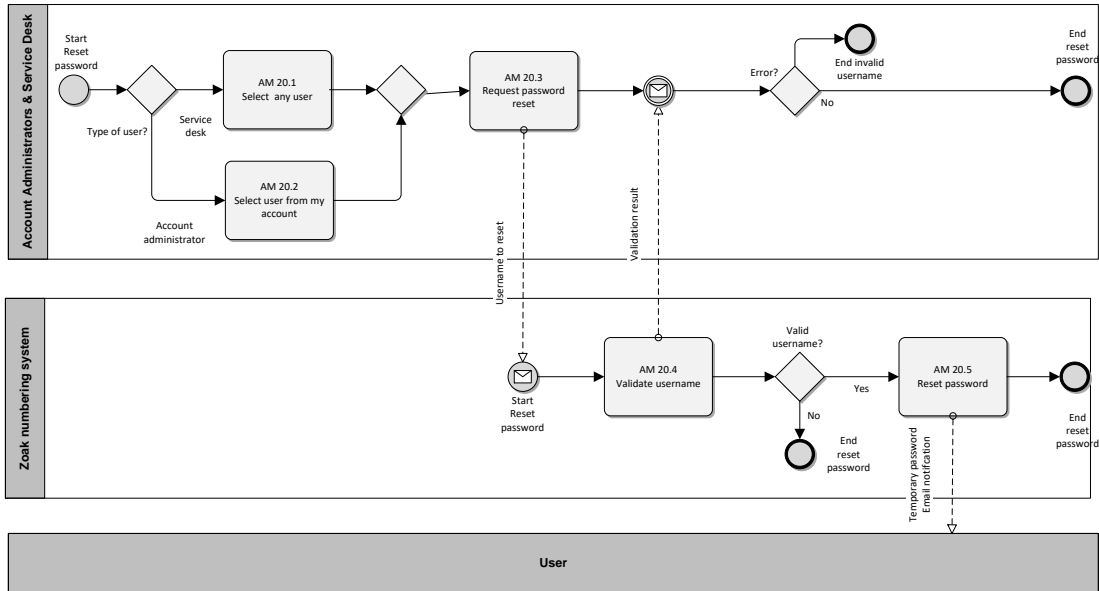


Figure 1.18: Reset password

Activity name	Business rules
Select any user	Service Desk users can select to reset the password of any user attached to a Numbering system client account.
Select user from my account	Account administrators can select to reset the password of any user within their account.
Request password reset	Request the Numbering system reset the password of the identified user.
Validate username	Only users that are active or have been locked out due to five consecutive login failures can have their passwords reset.
Reset password	<p>The temporary password must meet the criteria specified in Control 0421 in the <i>Australian Government Information Security Manual Controls – August 2013</i>.</p> <p>The password complies with the following criteria:</p> <ul style="list-style-type: none"> ▪ A minimum length of nine characters, consisting of at least three of the following character sets: <ul style="list-style-type: none"> ▫ Lowercase alphabetic characters (a–z) ▫ Uppercase alphabetic characters (A–Z) ▫ Numeric characters (0–9) ▫ Special characters <p>The password is via email to the email address specified in the user's contact details.</p> <p>When the user logs in to the Numbering system the user will be forced to change their password.</p>

9.17 Logout via web browser

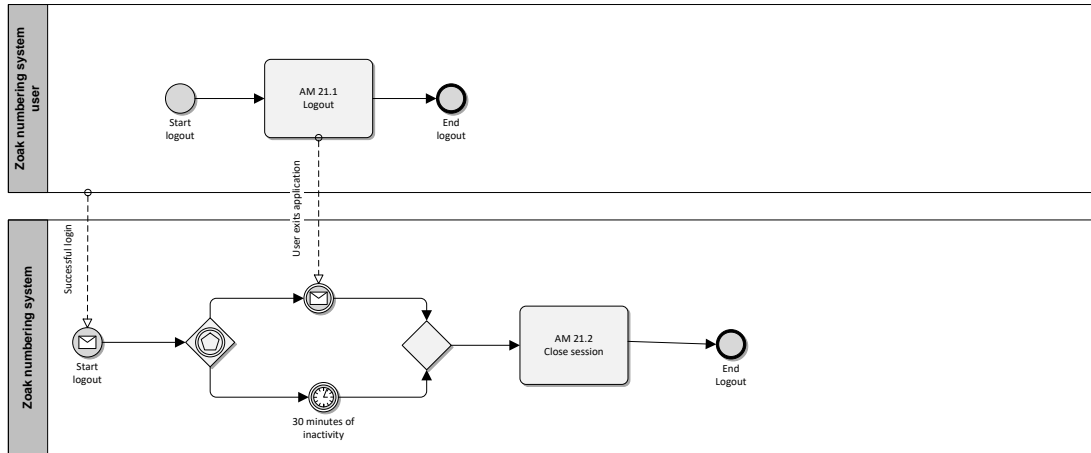


Figure 1.19: Logout via web browser

Activity name	Business rules
Logout	The logged in user requests to exit or logout of the Numbering system.
Close session	There are two conditions that can trigger the Numbering system to terminate a user's Numbering system session. These conditions are: <ul style="list-style-type: none"> ▪ User requests to exit the Numbering system by logging out. ▪ The Numbering system detects there has not been any activity by the user for 15 minutes, the Numbering system will automatically logout the user as described in Control 0427 in the <i>Australian Government Information Security Manual Controls – August 2013</i>.

10 Freephone, Local Rate and Premium rate numbers

The Numbering system supports the allocation of Freephone and local rate numbers that have not been classed to have smartnumber characteristics. These are made available to CSPs by administrative allocation. All premium rate numbers (6-8 digits) are also available to CSPs by administrative allocation.

These freephone, local rate and premium numbers (FLRPRN) can be allocated to a CSP in three ways:

- Allocation without reservation – the CSP is allocated the requested number by the Numbering system.
- Allocation with 'Withheld' status – the CSP is allocated the number for a short period of time, so that it can be evaluated.
- Allocation with 'Reserved' status – the CSP is allocated the number for a longer period of time, so that it can be evaluated.

When a number is allocated with a 'Withheld' or 'Reserved' status a CSP can elect to extend the reservation period once, before the reservation expires. Prior to the reservation period expiring the CSP can elect to notify the Numbering system to alter the allocation to allocated without reservation. Otherwise the CSP can either surrender the number or wait for the reservation period to expire, at which point the Numbering system will withdraw the number.

The Numbering system provides two interfaces to allocate FLRPRNs:

- Web browser
- XML interface

The Numbering system also allows the Transfer and Surrender of these FLRPRN numbers.

The following business processes and the rules will provide further details about how the Numbering system deals with the FLRPRN numbers.

10.1 Number state and transition for FLRPRN

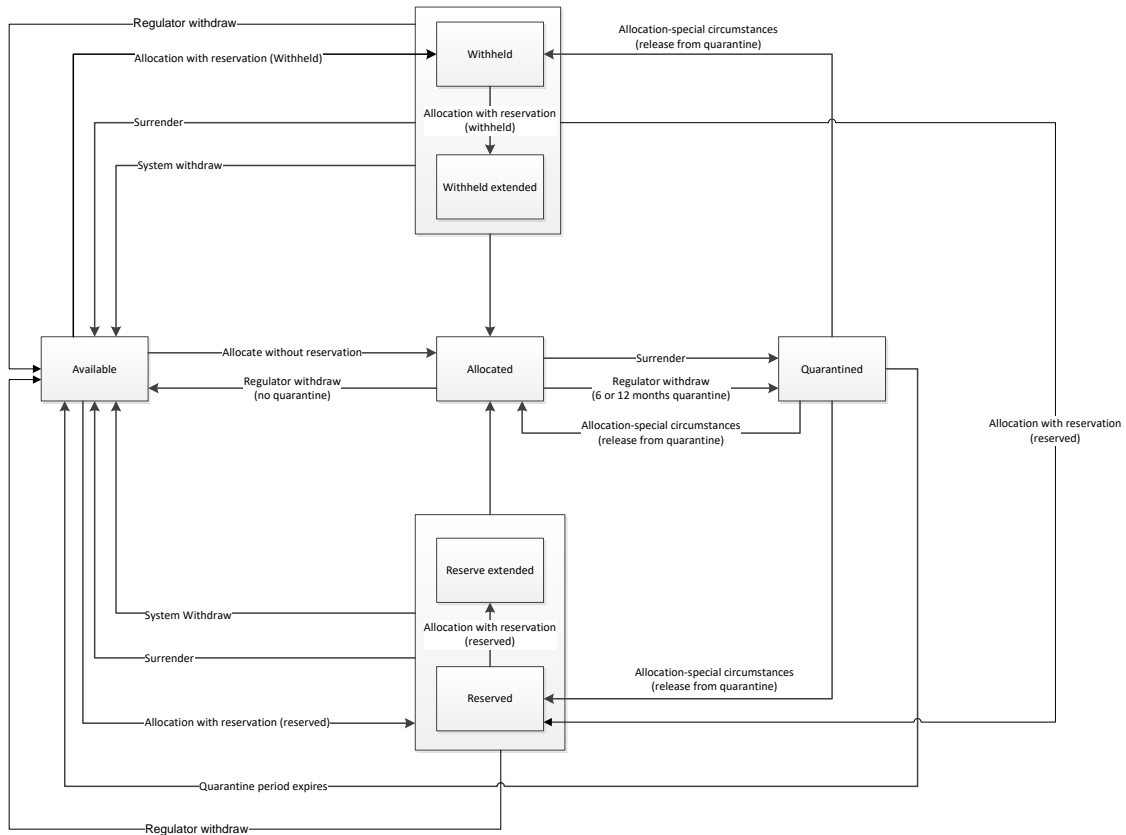


Figure 2.1: State transition diagram

Current state	Description	Duration	Valid state transition
Available	When a FLRPRN is available for allocation via the administrative allocation process.	N/A	Withheld Reserve Allocated
Withheld	Withheld is a temporary reservation of an Admin number for a short period. The purpose of this state is to allow a potential customer to consider the use of a small quantity of Admin number(s).	14 days	Withheld Extended Reserved Allocated Available
Withheld Extended	During the initial withheld period the Registered CSP may extend the period for a further 14 days.	14 days	Reserved Allocated Available
Reserved	Reserved is a longer term reservation of Admin number on behalf of a contracted customer who intends to activate the service. A number cannot be reserved unless an order for activation of the number exists. If an activation order does not exist, Withheld must be used.	90 days	Reserved Extended Allocated Available
Reserved Extended	Reserved Extended is the allowed extension period to the Reserved State.	30 days	Allocated Available

Allocated	Allocated state represents allocation without reservation and hence there will be no expiry for this state.	NA	Available Quarantined
Quarantined	This state denotes a surrendered Admin number which is unavailable for allocation for 6-12 months depending on the business rules.	6months default and 12 months for surrendered with nuisance calls.	Available Allocated Withheld Reserved

The following business processes will explain the business rules associated with these states.

10.2 Allocation of FLRPRN

Allocation of FLRPRN process will provide details about the activities which allow the allocation with reservation and without reservation and the associated business rules for the state transitions mentioned above.

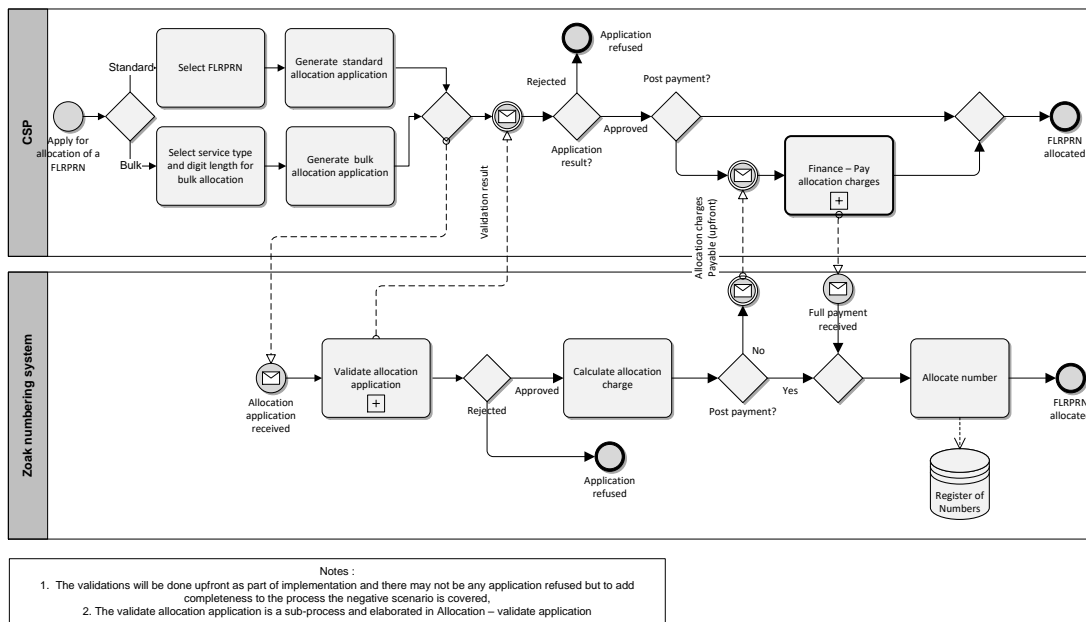


Figure 2.2.1: Allocation of FLRPRN

The sub-process Validate allocation application is elaborated in the diagram below.

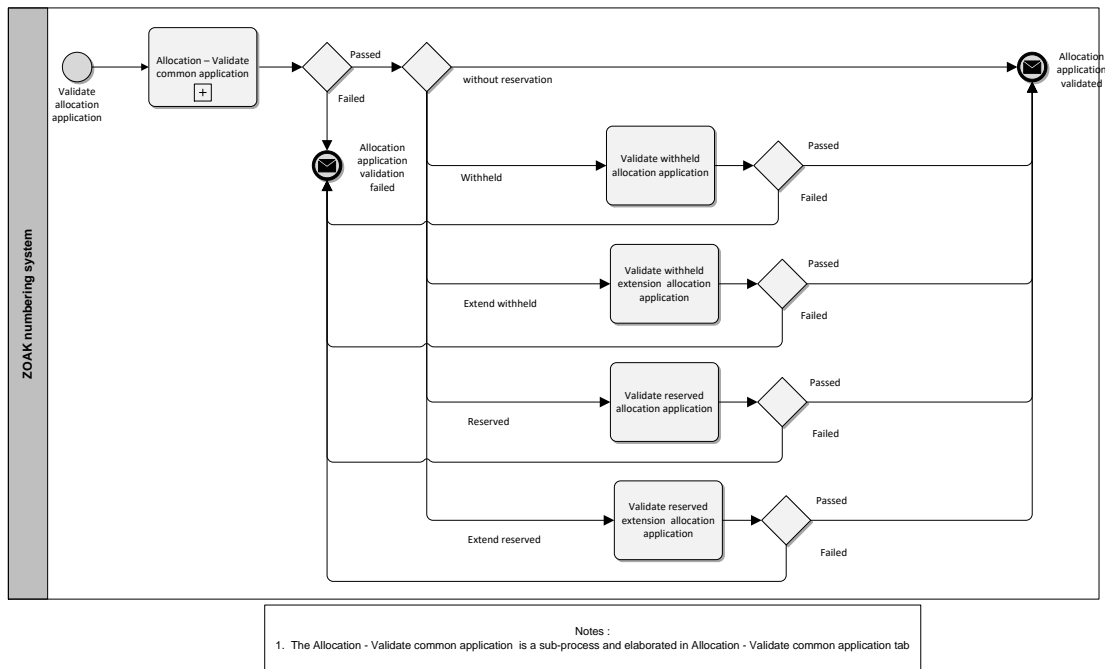


Figure 2.2.2: Validate allocation application – sub process

The sub-process validate common allocation application is elaborated in the diagram below.

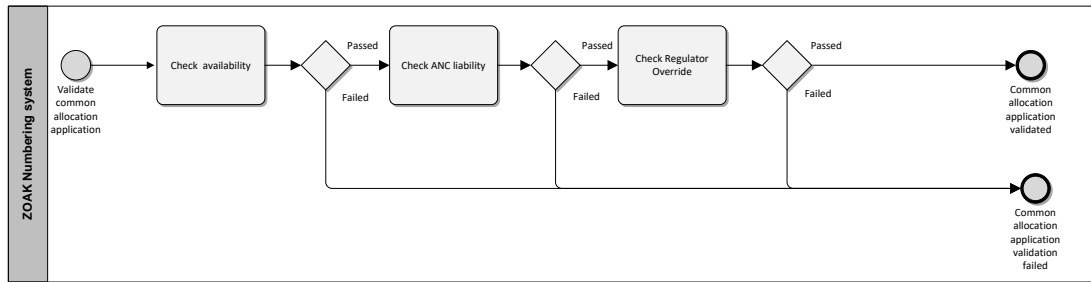


Figure 2.2.3: Validate common allocation application –sub process

Activity name	Business rules
Select FLRPRN	<p>The pool of FLRPRN available for allocation is combination of the following:</p> <ul style="list-style-type: none"> ▪ Available FLRPRN from the administrative allocated numbering pool. ▪ Conditionally allocated to the applying CSP. Conditional allocated is defined as a FLRPRN with one of the following status: <ul style="list-style-type: none"> ▫ Withheld ▫ Reserved ▫ Withheld Extended; or ▫ Reserved Extended
Generate allocation application (Standard)	<p>CSP will opt for the standard allocation when CSP wants to select a particular number from the available FLRPRN list and may wish to reserve or withhold the number.</p> <p>An allocation application can be made by a registered CSP.</p> <p>An allocation application contains one or more FLRPRNs that are available for allocation selected from the administrative allocated numbering pool.</p> <p>An allocation application captures the type of allocation requested. The type of allocation can be one the following:</p> <ul style="list-style-type: none"> ▪ Allocation without reservation ▪ Allocation with withheld status ▪ Allocation with reserved status <p>To apply for an extension to a number with withheld or reserved status, a second application for withheld or reserved status is to be submitted.</p>
Select service type and digit length for bulk allocation	<p>When CSP would like to apply for a large quantity of FLRPRN from the Admin pool then CSPs will opt for the standard bulk allocation option.</p> <p>To apply for FLRPRNS in bulk CSP must select a service type and corresponding digit length and the quantity to apply for.</p> <p>CSPs cannot apply for multiple service types or same service type multiple digit lengths in one application.</p>
Generate bulk allocation application	<p>Based on the service type, digit length and the quantity provided by user the Numbering system will enlist available FLRPRNs matching this criteria and will allow the user to review the numbers before submission.</p> <p>User will also be able to see the total quantity and the total amount of charge while reviewing the application.</p>
Check availability	<p>The following conditions are checked:</p> <ul style="list-style-type: none"> ▪ The numbers applied for must be FLRPRNs available for allocation. ▪ The allocation application has been submitted by a registered CSP.
Check ANC liability	<p>The following conditions are checked:</p> <ul style="list-style-type: none"> ▪ The applying registered CSP has an outstanding ANC liability for more than 3 months before the date the allocation application was received. ▪ The applying registered CSP has an outstanding late payment penalty for more than 3 months before the date the allocation application was received.

	<ul style="list-style-type: none"> The CSP has acknowledged it understands that the requested numbers may be subject to annual numbering charge.
Check Regulator Override	<p>The Regulator has the ability to disable/suspend a CSP's ability to request an allocation of numbers. The disable/suspension will be controlled through the Numbering system's account management feature.</p> <p>As part of the allocation application validation the Numbering system checks whether the Regulator disabled or suspended the CSP's ability to generate an allocation application. If disabled or suspended the Numbering systems shall reject the allocation application.</p>
Validate withheld allocation application	<p>The following conditions are checked:</p> <ul style="list-style-type: none"> FLRPRN has a status of Available
Validate withheld extension allocation	<p>The following conditions are checked:</p> <ul style="list-style-type: none"> FLRPRN has a status of Withheld FLRPRN has not been previously extended Requesting CSP is current holder of the number
Validate reserved allocation application	<p>The following conditions are checked:</p> <ul style="list-style-type: none"> FLRPRN has a status of Available, Withheld or Withheld Extended FLRPRN with a status of Withheld or Withheld Extended and the requesting CSP is the current holder of the number
Validate reserved extension allocation	<p>The following conditions are checked:</p> <ul style="list-style-type: none"> FLRPRN has a status of Reserved FLRPRN has not been previously extended Requesting CSP is current holder of the number
Calculate allocation charge	<p>Calculate the allocation charge as specified in the latest Telecommunications (Numbering Charges - Delegated Services) Determination.</p> <p>Overtime the ACMA may alter the amount of charge for an allocation of number(s). Using the type of allocation and the date the application was received; the correct amount of charge in effect can be determined and charged to the registered CSP.</p> <p>For CSP accounts configured for upfront payment an invoice containing the allocation charges will be created.</p> <p>For CSP accounts configured for post payment the allocation charge is recorded and will be invoiced at later date.</p>
Pay allocation charges	<p>For CSP accounts configured to pay their allocation charges via upfront payment</p> <p>Pay allocation charges by credit card.</p> <p>Full payment must be made.</p>
Allocate Number	<p>The following activates when a FLRPRN is allocated to a CSP:</p> <ul style="list-style-type: none"> FLRPRNs are allocated to the applying CSP. The Register of Numbers is updated to reflect the allocation to the requested CSP. Update status of FLRPRN to reflect its requested allocation status: <ul style="list-style-type: none"> Allocated Withheld Withheld Extended Reserved Reserved Extended If allocation with reservation was requested, set the reservation period to expiry after the following number of days: <ul style="list-style-type: none"> Withheld = 14 days Withheld Extension = 14 days Reserved = 90 days Reserved Extension = 30 days <p>Note: The above reservation periods will be need to be configurable</p>

10.3 Allocation of FLRPRN under special circumstances

Allocation under special circumstances will release a quarantined FLRPRN number from its quarantine period. Currently any CSP can choose a quarantined number and can apply for the special allocation. Applications where the CSP who is applying is the last holder of the number and is requesting the number for the customer who last held the number do not require ACMA consideration and will be processed immediately. Other special allocation applications will be audited by ACMA and only when an application is approved will the number be allocated to the CSP. Based on the current *Telecommunications Numbering Plan 2015* a CSP can request for Allocation with or without reservation for quarantined number.

Allocation with special circumstances are possible via the Numbering system web-browser, with exception to applications where the CSP was the last holder of the number and the number is for the last customer, these applications may also be made via the XML interface for CSP's configured for post payment.

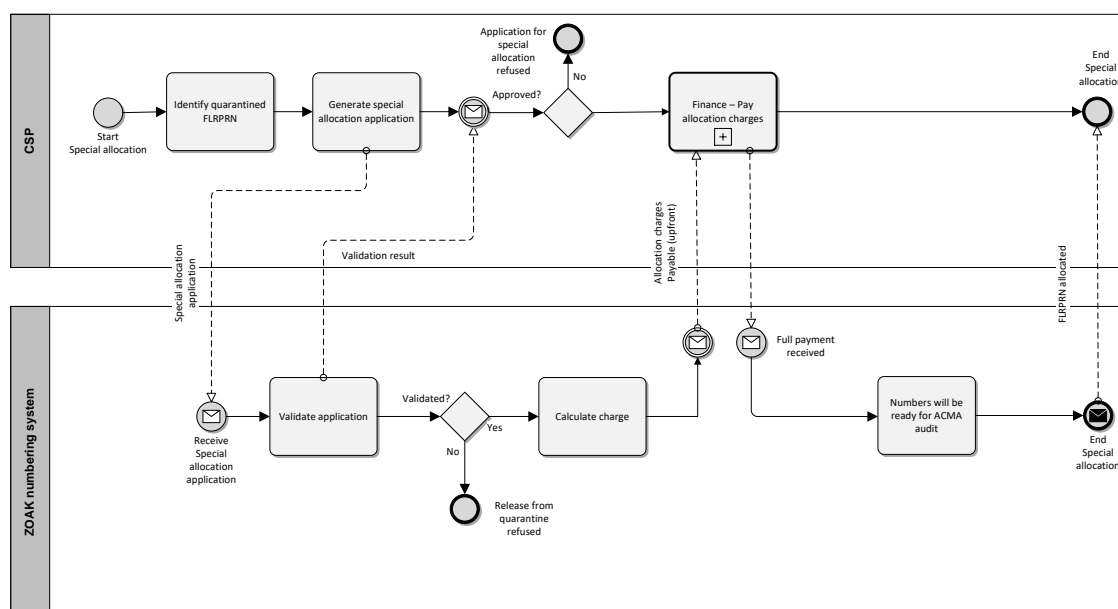


Figure 2.3: Allocation under special circumstances

Activity name	Business rules
Identify FLRPRN	The Numbering system will list all Quarantined FLRPRN numbers (non smartnumbers). The CSP user will be able to filter by service type. Note: Allocation of special circumstances can be made through the Numbering system's web browser interface.
Generate special allocation application	Generate a special allocation application. The application contains: <ul style="list-style-type: none"> The identified quarantined FLRPRN. A special allocation application captures the type of allocation requested. The type of allocation can be one the following: <ul style="list-style-type: none"> Allocation without reservation Allocation with withheld status Allocation with reserved status A mandatory reason from one of the following options:

	<ul style="list-style-type: none"> ▫ 'I am the CSP who last held this number and I am requesting it for the last customer' ▫ 'I am not the last CSP who held this number but I am requesting it for the last customer' ▫ 'I am not requesting this number for the last customer' ▪ A mandatory text box to provide supporting information. ▪ The requesting CSP accepts terms and conditions and accepts that the FLRPRN may experience nuisance calls.
Validate release from quarantine application	<p>The validations performed on a special allocation application are as follows:</p> <ul style="list-style-type: none"> ▪ Application is submitted by a registered CSP. ▪ The CSP has accepted the FLRPRN may experience nuisance calls. ▪ The identified FLRPRN are quarantined. ▪ The requesting CSP must provide the reason and supporting information.
Calculate allocation charge	<p>If the special application is validated then calculate the release from quarantine charge. The charge is specified in the latest Telecommunications (Numbering Charges - Delegated Services) Determination.</p> <p>Over time the ACMA may alter the amount of charge for an allocation of number(s). Using the type of allocation and the date the application was received; the correct amount of charge in effect can be determined and charged to the registered CSP.</p> <p>For CSP accounts configured for upfront payment an invoice containing the allocation charges will be created.</p> <p>For CSP accounts configured for post payment the allocation charge is recorded and will be invoiced at later date.</p>
Pay allocation charges	<p>For CSP accounts configured to pay their allocation charges via upfront payment</p> <p>Pay allocation charges by credit card.</p> <p>Full payment must be made.</p>
Numbers will be ready for ACMA audit	<ul style="list-style-type: none"> ▪ Once the full payment has been received the applications for the special allocation will be available for ACMA audit. ▪ Special allocation applications submitted with reason "I am the CSP who last held this number and I am requesting it for the last customer" will be automatically approved by the system. ▪ An email notification will be sent to ACMA notifying that an audit application is submitted. ▪ ACMA will review and can approve or reject the application. If the application is approved then only numbers get allocated to the CSP.

10.4 Audit special allocate application

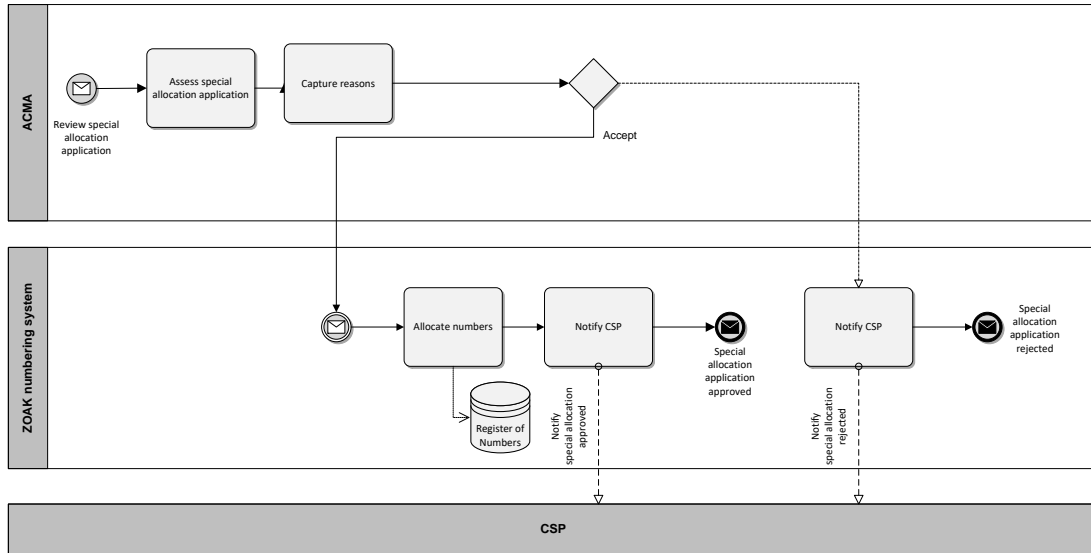


Figure 2.4: Audit special allocate application

Activity name	Business rules
Assess special allocation application	<p>ACMA will be able to find /search the special allocation applications.</p> <p>ACMA will be able to search on following parameters:</p> <ul style="list-style-type: none"> ▪ Number (range) ▪ Applicant ▪ Application status (In progress, Cancelled, Rejected, Completed) ▪ Date applied from/to <p>When an application is submitted it starts the journey in the "In progress" state.</p> <ul style="list-style-type: none"> ▪ When approved the application state changes to "Completed" or "Auto Completed" for applications submitted with reason 'I am the CSP who last held this number and I am requesting it for the last customer' <p>When Rejected the application state changes to "Rejected".</p> <p>Similarly, when system-cancelled the application state changes to "Cancelled".</p> <p>The following details will be provided to the ACMA to help them perform the audit:</p> <ul style="list-style-type: none"> ▪ Date of application ▪ Number ▪ Applicant ▪ Application status ▪ Application type ▪ Reason ▪ Date of surrender ▪ Previous holder ▪ Quarantine expiry date
Capture reasons	<p>When ACMA approves or rejects an application then it is mandatory to provide a reason which will be kept for future reference.</p> <p>ACMA user can view the reasons captured by them during audit of the application i.e. the approval /rejection reasons are visible from the view applications page.</p>

Allocate Number	<p>The following activities occur when a FLRPRN is allocated to a CSP:</p> <ul style="list-style-type: none"> ▪ The quarantined FLRPRNs are allocated to the requesting CSP. ▪ The Register Of Numbers is updated to reflect the allocation to the requested CSP. ▪ Status of FLRPRN is updated to reflect its requested allocation status: <ul style="list-style-type: none"> ▫ Allocated ▫ Withheld ▫ Reserved ▪ If allocation with reservation was requested, the reservation period is set to expire after the following number of days: <ul style="list-style-type: none"> ▫ Withheld = 14 days ▫ Reserved = 90 days <p>Note: The same reservation periods are configured for standard allocation.</p>
Notify CSP (in case of application approved)	<p>Notification email is sent from the Numbering system to the CSPs. The email includes the numbers which are approved and allocated to the CSP.</p>
Notify CSP (in case of application rejected)	<p>The notification email is sent from the Numbering system to CSPs. The email includes the numbers which are rejected by the ACMA.</p>

10.5 Transfer FLRPRN number

When CSPs want to transfer their holding to another CSP, then the FLRPRN transfer process will be used. FLRPRN transfer is possible via the Numbering system web application only.

End user requested Porting is supported by INMS and is part of the Bi-directional interface specification, hence not covered here.

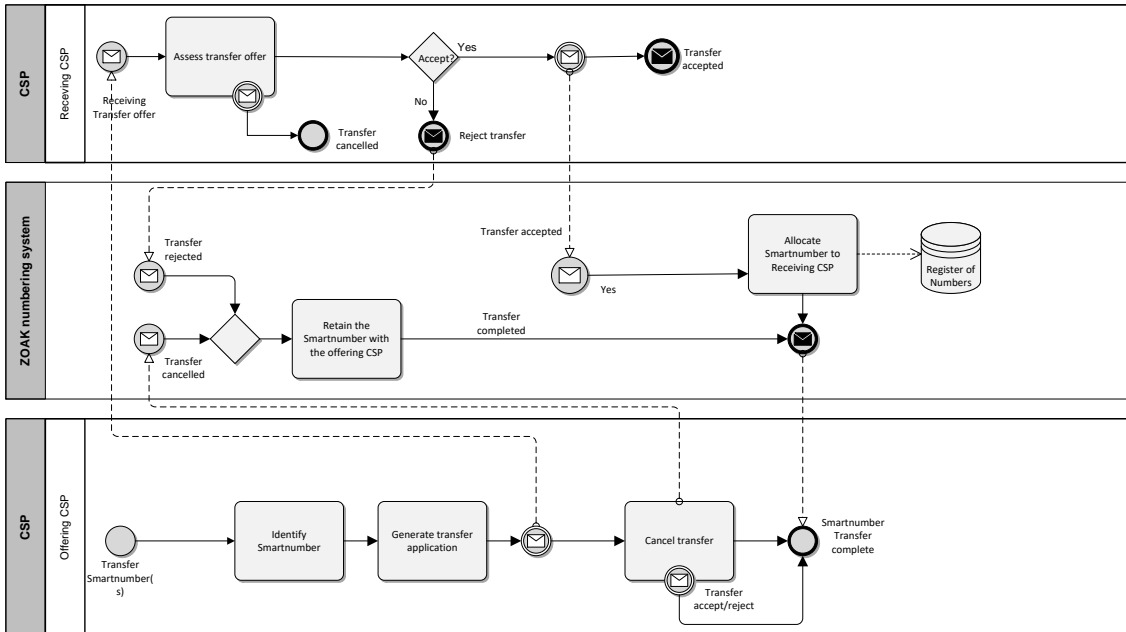


Figure 2.5: Transfer of FLRPRN between CSPs

Activity name	Business rules
Select FLRPRN's to transfer	FLRPRNs allocated without reservation to the offering CSPs can be selected for transfer. Multiple FLRPRNs can be assigned to one "pending" transfer application. Note: FLRPRN transfer applications can be made through the Numbering system's web browser interface.
Generate transfer application	Generate a transfer application. The application contains: <ul style="list-style-type: none"> The receiving account. The identified account must be a registered CSP. The FLRPRNs offered for transfer. Only FLRPRNs allocated without reservation can be transferred. The status of the application is set to "Pending". Email is sent to the Receiving account to advise a transfer requires their attention. The Numbering system creates transfer application(s) for each offered FLRPRN. This allows the offering and receiving CSP accounts to cancel, accept or reject individual FLRPRNs.
Cancel FLRPRN transfer application	A "Pending" transfer application can be cancelled by the offering CSP prior to the receiving CSP accepting or rejecting the application. The offering CSP can cancel one or more individual FLRPRNs (ie partial) or cancel an entire transfer application: <ul style="list-style-type: none"> The status of the transfer application is set to "Cancelled". Email is sent to the receiving CSP to advise the transfer has been cancelled. Send an email notification to the offering CSP/receiving CSP when ALL the FLRPRNs created in the same transfer application ID have been accepted, rejected

	or amended/cancelled.
Assess transfer offer	<p>Receiving CSP examines the "pending" transfer offer to determine whether to accept or reject FLRPRNs offered by the offering CSP. The receiving CSP can have the following actions:</p> <ul style="list-style-type: none"> ▪ Can accept one or more individual FLRPRNs (ie partial) or accept the entire transfer application. ▪ Can reject one or more individual FLRPRNs (ie partial) or reject the entire transfer application. ▪ Send an email notification to the offering CSP when individual FLRPRNs are accepted or rejected. ▪ Send an email notification to the offering CSP/receiving CSP when ALL the FLRPRNs created in the same transfer application ID have been accepted, rejected or amended/cancelled. <p>Note: The offering CSP has the option to cancel the one or more FLRPRNs or the entire transfer application.</p>
Allocate FLRPRN to receiving CSP	<p>Once the receiving CSP accepts the transfer offer:</p> <ul style="list-style-type: none"> ▪ Each FLRPRN is accepted are allocated to the receiving CSP. ▪ The Register of Numbers is updated.
Return FLRPRN to offering CSP	<p>A FLRPRN transfer application has been rejected by the receiving CSP or cancelled by the offering CSP:</p> <ul style="list-style-type: none"> ▪ The FLRPRN is returned to the offering CSP's holdings.

10.6 Surrender of FLRPRN

CSPs can surrender the FLRPRN via web browser or via the XML interface. Via the web browser the CSP can use “Surrender all” to surrender their holding in one single action. They may selectively surrender as well.

The web browser and XML both provide the option to surrender with or without nuisance call.

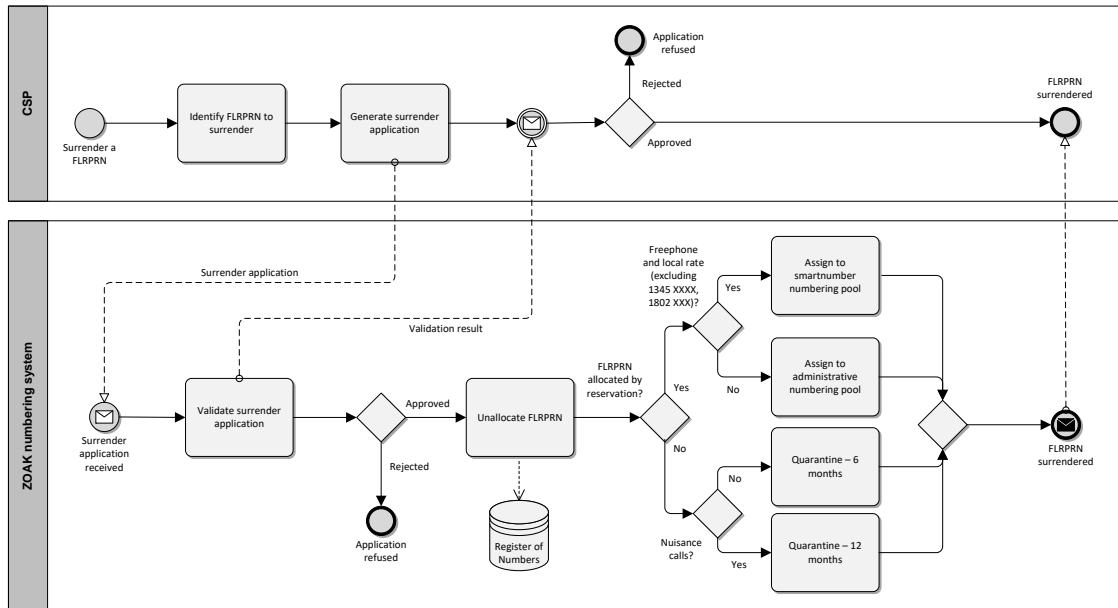


Figure 2.6: Surrender of FLRPRN

Activity name	Business rules
Select FLRPRN to surrender	FLRPRN allocated to the surrendering CSP can be offered for surrender.
Generate surrender application	Generate a surrender application. The application contains: <ul style="list-style-type: none"> FLRPRNs offered for surrender. This includes FLRPRNs allocated with or without reservation (i.e., status of Allocated, Withheld, Withheld Extended, Reserved, Reserved Extended). For each FLRPRN allocated without reservation (ie status of Allocated) indicate whether the number has been experiencing nuisance calls. Declare the numbers being surrendered have no active service. The status of the application is set to "Pending".
Validate surrender application	Validate the surrender application: <ul style="list-style-type: none"> Submitted by a registered CSP. The FLRPRNs are allocated to the registered CSP submitting the application. The FLRPRNs have a status that permits surrender (i.e., status of Allocated, Withheld, Withheld Extended, Reserved, Reserved Extended). The CSP has declared the FLRPRNs offered for surrender have no active service.
Un-allocate FLRPRN	A valid surrender application has been received: <ul style="list-style-type: none"> The FLRPRN is unallocated from the surrendering CSP. The Register of Numbers is updated to reflect the change in the FLRPRN status.

Assign to administrative numbering pool	<p>For All free phone and local rate numbers (including 1802 XXX Freephone numbers), 1345 XXXX local rate numbers, and premium rate numbers that were allocated by reservation to the surrendering CSP, they will:</p> <ul style="list-style-type: none">▪ Be assigned to the administrative numbering pool.▪ Have status set to Available.
Quarantine – 6 months	<p>For surrendered FLRPRNs that were allocated without reservation to the surrendering CSP:</p> <ul style="list-style-type: none">▪ If the number is not experiencing nuisance calls, the quarantine period is set to 6 months.▪ The status of the FLRPRN will be set to "Quarantined". <p>Note: Quarantine period will be configurable.</p>
Quarantine – 12 months	<p>For surrendered FLRPRNs that were allocated without reservation to the surrendering CSP:</p> <ul style="list-style-type: none">▪ If the number is experiencing nuisance calls, the quarantine period is set to 12 months.▪ The status of the FLRPRN will be set to "Quarantined". <p>Note: Quarantine period will be configurable.</p>

10.7 System release from quarantine

This process is automatic release from quarantine after the quarantine period expires.

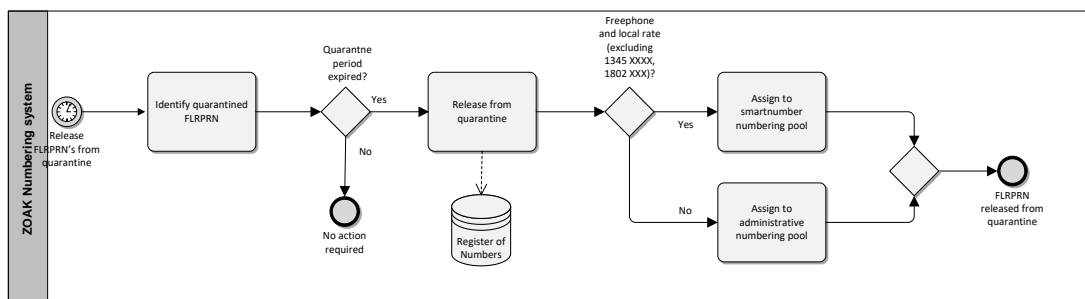


Figure 2.7: System release from quarantine

Activity name	Business rules
Identify quarantined FLRPRN	Once per day the Numbering system will automatically identify quarantined FLRPRNs where the number's quarantine period has expired.
Release from quarantine	On release from quarantine: <ul style="list-style-type: none"> ▪ Status of the number set to Available. ▪ Register of Numbers is updated.
Assign to smartnumber numbering pool	For quarantined Freephone and local rate numbers (excluding 1345 XXXX, 1802 XXX) where the quarantine period has expired, the following occurs: <ul style="list-style-type: none"> ▪ Assigned to the smartnumber pool. ▪ Assigned a price using the pricing categories defined in the smartnumber auction system.
Assign to administrative numbering pool	For quarantined 1802 free phone numbers, 1345 XXXX local rate numbers and premium rate numbers allocated without reservation where the quarantine period has expired, the following occurs: <ul style="list-style-type: none"> ▪ Assigned to the administrative numbering pool.

10.8 System withdraw

This process is a periodic job which runs every night at a configured time to identify allocation with reservation and when an expiry date is reached, to then make those numbers available.

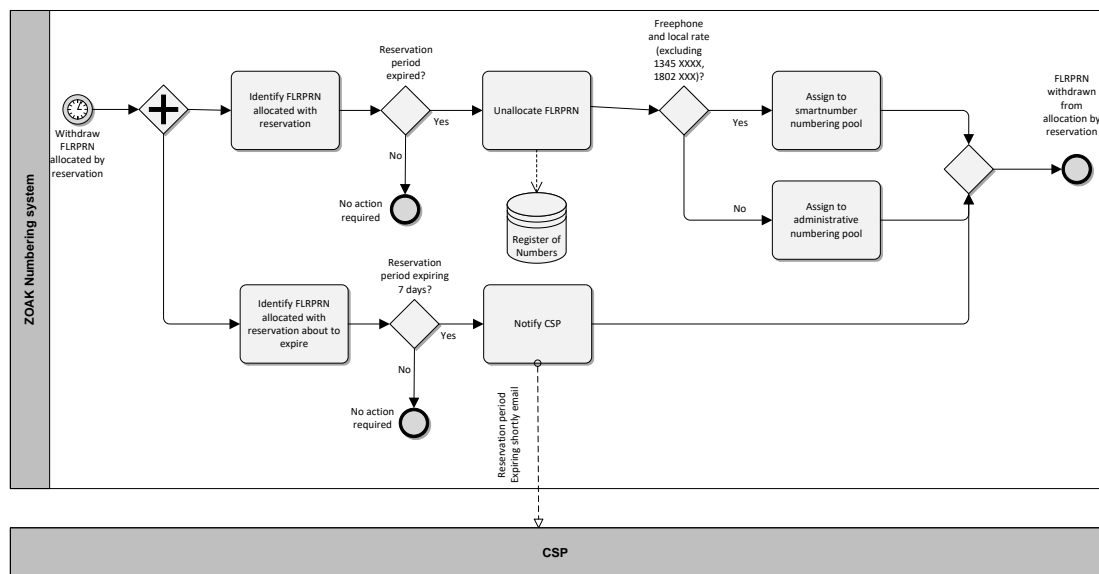


Figure 2.8: System withdraw

Activity name	Business rules
Identify FLRPRN allocated with reservation	Once per day the Numbering system will automatically identify any FLRPRN allocated by reservation where the reservation period has expired.
Un-allocate FLRPRN	When a FLRPRN has been allocated by reservation and the reservation period has expired, the following occurs: <ul style="list-style-type: none"> The FLRPRN is unallocated and status of the number is set to "Available". The Register of Numbers is updated to reflect the change in the FLRPRN status. An email notification is sent to advise the effected CSP the regulator has automatically withdrawn numbers due the reservation period expiring.
Identify FLRPRN allocated with reservation about to expire	Once per day the Numbering system will automatically identify any FLRPRN allocated by reservation where the reservation period will expire in 7 days. Note: The number of days prior to expiry needs to be configurable.
Notify CSPs	Notify the CSPs by email that their allocated FLRPRNs with reservation will be automatically withdraw in 7 days.
Assign to administrative numbering pool	For all Freephone and local rate numbers (including 1802 XXX Freephone numbers), 1345 XXXX local rate numbers, and premium rate numbers allocated with reservation, where the reservation has expired the following occurs: <ul style="list-style-type: none"> Assigned to the administratively allocated numbering pool. Status of the number set to Available.

10.9 Regulator withdraw (from CSP)

This regulator withdraw is a quite infrequent process. The process is used when the ACMA wants to withdraw some or all numbers from CSP for the following reasons:

- Inconsistency with numbering plan
- Inconsistency with conditions
- Non-payment of annual numbering charge
- Number is not use
- Cessation of business

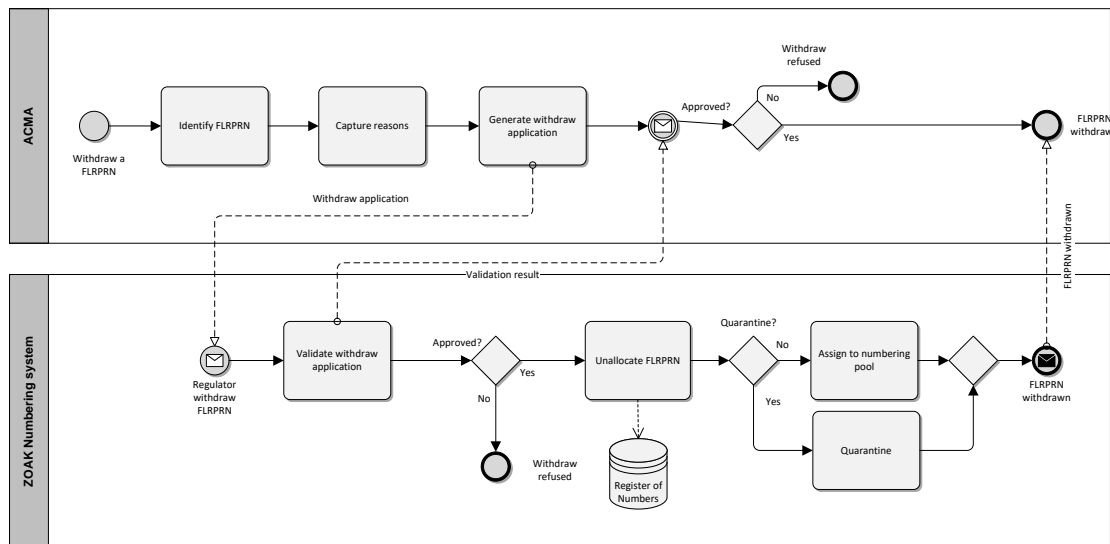


Figure 2.8: Regulator withdraw

Activity name	Business rules
Select FLRPRN to withdraw	Any allocated FLRPRNs including those allocated by reservation. Note: Regulator withdraw can be made through the Numbering systems web browser interface.
Capture reason	Capture the reasons for withdraw: <ul style="list-style-type: none"> ▪ Inconsistency with numbering plan ▪ Inconsistency with conditions ▪ Non-payment of annual numbering charge ▪ Number is not used ▪ Cessation of business Plus a freeform textbox for the Regulator to elaborate further information
Generate withdraw application	Generate a withdraw application. The application contains: <ul style="list-style-type: none"> ▪ The selected FLRPRNs to be withdrawn ▪ The reasons why the FLRPRNs are being withdrawn ▪ Whether the number is to be quarantined and the period (6 or 12 months) The status of the application is set to "Pending"

Validate withdraw application	<p>On receiving a withdraw application the following validations occurs:</p> <ul style="list-style-type: none"> ▪ Application has been submitted by the ACMA. ▪ Selected FLRPRNs are allocated to a CSP. ▪ Reasons for the withdrawal of the selected FLRPRNs have been provided. <p>If all of the above conditions are satisfied the application status is set to "Approved", otherwise the application status is set to "Rejected".</p>
Un-allocate FLRPRN	<p>When a withdraw application is received:</p> <ul style="list-style-type: none"> ▪ The FLRPRN is unallocated ▪ The Register of Numbers is updated ▪ A email notification is sent to advise the effected CSP the regulator has withdrawn numbers
Quarantine	<p>If the Regulator indicated the withdrawn FLRPRN is to be quarantined the following occurs:</p> <ul style="list-style-type: none"> ▪ The quarantine period is set to 6 or 12 months as specified in the withdraw application ▪ The status of the FLRPRN is set to "Quarantined"
Assign to numbering pool	<p>If the Regulator indicated the withdrawn FLRPRN is NOT to be quarantined, the following occurs:</p> <ul style="list-style-type: none"> ▪ Freephone and local rate numbers (excluding 1345 XXXX, 1802 XXX) are assigned to the smartnumber pool. ▪ A price is assigned using the pricing categories defined in the smartnumber auction system. ▪ 1802 XXX Freephone numbers, 1345 XXXX local rate numbers and premium rate numbers, are assigned to the administratively allocated numbering pool. ▪ The FLRPRN is made available for allocation.

10.10 Automatic top up of admin number pool

This automatic top-up of number pool is a job which runs every night at a configured time to check the number of available numbers in each service types and apply top-up if necessary.

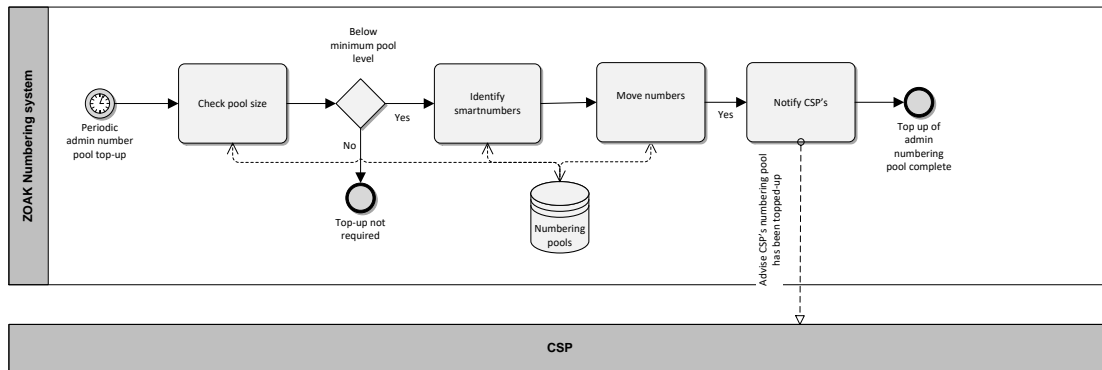


Figure 2.10: Automatic top-up of Admin number pool

Activity name	Business rules
Check pool size	<p>The administratively allocated pool size is checked automatically by the Numbering system once per day at 8 am to verify if the smartnumbers are required to be moved from the smartnumbers numbering pool to the administratively allocated numbering pool – to maintain the administratively allocated numbering pool at the specified levels.</p> <p>Pool Sizes:</p> <ul style="list-style-type: none"> ▪ 13 (6 digit) = 200 ▪ 1300 (10 digit) = 5000 ▪ 1800 (10 digit) = 5000 <p>When the quantity of 13, 1300 or 1800 numbers falls below 75% of the applicable pool size, then the Numbering system will trigger the move of 13, 1300 or 1800 numbers as required to top-up the administratively allocated numbering pool to the specified pool size.</p>
Identify smartnumbers	<p>Locate 13, 1300 or 1800 available numbers that meet the following criteria:</p> <ul style="list-style-type: none"> ▪ Located in one or more of the lowest value smartnumber pricing categories to top-up the pool to reach its pool size. ▪ Assigned in the smartnumber number pool.
Move numbers	<p>Move the identified 13, 1300 and/or 1800 numbers from the smartnumbers numbering pool to the administratively allocated numbering pool. On completion of the move the numbers will be available for administrative allocation.</p>
Notify CSPs	<p>Generate an email notification containing a list of the numbers that have been moved into administratively allocated numbering pool. The email will be sent to registered CSP users that have opted to receive this email notification. Users can select which emails they wish to receive through the account management feature.</p>

11 smartnumbers

smartnumbers are a subset of Freephone and local rate numbers. The numbers comprising a smartnumber form a pattern or translate into a phone word that may have some value to an individual or organisation. Unlike standard Freephone and local rate numbers, smartnumbers come with an Enhanced Right of Use (EROU) that allows the holder of the number to trade or lease the rights of use for the number to another party.

Individuals and organisations can acquire a smartnumber through an over the counter allocation system. As per the new Numbering plan this system replaces the previous auction system – because competition for smartnumbers has subsided and the over the counter allocation system is a more efficient way to purchase smartnumbers.

A purchaser, on successfully purchasing a smartnumber, obtains the EROU to the smartnumber which is recorded in the Register of smartnumbers. The EROU Holder has the option to trade the EROU to another individual or organisation. When the EROU is no longer required the EROU can be returned.

The ACMA and Numbering Service Provider can cancel or withdraw smartnumbers if the smartnumbers are being used in ways contrary to the *Telecommunications Numbering Plan*.

Smartnumber users (non CSP) can perform the following actions from a web-browser:

- Buy smartnumber
- Trade smartnumber
- Return smartnumber

CSP users will have access to all the above mentioned functions and can also perform:

- Allocate (via web or XML)
- Transfer (via Web only)
- Surrender (via Web or XML)

11.1 smartnumbers state transition

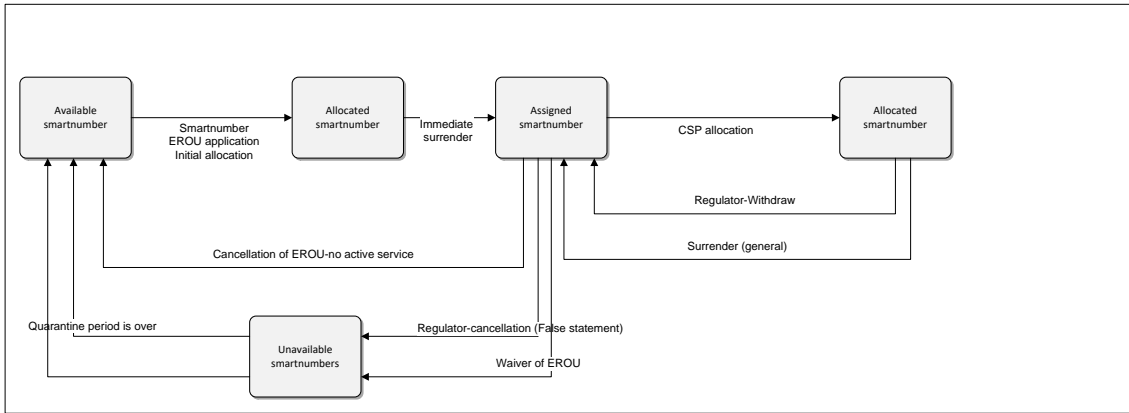


Figure 3.1: smartnumber state transitions

Current state	Description	Duration	Valid state transition
Available smartnumber	This number is available for purchase as a smartnumber	N/A	Assigned smartnumber
Assigned smartnumber	The EROU to the smartnumber has been purchased but the smartnumber is not in service.	3 years	Allocated smartnumber Available smartnumber Unavailable smartnumber
Allocated smartnumber	The EROU to smartnumber has been purchased and the number is in service	NA	Assigned smartnumber
Unavailable smartnumber	The number is in quarantine	6-12 months	Available smartnumber

11.2 Buy smartnumber

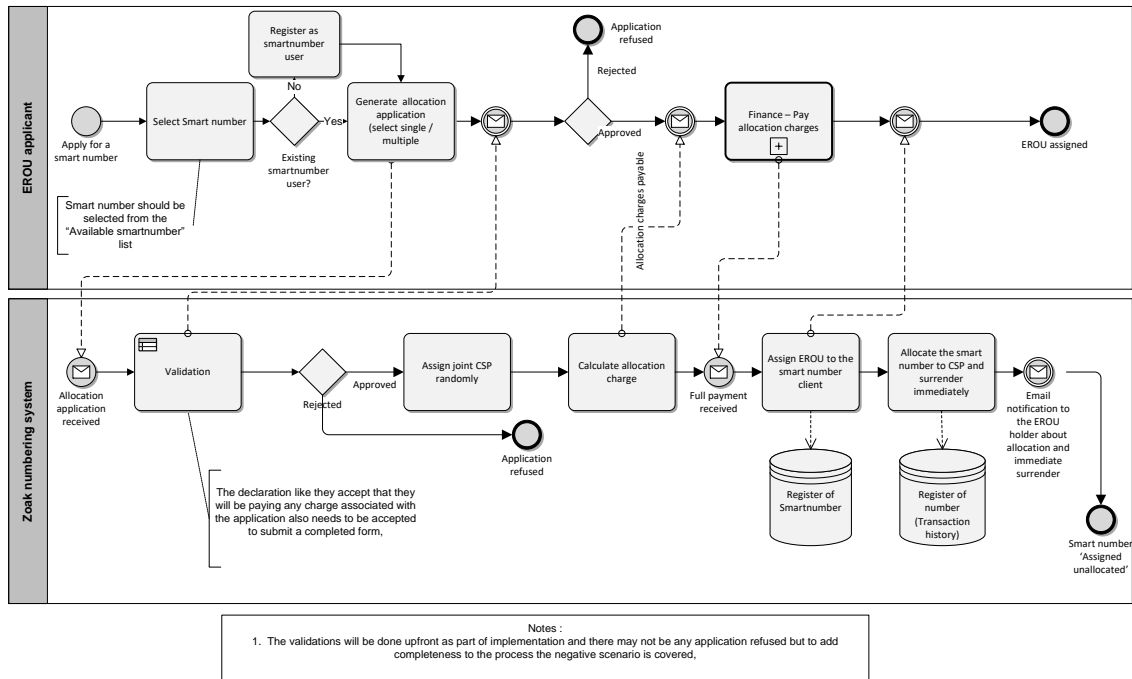


Figure 3.2: Buy smartnumber

Activity name	Business rules
Select smartnumber	<p>For new smartnumber users (the combined checkout process is when the EROU applicant doesn't have an account in the Numbering system and wants to buy a smartnumber – this process allows the user to have both):</p> <ol style="list-style-type: none"> 1 The EROU applicant must not have any account in the Numbering System and wants to buy a smartnumber. 2 The first step is search and select. 3 The searching can be done by number or phone word across all the prefixes like 13, 1300, 1800. 4 To search with phone words the user first needs to select at least one prefix and provide the phone words – such as for 13 CABS the user selects 13 and enters CABS in the phone word search. 5 On the search page, the search result can be reduced. 6 After selecting the numbers, numbers are added to the cart (the user can remove or add more numbers in the cart). 7 When number selection is done, the user progresses to the next step – Account registration. <p>When EROU applicant already has an account:</p> <ol style="list-style-type: none"> 1 The EROU applicant must be logged in. 2 The EROU applicant should have the permission to 'Buy smartnumber' for an available smart number. 3 The number pool will provide 'Available smartnumbers' to be picked up for the initial allocation. 4 User can add multiple numbers in the cart and review and submit the application.

Register as smartnumber user	After selecting the numbers, a user must register and provide all the mandatory information required (the smartnumber registration mandatory information is described in Account management > smartnumber registration process).
Generate allocation application (single/multiple)	Only the selected 'Available smartnumbers' can be added in the application. There is no upper limit on the number that can be added in the cart though the numbers will be added through selection. EROU application is always pre-paid and EROU applicant must pay the amount in full to get the numbers.
Validation	Allocation application will be submitted only when the EROU applicant acknowledges the 'Terms and conditions' specified by the ACMA. If there is any concurrent smartnumber EROU application submitted successfully including the same smartnumber in another application, then the later application is not successful.
Assign joint CSP randomly	The system will assign the CSP from the list of CSPs who can be chosen as joint applicants. The system cannot choose randomly any other CSP who is not listed in the above mentioned category. Where multiple numbers are being applied for in a bulk application, the same CSP should be the joint applicant for all the numbers.
Calculate allocation charge	The charge will be calculated based on the 'Reserved price' for each smart number. The invoice should contain all the numbers and associated charge. Invoice should contain the total amount of the charge payable. In case of combined application, the smartnumber account creation fee will also be added in the total amount and the invoice.
Finance-pay allocation change'	The system provides a facility to pay by credit card which can secure the numbers immediately upon payment. Users can pay the numbers by BPAY and EFT method providing the invoice reference. In case of users who already have an account: <ul style="list-style-type: none"> ▪ After submitting the application, if the user doesn't pay immediately then the numbers are not secured by the EROU applicant. ▪ The number will be still shown as 'Available smartnumber' in the Register of Numbers and any other user can apply for the number. ▪ The user who pays for the numbers first gets the number allocated. In case the user applied for the new account and the number application together: <ul style="list-style-type: none"> ▪ The user will be provided with two options – Pay now by credit card or Pay later: <ul style="list-style-type: none"> ▫ Pay now by credit card will redirect to the ANZ payment gateway and if the transaction is successful, then the user will be notified with emails related to the new ACCOUNT creation. Containing user ID and temporary password. ▫ If the user opts to pay later then the Account will be created and the user will be notified with emails but the user will not be assigned the EROU of the numbers unless paid in full.
Assign EROU to the smartnumber client	Upon receipt of full payment, the EROU applicant for the smartnumber will be marked as EROU holder for that particular smartnumber(s). System will update the Register of smartnumbers.
Allocate the smart number to CSP and surrender immediately	The smartnumber is allocated to the joint-applicant CSP and the Register of Numbers is updated. The system surrenders the smartnumber on behalf of the CSP and the Register of Numbers is updated. The number appears in the Register of Numbers as 'Assigned unallocated'. The system puts the EROU expiry date as the current date plus 3 calendar years as no active service on the number.

<p>Send email to the EROU applicant about allocate and immediate surrender</p>	<p>The email notification goes out to the EROU holder specifying:</p> <ul style="list-style-type: none">▪ That the smartnumber was allocated to the registered CSP and that the allocation was surrendered by the system immediately after the smartnumber was allocated.▪ That until the smartnumber is allocated the smartnumber is an 'Assigned smartnumber' smartnumber.▪ The date of the system allocation and system surrender.▪ The date (current date plus 3 years) the EROU will be cancelled in the event that no service is put on the number.
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11.3 Trade smartnumber

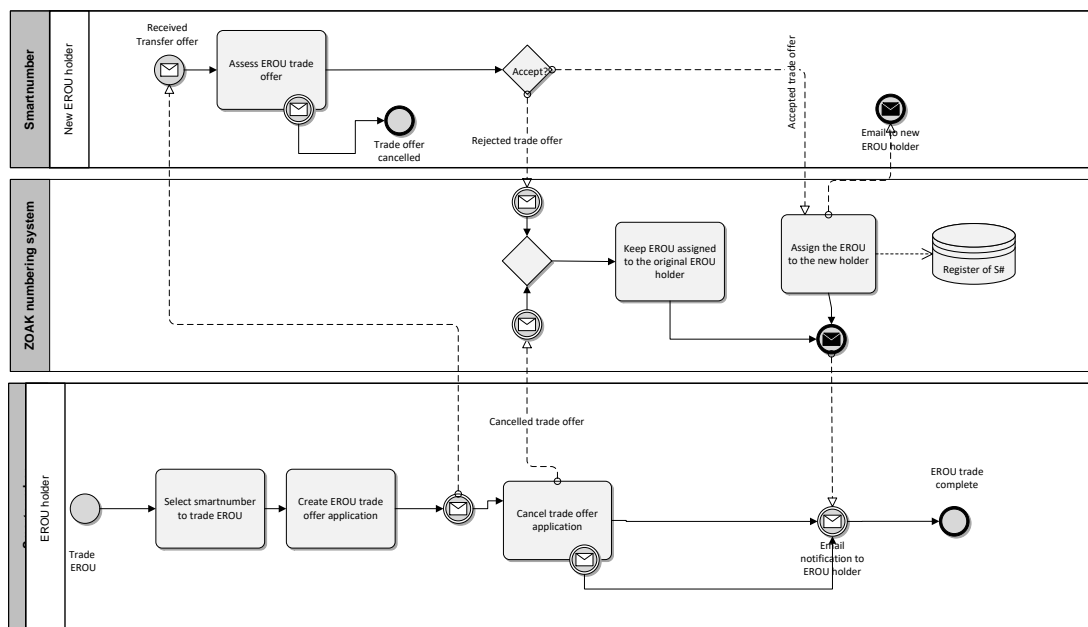


Figure 3.3: Trade smartnumber

Activity name	Business rules
Select smartnumber to trade EROU	<p>The EROU holder must be logged in the Numbering system.</p> <p>The EROU holder can only trade the smartnumber EROU from their holding.</p>
Create trade offer application	<p>The EROU holders can create the trade offer for one or more smartnumbers from their holding.</p> <p>Each trade offer will be assigned a unique ID so that users can search and manage a particular trade offer.</p> <p>The trade offer must include the smartnumber to which the enhanced rights of use relate; the chosen new EROU holder and system should log the date of the trade offer.</p> <p>The new EROU holder to whom the trade offer is made must be a Registered smartnumber user in the Numbering system.</p> <p>One trade offer can include only one 'New EROU holder'.</p> <p>The trade offer application state becomes 'Pending'.</p> <p>Email notification goes to the new EROU holder specifying:</p> <ul style="list-style-type: none"> ▪ The smartnumbers in the trade offer. ▪ Date the trade offer was made. ▪ If the smartnumber is allocated – the name of the CSP it is allocated to. ▪ If the smartnumber is unallocated – the date the EROU will be cancelled if no service is put on the number. <p>Note: The clock does not restart when an EROU is traded.</p>
Cancel trade offer application	<p>The EROU holder can manage the outgoing trade offers (e.g., cancel the trade offer).</p> <p>The EROU holder who initiated the trade offer application can only cancel the trade offer.</p> <p>The trade offer can be cancelled only when the application status is 'Pending'.</p> <p>Email notification goes to the new EROU holder with the cancellation email.</p>

<p>Assess smartnumber transfer offer</p>	<p>The new EROU holder to whom the trade offer is created can only assess the transfer offer. The new EROU holder must be logged in with Trade EROU permission. The user can either accept or reject the offer (accept all or reject all will also be an option). Where multiple numbers are part of one trade offer, the new EROU holder can accept/reject some of the numbers and the others will remain pending until they are cancelled by the existing EROU holder or accepted/rejected by the new EROU holder. There should be a specific date by when a trade offer can be accepted/ rejected else the trade offer will lapse. There is no regulatory action that will be taken by ACMA/ZOAK operations to cancel/hold the offer.</p>
<p>Return smartnumber to the offering EROU holder</p>	<p>Smartnumbers rejected as part of trade offer rejection by the new EROU holder will remain 'Assigned' to the original EROU holder. There will be no impact on the 'Allocation' status of the smartnumbers. The EROU holder will have the rights to trade these numbers again with immediate effect. An email should be sent out to the EROU holder specifying the rejection and date for rejection.</p>
<p>Assign EROU to the new holder</p>	<p>After the smartnumber trade offer is accepted the 'Register of smartnumber' is updated with the 'new EROU holder' details. The system carries forward the EROU expiry date. If the number is already allocated then there will be no expiry date on that smartnumber EROU. Email notification will go to the new EROU holder specifying that the trade is successful and also specifying the EROU expiry date. An email will also go to the old EROU holder confirming the trade. If the number is allocated, an email should go to CSP to notify them of new EROU holder.</p>

11.4 Return smartnumber

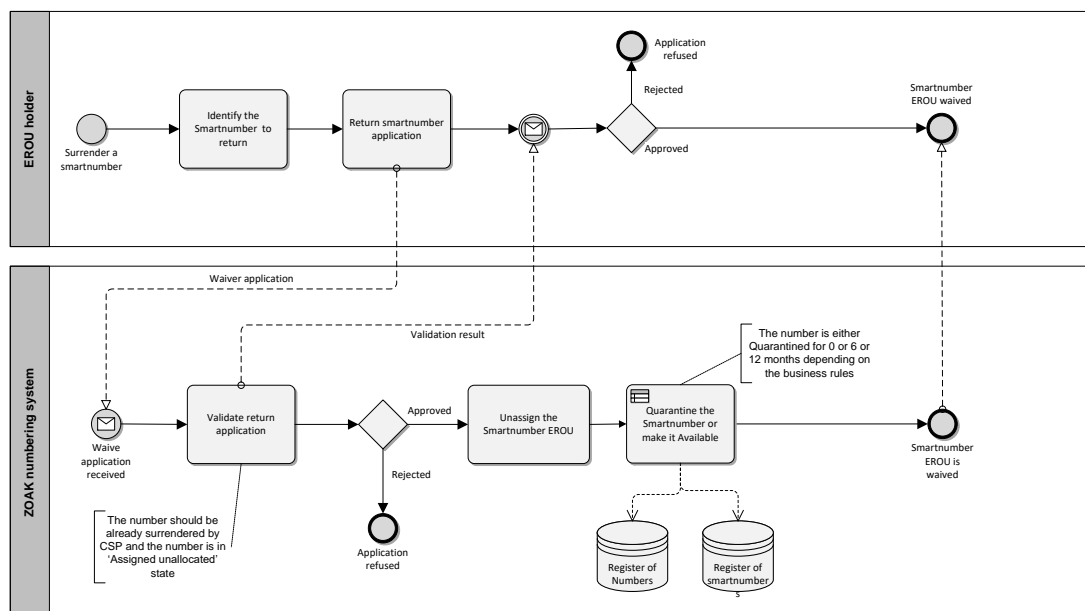


Figure 3.4: Return smartnumber

Activity name	Business rules
Identify the Smartnumber to return	EROU holder can opt for waiver only for an 'Assigned smartnumber'. They can't identify a smartnumber to waive when an 'Active service' is on.
Return smartnumber application	The EROU return application can contain only the 'Assigned smartnumber'. The application can contain multiple numbers. Specify whether the user has faced nuisance calls on that number.
Validate return application	The system must ensure that the EROU waiver application only contains the 'Assigned smartnumbers'. The system must ensure that EROU holder should agree to the terms and condition set in this process.
Un-assign the smartnumber EROU	The number becomes an 'Available' smartnumber if the Quarantine period is 0.
Quarantine the Smartnumber or make it Available	The number status is updated with 'Quarantined EROU unassigned' smartnumber. Rules for Quarantine: <ul style="list-style-type: none"> ▪ If nuisance call received and the number is surrendered by CSP or withdrawn by ACMA > 12 months ago – 0 Quarantine period. ▪ If nuisance call received and the number is surrendered by CSP or withdrawn by ACMA < 12 months ago – 12 months Quarantine period (beginning from date the number was last surrendered). ▪ If no nuisance call received and the number is surrendered by CSP or withdrawn by ACMA > 6 months ago – 0 Quarantine period. ▪ If no nuisance call received and the number is surrendered by CSP or withdrawn by ACMA < 6 months ago – 6 months Quarantine period (beginning from date the number was last surrendered). The EROU holder ceases to be the EROU holder for the smartnumber. Both the Register of smartnumbers and Register of Numbers are updated.

	The number is automatically taken out of quarantine after the quarantine period and added to the 'Available smartnumber' pool.
Identify the Smartnumber to return	EROU holder can opt for waiver only for 'Assigned smartnumber'. They can't identify a smartnumber to waive when an 'Active service' is on.

11.5 Allocate smartnumber (by CSPs)

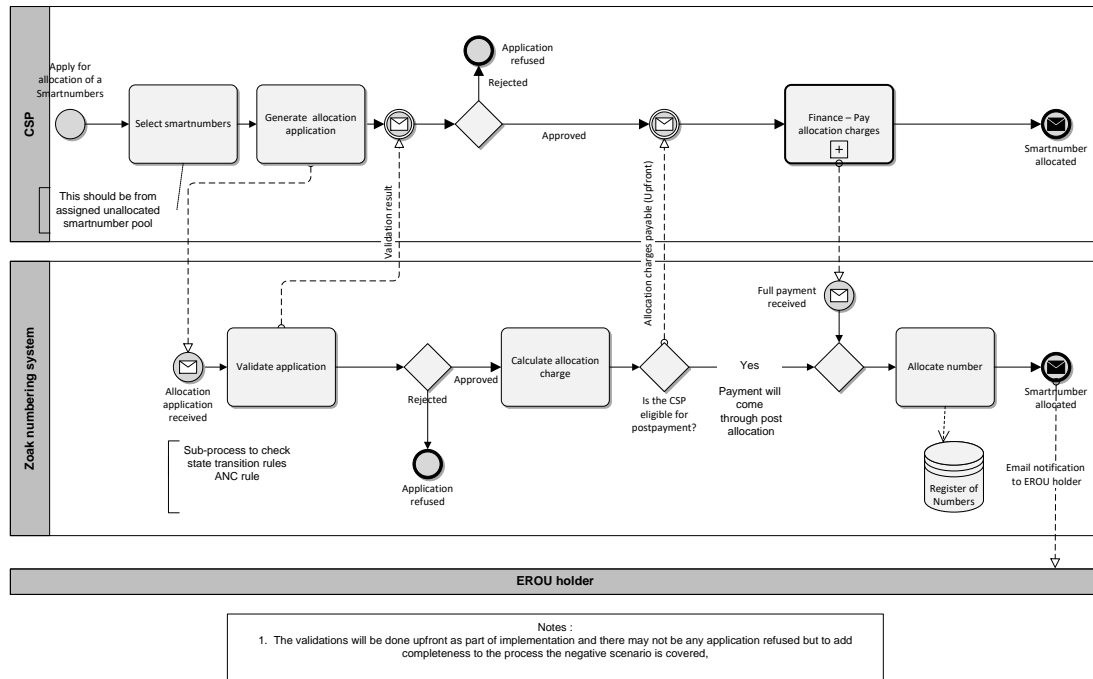


Figure 3.5: Allocation of smartnumbers

Activity name	Business rules
Select smartnumber	<p>The CSP must be logged in to the system.</p> <p>The CSP should have the permission to apply for smartnumber allocation.</p> <p>The number pool will provide 'Assigned unallocated' numbers as 'Available' to be picked up for allocation.</p>
Generate allocation application (single/multiple)	<p>The CSP must be logged into the system and have selected the numbers.</p> <p>Only the 'Assigned unallocated' smartnumbers can be added in the application.</p> <p>There is no upper limit on the number that can be added in the cart through selection.</p> <p>The numbers selected by the CSP can have different EROU holders.</p> <p>This is the FLRN allocation application without reservation.</p>
Validate application	<p>Allocation application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p> <p>If there is any concurrent smartnumber allocation application submitted successfully which includes the same smartnumber in another application, the later application should not be successful.</p> <p>The applying registered CSP must not have an outstanding ANC liability for more than 3 months before the date the allocation application was received.</p> <p>The applying registered CSP must not have an outstanding late payment penalty for more than 3 months before the date the allocation application was received.</p> <p>ACMA has not placed any restrictions on the CSP account.</p>
Calculate allocation charge	<p>Calculate the allocation charge as specified in the latest Telecommunications (Numbering Charges – Delegated Services) Determination.</p> <p>Over time the ACMA may alter the amount of charge for an allocation of number(s). Using the type of allocation and the date the application was received; the correct amount of charge in effect can be determined and charged to the registered CSP.</p> <p>The invoice contains all the numbers and associated charge and the total amount of the</p>

	<p>charge payable.</p> <p>If the CSP is eligible for 'Post-payment' then CSPs will receive monthly post pay invoices.</p> <p>If the CSP is not eligible for 'Post-payment' then their invoices will be created upfront per application.</p>
Finance-pay allocation change	<p>If the CSPs are listed to be eligible for 'Post-payment' then they don't have to pay the allocation charges upfront, they will get the numbers allocated to them immediately after the applications are successfully submitted.</p> <p>If the CSPs are not eligible for post-payment then they have to pay the full amount upfront to get the allocation of numbers.</p> <p>If a smartnumber allocation application is "Pending payment" with one CSP then all other CSPs will see these numbers as "Assigned smartnumber" i.e. Available for allocation.</p>
Allocate number	<p>If the CSPs are listed to be eligible for 'Post-payment' then they don't have to pay the allocation charges upfront, hence the numbers will be allocated to the CSPs immediately.</p> <p>If the CSPs are not eligible for post-payment and CSPs have paid in full for the application then only the numbers will be allocated to the CSP.</p> <p>The Register of Numbers and Register of smartnumbers will be updated with the smartnumber as 'Allocated smartnumber' and will reflect the current holder as well.</p> <p>Email notification to CSP confirming that the smartnumber is allocated to them.</p> <p>Email notification to EROU holder confirming the allocation of the smartnumber.</p>

11.6 Transfer smartnumber (between CSPs)

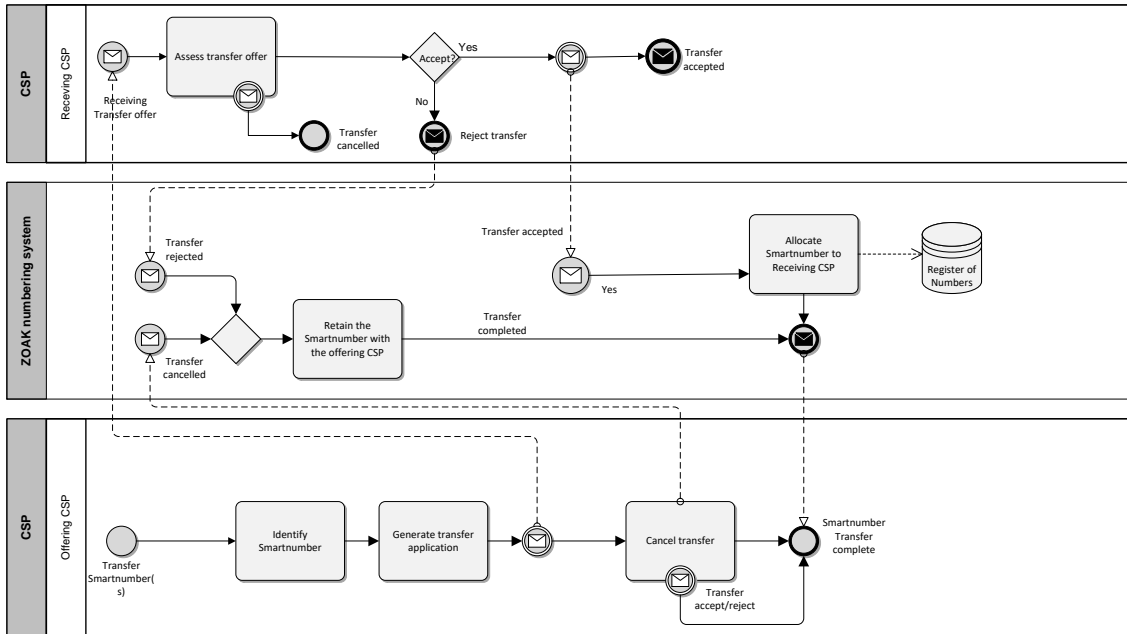


Figure 3.6: Transfer of smartnumbers (Between CSPs)

Activity name	Business rules
Select Smartnumbers to transfer	<p>Smartnumber transfer is only between CSPs and only applicable for "Allocated smartnumbers".</p> <p>CSPs can only select the smartnumbers from their holding.</p> <p>Multiple Smartnumbers can be added to one "pending" transfer application.</p> <p>The numbers selected by the CSP may have different EROU holders.</p> <p>Note: Smartnumbers transfer applications can only be made through the Numbering systems web browser interface.</p>
Generate transfer application	<p>Generate a transfer application. The application contains the smartnumbers(s) selected to be transferred.</p> <p>The receiving account. The identified account must be a registered CSP.</p> <p>The offering CSP must accept the 'Terms and conditions' set by ACMA for transfer.</p> <p>The Smartnumbers offered for transfer.</p> <p>The status of the application is set to "Pending".</p> <p>There should not be any impact on the EROU holder</p> <p>Two email notifications will be gone.</p> <p>Notifying the receiving account a transfer is pending their acceptance - email includes:</p> <ul style="list-style-type: none"> ▪ The numbers in the transfer offer ▪ The offering CSP ▪ Date of transfer <p>The email notification goes out to the EROU holder specifying - email includes:</p> <ul style="list-style-type: none"> ▪ The CSP has placed a transfer offer on the smartnumber which belong to the EROU holder ▪ The receiving CSP ▪ The date of the transfer

<p>Cancel Smartnumbers transfer application</p>	<p>A "Pending" transfer application can be cancelled by the offering CSP prior to receiving CSP accepting or rejecting the application. The status of the transfer application is set to "Cancelled". Email notification should go to the receiving account that the transfer offer is cancelled. Email notification will go to the EROU holder in case their numbers are cancelled or added in the smartnumber application</p>
<p>Assess transfer offer(Includes Accept Smartnumbers transfer application and Reject Smartnumbers transfer application)</p>	<p>Receiving CSP examines the "pending" transfer offer. Receiving CSP can perform the following actions:</p> <ul style="list-style-type: none"> ▪ Accept the transfer application updating the status of the transfer application to "Accepted". ▪ If it's a bulk offer then CSP can accept partially. ▪ Reject the transfer application updating the status of the transfer application to "Rejected". ▪ If it's a bulk offer then CSP can reject partially. ▪ But in case of bulk offer though they can accept or reject partially they have to assess each number. ▪ The offering CSP has the option to cancel the transfer application prior to the receiving account taking any action. ▪ Email goes to the offering CSP specifying: <ul style="list-style-type: none"> ▫ The numbers accepted / rejected ▪ Email goes out to EROU holder specifying: <ul style="list-style-type: none"> ▫ The numbers rejected <p>Note: The acceptance email will be sent to EROU holder after the number is allocated to receiving CSP, row 70. Where multiple numbers are offered in a bulk offer, the receiving CSP can accept/reject some of the numbers and the others will remain pending until they are cancelled by the offering CSP, accepted/rejected by the receiving CSP or the offer lapses.</p>
<p>Allocate Smartnumbers to receiving CSP</p>	<p>When the receiving CSP accepts a transfer offer then the system performs the following steps:</p> <ul style="list-style-type: none"> ▪ The Smartnumbers assigned to the transfer application are allocated to the receiving CSP. ▪ The Register of Numbers is updated. ▪ Email notification goes to EROU holder specifying: <ul style="list-style-type: none"> ▫ Transfer offer is successful ▫ Current holder of the number ▪ Notify the offering CSP that transfer is complete.
<p>Retain the Smartnumber with the offering CSP</p>	<p>A transfer application has been rejected by the receiving CSP or cancelled by the offering CSP:</p> <ul style="list-style-type: none"> ▪ The Smartnumbers assigned to the transfer application are remained allocated to the offering CSP's holdings.

11.7 Surrender of smartnumber by CSP

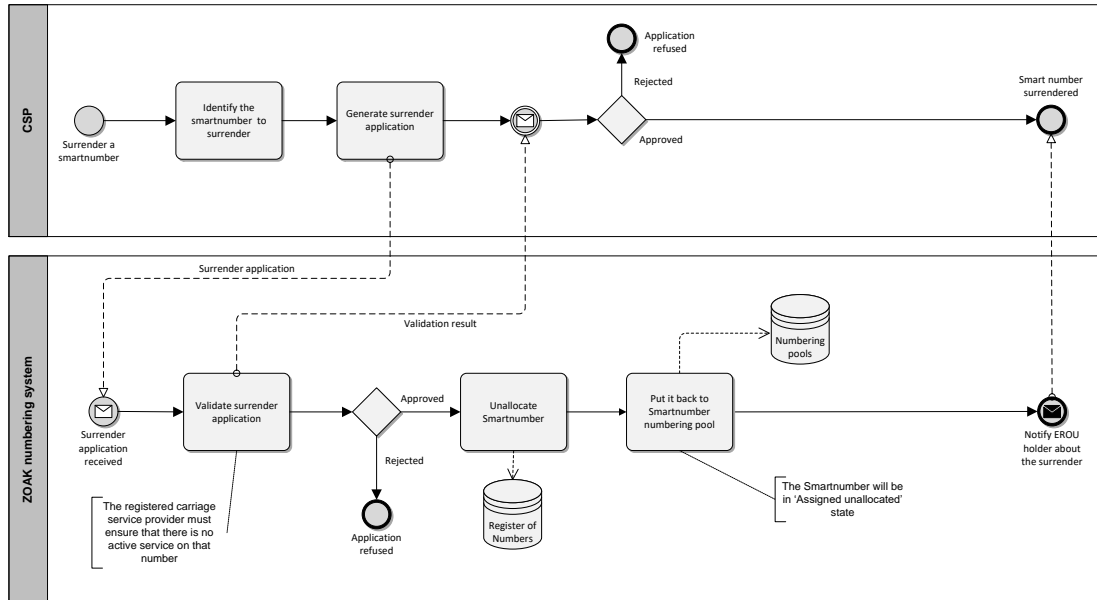


Figure 3.7: Surrender of smartnumber by CSP

Activity name	Business rules
Identify the smartnumber to surrender	<p>CSPs must be logged-in the Numbering system or a CSP must be a system user to send the surrender XML via the XML interface.</p> <p>CSPs can select single or multiple smartnumbers which are 'Allocated smartnumber' state.</p> <p>CSPs can only select the numbers that are allocated to them.</p>
generate surrender application	<p>The surrender application can come via Web portal when CSPs are logged-in to the Numbering system.</p> <p>The surrender request can come via the XML interface if the CSP has a setup of the XML message.</p> <p>The initiation of surrender by the EROU holder happens outside of the Numbering system, and in the Numbering system only CSP can initiate the surrender application.</p>
Validate surrender application	<p>If the surrender request comes via XML, the system needs to validate whether the number is 'Allocated smartnumber' and allocated only to the requesting CSP.</p> <p>But in case of surrender via Web portal the "identify smartnumber to surrender" activity will take care of that.</p> <p>CSP should accept the terms and condition.</p> <p>There will be no charges associated with surrender.</p>
Un-allocate smartnumber	<p>The system un-allocates the smartnumber from the CSP.</p> <p>The number becomes an 'Assigned smartnumber'.</p> <p>The system updates the Register of smartnumbers and the Register of Numbers with the new status.</p> <p>The system starts counting down the 3 years expiry of EROU date because the smartnumber has no allocation on it (no active service).</p> <p>Notify the EROU holder that the smartnumber is surrendered by the CSP and specify the date of surrender, and the date the EROU will be cancelled if no service is put on the number.</p>

11.8 Withdraw smartnumber by ACMA (from CSP)

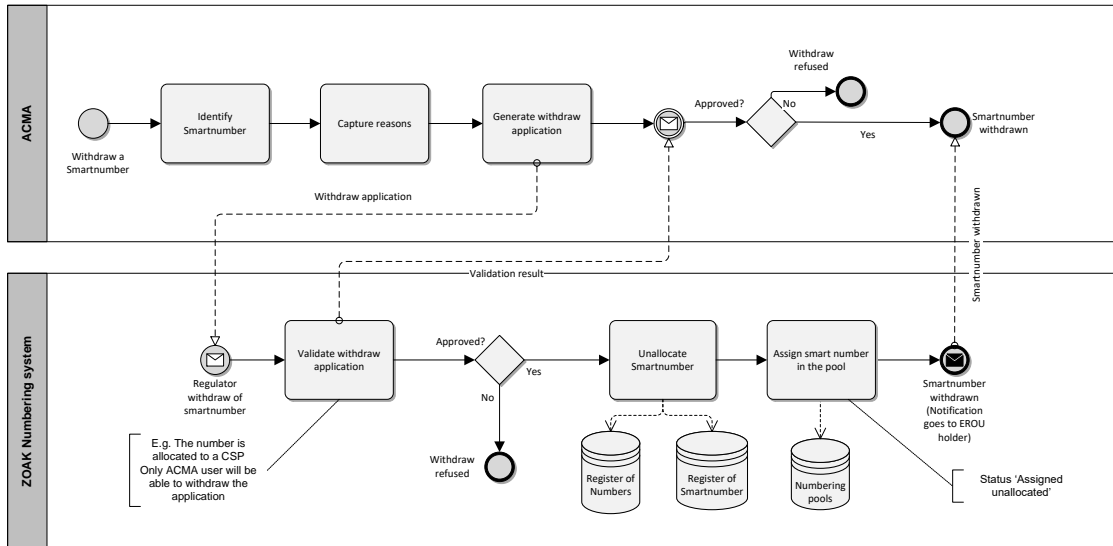


Figure 3.8: Withdraw smartnumber by ACMA

Activity name	Business rules
Identify smartnumber	<p>ACMA users can only withdraw the smartnumber allocation from a CSP.</p> <p>The system will provide only "Allocated smartnumber" for withdrawal.</p> <p>The withdrawal application can contain multiple numbers allocated to the one CSP – the reason for withdrawal will be the same for all the numbers in a withdrawal application.</p>
Capture reason	<p>ACMA user should capture the reason.</p> <p>The systems should allow a free text editor to write the same.</p> <p>The reason should be mandatory.</p> <p>The reason should be stored against the application in the database for the future legal purpose.</p>
Generate withdraw application	<p>The withdraw application is submitted with the numbers and the statement of reasons.</p> <p>No other details need to be captured as part of the withdraw application.</p> <p>Withdraw application is for a specific number and withdrawal from a specific CSP, hence one withdraw application must contain the numbers related to only one CSP.</p>
Validate Withdraw application	<p>The validation process will ensure.</p> <ul style="list-style-type: none"> The number should belong to a CSP. Only ACMA users are withdrawing the application.
Un-allocate smartnumber	<p>The number is unallocated from the CSP with immediate effect.</p> <p>The Register of Numbers and the Register of smartnumbers is updated where the status of the smartnumber is 'Assigned smartnumber'.</p> <p>Email notification will be sent to the EROU holder and CSP specifying that the number is withdrawn from the CSP.</p>
Assign smart number in the pool	<p>The smartnumber would appear as available in the pool of smartnumbers for CSP allocation.</p>

11.9 Regulator cancellation of EROU (false statement)

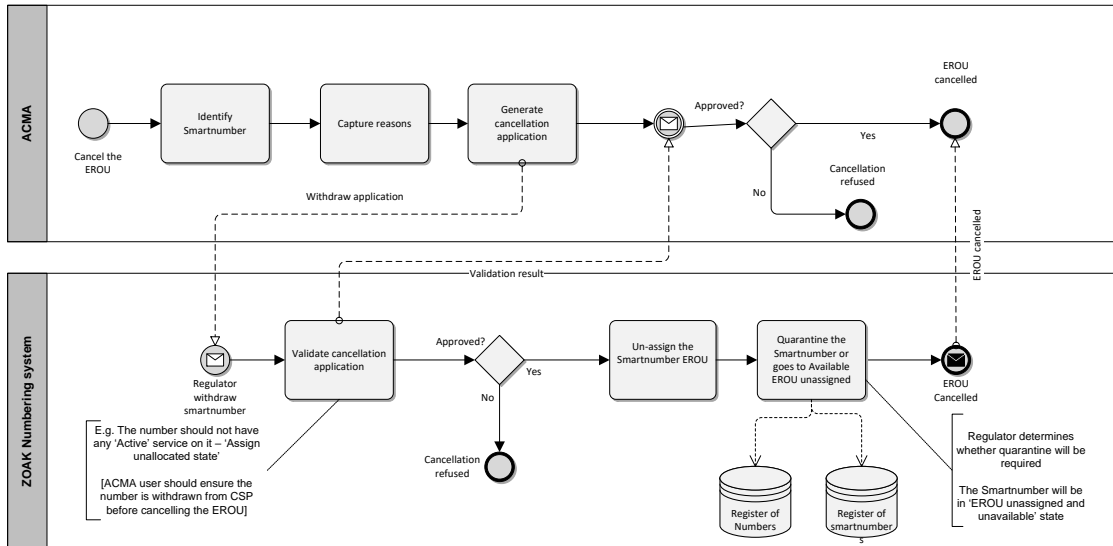


Figure 3.9: Regulator cancellation of EROU

Activity name	Business rules
Identify smartnumber	<p>ACMA users can only cancel the EROU of an EROU holder.</p> <p>The system will provide only an 'Assigned unallocated' number for 'EROU cancellation'.</p> <p>The cancellation application can contain multiple numbers assigned to the same EROU holder – the reason for the cancellation will be the same for all the numbers in the bulk cancellation application.</p>
Capture reason	<p>ACMA user must have the 'Cancel EROU' permission.</p> <p>ACMA user should capture the reason.</p> <p>The systems should allow a free text editor to write the same.</p> <p>The reason should be mandatory.</p> <p>The reason should be stored against the application in the database for the future legal purpose.</p>
Generate Cancellation application	<p>The cancellation application is submitted with the numbers and the statement of reasons.</p> <p>No other details need to be captured as part of application.</p>
Validate cancellation application	<p>The number should be in the 'Assigned unallocated' state.</p> <p>The statement of reason is captured.</p> <p>Only ACMA users are withdrawing the application.</p> <p>The Cancellation application should be restricted at single number level because the statement of reason would be relevant for a single EROU holder.</p>
Un-assign the smartnumber EROU	<p>The system un-assigns the EROU holder from the smartnumber.</p> <p>The system applies the rule for an individual number.</p>

<p>Quarantine the Smartnumber or goes to Available EROU unassigned</p>	<p>The number status is updated with 'Unavailable smartnumber' if the regulator puts the number in quarantine. In case the Quarantine period is 0 it goes to 'Available EROU unassigned' pool. The EROU holder ceases to be the EROU holder for the smartnumber. Both the Register of smartnumbers and the Register of Numbers are updated. The Previous EROU holder can't get back the number unless the number is again available after Quarantine. Notify the EROU holder about cancellation of EROU.</p>
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11.10 Cancellation of EROU (no active service)

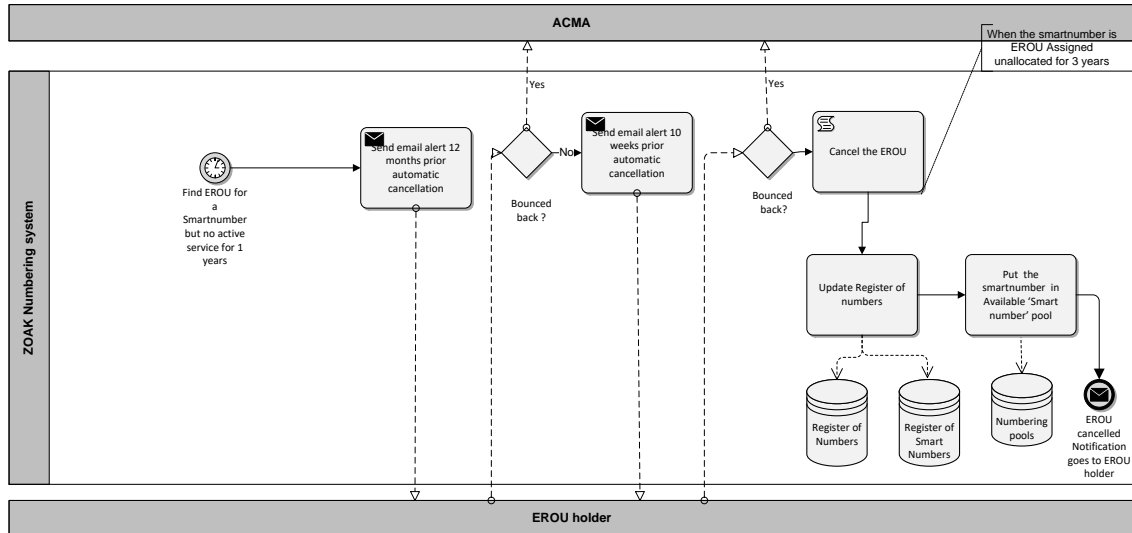


Figure 3.10: Cancellation of EROU (no active service)

Activity name	Business rules
Send email alert 12 months prior automatic cancellation	The smartnumber must be in 'Assigned unallocated' state for a consecutive 2 years and the system checks the time is 12 months prior to the system driven automatic cancellation. The system sends the email to the EROU holder at midnight when the batch job runs. The system checks whether the email is bounced back. The system needs to note that the email is bounced back. ACMA may take manual action but that is outside of the scope of the Numbering system / ZOAK operations.
Send email alert 10 weeks prior automatic cancellation	The smartnumber must be in 'Assigned unallocated' state and the system checks the time is 10 weeks prior to the system driven automatic cancellation. The system sends the email to the EROU holder at midnight when the batch job runs. The system checks whether the email is bounced back. The system needs to note that the email is bounced back. ACMA may take manual action but that is outside of the scope of the Numbering system / ZOAK operations.
Cancel the EROU	The Numbering system will have a nightly batch job which will check if there are any smartnumbers which are in the 'Assigned unallocated' state for 3 years consecutively. All the numbers which match the above mentioned criteria will have the EROU cancelled and the batch job will update the state to 'EROU unassigned unallocated'. Notify the EROU holder about cancellation of EROU.
Update Register of Numbers	The system will update the Register of Numbers and the Register of smartnumbers to reflect the numbers are 'Available EROU unassigned'.
Make the smartnumber available in the 'Smart number pool'	The smartnumber should appear as 'Available' in the smartnumber pool with status 'Available EROU unassigned'.

11.11 System release from quarantine (smartnumber)

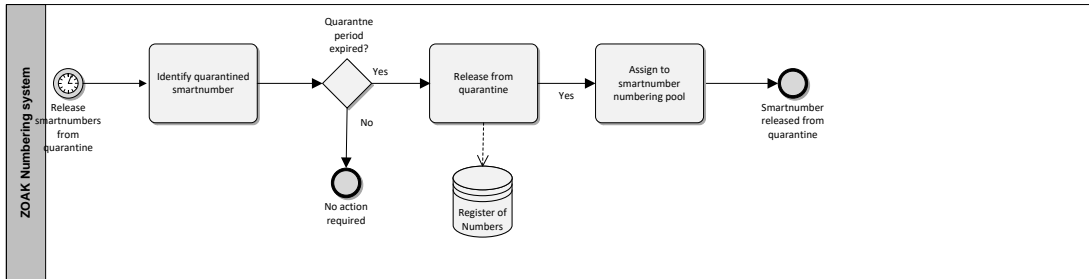


Figure 3.11: System release from quarantine

Activity name	Business rules
Identify quarantined Smartnumber	Once per day the Numbering system will automatically identify quarantined smartnumbers where the numbers' quarantine period has expired.
Release from quarantine	On release from quarantine: <ul style="list-style-type: none"> ▪ Status of the number is set to Available smartnumber. ▪ The Register of Numbers and the register of smartnumber is updated.
Assign to smartnumber numbering pool	Assigned to the smartnumber pool. Assigned a price using the pricing categories defined in the smartnumber system.

12 Mobile Numbers

The Numbering system supports the allocation of Digital mobile numbers. These are made available to CSPs by administrative allocation.

The Numbering system allows Digital Mobile numbers to be allocated, transferred and surrendered via the Web browser interface, and also allows the Regulator to withdraw Digital Mobile numbers.

The following business processes and the rules provide further details about how the Numbering system deals with Digital Mobile numbers.

12.1 Allocation of mobile numbers

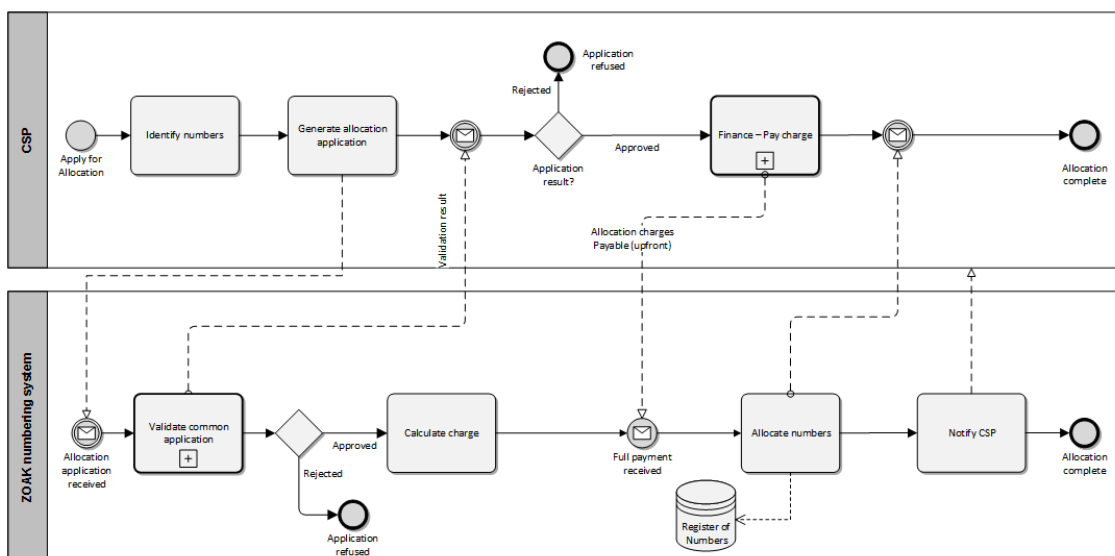


Figure 4.1: Allocation of mobile numbers

Activity name	Business rules
Identify numbers	<p>The CSP must be logged in to the system.</p> <p>The CSP should have the permission to apply for mobile number allocation.</p> <p>Ability to select one or more mobile number blocks that are available for standard allocation. The standard block size is 100,000.</p>
Generate allocation application	<p>The CSP must be logged into the system and have selected the numbers.</p> <p>Only the Available mobile numbers can be added in the application.</p> <p>There is no upper limit on the number that can be added in the cart through selection.</p> <p>Multiple mobile number ranges may be combined in a single allocation application.</p>
Validate application	<p>Allocation application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p> <p>If there is any concurrent mobile number allocation application submitted successfully which includes the same mobile numbers, or part of the same numbers in another application, the later application should not be successful.</p> <p>The applying registered CSP must not have an outstanding ANC liability for more than 3 months before the date the allocation application was received.</p> <p>The applying registered CSP must not have an outstanding late payment penalty for more than 3 months before the date the allocation application was received.</p> <p>ACMA has not placed any restrictions on the CSP account.</p>
Calculate allocation charge	<p>Calculate the allocation charge as specified in the latest Telecommunications (Numbering Charges – Delegated Services) Determination.</p> <p>Over time the ACMA may alter the amount of charge for an allocation of number(s). Using the type of allocation and the date the application was received; the correct amount of charge in effect can be determined and charged to the registered CSP.</p> <p>The invoice contains all the number ranges and associated charge and the total amount of the charge payable.</p>

Finance-pay allocation change	Upfront payment is required for mobile numbers, a CSP must pay the full amount upfront to get the allocation of numbers. If a mobile number allocation application is "Pending payment" with one CSP then all other CSPs will see these numbers as "Available" i.e. Available for allocation.
Allocate numbers	The following activities occur when mobile number blocks are allocated to a CSP: <ul style="list-style-type: none">▪ Mobile number blocks are allocated to the applying CSP.▪ The Register of numbers will be updated with the mobile numbers as 'Allocated'.
Notify CSP	An email notification is sent to the CSP that contains a list of mobile number blocks that have been allocated.

12.2 Special allocation of mobile numbers

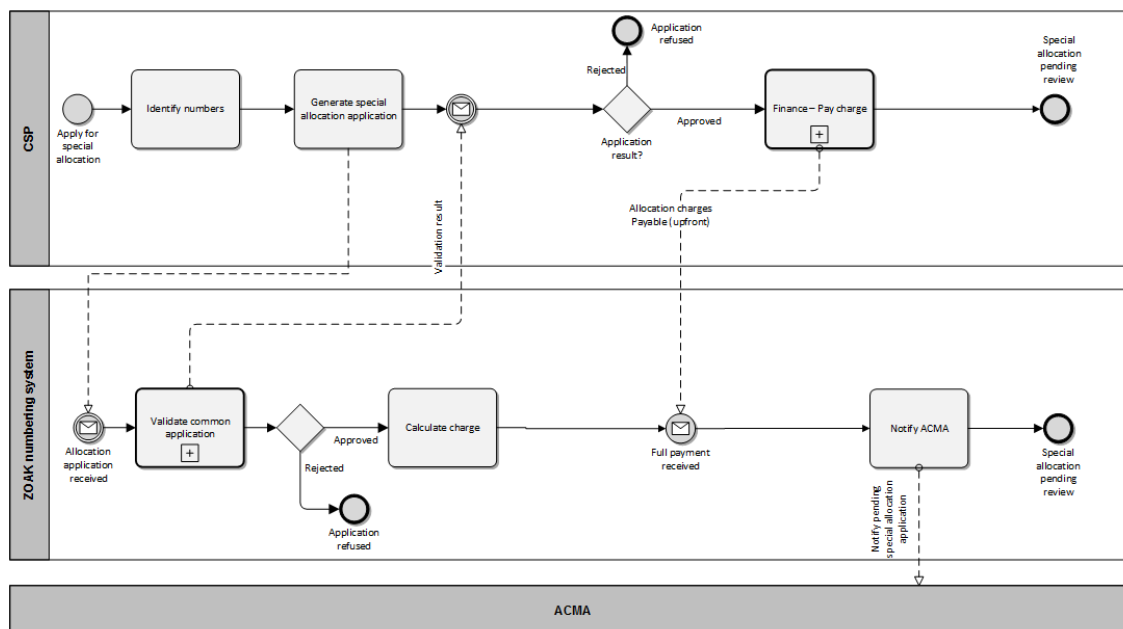


Figure 4.2: Special allocation of mobile numbers

Activity name	Business rules
Identify numbers	<p>The CSP must be logged into the system.</p> <p>The CSP should have the permission to apply for mobile number allocation.</p> <p>Ability to select one or more mobile number blocks that are available for special allocation. The special allocation block size is 10,000.</p> <p>To support the efficient use of numbers, the system will present the CSP with all mobile number ranges that are less than 100,000 in size and the next smallest range equal to or above 100,000.</p>
Generate allocation application	<p>The CSP must be logged into the system and have selected the numbers.</p> <p>Only the Available mobile numbers can be added in the application.</p> <p>The upper limit on the amount that can be added for special allocation in the cart through selection is 90,000. CSPs wanting to allocate more than 90,000 numbers can perform a standard allocation of mobile numbers.</p> <p>Multiple mobile number ranges may be combined in a single allocation application.</p>
Validate application	<p>Allocation application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p> <p>If there is any concurrent mobile number allocation application submitted successfully which includes the same mobile numbers, or part of the same numbers in another application, the later application should not be successful.</p> <p>The applying registered CSP must not have an outstanding ANC liability for more than 3 months before the date the allocation application was received.</p> <p>The applying registered CSP must not have an outstanding late payment penalty for more than 3 months before the date the allocation application was received.</p> <p>ACMA has not placed any restrictions on the CSP account.</p>

Calculate allocation charge	<p>Calculate the allocation charge as specified in the latest Telecommunications (Numbering Charges – Delegated Services) Determination.</p> <p>Over time the ACMA may alter the amount of charge for an allocation of number(s). Using the type of allocation and the date the application was received; the correct amount of charge in effect can be determined and charged to the registered CSP.</p> <p>The invoice contains all the number ranges and associated charge and the total amount of the charge payable.</p>
Finance-pay allocation charge	<p>Upfront payment is required for mobile numbers, for special allocation a CSP must pay the full amount upfront before the application is set to 'Pending approval' and sent to the ACMA for assessment.</p> <p>If a mobile number allocation application is 'Pending payment' or 'Pending approval' with one CSP then all other CSPs will see these numbers as "Available" i.e. Available for allocation.</p>
Notify ACMA	<p>An email notification is sent to the ACMA to notify that a pending special allocation application is awaiting review.</p> <p>The system will allow two special allocation applications for the same numbers to be submitted (paid for) and pending, where the ACMA will be able to decide which application to accept or reject.</p>

12.3 Audit special allocation of mobile numbers

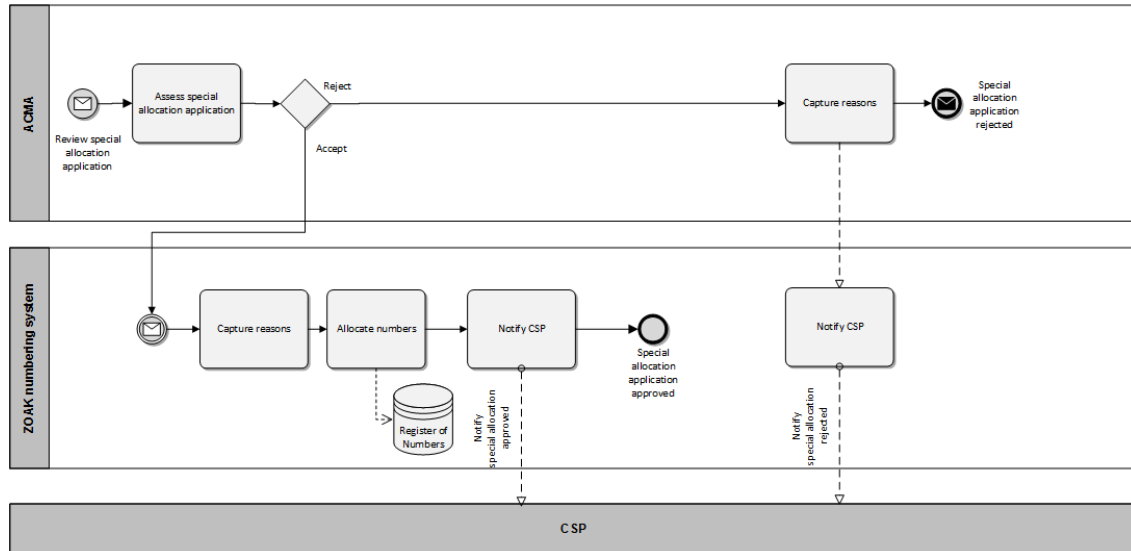


Figure 4.3: Audit special allocation of mobile numbers

Activity name	Business rules
Assess special allocation application	<p>ACMA will be able to find/search the special allocation applications.</p> <p>ACMA will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Number (range) ▪ Blocks ▪ Quantity ▪ Applicant ▪ Application date <p>ACMA will be able to approve or reject an application; only one application at a time can be actioned.</p> <p>Special allocation applications that have been actioned (approved/rejected) are not viewable via the web interface.</p>
Capture reasons	<p>When ACMA approves or rejects an application then it is mandatory to provide a reason which will be kept for future reference.</p>
Allocate Numbers	<p>The following activities occur when mobile number blocks are allocated to a CSP:</p> <ul style="list-style-type: none"> ▪ Mobile number blocks are allocated to the applying CSP. ▪ The Register of numbers will be updated with the mobile numbers as 'Allocated'.
Notify CSP (in case of application approved)	<p>Notification email is sent from the Numbering system to the CSPs.</p> <p>The email includes the numbers which are approved and allocated to the CSP.</p>
Notify CSP (in case of application rejected)	<p>Notification email is sent from the Numbering system to CSPs.</p> <p>The email includes the numbers which are rejected by the ACMA.</p>

12.4 Transfer mobile numbers

12.4.1 Create transfer offer

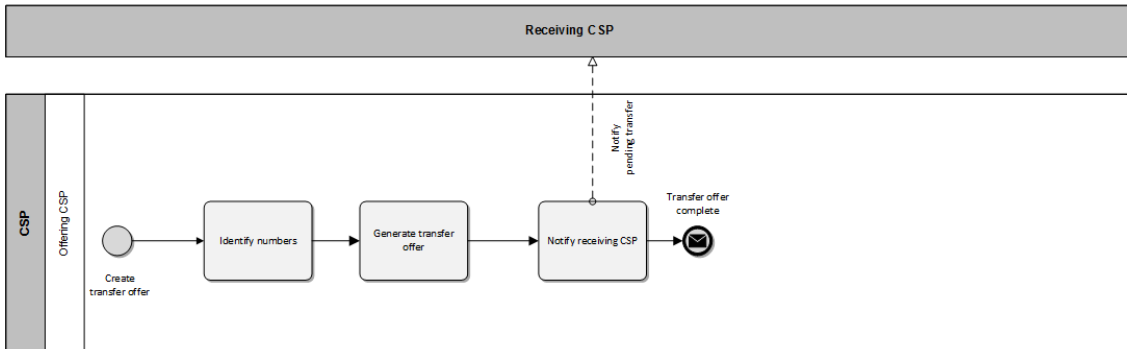


Figure 4.4.1: Transfer mobile numbers – create offer

Activity name	Business rules
Identify numbers	<p>Mobile number transfer is only between CSPs and only applicable for 'Allocated' Mobile numbers.</p> <p>CSPs can only select the Mobile numbers from their holdings.</p> <p>Multiple Mobile number blocks can be added to one transfer application.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Generate transfer offer	<p>Generate a transfer application. The application contains the Mobile number blocks selected to be transferred.</p> <p>The receiving account. The identified account must be a registered CSP.</p> <p>The offering CSP must accept the 'Terms and conditions' set by ACMA for transfer.</p> <p>The status of the application is set to 'Pending'.</p> <p>NOTE: Numbers always remain allocated to the offering CSP until a transfer is completed successfully (accepted).</p>
Notify receiving CSP	<p>Notification email is sent from the Numbering system to the receiving CSP.</p> <p>The email includes the numbers which the offering CSP has offered for transfer.</p>

12.4.2 Accept/reject transfer offer

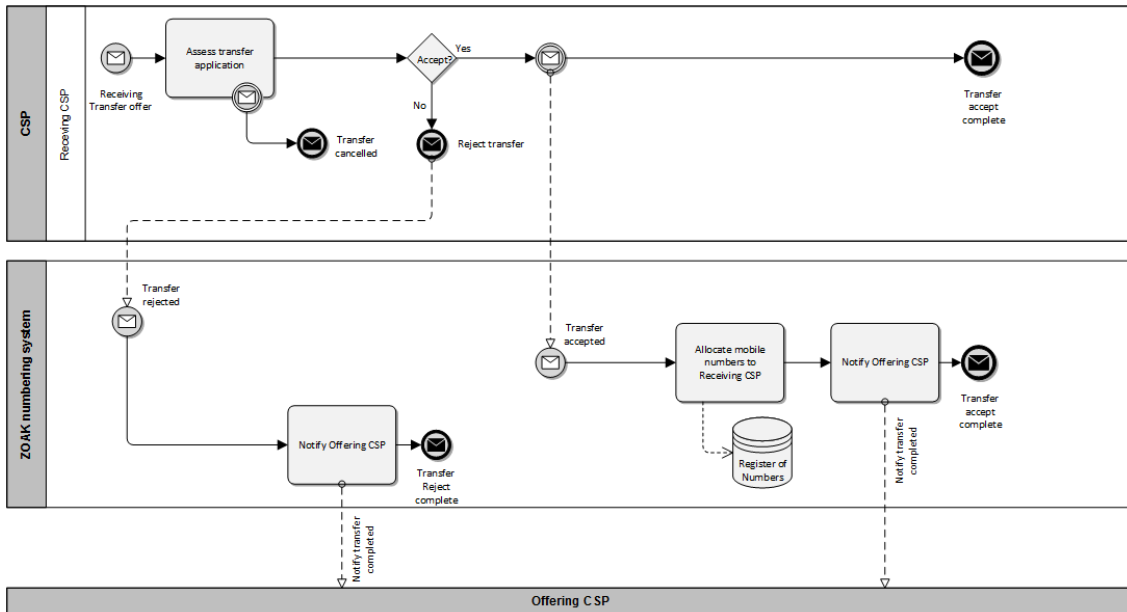


Figure 4.4.2: Transfer mobile numbers – accept/reject offer

Activity name	Business rules
Assess transfer application	<p>The receiving CSP examines the pending transfer offers to determine whether to accept or reject mobile number blocks offered by the offering CSP. The receiving CSP can perform the following actions:</p> <ul style="list-style-type: none"> Accept one or more individual number blocks (i.e., partial) or accept the entire transfer application. Reject one or more individual number blocks (i.e., partial) or reject the entire transfer application <p>A CSP may also accept and reject Mobile number blocks as part of a single transfer assessment.</p> <p>CSP's will be able to view the following parameters:</p> <ul style="list-style-type: none"> Prefix Block Size Status Number (range) Blocks <p>Quantity</p>
Notify offering CSP (transfer rejected)	<p>Notification email is sent from the Numbering system to the offering CSP. The email includes the numbers that the receiving CSP has rejected.</p>
Allocate mobile numbers to receiving CSP	<p>Once the receiving CSP has accepted mobile number blocks for transfer, the following occurs:</p> <ul style="list-style-type: none"> Each accepted mobile number block is transferred to the Receiving CSP who becomes the new holder of the number. The Register of numbers will be updated to reflect the receiving CSP as the new current holder.
Notify offering CSP (transfer accepted)	<p>Notification email is sent from the Numbering system to the offering CSP. The email includes the numbers that the receiving CSP has accepted.</p>

12.4.3 Cancel transfer offer

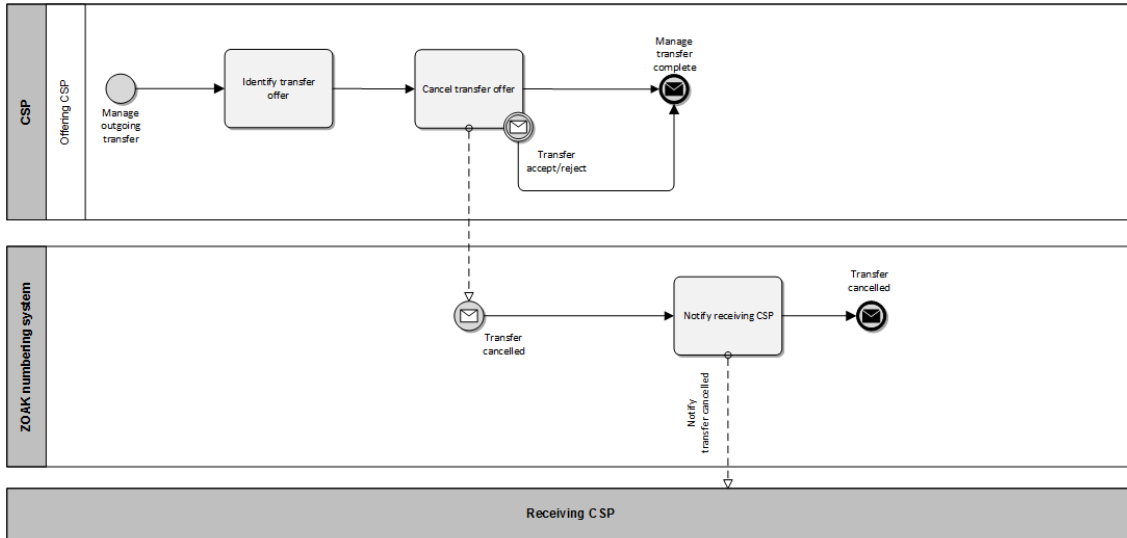


Figure 4.4.3: Transfer mobile numbers – cancel offer

Activity name	Business rules
Identify transfer offer	<p>A "Pending" transfer application can be cancelled by the offering CSP prior to the receiving CSP accepting or rejecting the application.</p> <p>Select one or more mobile number blocks from those currently pending transfer, the CSP will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Offer ID ▪ Offer Date ▪ Receiving CSP ▪ Prefix ▪ Block Size ▪ Number (range) ▪ Blocks ▪ Quantity
Cancel transfer offer	<p>The status of the transfer application is set to "Cancelled".</p> <p>There is no change to the Register of Numbers, the mobile numbers are still held by the CSP who had offered the numbers for transfer.</p>
Notify receiving CSP (transfer cancelled)	<p>Notification email is sent from the Numbering system to the offering CSP.</p> <p>The email includes the numbers that the offering CSP has cancelled.</p>

12.5 Surrender mobile numbers

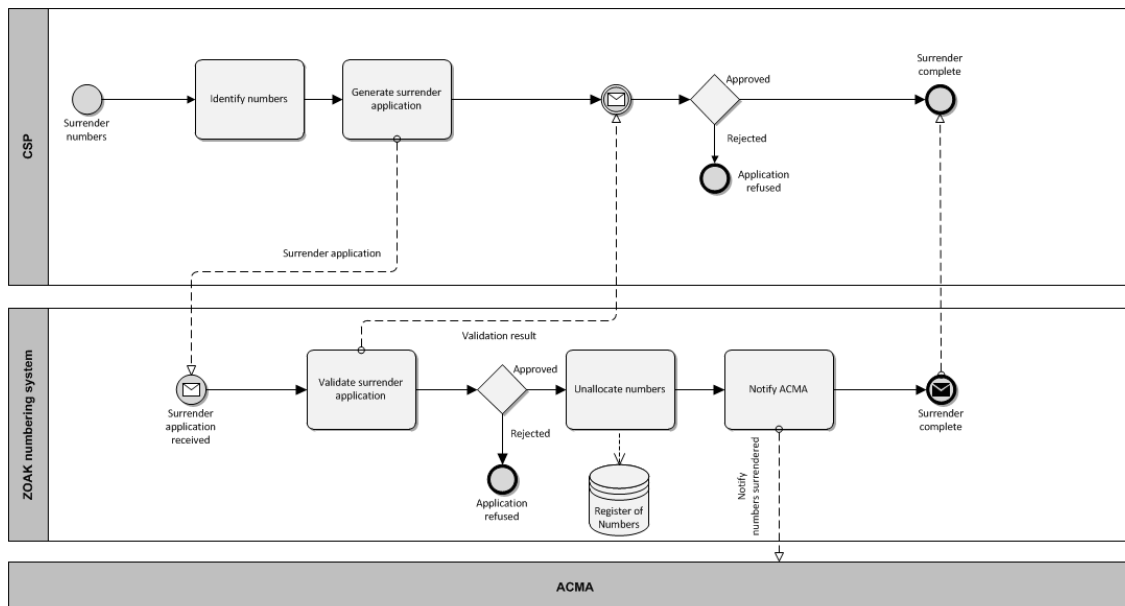


Figure 4.5: Surrender mobile numbers

Activity name	Business rules
Identify numbers	<p>CSP's can only select the Mobile numbers from their holdings and only 'Allocated' Mobile numbers can be surrendered.</p> <p>Multiple Mobile number blocks can be added to one surrender application.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Generate surrender application	<p>Generate a surrender application. The application contains the Mobile number blocks selected to be surrendered.</p> <p>A CSP may surrender any combination of mobile number blocks, including mobile numbers that were allocated as part of a special allocation.</p>
Validate surrender application	<p>A surrender application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p>
Unallocate numbers	<p>Once a CSP has surrendered mobile number blocks, the following occurs:</p> <ul style="list-style-type: none"> ▪ The mobile number blocks are unallocated from the surrendering CSP. ▪ The Register of Numbers is updated to reflect the surrender of numbers by the CSP and the numbers are returned to 'Available'.
Notify ACMA	<p>Notification email is sent from the Numbering system to the ACMA.</p> <p>The email includes the numbers which the CSP has surrendered.</p>

12.6 Withdraw mobile numbers

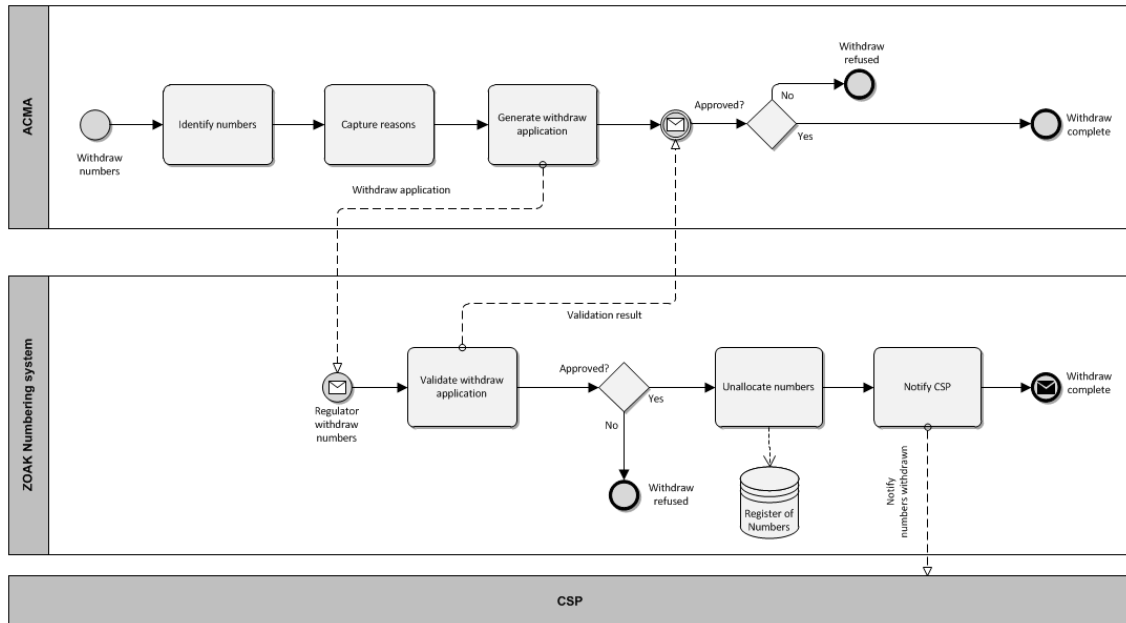


Figure 4.6: Withdraw mobile numbers

Activity name	Business rules
Identify numbers	<p>ACMA can only withdraw 'Allocated' Mobile numbers held by a CSP.</p> <p>The ACMA can only select Mobile numbers to be withdrawn from a single CSP at a time.</p> <p>Multiple Mobile number blocks can be added to one withdraw application.</p> <p>ACMA will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity ▪ Current Holder
Capture reasons	<p>Before ACMA submits an application to withdraw Mobile numbers, the ACMA must provide a reason which will be kept for future reference.</p>
Generate withdraw application	<p>Generate a withdraw application. The application contains the Mobile number blocks selected to be withdrawn.</p> <p>The ACMA may withdraw any combination of mobile number blocks, including mobile numbers that were allocated as part of a special allocation.</p>
Unallocate numbers	<p>Once the ACMA has withdrawn mobile number blocks, the following occurs:</p> <ul style="list-style-type: none"> ▪ The mobile number blocks are unallocated from the CSP. ▪ The Register of Numbers is updated to reflect the withdrawal of numbers by the ACMA and the numbers are returned to 'Available'.
Notify CSP	<p>Notification email is sent from the Numbering system to the CSP.</p> <p>The email includes the numbers which the ACMA has withdrawn.</p>

13 Geographic Numbers

The Numbering system supports the allocation of Geographic numbers (Local Service numbers). These are made available to CSPs by administrative allocation.

The Numbering system allows Geographic numbers to be allocated, transferred and surrendered via the Web browser interface and also allows the Regulator to withdraw Geographic numbers.

The following business processes and the rules will provide further details about how the Numbering system deals with Geographic numbers.

13.1 Allocation of geographic numbers

A CSP may allocate geographic numbers in three ways.

- Standard allocation allows a CSP to search for each SZU (Standard Zone Unit) individually and selects the required numbers.
- Bulk allocation allows a CSP to upload a file containing a list of SZUs and optional quantity of blocks.
- National Allocation provides a CSP with a working supply of geographic numbers where a CSP is allocated one block of numbers in each SZU.

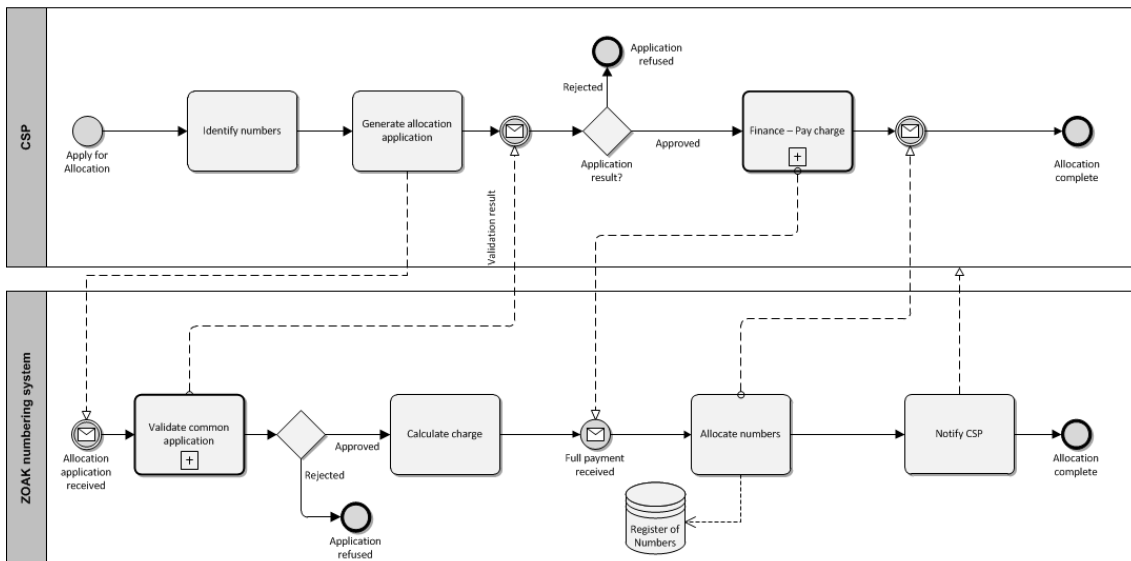


Figure 5.1: Allocation of geographic numbers

Activity name	Business rules
Identify numbers (Standard allocation)	<p>The CSP must be logged into the system.</p> <p>The CSP should have the permission to apply for geographic number allocation.</p> <p>The CSP must provide the SZU (Standard zone unit) and the system will then provide all prefixes that allow allocations in the provided SZU.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity <p>Ability to select one or more geographic number blocks that are available for standard allocation. The standard block size is 1,000</p> <p>Multiple number blocks across multiple SZU's can be added to one geographic allocation application.</p>

<p>Identify numbers (Bulk allocation)</p>	<p>Bulk allocation allows a CSP to upload the list of SZU's in which it wants to allocate numbers. The CSP can also optionally provide the number of blocks to allocate in each SZU.</p> <p>The CSP can upload a CSV containing the SZUs and quantity of blocks.</p> <ul style="list-style-type: none"> ▪ The file should not include a header row. ▪ The first column should be the SZU name. SZU names are not case sensitive. ▪ The second column is the amount of 1,000 number blocks required; e.g., insert 5 for 5,000 numbers. Leaving the number cell blank will populate the default amount of 1,000 numbers. <p>Once a CSV file is uploaded successfully, the numbers will be placed in the cart and the CSP will be able to add and remove numbers as the standard allocation process.</p>
<p>Identify numbers (National allocation)</p>	<p>National allocation provides a CSP with a working supply of geographic numbers. A CSP will be allocated a 1,000 number block in each SZU.</p> <p>There are certain SZUs that are subject to the Reduced Number Policy (RNP) where a 100 number block will be allocated as part of the National Allocation.</p>
<p>Generate allocation application</p>	<p>The CSP must be logged into the system and have selected the numbers.</p> <p>Only the available geographic numbers can be added in the application.</p> <p>There is no upper limit on the number that can be added in the cart through selection.</p> <p>Multiple geographic number ranges may be combined in a single allocation application.</p>
<p>Validate application</p>	<p>Allocation application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p> <p>If there is any concurrent geographic number allocation application submitted successfully which includes the same geographic numbers, or part of the same numbers in another application, the later application should not be successful.</p> <p>The applying registered CSP must not have an outstanding ANC liability for more than 3 months before the date the allocation application was received.</p> <p>The applying registered CSP must not have an outstanding late payment penalty for more than 3 months before the date the allocation application was received.</p> <p>ACMA has not placed any restrictions on the CSP account.</p>
<p>Calculate allocation charge</p>	<p>Calculate the allocation charge as specified in the latest Telecommunications (Numbering Charges – Delegated Services) Determination.</p> <p>Over time the ACMA may alter the amount of charge for an allocation of number(s). Using the type of allocation and the date the application was received; the correct amount of charge in effect can be determined and charged to the registered CSP.</p> <p>The invoice contains all the number ranges and associated charge and the total amount of the charge payable.</p>
<p>Finance-pay allocation change</p>	<p>Upfront payment is required for geographic numbers, a CSP must pay the full amount upfront to get the allocation of numbers.</p> <p>If a geographic number allocation application is "Pending payment" with one CSP then all other CSPs will see these numbers as "Available" (i.e., Available for allocation).</p>
<p>Allocate numbers</p>	<p>The following activities occur when geographic number blocks are allocated to a CSP:</p> <ul style="list-style-type: none"> ▪ Geographic number blocks are allocated to the applying CSP. ▪ The Register of numbers will be updated with the geographic numbers as 'Allocated' and display the SZU the numbers are allocated in.
<p>Notify CSP</p>	<p>An email notification is sent to the CSP that contains a list of geographic number blocks that have been allocated.</p>

13.2 Transfer geographic numbers

13.2.1 Create transfer offer

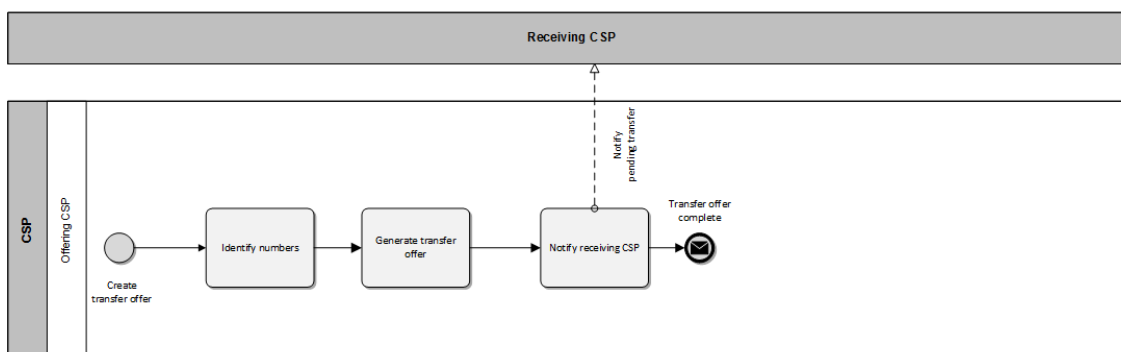


Figure 5.2.1: Transfer geographic numbers - create offer

Activity name	Business rules
Identify numbers	<p>Geographic number transfer is only between CSPs and only applicable for 'Allocated' Geographic numbers.</p> <p>CSPs can only select the Geographic numbers from their holdings.</p> <p>Multiple Geographic number blocks can be added to one transfer application.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ SZU ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Generate transfer offer	<p>Generate a transfer application. The application contains the Geographic number blocks selected to be transferred.</p> <p>The receiving account. The identified account must be a registered CSP.</p> <p>The offering CSP must accept the 'Terms and conditions' set by ACMA for transfer.</p> <p>The status of the application is set to 'Pending'.</p> <p>NOTE: Numbers always remain allocated to the offering CSP until a transfer is completed successfully (accepted).</p>
Notify receiving CSP	<p>Notification email is sent from the Numbering system to the receiving CSP.</p> <p>The email includes the numbers which the offering CSP has offered for transfer.</p>

13.2.2 Accept/reject transfer offer

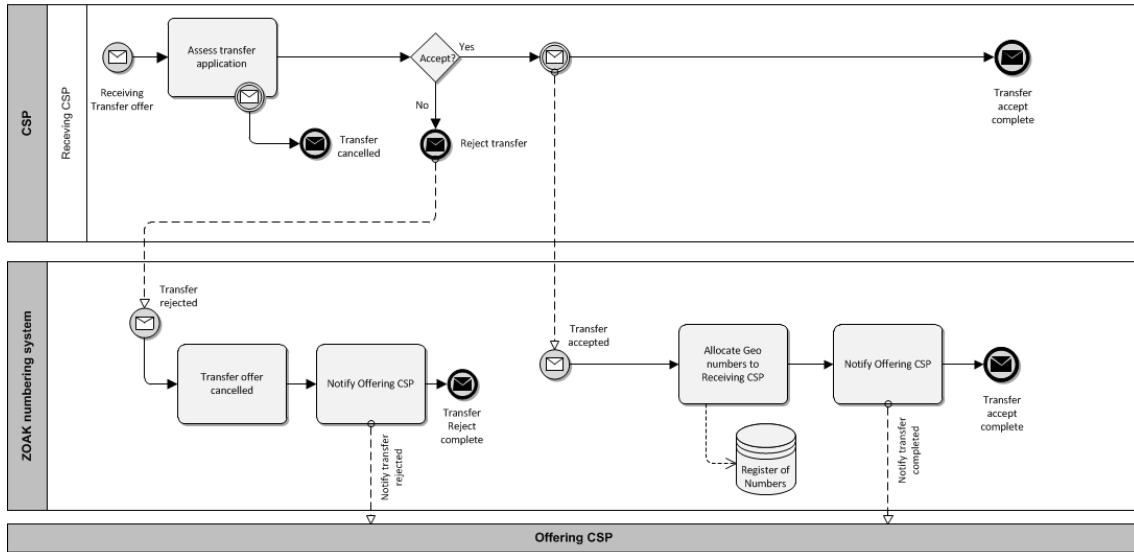


Figure 5.2.2: Transfer geographic numbers - accept/reject offer

Activity name	Business rules
Assess transfer application	<p>The receiving CSP examines the pending transfer offers to determine whether to accept or reject Geographic number blocks offered by the offering CSP. The receiving CSP can perform the following actions:</p> <ul style="list-style-type: none"> Accept one or more individual number blocks (i.e. partial) or accept the entire transfer application. Reject one or more individual number blocks (i.e. partial) or reject the entire transfer application <p>A CSP may also accept and reject Geographic number blocks as part of a single transfer assessment.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> Offer ID Offer Date SZU Offering CSP Prefix Block Size Number (range) Blocks Quantity
Notify offering CSP (transfer rejected)	<p>Notification email is sent from the Numbering system to the offering CSP. The email includes the numbers that the receiving CSP has rejected.</p>
Allocate Geographic numbers to receiving CSP	<p>Once the receiving CSP has accepted Geographic number blocks for transfer, the following occurs:</p> <ul style="list-style-type: none"> Each accepted Geographic number block is transferred to the Receiving CSP who becomes the new holder of the number. The Register of numbers will be updated to reflect the receiving CSP as the new current holder.

Notify offering CSP (transfer accepted)	Notification email is sent from the Numbering system to the offering CSP. The email includes the numbers that the receiving CSP has accepted.
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13.2.3 Cancel transfer offer

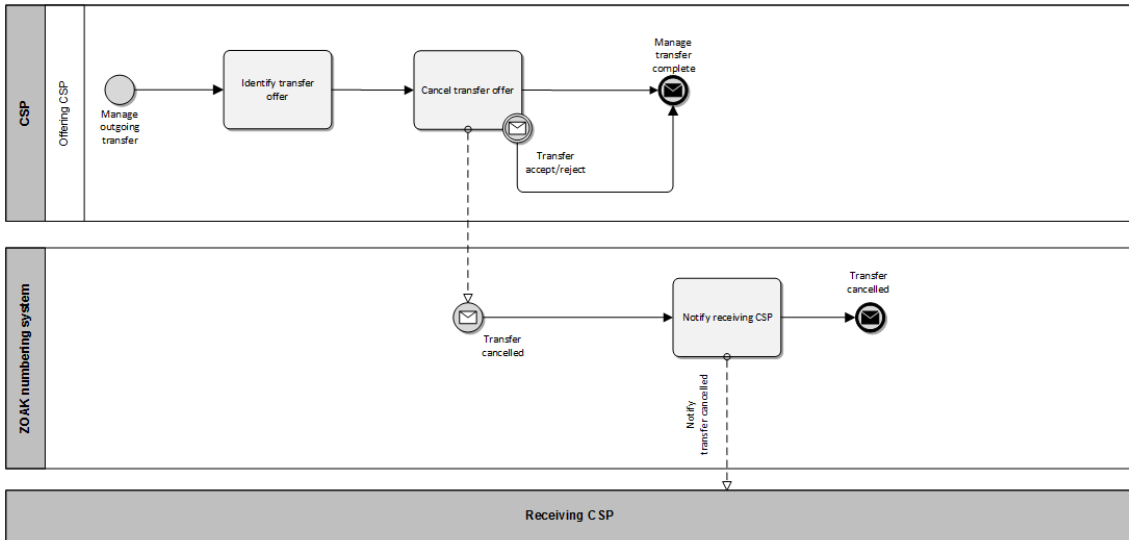


Figure 5.2.3: Transfer Geographic numbers - cancel offer

Activity name	Business rules
Identify transfer offer	A "Pending" transfer application can be cancelled by the offering CSP prior to the receiving CSP accepting or rejecting the application. Select one or more Geographic number blocks from those currently pending transfer, the CSP will be able to view the following parameters: <ul style="list-style-type: none"> ▪ Offer ID ▪ Offer Date ▪ Receiving CSP ▪ SZU ▪ Prefix ▪ Block Size ▪ Number (range) ▪ Blocks ▪ Quantity
Cancel transfer offer	The status of the transfer application is set to "Cancelled". There is no change to the Register of Numbers, the geographic numbers are still held by the CSP who had offered the numbers for transfer.
Notify receiving CSP (transfer cancelled)	Notification email is sent from the Numbering system to the offering CSP. The email includes the numbers that the offering CSP has cancelled.

13.3 Surrender geographic numbers

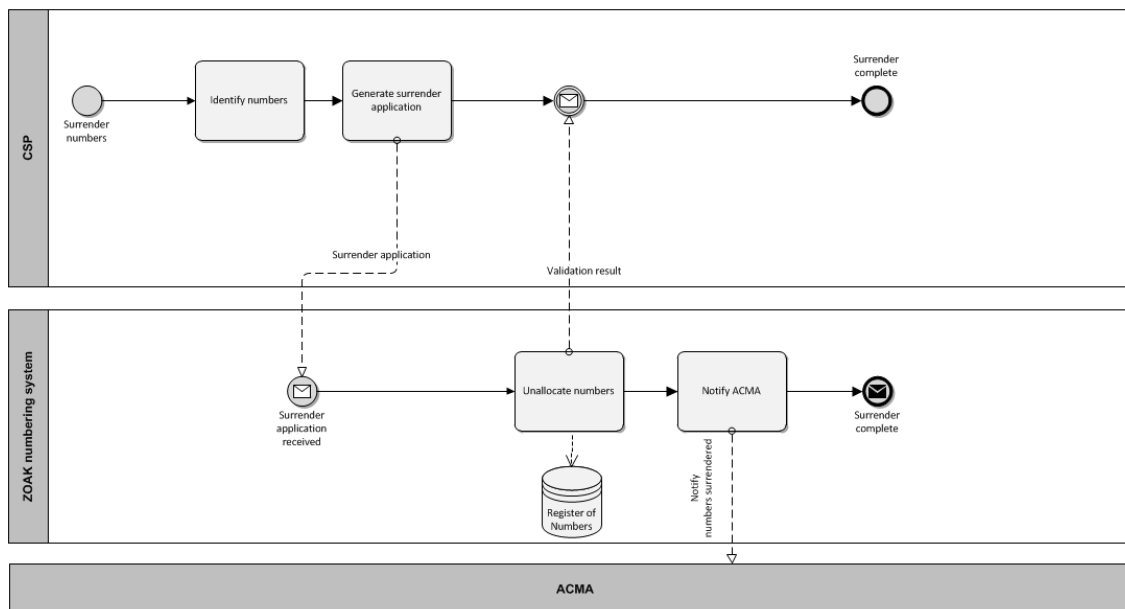


Figure 5.3: Surrender geographic numbers

Activity name	Business rules
Identify numbers	<p>CSPs can only select the Geographic numbers from their holdings and only 'Allocated' Geographic numbers can be surrendered.</p> <p>Multiple Geographic number blocks can be added to one surrender application.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ SZU ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Generate surrender application	<p>Generate a surrender application. The application contains the Geographic number blocks selected to be surrendered.</p> <p>A CSP may surrender any combination of Geographic number blocks, including Geographic numbers that were allocated as part of a special allocation.</p> <p>A surrender application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p>
Unallocate numbers	<p>Once a CSP has surrendered Geographic number blocks, the following occurs:</p> <ul style="list-style-type: none"> ▪ The Geographic number blocks are unallocated from the surrendering CSP. ▪ The Register of Numbers is updated to reflect the surrender of numbers by the CSP and the numbers are returned to 'Available'.
Notify ACMA	<p>Notification email is sent from the Numbering system to the ACMA.</p> <p>The email includes the numbers which the CSP has surrendered.</p>

13.4 Variation to allocation of geographic numbers

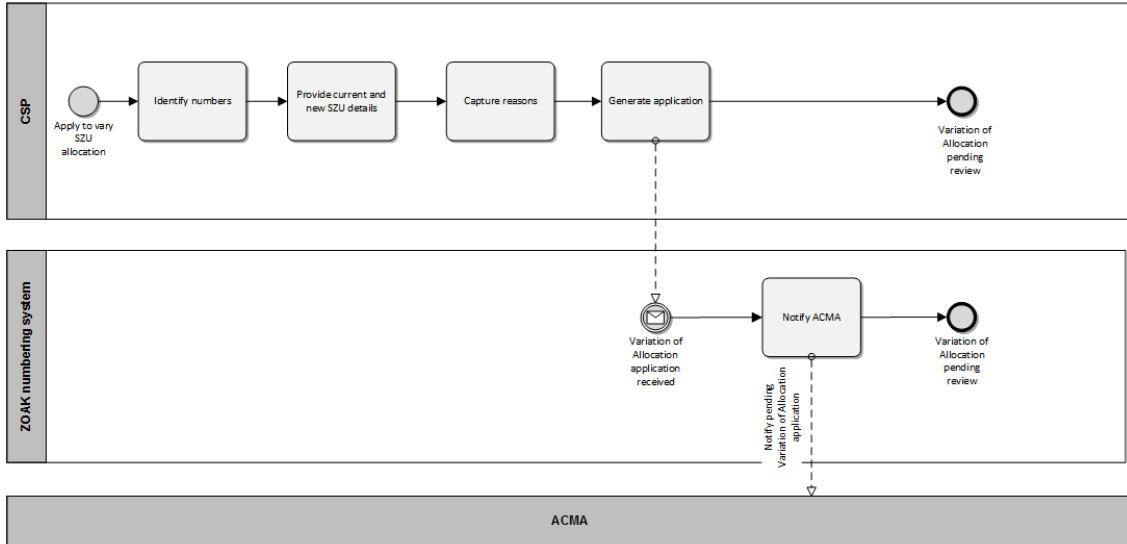


Figure 5.4: Variation to allocation of geographic numbers

Activity name	Business rules
Identify numbers	<p>Variation to allocation is only applicable for 'Allocated' Geographic numbers.</p> <p>CSPs can only select the Geographic numbers from their holdings, the select function will allow numbers to be selected in multiples of 100. A 1,000 number block may be split into ten 100 number blocks. For variation of whole 1,000 number blocks there will be no split as the whole block is being varied.</p> <p>Multiple Geographic number blocks can be added to one variation to application. The CSP must be logged into the system and have selected the numbers.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ SZU ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Provide current and new SZU details	<p>The CSP must provide the destination SZU.</p> <p>There is no restriction on selecting an SZU.</p>
Capture reasons	<p>Before the CSP submits a variation to allocation application, the CSP must provide a reason which will be reviewed by the ACMA</p>

Generate variation to allocation application	<p>Generate a variation to allocation application. The application contains the Geographic number blocks selected to be varied.</p> <p>A CSP may vary any number of Geographic number blocks, including Geographic numbers that were allocated as part of the Reduced Number Policy (RNP).</p> <p>Geographic numbers can only be varied from one current SZU to one destination SZU in a single application.</p> <p>A variation to allocation application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p>
Notify ACMA	<p>An email notification is sent to the ACMA to notify that a pending variation to allocation application is awaiting review.</p>

13.5 Audit variation to allocation of geographic numbers

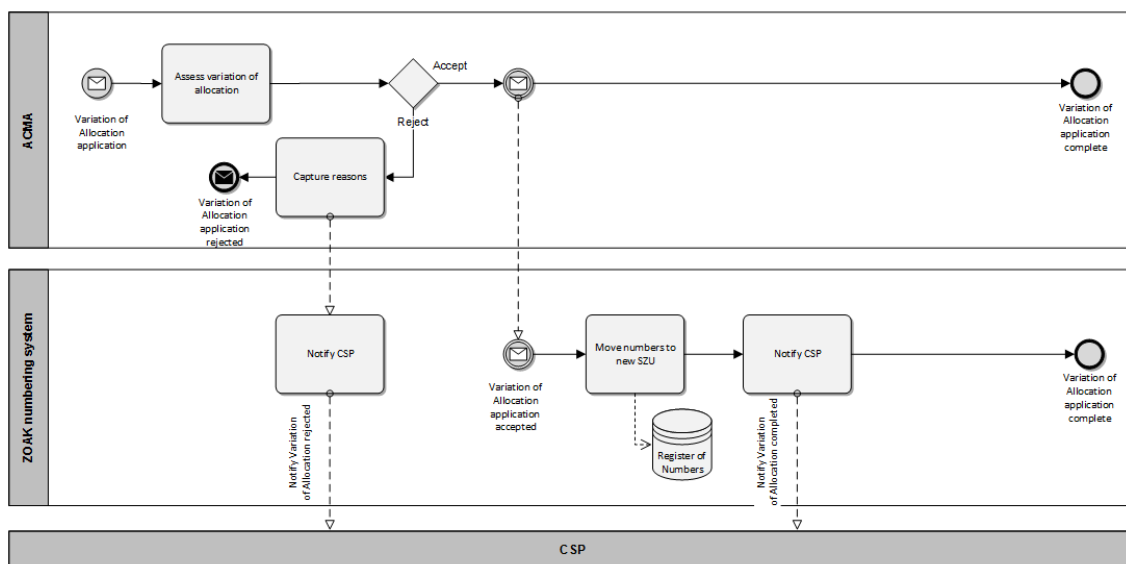


Figure 5.5: Audit variation of allocation of geographic numbers

Activity name	Business rules
Assess variation to allocation application	<p>ACMA will be able to find /search the variation to allocation applications.</p> <p>ACMA will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Application ID ▪ Prefix ▪ Block Size ▪ Number (range) ▪ Blocks ▪ Quantity ▪ From SZU ▪ To SZU ▪ Applicant ▪ Application date <p>ACMA will be able to approve or reject an application, only one application at a time can be actioned.</p> <p>Variation to allocation applications that have been actioned (approved/rejected) are not viewable via the web interface.</p>
View reason	<p>ACMA will be able to view the reason provided by the CSP.</p> <p>The ACMA can examine the pending variation to allocation applications to determine whether to accept or reject the application. The ACMA must determine outside of the system if the variation of allocation between the current and destination SZU is valid.</p>
Capture reasons	<p>When ACMA approves or rejects an application then it is mandatory to provide a reason which will be kept for future reference.</p> <p>Variation to allocation applications that have been actioned (approved/rejected) are not viewable via the web interface.</p>
Move numbers to new SZU	<p>The following activities occur when geographic number blocks are varied:</p> <ul style="list-style-type: none"> ▪ The Register of numbers will be updated with the new SZU.

Notify CSP (in case of application approved)	Notification email is sent from the Numbering system to the CSPs. The email includes the numbers which are approved by the ACMA.
Notify CSP (in case of application rejected)	Notification email is sent from the Numbering system to CSPs. The email includes the numbers which are rejected by the ACMA.

13.6 Withdraw geographic numbers

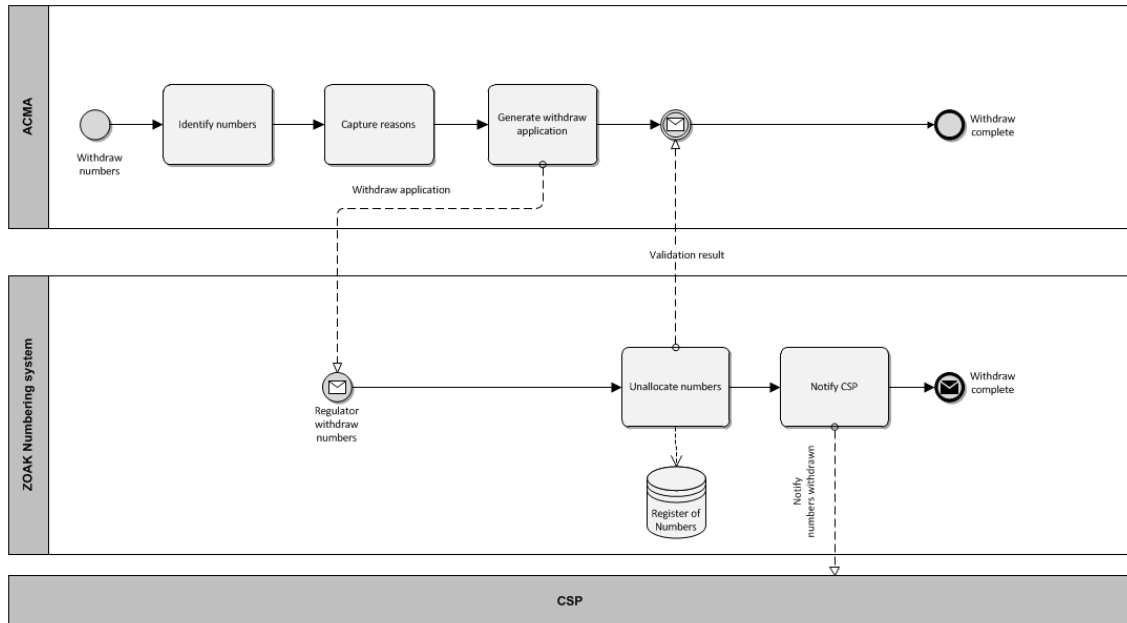


Figure 5.6: Withdraw geographic numbers

Activity name	Business rules
Identify numbers	<p>ACMA can only withdraw 'Allocated' Geographic numbers held by a CSP.</p> <p>The ACMA can only select Geographic numbers to be withdrawn from a single CSP at a time.</p> <p>Multiple Geographic number blocks can be added to one withdraw application.</p> <p>ACMA will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity ▪ Current Holder
Capture reasons	<p>Before ACMA submits an application to withdraw Geographic numbers, the ACMA must provide a reason which will be kept for future reference.</p>
Generate withdraw application	<p>Generate a withdraw application. The application contains the Geographic number blocks selected to be withdrawn.</p> <p>The ACMA may withdraw any combination of Geographic number blocks.</p>
Unallocate numbers	<p>Once the ACMA has withdrawn Geographic number blocks, the following occurs:</p> <ul style="list-style-type: none"> ▪ The Geographic number blocks are unallocated from the CSP. ▪ The Register of Numbers is updated to reflect the withdrawal of numbers by the ACMA and the numbers are returned to 'Available'.
Notify CSP	<p>Notification email is sent from the Numbering system to the CSP.</p> <p>The email includes the numbers which the ACMA has withdrawn.</p>

14 Other Numbers

The Numbering system also supports the allocation of Other numbers which is comprised of 15 service types:

- Premium rate
- Calling card
- Community
- Data network access
- Incoming only international
- Interconnection and routing
- Internal network
- International service
- Operator service
- Paging
- Premium rate and paging
- Restricted access and premium
- Satellite telephone
- Testing service
- Virtual private network

These service types are made available to CSPs by administrative allocation.

The Numbering system allows Other numbers to be allocated, transferred and surrendered via the Web browser interface, and also allows the Regulator to withdraw Other numbers.

The following business processes and the rules will provide further details about how the Numbering system deals with Other numbers.

14.1 Allocation of other numbers

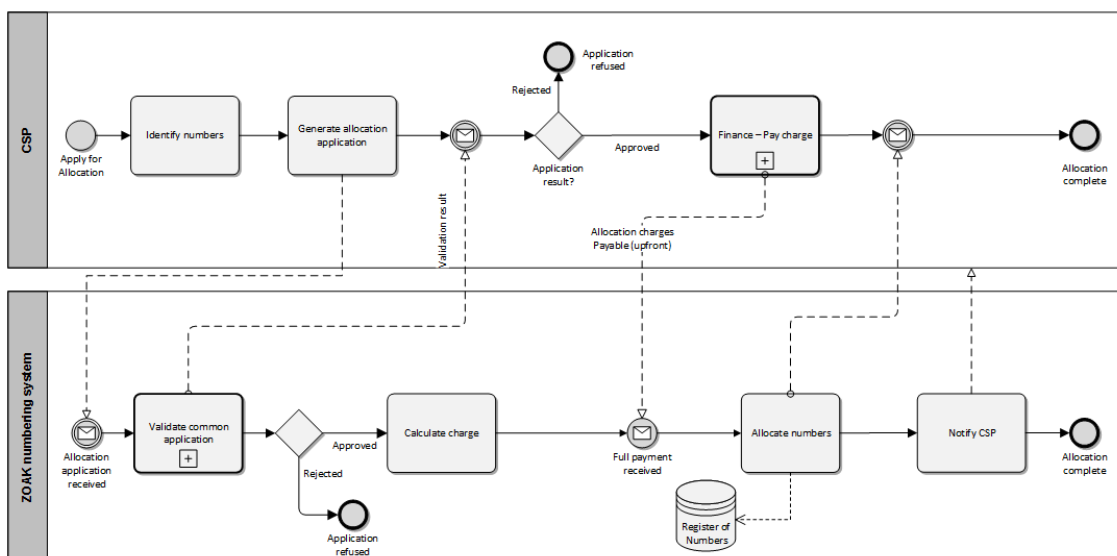


Figure 6.1: Allocation of other numbers

Activity name	Business rules
Identify numbers	<p>The CSP should have the permission to apply for other number allocation.</p> <p>To apply for other number allocation the CSP must select a service type and corresponding digit length.</p> <p>Ability to select one or more number blocks that are available for standard allocation. The standard block size depends on the service type selected.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Generate allocation application	<p>The CSP must be logged into the system and have selected the numbers.</p> <p>Only the Available numbers can be added in the application.</p> <p>There is no upper limit on the numbers that can be added in the cart through selection.</p> <p>Only multiple number ranges of the same service type may be combined in a single allocation application. An application cannot contain multiple service types.</p>
Validate application	<p>Allocation application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p> <p>If there is any concurrent number allocation application submitted successfully which includes the same numbers, or part of the same numbers in another application, the later application should not be successful.</p> <p>The applying registered CSP must not have an outstanding ANC liability for more than 3 months before the date the allocation application was received.</p> <p>The applying registered CSP must not have an outstanding late payment penalty for more than 3 months before the date the allocation application was received.</p> <p>ACMA has not placed any restrictions on the CSP account.</p>

Calculate allocation charge	<p>Calculate the allocation charge as specified in the latest Telecommunications (Numbering Charges – Delegated Services) Determination.</p> <p>Over time the ACMA may alter the amount of charge for an allocation of number(s). Using the type of allocation and the date the application was received; the correct amount of charge in effect can be determined and charged to the registered CSP.</p> <p>The invoice contains all the number ranges and associated charge and the total amount of the charge payable.</p>
Finance-pay allocation change	<p>Upfront payment is required for numbers, a CSP must pay the full amount upfront to get the allocation of numbers.</p> <p>If a number allocation application is "Pending payment" with one CSP then all other CSPs will see these numbers as "Available" i.e. Available for allocation.</p>
Allocate numbers	<p>The following activities occur when number blocks are allocated to a CSP:</p> <ul style="list-style-type: none">▪ Number blocks are allocated to the applying CSP.▪ The Register of numbers will be updated with the numbers as 'Allocated'.
Notify CSP	<p>An email notification is sent to the CSP that contains a list of number blocks that have been allocated.</p>

14.2 Transfer other numbers

14.2.1 Create transfer offer

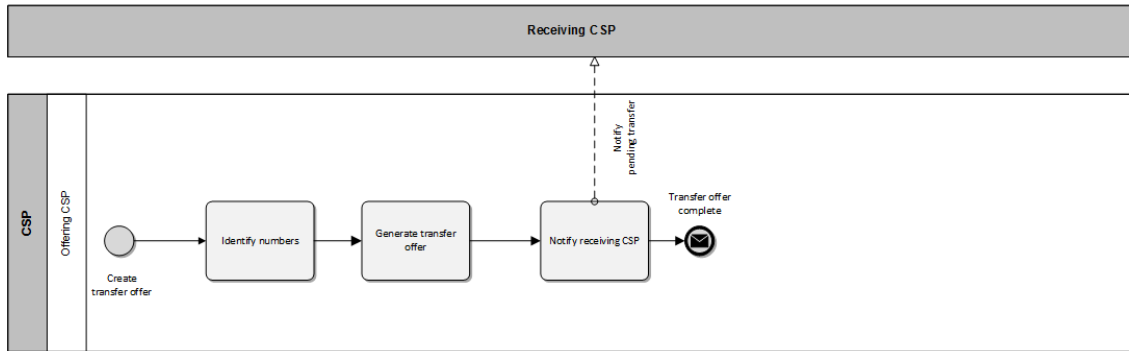


Figure 6.2.1: Transfer other numbers – create offer

Activity name	Business rules
Identify numbers	<p>Other number transfer is only between CSPs and only applicable for 'Allocated' numbers. CSPs can only select the numbers from their holdings.</p> <p>Multiple number blocks can be added to one transfer application.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Generate transfer offer	<p>Generate a transfer application. The application contains the number blocks selected to be transferred.</p> <p>Only multiple number ranges of the same service type may be combined in a single transfer application. An application cannot contain multiple service types.</p> <p>The receiving account. The identified account must be a registered CSP.</p> <p>The offering CSP must accept the 'Terms and conditions' set by ACMA for transfer.</p> <p>The status of the application is set to 'Pending'.</p> <p>NOTE: Numbers always remain allocated to the offering CSP until a transfer is completed successfully (accepted).</p>
Notify receiving CSP	<p>Notification email is sent from the Numbering system to the receiving CSP.</p> <p>The email includes the numbers which the offering CSP has offered for transfer.</p>

14.2.2 Accept/reject transfer offer

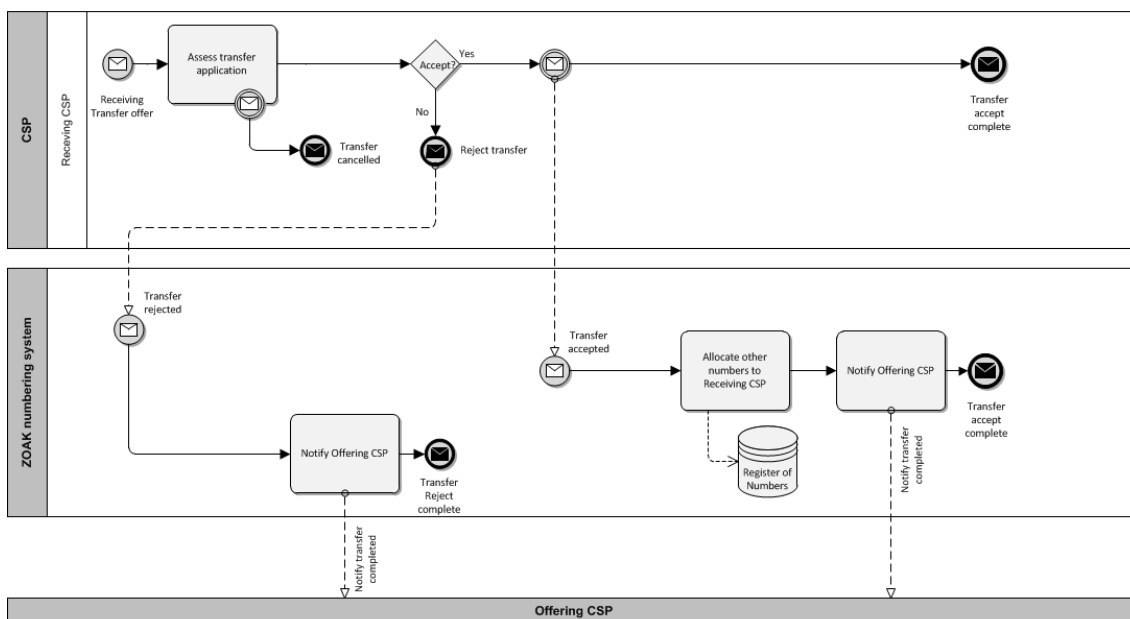


Figure 6.2.2: Transfer other numbers – accept/reject offer

Activity name	Business rules
Assess transfer application	<p>The receiving CSP examines the pending transfer offers to determine whether to accept or reject number blocks offered by the offering CSP. The receiving CSP can perform the following actions:</p> <ul style="list-style-type: none"> Accept one or more individual number blocks (i.e. partial) or accept the entire transfer application. Reject one or more individual number blocks (i.e. partial) or reject the entire transfer application <p>Only multiple number ranges of the same service type may be combined in a single transfer assessment application. An application cannot contain multiple service types. A CSP may also accept and reject number blocks as part of a single transfer assessment. CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> Offer ID Offer Date Offering CSP Prefix Block Size Number (range) Blocks Quantity
Notify offering CSP (transfer rejected)	<p>Notification email is sent from the Numbering system to the offering CSP. The email includes the numbers that the receiving CSP has rejected.</p>
Allocate mobile numbers to receiving CSP	<p>Once the receiving CSP has accepted number blocks for transfer, the following occurs:</p> <ul style="list-style-type: none"> Each accepted number block is transferred to the Receiving CSP who becomes the new holder of the number. The Register of numbers will be updated to reflect the receiving CSP as the new current holder.

Notify offering CSP (transfer accepted)	Notification email is sent from the Numbering system to the offering CSP. The email includes the numbers that the receiving CSP has accepted.
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14.2.3 Cancel transfer offer

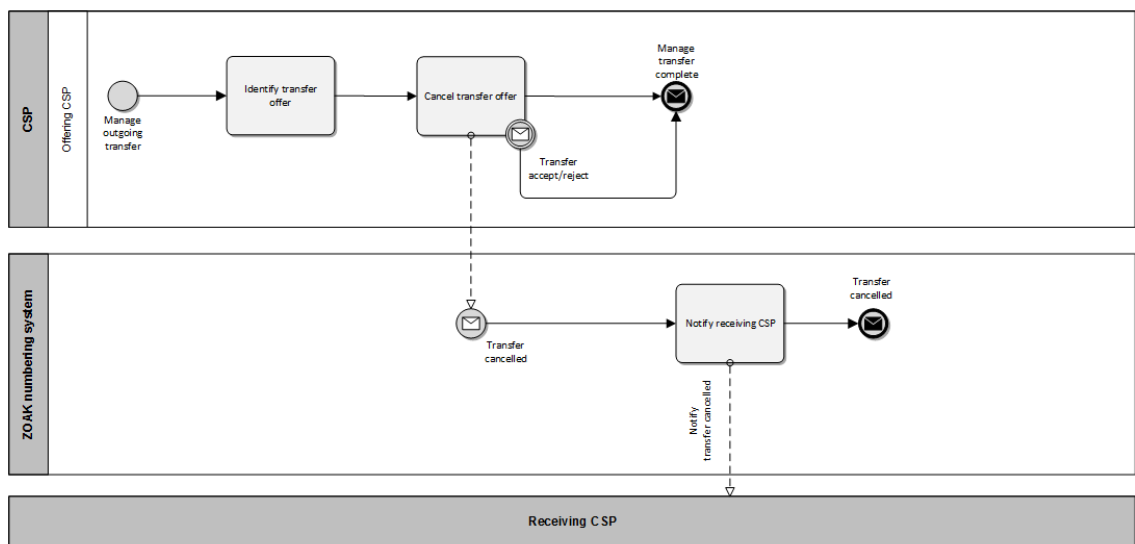


Figure 6.2.3: Transfer other numbers – cancel offer

Activity name	Business rules
Identify transfer offer	<p>A "Pending" transfer application can be cancelled by the offering CSP prior to the receiving CSP accepting or rejecting the application.</p> <p>Only multiple number ranges of the same service type may be combined in a single transfer cancel application. An application cannot contain multiple service types.</p> <p>Select one or more number blocks from those currently pending transfer, the CSP will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Offer ID ▪ Offer Date ▪ Receiving CSP ▪ Prefix ▪ Block Size ▪ Number (range) ▪ Blocks ▪ Quantity
Cancel transfer offer	<p>The status of the transfer application is set to "Cancelled".</p> <p>There is no change to the Register of Numbers, the numbers are still held by the CSP who had offered the numbers for transfer.</p>
Notify receiving CSP (transfer cancelled)	<p>Notification email is sent from the Numbering system to the offering CSP.</p> <p>The email includes the numbers that the offering CSP has cancelled.</p>

14.3 Surrender other numbers

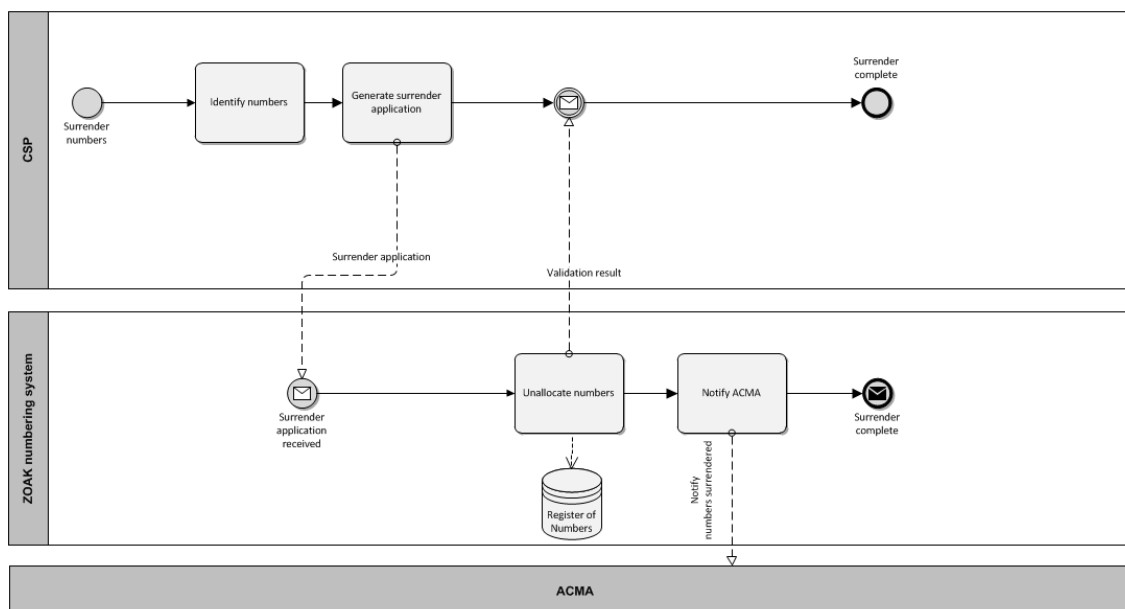


Figure 6.3: Surrender other numbers

Activity name	Business rules
Identify numbers	<p>CSPs can only select the numbers from their holdings and only 'Allocated' numbers can be surrendered.</p> <p>Only multiple number ranges of the same service type may be combined in a single surrender application. An application cannot contain multiple service types.</p> <p>CSPs will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity
Generate surrender application	<p>Generate a surrender application. The application contains the number blocks selected to be surrendered.</p> <p>A surrender application will be submitted only when the Registered CSP acknowledges the 'Terms and conditions including ANC implication' specified by ACMA.</p>
Unallocate numbers	<p>Once a CSP has surrendered number blocks, the following occurs:</p> <ul style="list-style-type: none"> ▪ The number blocks are unallocated from the surrendering CSP. ▪ The Register of Numbers is updated to reflect the surrender of numbers by the CSP and the numbers are returned to 'Available'.
Notify ACMA	<p>Notification email is sent from the Numbering system to the ACMA.</p> <p>The email includes the numbers which the CSP has surrendered.</p>

14.4 Withdraw other numbers

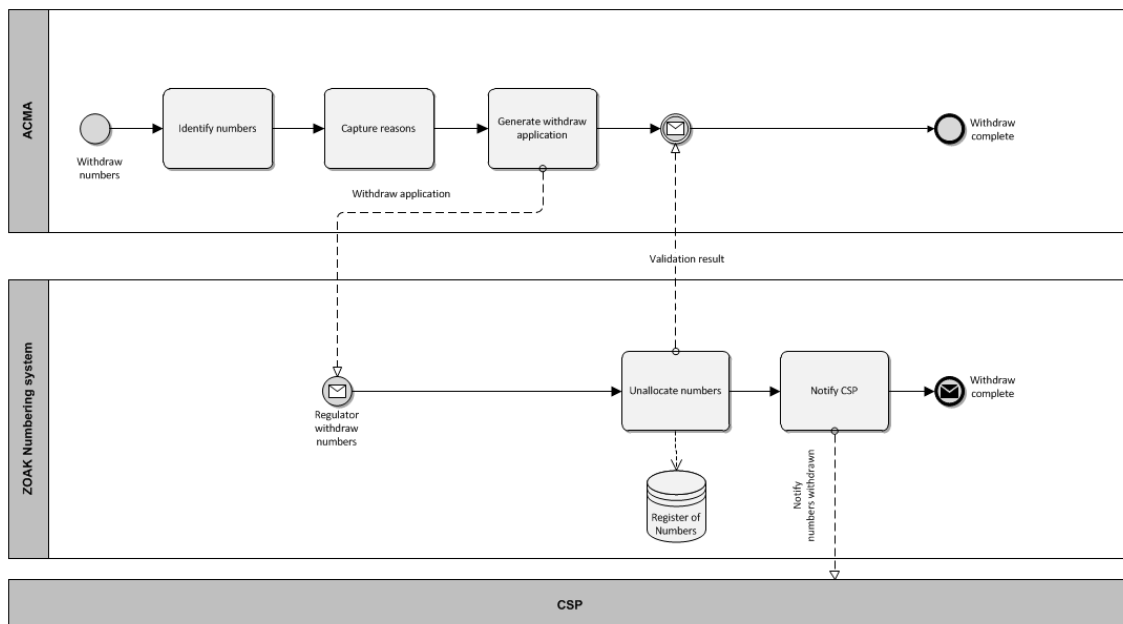


Figure 6.4: Withdraw other numbers

Activity name	Business rules
Identify numbers	<p>ACMA can only withdraw 'Allocated' numbers held by a CSP.</p> <p>The ACMA can only select numbers to be withdrawn from a single CSP at a time.</p> <p>Multiple service types can be added to one withdraw application.</p> <p>ACMA will be able to view the following parameters:</p> <ul style="list-style-type: none"> ▪ Prefix ▪ Block Size ▪ Status ▪ Number (range) ▪ Blocks ▪ Quantity ▪ Current Holder
Capture reasons	<p>Before ACMA submits an application to withdraw numbers, the ACMA must provide a reason which will be kept for future reference.</p>
Generate withdraw application	<p>Generate a withdraw application. The application contains the number blocks selected to be withdrawn.</p>
Unallocate numbers	<p>Once the ACMA has withdrawn number blocks, the following occurs:</p> <ul style="list-style-type: none"> ▪ The number blocks are unallocated from the CSP. ▪ The Register of Numbers is updated to reflect the withdrawal of numbers by the ACMA and the numbers are returned to 'Available'.
Notify CSP	<p>Notification email is sent from the Numbering system to the CSP.</p> <p>The email includes the numbers which the ACMA has withdrawn.</p>

15 Finance

The Numbering system is integrated with ANZ eGate as the up-front payment system, allowing a CSP or smartnumber account to apply for, pay and receive their number allocation in a single end to end transaction.

To assist in settling invoices paid by BPAY and EFT, the Numbering System has a scheduled job which will match the payments received by BPAY/EFT automatically.

The matching function scans the bank statement provided by the ACMA daily and matches receipts to invoices. If a match is found the invoice is settled and any numbers are allocated.

The ACMA has a number of fees defined by legislative instruments. On occasion the Numbering system allows the fees rates to be adjusted whenever a new *Telecommunications (Numbering Charges – Delegated Services) Determination* is issued.

The following diagram will provide an overview of the finance system and then each process will be described in detail with business rules.

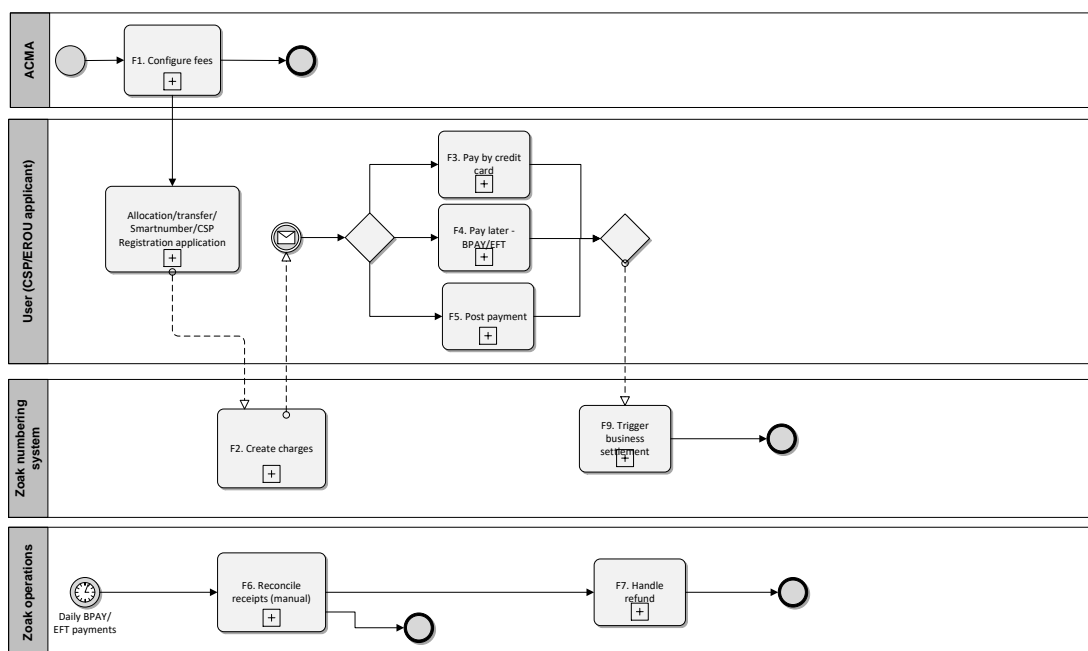


Figure 4: Finance end to end process flow

15.1 Configure fees

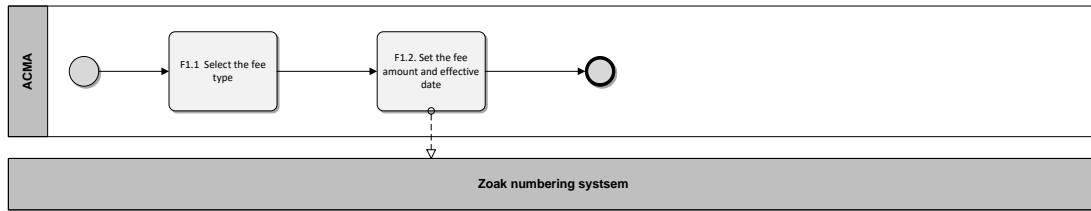


Figure 4.1: Configure fees

Activity name	Business rules
Select the fee type	<p>The configure fee page will only be available to ACMA users with specific permission.</p> <p>The categories available now:</p> <ul style="list-style-type: none"> ▪ Account registration: <ul style="list-style-type: none"> ▫ Smartnumber account registration ▫ CSP account registration ▪ FLRPRN standard application: <ul style="list-style-type: none"> ▫ FLRPRN allocation with withheld status ▫ FLRPRN allocation with withheld extension Status ▫ FLRPRN allocation with reservation ▫ FLRPRN allocation with reservation extension ▫ FLRPRN allocation without reservation ▪ FLRPRN allocation under special circumstances: <ul style="list-style-type: none"> ▫ FLRPRN special allocation without reservation ▫ FLRPRN special allocation with reservation ▫ FLRPRN special allocation with withheld status ▫ FLRPRN special allocation with withheld extension status ▫ FLRPRN special allocation with reserve extension status ▪ Smartnumber allocation: <ul style="list-style-type: none"> ▫ smartnumber allocation without reservation ▪ Geographic allocation: <ul style="list-style-type: none"> ▫ Geographic allocation application ▪ Mobile allocation: <ul style="list-style-type: none"> ▫ Mobile allocation application ▪ Other numbers allocation: <ul style="list-style-type: none"> ▫ Other numbers application
Set the fee amount	<ul style="list-style-type: none"> ▪ The configure fee page will only be available to ACMA users with specific permission. ▪ The edit form will be available for the entire above mentioned category. ▪ User has to specify an effective date only in the future. ▪ The Numbering system will calculate the changed charge from the effective date. ▪ There will be no retrospective change applied to the system.

15.2 Create charges

Charge type	Business rules for calculation																																			
Calculate allocation charge for FLRPRN	<p>The charge will be calculated based on the configured values:</p> <ul style="list-style-type: none"> ▪ FLRPRN standard application: <ul style="list-style-type: none"> ▫ FLRPRN allocation with withheld status ▫ FLRPRN allocation with withheld extension Status ▫ FLRPRN allocation with reservation ▫ FLRPRN allocation with reservation extension ▫ FLRPRN allocation without reservation <p>If the allocation application contains multiple categories like Allocation without reservation, Allocation with withheld status, and allocation with reservation, then the total charge on the application will dependent on Configured fees for each category. The charges will be shown on the screen in case the CSP applies via the web.</p>																																			
Calculate allocation charge for Smartnumber to CSPs	<p>The charge will be calculated based on the following configured values:</p> <ul style="list-style-type: none"> ▪ smartnumber allocation ▪ smartnumber allocation without reservation <p>The total value will be equal to the number of smartnumbers in the application multiplied by smartnumber allocation without reservation fee.</p>																																			
Calculate Smartnumber EROU application charge	<p>The smartnumber EROU application charge will be calculated based on the reserved price of the selected numbers.</p> <p>Each smartnumber belongs to a category depending on the pattern the smartnumber has and highest price from all these categories will be the "Reserved" price for the smartnumber.</p> <ul style="list-style-type: none"> ▪ When an EROU applicant searches for a smartnumber the smartnumber charge will be displayed. ▪ The table below outlines the general pricing structure for the three types of numbers (13, 1300 and 1800): <table border="1"> <thead> <tr> <th>Categories</th> <th>Basis of charge</th> <th>13 charge</th> <th>1300 charge</th> <th>1800 charge</th> </tr> </thead> <tbody> <tr> <td>Platinum</td> <td>Numeric pattern</td> <td>\$16,000</td> <td>\$20,000</td> <td>\$20,000</td> </tr> <tr> <td>Diamond</td> <td>Word value</td> <td>\$8,000</td> <td>\$8,000</td> <td>\$8,000</td> </tr> <tr> <td>Gold</td> <td>Numeric pattern</td> <td>\$6,000</td> <td>\$4,500</td> <td>\$4,500</td> </tr> <tr> <td>Opal</td> <td>Word value</td> <td>\$2,400</td> <td>\$1,500</td> <td>\$1,500</td> </tr> <tr> <td>Silver</td> <td>Numeric pattern</td> <td>\$1,200</td> <td>\$750</td> <td>\$750</td> </tr> <tr> <td>Other</td> <td>Low/no pattern or value</td> <td>\$400</td> <td>\$250</td> <td>\$250</td> </tr> </tbody> </table> <p>If there are multiple smartnumbers in the application then the application charge will be the summation of all individual smartnumber prices.</p>	Categories	Basis of charge	13 charge	1300 charge	1800 charge	Platinum	Numeric pattern	\$16,000	\$20,000	\$20,000	Diamond	Word value	\$8,000	\$8,000	\$8,000	Gold	Numeric pattern	\$6,000	\$4,500	\$4,500	Opal	Word value	\$2,400	\$1,500	\$1,500	Silver	Numeric pattern	\$1,200	\$750	\$750	Other	Low/no pattern or value	\$400	\$250	\$250
Categories	Basis of charge	13 charge	1300 charge	1800 charge																																
Platinum	Numeric pattern	\$16,000	\$20,000	\$20,000																																
Diamond	Word value	\$8,000	\$8,000	\$8,000																																
Gold	Numeric pattern	\$6,000	\$4,500	\$4,500																																
Opal	Word value	\$2,400	\$1,500	\$1,500																																
Silver	Numeric pattern	\$1,200	\$750	\$750																																
Other	Low/no pattern or value	\$400	\$250	\$250																																
Calculate allocation under special circumstances charge for FLRPRN	<p>The charge will be calculated based on the configured values " FLRPRN allocation under special circumstances" for each number in the application.</p> <p>FLRPRN allocation under special circumstances:</p> <ul style="list-style-type: none"> ▪ FLRPRN special allocation without reservation. ▪ FLRPRN special allocation with reservation. ▪ FLRPRN special allocation with withheld status. ▪ FLRPRN special allocation with withheld extension status. ▪ FLRPRN special allocation with reserve extension status. <p>The total amount of application charge will be visible in the web interface in the review and confirmation steps for an application.</p>																																			

Calculate Smartnumber registration charge	<p>Each smartnumber account application will incur a 'smartnumber account registration fee':</p> <ul style="list-style-type: none"> ▪ The smartnumber client can pay the fee as part of the end-to-end process where they can pay by credit card. ▪ If they do not pay by credit card then the user can still log in to the system and pay the invoice later. ▪ If the smartnumber account is created but the charge is not paid, in that case the user will have restricted access to the system. A user will not be able to use any other part of the system apart from the Finance pay invoice module.
Calculate CSP registration charge	<p>Each CSP account application will incur a 'CSP application registration fee':</p> <ul style="list-style-type: none"> ▪ The CSP can pay the fee as part of the end to end process where they can pay by credit card. ▪ If they do not pay by credit card then the user can still log in to the system and pay the invoice later. ▪ If the CSP account is created but the charge is not paid in that case user will have restricted access to the system. The user will not be able to use any other part of the system apart from the Finance pay invoice module.
Calculate the Mobile number standard allocation charge	<p>The charge for mobile numbers will be per application:</p> <ul style="list-style-type: none"> ▪ If the CSP applies for one or more blocks in one application then charges for the application will remain the same at \$57.00. ▪ So, if 10 blocks are applied as part of a mobile number application, then the charge will be \$57.00. The charge does not change depending on number of blocks in an application.
Calculate the Mobile number special allocation charge	<p>The charge for mobile numbers will be per application:</p> <ul style="list-style-type: none"> ▪ If the CSP applies for one or more blocks in one application then charge for the application will remain the same at \$57.00. ▪ So, if 5 blocks are applied as part of a mobile number special application, then the charge will be \$57.00. The charge does not change depending on number of blocks in an application.
Calculate the Geo number allocation charge	<p>The charge for Geographic number will be per application and does not vary depending on the number of blocks applied through the application:</p> <ul style="list-style-type: none"> ▪ If the CSP applies for one or more blocks in one application, then the charge for the application will remain the same at \$57.00. ▪ So, if 100 blocks are applied as part of a Geographic number application then also the charge will be \$57.00. The charge does not change depending on number of blocks in an application.
Calculate the Other number allocation charge	<p>The charge for Other numbers will be per application, exactly similar to Mobile and Geographic:</p> <ul style="list-style-type: none"> ▪ If the CSP applies for one or more blocks in one application, then the charge for the application will remain the same at \$57.00. ▪ So, if 10 blocks are applied as part of a mobile number application, then the charge will be \$57.00. The charge does not change depending on number of blocks in an application.

15.3 Pay by credit card

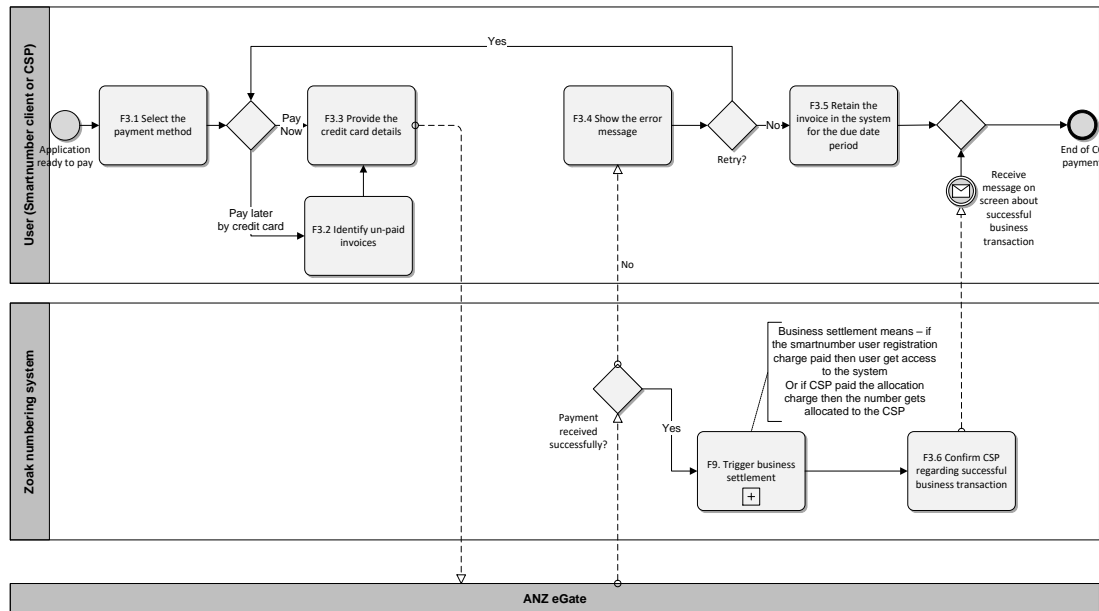


Figure 4.3: Pay by credit card

Activity	Business rules
Select the payment method	<p>After the application is successfully submitted and the charge is created by the system, the user provide the 'Pay now' or 'Pay later' option:</p> <ul style="list-style-type: none"> "Pay now" option is the recommended option as it secures the numbers or creates the registration immediately upon a successful payment. If a user selects 'Pay now' the user will be automatically routed to the 'Payment by credit card' – via the ANZ eGate.
Identify un-paid invoices	<p>The user (CSP / smartnumber client) chooses to pay later and then coming back to pay by credit card they will need to search for the invoices in their account:</p> <ul style="list-style-type: none"> The user will be able to select the invoices with the following criteria: <ul style="list-style-type: none"> Invoice number Date of invoice creation Invoice status Fee type associated (Allocation charge, Transfer charge etc) The user must be able to view the PDF and HTML copy of the invoice. The user must be able to download the PDF. The user must be able to select the invoice and opt to 'Pay by credit card'.

Provide the credit card details	<p>When a user selects 'Pay now' then the Numbering system will redirect them to the ANZ eGate payment portal.</p> <p>The invoice number and the payment amount will be pre-populated and read only.</p> <p>The other details needed to be provided are:</p> <ul style="list-style-type: none"> ▪ Name on the credit card ▪ Credit card number ▪ Expiry date ▪ CVV number <p>The Numbering system will not store any details about the credit card in its server or database.</p> <p>After redirecting to the ANZ payment portal all the validations are performed by ANZ and the system has no control on the same.</p>
Confirm CSP/EROU holder regarding successful business transaction	<p>ANZ will process the payment and when the processing is successful the user will see a confirmation of the payment.</p> <p>User will be then be re-directed from the ANZ to the Numbering system.</p>
Trigger business settlement	<p>Upon receiving the success message the business settlement is triggered (covered in a separate process).</p> <p>If it's an allocation request then the numbers will get allocated, if it's a registration request then the account will get Registered.</p>
Show the error message	<p>If ANZ eGate validation fails then the payment processing will not be successful and the user must be notified on the screen that the payment is not successful.</p>
F3.5 Retain the invoice in the system for the due date period	<p>When the payment via credit card method failed then the invoice is not cancelled rather the invoice is retained for the pay later option.</p> <p>The invoice is kept for the invoice due date period.</p> <p>After the Due date is crossed then the invoices are cancelled.</p> <p>The user will be notified in case their invoice is cancelled.</p>

15.4 Pay later – BPAY/EFT

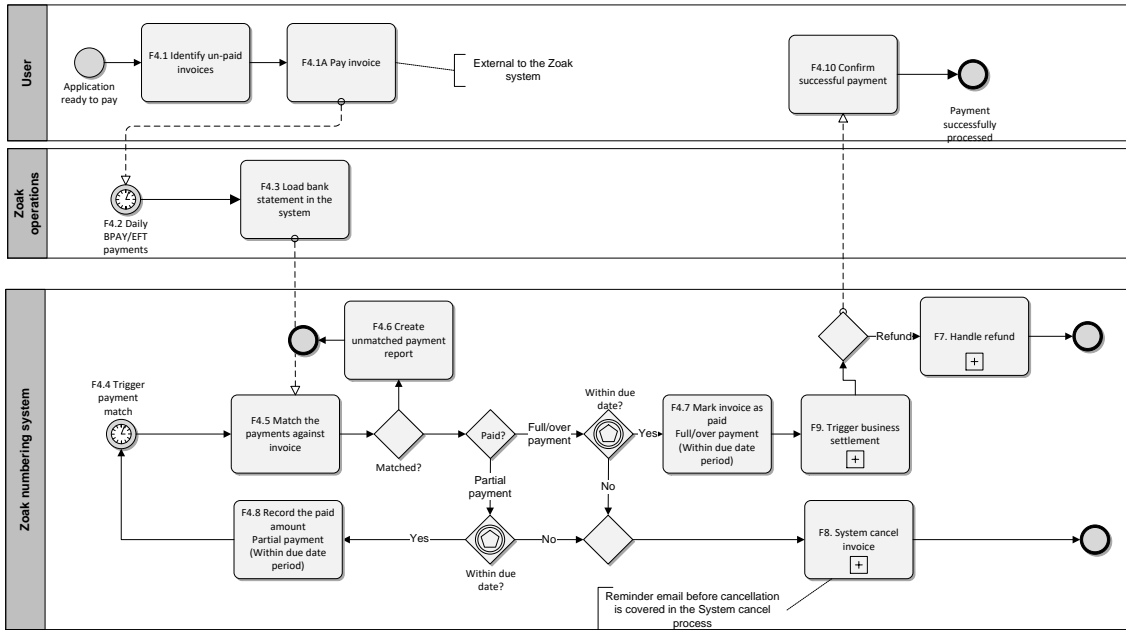


Figure 4.4: Pay later – BPAY/EFT

Activity	Business rule
Identify unpaid invoices	<p>The user must be logged in to the system. The user will be either a CSP or the EROU applicant.</p> <ul style="list-style-type: none"> To pay later, the user will need to search for the invoices in their account. The user will be able to select the invoices with the following criteria: <ul style="list-style-type: none"> Invoice number Date of invoice creation Invoice status Fee type associated (Allocation charge, Transfer charge, etc) User must be able to view the PDF, HTML copy of the invoice. User must be able to download the PDF. User may be able to print the HTML version from the browser depending on browser.

<p>Daily BPAY/EFT payment</p>	<p>A ZOAK operations' user has to setup login credentials to access ACMA's bank look-in interface.</p> <p>Once a day, a ZOAK operations' user will extract the bank statement using the ACMA look-in interface by downloading the TRANSCSV.</p> <p>Sample format of ANZ Transactive bank account file downloaded via CSV:</p> <ul style="list-style-type: none"> ▪ Column A is the Transaction date (Tran Date on bank statement) ▪ Column B is the Account Number from the bank statement ▪ Column C we do not use this information ▪ Column D we do not use this information ▪ Column E is the Account Name from the bank statement ▪ Column F is the currency ▪ Column G is blank ▪ Column H is the Transaction Type (Tran Type on bank statement) ▪ Column I is the reference from the bank statement ▪ Column J is the amounts (you will see that Line 7 is the sweep amount debited to Department of Finance due to being administered; this will be similar to the Numbering Revenue account). ▪ Column K is the Narrative from the bank statement ▪ Column L – O is not used
<p>Load Bank statement in the system</p>	<p>The Numbering system will provide file upload functionality to ZOAK operations:</p> <ul style="list-style-type: none"> ▪ The file will be in 'CSV' format. ▪ ZOAK finance will upload the file 'as is'.
<p>Trigger payment match</p>	<p>The Numbering system will build a job which will run at a frequency configured at greater or equal to once per day, and will identify the bank statement for that particular day.</p> <p>The bank statement identified for that day will be matched against the invoices.</p>
<p>Match the payments against invoice</p>	<p>Each transaction of the identified bank statement for that particular day will be matched against the un-paid invoices.</p> <p>First the system will identify the payment method following the rules:</p> <ul style="list-style-type: none"> ▪ Column H: Trans type: BPAY CARD > Payment method = BPAY ▪ Column H: Trans type: POS CR > Payment method = Credit card (column K will always have "ANZ EFTPOS ACMA POS<merchant Id>" ▪ Column H: Trans type: Transfer or INTERNET or GOMONEYPAY > EFT ▪ Column H (for international transfer): There will be two rows in the file – 1) DEBIT, 2) BOOK TFR ▪ Column H: DEPOSIT > Payment Method = "Unknown" <p>The automatic match process will have the following rules:</p> <ul style="list-style-type: none"> ▪ If the Transaction file contains any of the Trans types (mentioned above) and column I contains the invoice, the Numbering system automatically matches and settles the invoice when applicable. ▪ For any other Trans type or/and when an invoice number is not found in the system, then we keep it for manual reconciliation. ▪ System does not process any negative payments in the system. ▪ Column I in ANZ Transactive which contains the payment reference -> system will strip out. <p>The bank transaction report will be marked as 'Matched' when system finds a match with the exact invoice number</p>

Create unmatched payment report	<p>System creates a bank transaction report indicating which transactions are 'Unmatched'.</p> <p>The format will be:</p> <ul style="list-style-type: none"> ▪ Date of transaction ▪ Payment method ▪ Transaction reference (should contain the invoice number) ▪ Amount paid ▪ Account name ▪ Status
Mark invoice as paid Full/over payment (Within due date period)	<p>System checks the payment amount received against each invoice and whether the payment is received within the due date:</p> <ul style="list-style-type: none"> ▪ Record the payment amount. ▪ Updates the outstanding balance to 0. ▪ Mark the invoice as paid.
Record the paid amount Partial payment (Within due date period)	<p>System checks the payment amount received against each invoice and whether the payment is received within the due date.</p> <p>Record the payment amount.</p> <p>Retain the invoice as 'Pending payment'.</p>
Trigger business settlement	<p>When the full payment is received the system will trigger business settlement i.e. allocate numbers, etc.</p>
Handle refund	<p>Refund will be elaborated as part of the 'Handle refund' process.</p> <p>There will be no automatic refund triggered by the Numbering system.</p>
Confirm successful payment	<p>After payment the Invoice will be marked as 'Tax invoice' and will be accessible from an account.</p>
System cancel invoice	<p>When an invoice is unpaid and the due date is crossed, in that case the system cancels invoice - covered in detail in a separate process.</p>

15.5 Post payment

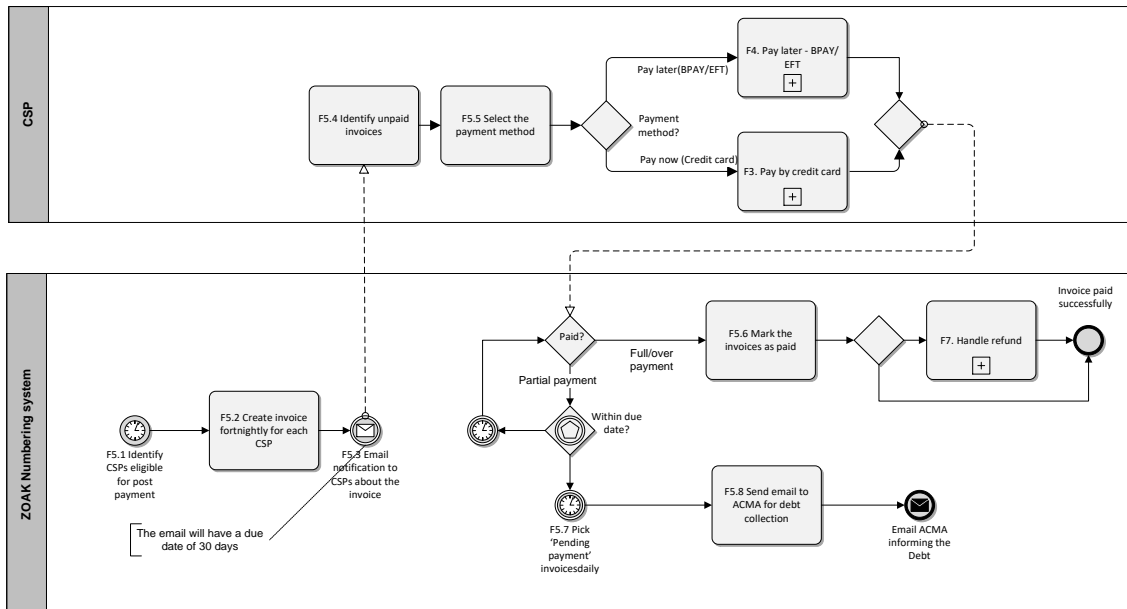


Figure 4.5: Post payment

Activity	Business rule
Identify CSPs eligible for post payment	ACMA will provide a list of CSPs which are eligible for post payment. The system will set up the static lookup with those CSPs before go-live.
Create invoice fortnightly for each CSP	<p>System will set-up a fortnightly batch job for identifying the charges created for the fortnight for each CSP listed for post payment.</p> <ul style="list-style-type: none"> Always created as Tax invoice. <p>Post-payment will be applicable to the following scenario:</p> <ul style="list-style-type: none"> FLRPRN allocation to CSP (Freephone Local Rate Premium numbers business processes v1.0 – Allocation). Smartnumber allocation to CSP (reference smartnumbers’ business processes v1.0 – Allocation of smartnumbers to CSPs). <p>The fortnightly invoice will contain all the charges mentioned. The invoice structure is decided to have the following details:</p> <ul style="list-style-type: none"> A summary page – which includes the total outstanding amount and the payment methods described. Due date of 30 days. Next pages will have the breakdown of charges based on application. <p>Generate separate invoices based on all transactions for a specific service type for a CSP:</p> <ul style="list-style-type: none"> One invoice for all free phone transactions (includes S#). One invoice for all local rate transactions (includes S#). One invoice for all Premium rate transactions (includes S#). <p>There will be no invoice in case of no charge.</p> <p>In case of post payment, the allocation will not be held up for payment they will go through considering full payment received and the invoices will be managed separately.</p>

Email notification to CSPs about the invoice	<p>CSPs has to be notified about the invoice.</p> <p>Email notification will be going out to CSP with the following details:</p> <ul style="list-style-type: none"> ▪ The total outstanding amount ▪ Due date ▪ Invoice as link <p>The email will go user/groups based on the following rule:</p> <ul style="list-style-type: none"> ▪ Create 'Permission' specifically related to Finance. ▪ Account admin (master user) decides which user will have permission to the 'following categories': <ul style="list-style-type: none"> ▫ Freephone invoice notification ▫ Local rate invoice notification ▫ Premium rate invoice notification ▪ The users who has permission to 'Finance' only they receive the email about invoice and they can only see the invoices.
Identify unpaid invoices	<p>The CSP must be logged in to the system.</p> <p>CSP will need to search for the invoices in their account. User will be able to select the invoices with the following criteria:</p> <ul style="list-style-type: none"> ▪ Invoice number ▪ Date of invoice creation ▪ Invoice status ▪ Fee type associated (Allocation charge, Transfer charge etc)
Select the payment method	<p>CSP must select an invoice which they want to pay.</p> <p>If the CSP selects 'Pay now' then CSP will be re-directed to the 'Pay by credit card process'.</p> <p>If CSP does not select the 'Pay now' then CSP can pay by BPAY/EFT offline.</p>
Pay later – BPAY/EFT	Reference – Pay later BPAY/EFT.
Pay now – Credit card payment	Reference – Pay now- credit card payment.
Mark invoices as paid	<p>The payment is received via either Credit card / BPAY /EFT the invoice will be marked as 'Paid'.</p> <p>The outstanding balance of the invoice should be updated with \$0.</p> <p>Calculate if the invoice is overpaid and then calculate the refund amount.</p>
Handle refund	<p>The refund amount will be notified to ACMA and ACMA will arrange for refund.</p> <p>Elaborated more in 'Handle refund' sub-process.</p>
Pick 'Pending payment' invoices daily	<p>A batch job is configured to run daily to identify the 'Pending payment' invoices categorised for 'Post payment' which are not paid or partially paid and their due date is over.</p> <p>The batch job will consolidate the following details:</p> <ul style="list-style-type: none"> ▪ Account name ▪ Invoice number ▪ Payment amount ▪ Due date ▪ Outstanding amount
Send email to ACMA for debt collection	<p>The email will be sent daily after the above batch job is completed producing the report.</p> <p>The email provides the list of invoices.</p>

15.6 Reconcile receipts (manual process)

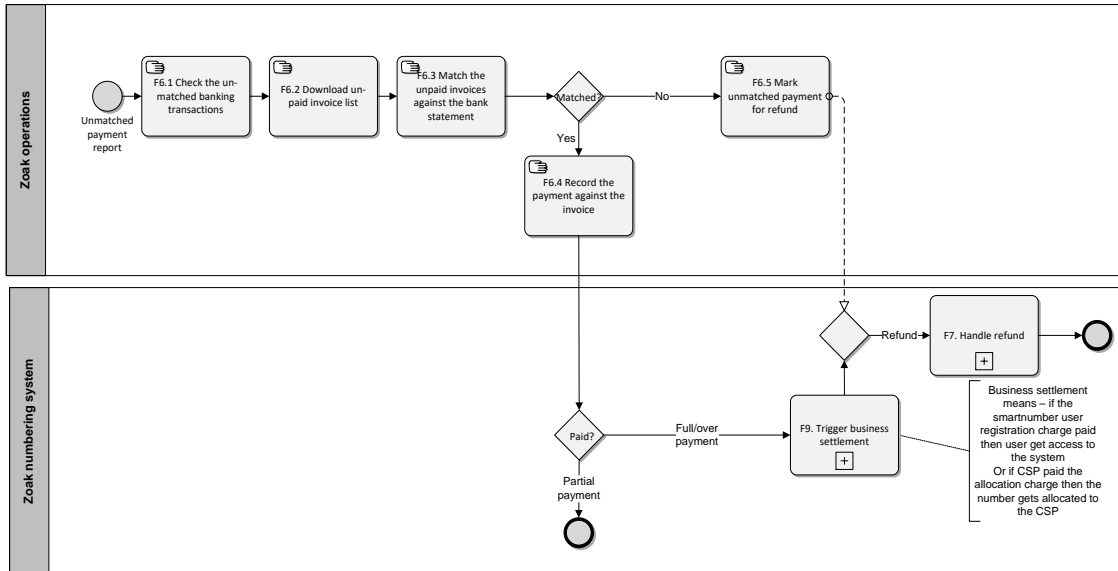


Figure 4.6: Reconcile receipts

Activity	Business rule
Check the un-matched banking transactions	<p>System will produce the unmatched payment report as part of the 'Pay later - BPAY/EFT sub-process'.</p> <p>This unmatched transaction will work as an input for the manual reconciliation.</p> <p>The details to be included:</p> <ul style="list-style-type: none"> ▪ Date of transaction ▪ Payment method ▪ Transaction reference (should contain the invoice number) ▪ Amount paid ▪ Status (the status will indicate whether system was able to match the payments)
Download un-paid invoice list	<p>ZOAK finance users must be logged in to the system.</p> <p>They can search invoices with the following criteria:</p> <ul style="list-style-type: none"> ▪ Account number ▪ Invoice number ▪ Date of invoice creation (date range) ▪ Invoice status ▪ Fee type associated (Allocation charge, Transfer charge, etc) ▪ Overdue (Yes/No) <p>User will be able to download the list of invoices for the manual reconciliation.</p> <p>The details which will be displayed in the search result and in the download are:</p> <ul style="list-style-type: none"> ▪ Invoice number ▪ Fee type associated ▪ Invoice status ▪ Invoice date ▪ Total amount ▪ Outstanding amount ▪ Method of payment

Match the payments against invoice	The banking transactions in the Un-matched report will be compared with the downloaded invoice list produced by 'Download un-paid invoice list'.
Record the payment against each invoice	When a match is found then user will manually select an invoice from the web browser and will record the payment amount, date and the method of payment.
Trigger business settlement	When full payment is received by the system then the invoice will be 'Paid' and the associated settlement will be triggered.
Mark unmatched payment for refund	When manual matching could not find a match then ZOAK operations will build a list of unmatched banking transactions.
Handle refund	Handle refund sub-process will be handling the refund by sending a report to the ACMA.
Check the un-matched banking transactions	<p>The system will produce the unmatched payment report as part of the 'Pay later - BPAY/EFT sub-process'.</p> <p>This unmatched transaction will work as an input for the manual reconciliation.</p> <p>The details to be included:</p> <ul style="list-style-type: none"> ▪ Date of transaction ▪ Payment method ▪ Transaction reference (should contain the invoice number) ▪ Amount paid ▪ Status (the status will indicate whether the system was able to match the payments)
Download un-paid invoice list	<p>ZOAK finance users must be logged in to the system.</p> <p>They can search invoices with the following criteria:</p> <ul style="list-style-type: none"> ▪ Account number ▪ Invoice number ▪ Date of invoice creation (date range) ▪ Invoice status ▪ Fee type associated (Allocation charge, Transfer charge, etc.) ▪ Overdue (Yes/No) <p>User will be able to download the list of invoices for the manual reconciliation.</p> <p>The details which will be displayed in the search result and in the download are:</p> <ul style="list-style-type: none"> ▪ Invoice number ▪ Fee type associated ▪ Invoice status ▪ Invoice date ▪ Total amount ▪ Outstanding amount ▪ Method of payment
Match the payments against invoice	The banking transactions in the Un-matched report will be compared with the downloaded invoice list produced by 'Download un-paid invoice list'.
Record the payment against each invoice	When a match is found then a user will manually select an invoice from the web browser and will record the payment amount, date and the method of payment.
Handle refund	Handle refund sub-process will be handling the refund by sending a report to the ACMA.

15.7 Handle refund

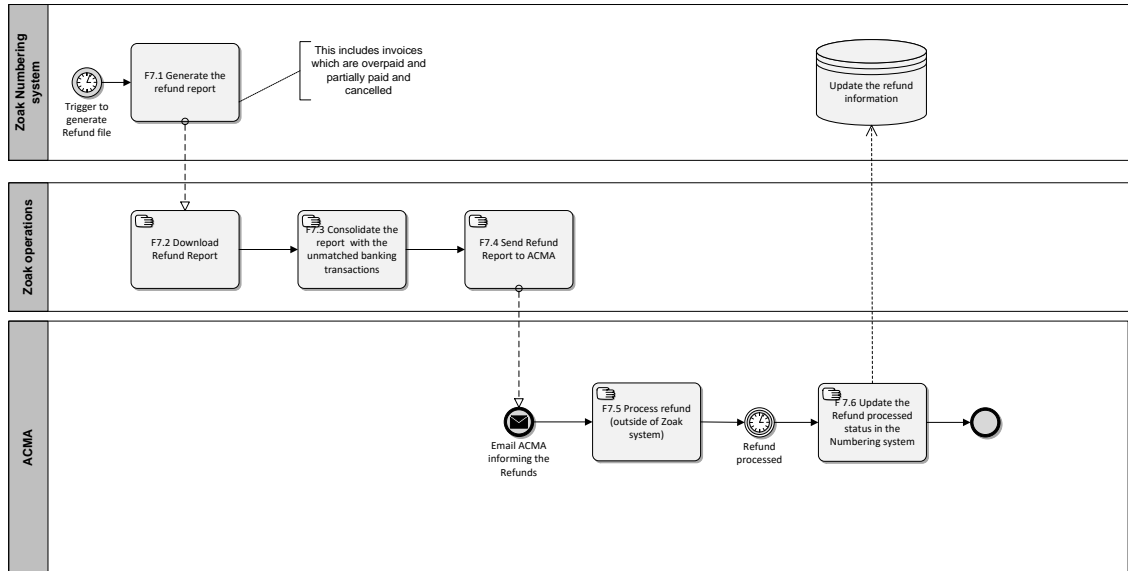


Figure 4.7: Handle refund

Activity	Business rule
Generate refund report	<p>The refund report will be generated by the system on a demand basis and in real time for a period of the transaction date specified.</p> <p>The report will contain a list of all invoices which are either overpaid or partially paid but then cancelled because of 'System cancel invoice' process.</p> <p>The structure of the report is:</p> <ul style="list-style-type: none"> ▪ Invoice number ▪ Refund amount ▪ Refund category (Refund category can have two types – Overpaid/Cancelled partially paid) <p>This report will then be available in the ZOAK operations view in the web portal with the date when the report was generated.</p>
Download the refund report	<p>ZOAK operations can download the refund report for a particular day from the web portal.</p> <p>Only ZOAK operations with specific permissions can perform the tasks.</p> <p>Note: This activity is manual.</p>
Consolidate the report with the unmatched banking transactions	<p>ZOAK operations will consolidate this report and the 'Unmatched banking transactions' to produce a final refund report.</p> <p>The weekly version of this report will be maintained outside of the system.</p>
Send refund report to ACMA	<p>The ZOAK finance team will send the weekly consolidated refund report to ACMA.</p>
Update the Refund processed status in the Numbering system	<p>The system provides a UI where ACMA and ZOAK finance users can access and update the refund amount and refund processed status.</p> <p>The invoice is updated to reflect the refund being processed.</p>

15.8 System cancel invoice

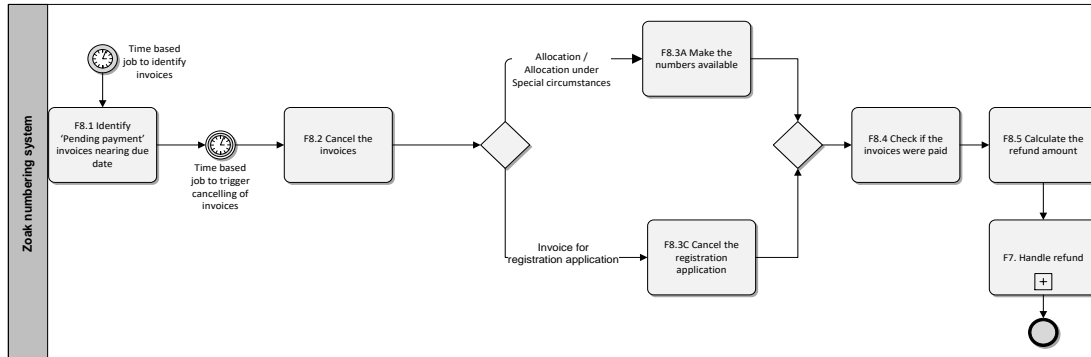


Figure 4.8: System cancel invoice

Activity	Business rule
Identify 'Pending payment' invoices past due date	<p>System identifies the 'Pending payment' invoices with nearing due dates. This process excludes the invoices associated with the 'Post payment' method. This process will take care of the following invoices:</p> <ul style="list-style-type: none"> ▪ Invoices created for smartnumber and CSP account registration. ▪ Invoices created for the FLRPRN, smartnumber, GEO, Mobile and Other number allocation. ▪ Invoices created for smartnumber EROU application.
Cancel the invoice	<p>If any of the identified un-paid invoices are in the above mentioned category when they have crossed the required period. This period will be database configurable (it will be set as 10).</p>
Make the numbers available	<p>The number will be available and will be back to the pool:</p> <ul style="list-style-type: none"> ▪ Invoices created for the FLRPRN allocation > Goes back to 'Available' state and in Admin pool. ▪ Invoices created for the Mobile/Geo/Other number allocation > Goes back to 'Available' state. ▪ Invoices created for smartnumber EROU application > Goes back to 'Available smartnumber' and to 'smartnumber pool' for EROU holder to pick. ▪ Invoices created for smartnumber allocation to CSP > Goes back to 'Assigned smartnumber' and to 'smartnumber pool' for CSP to pick.
Cancel the registration application	<p>For registration application for the CSP and Smartnumber client:</p> <ul style="list-style-type: none"> ▪ The invoice must be cancelled if it crossed due date and still pending payment. ▪ The account should be closed. ▪ If an account is closed then the same entity can re-register again with the same ABN/ACN details. ▪ If an entity comes to register with an ABN/ACN that already belongs to an account which is Active, then the account application will be rejected.
Check if the invoices were paid	<p>Check if any of the invoices which were cancelled were paid. For those invoices, the paid amount should go in 'Refund amount'.</p>

Calculate the refund amount	System calculates the refund amount for the cancelled invoices which are partially paid. This will act as an input for the refund report generation by the system.
Handle refund	The refund amount should be paid back to the end user – handled in the separate process 'Handle refund'.

15.9 Trigger business settlement

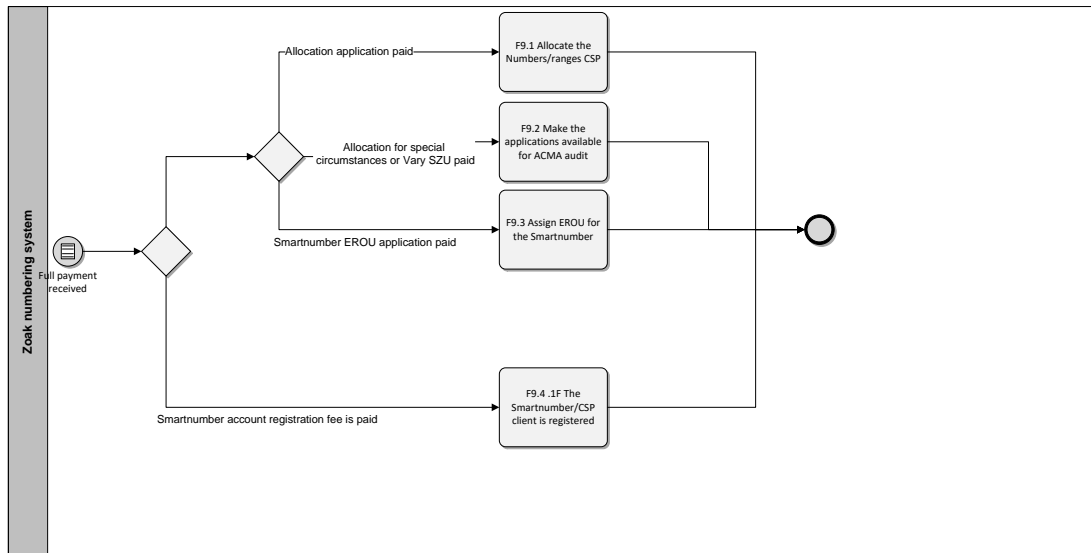


Figure 4.9: Trigger business settlements

Activity	Business rule
Allocation application paid	<p>Upon full payment received on an invoice the number or numbers associated with the invoice will be allocated to the CSP.</p> <p>If an invoice contains fees for the multiple numbers, unless the invoice is fully paid the numbers won't be allocated.</p> <p>Only applicable for the up-front payment scenario.</p>
Make the applications available for ACMA audit	<p>Upon full payment being received for an invoice for FLRPRN/Mobile special allocation or Geo vary SZU application, the application will be considered successful and will be available for ACMA audit.</p> <p>If an invoice contains fees for multiple numbers, the numbers won't be considered for the ACMA audit process unless the invoice is fully paid.</p> <p>Only applicable for the up-front payment scenario.</p>
Assign EROU for the Smartnumber	<p>Upon full payment received on an invoice the EROU for number or numbers associated with the invoice, will be allocated to the smartnumber EROU applicant.</p> <p>If an invoice contains fees for multiple numbers, the numbers won't be allocated unless the invoice is fully paid.</p> <p>Always applicable as smartnumber EROU application should only go through up-front payment scenario.</p>
The Smartnumber/CSP client is registered	<p>Upon full payment of the registration application, the user will be able to have full access to the system.</p>

16 Number Planning

Number planning is the specification and assignment of numbers and establishes the relationships between service types, number definitions, prefixes, standard zone units and numbers.

Prefix definitions are maintained through the number planning functions within the Numbering system. As changes to prefix definitions are infrequent the number planning functions have been scaled back to provide minimal features to support update, release and withdraw prefix definitions as well as to support adding and removing SZUs from local service prefixes.

The major differences between the NUMB and the Numbering system are summarised below:

- No hierarchical relationship between prefix definitions or service type definitions is maintained. Updating a parent prefix definition or service type definition will not cascade down to the child prefixes.
- When assigning a service type to a prefix definition the service types definition are used as a template to assign initial values to the prefix definition.
- Prefix definitions can be updated provided the prefix has not been released. The exception to this rule is the 'Annual numbering charge applies' attribute can be updated at any time.
- When a prefix definition is released the Numbering system determines whether there is sufficient space within the Register of Numbers:
 - No overlapping number ranges can exist.
 - At least one allocation of the standard unit size can be made.
- A prefix can be withdrawn when the entire number range is spare.

16.1 Update Service Type

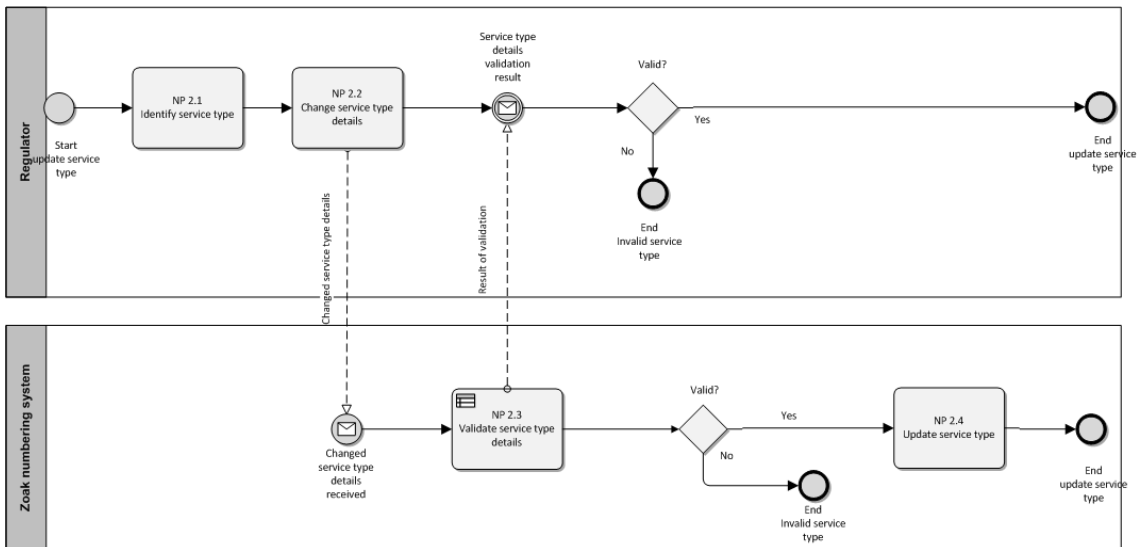


Figure 5.1: Update service type

Activity name	Business rules
Identify service type	Find a service type to modify.
Change service type details	The following attributes of a service type can be modified: <ul style="list-style-type: none"> Geographical service – set to Y if service type is local service, otherwise set to N Number length (mandatory) integer 4 to 15 Standard unit size (mandatory) – one of 1, 10, 100, 1000, 10000, 100000 Reduced unit size – mandatory for geographical and mobile service type Annual numbering charge applies – Y/N (mandatory)
Validate service type details	The following validations are applied: <ul style="list-style-type: none"> A service type can only be created by a Regulator account user that has been granted the number planning role. All mandatory fields are supplied. Reduced unit size is required only for geographic service types. The value provided must be less than the standard unit size.
Update service types	The service type is updated in the Numbering system with the supplied values. Updating a service type will not alter any prefix definitions or allocations associated with the service type.

16.2 Update Prefix

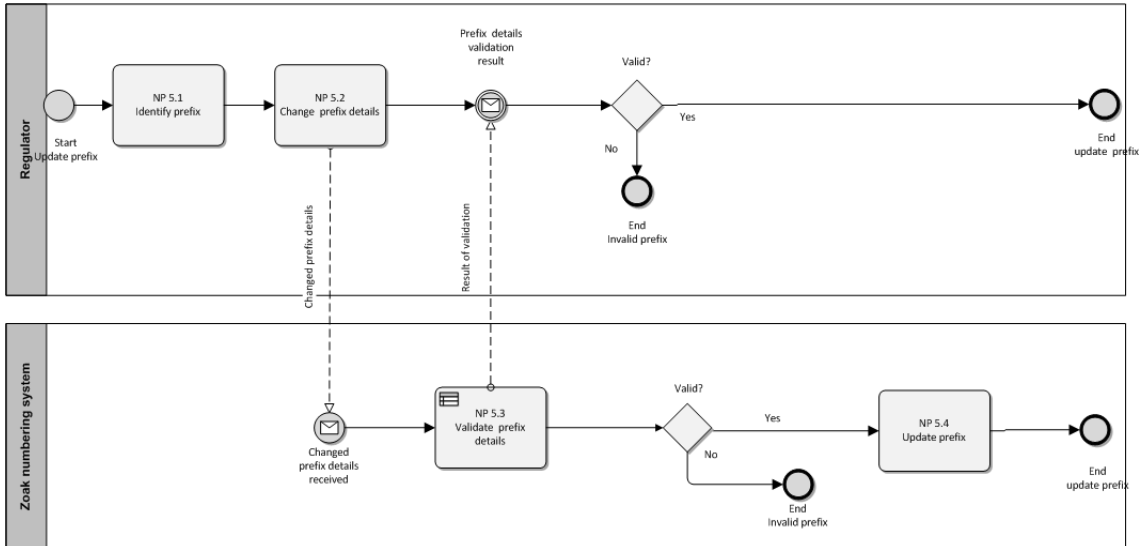


Figure 5.2: Update prefix

Activity name	Business rules
Identify prefix	Find a prefix to modify.
Change prefix details	<p>The following attributes can be modified based on the prefix's status:</p> <ul style="list-style-type: none"> ▪ "Not released" status <ul style="list-style-type: none"> ▫ Service type ▫ Number length ▫ Standard unit size ▫ Reduced unit size (geographic service types only) ▫ Annual numbering charge applies ▪ "Released" status <ul style="list-style-type: none"> ▫ Annual numbering charge applies <p>The following metrics are to be reported for each prefix:</p> <ul style="list-style-type: none"> ▪ Quantity (total quantity numbers released) ▪ Spare ▪ Allocated <p>The totals will include child prefixes i.e., 03 includes 0388 etc.</p> <p>NOTES: Standard unit sizes are unlikely to change in the future. This change will require an update to the Numbering plan. The ACMA will raise a change request as existing allocations using the previous standard unit size will need to be supported.</p>

Validate prefix details	<p>The following validations are applied:</p> <ul style="list-style-type: none">▪ Standard Unit Size – one of 1, 10, 100, 1000, 10000, 100000.▪ The number range must have enough available numbers to satisfy the allocation of the standard unit size (see below).▪ Reduced unit size is required only for local (geographic) service types. The value provided must be less than the standard unit size.▪ Annual numbering charge applies (Y/N) (mandatory). <p>Number range</p> <p>The following rules are applied to calculate the number range based on the entered number length:</p> <ul style="list-style-type: none">▪ The start of the range is the prefix followed by one or more zeros to pad the number out to its number length.▪ The end of the range is the prefix followed by one or more nines to pad the number out to its number length.▪ For example, prefix 0388 has a number length of 10. Therefore, the number range for prefix 0388 is 0388 000000 to 0388 999999. <p>Within a prefix definition, number ranges are permitted to overlap, thus supporting a parent-child relationship where smaller child prefix's number ranges can exist within a parent's prefix's number range. For example, see the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.</p>
Update prefix	<ul style="list-style-type: none">▪ The prefix is updated within the Numbering system.▪ The status of the prefix is not altered.

16.3 Release Prefix

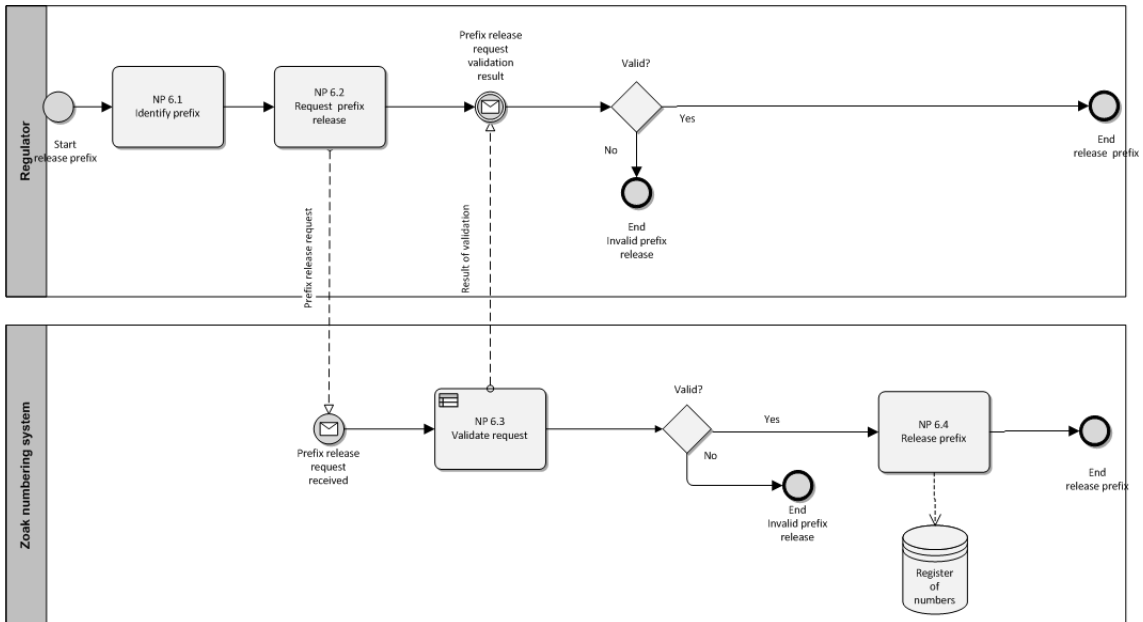


Figure 5.3: Release prefix

Activity name	Business rules
Identify prefix	Find/list the prefix to release.
Request prefix release	Request the selected prefix be released for allocation.
Validate request	<p>To release a prefix the following criteria needs to be satisfied:</p> <ul style="list-style-type: none"> ▪ A prefix can only be released by a Regulator account user that has been granted the Number planning role. ▪ Status of the prefix is "Not released". ▪ For a geographical service type, at least one SZU is assigned to the prefix. ▪ The number range contained in the prefix definition can be created in the Register of Numbers according to the number range rules below. <p>Number ranges rules</p> <ul style="list-style-type: none"> ▪ For a prefix that is a parent prefix: <ul style="list-style-type: none"> ▫ The prefix's number range completely contains any child prefixes number ranges (eg can't split a child prefix number range in half). ▫ Parent prefix number ranges are created (interleaved) around the child prefix number ranges. ▫ For each parent prefix number range the created number ranges can allocate at least a single stand unit size allocation. ▫ Number range must be spare. ▪ For prefix that is child prefix: <ul style="list-style-type: none"> ▫ Fully contained within the parent prefixes number range. ▫ Numbers must be spare. <p>NOTES: Prefixes at the same level in the hierarchy cannot have overlapping number ranges Although prefix definitions overlap the Register of Numbers interpret the prefix definitions to determine number ranges available for allocation, ensuring none of the number ranges overlap.</p> <p>Parent prefixes numbers are made available in the number ranges not used by the child</p>

	prefixes. For example, examine the prefix definition for incoming only international service "12" and operator service "124" and "125" as well as Register of Numbers, to demonstrate how the parent prefixes number ranges fills the number ranges outside the child prefixes number ranges.
Release prefix	<p>The prefix is released in the Numbering system and the following occurs:</p> <ul style="list-style-type: none">▪ The status of the prefix is set to "Released".▪ The prefix is added to the Register of Numbers.▪ The released prefix number range(s) is marked as spare in the Register of Numbers.▪ The released prefix number range(s) is available for allocation through the applicable allocation process.

16.4 Withdraw Prefix

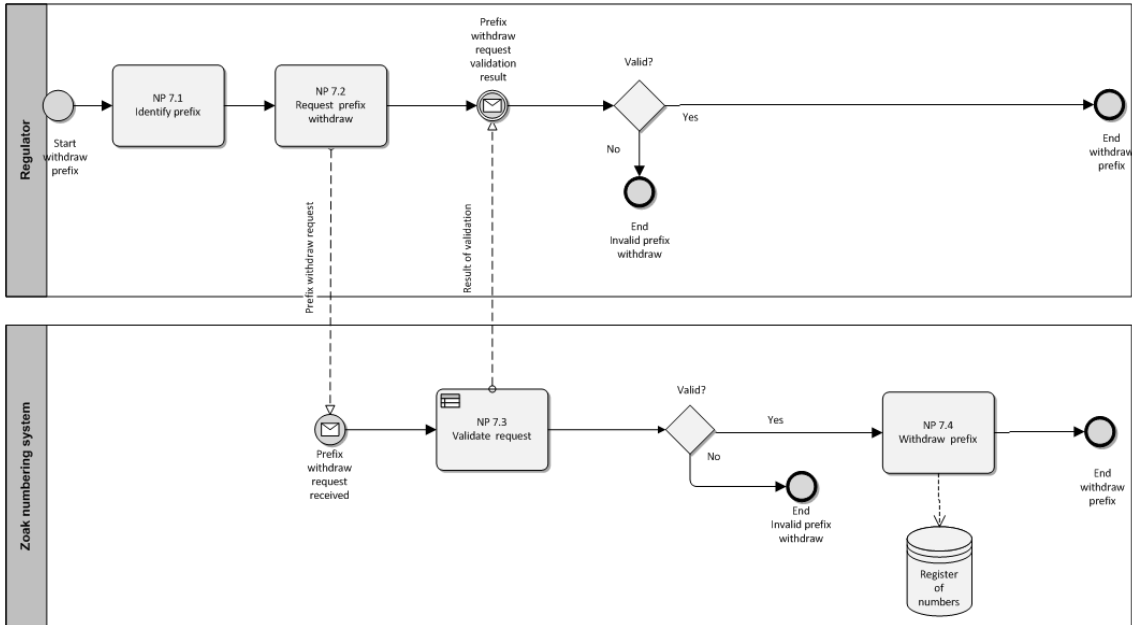


Figure 5.4: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a released prefix to withdraw
Request prefix withdraw	Select the released prefix to be withdrawn.
Validate request	A released prefix can be withdrawn when the following criteria is satisfied: <ul style="list-style-type: none"> ▪ A prefix can be withdrawn by a Regulator account user that has been granted the Number planning role. ▪ All numbers for the prefix are spare. ▪ Status of the prefix is "Released".
Withdraw prefix	The released prefix is withdrawn and the following occurs: <ul style="list-style-type: none"> ▪ The status of the prefix is set to "Not released". ▪ The prefix number range is removed from the Register of Numbers. ▪ The withdrawn prefix number range is not shown in the Register of Numbers. ▪ The withdrawn prefix number range is not available for allocation through the applicable allocation process.

16.5 Add SZU to a Local Service Prefix

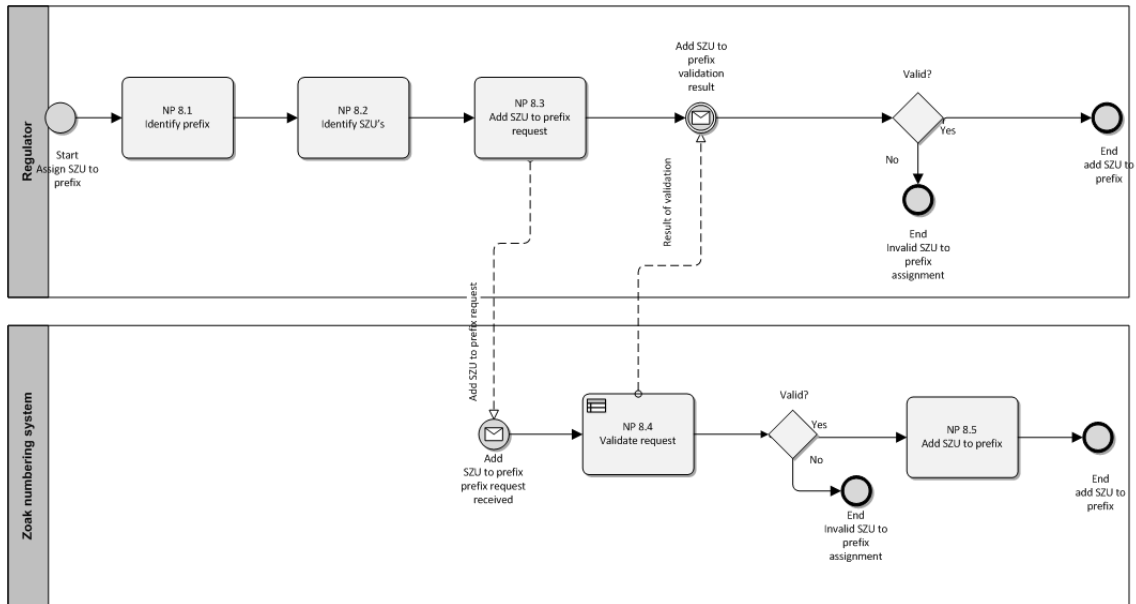


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to add SZUs.
Identify SZUs	Find an SZU to add to the selected prefix.
Add SZU to prefix request	Add one or more selected SZUs to the selected prefix with local (geographic) service.
Validate request	<p>To add an SZU to a prefix defined with local (geographic) service the following validations are applied:</p> <ul style="list-style-type: none"> SZU can be added to a prefix by a Regulator account user that has been granted the number planning role. SZUs can only be added to prefix that has been assigned a local (geographic) service type. SZUs can be added to a prefix regardless of the prefix's status. The same SZU cannot be added twice. A prefix can have multiple SZUs (conversely a SZU can be assigned multiple prefixes). <p>NOTE: Moving a released prefix to another SZU.</p> <p>On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation to the original SZU. All further allocations will indicate allocation to the new SZU.</p>
Add SZU to prefix	<ul style="list-style-type: none"> Link the selected SZUs to the prefix. Numbers can be allocated from the added SZUs.

16.6 Remove SZU from Local Service Prefix

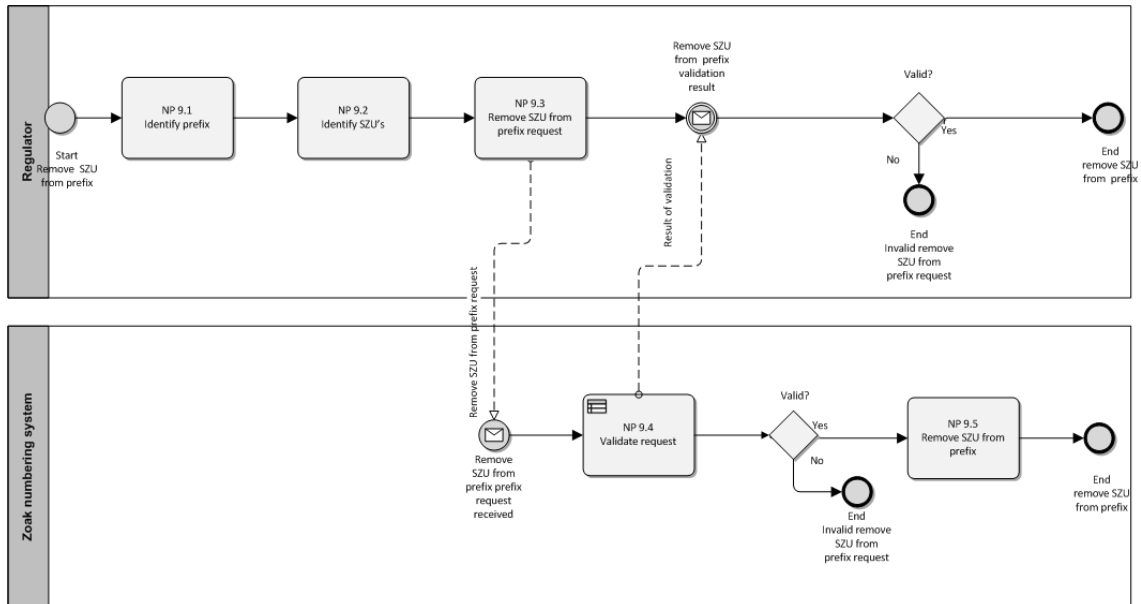


Figure 5.5: Withdraw prefix

Activity name	Business rules
Identify prefix	Find a local service prefix to remove SZUs.
Identify SZUs	Identify one or more SZUs to remove from the identified prefix.
Remove SZU from prefix request	Request to remove one or more selected SZUs from the selected prefix.
Validate request	<p>To remove a SZU from a prefix definition with local (geographic) service the following validations are applied:</p> <ul style="list-style-type: none"> ▪ SZU can be removed from a prefix by a Regulator account user that has been granted the number planning role. ▪ SZUs can be removed from a prefix that has been defined as a local (geographic) service type. ▪ SZUs can be removed from a prefix regardless of the prefix's status. ▪ A released prefix must have at least one SZU. <p>NOTE: Moving a released prefix to another SZU. On occasion the Regulator may move a prefix from a SZU to another SZU. Where numbers have been allocated to the original SZU the existing allocations will continue to show the allocation made in the original SZU. All further allocations will indicate the allocation was made to the new SZU.</p>
Remove SZU from prefix	<ul style="list-style-type: none"> ▪ Remove the selected SZUs from the prefix. ▪ Numbers cannot be allocated from the prefix in the removed SZUs.

16.7 Number planning report

Activity name	Business rules
Generate number planning report	<p>ACMA users will be able to access the number planning report which allows ACMA to determine whether a certain prefix belonging to a service type or an entire service type is close to running out of numbers.</p> <p>The report can be generated for a single service type or an individual prefix.</p> <p>The report allows the ACMA to decide when to release more numbers in a certain service type based on the quantity of spare numbers and spare ratio.</p>
View number planning report	<p>The number planning report contains:</p> <ul style="list-style-type: none">▪ Report generated date▪ Report generated by user <p>The columns in the number planning report include:</p> <ul style="list-style-type: none">▪ Service Type▪ Number prefix▪ Quantity of allocated numbers▪ Allocation ratio (%)▪ Quantity of spare numbers (%)▪ Spare ratio (%)

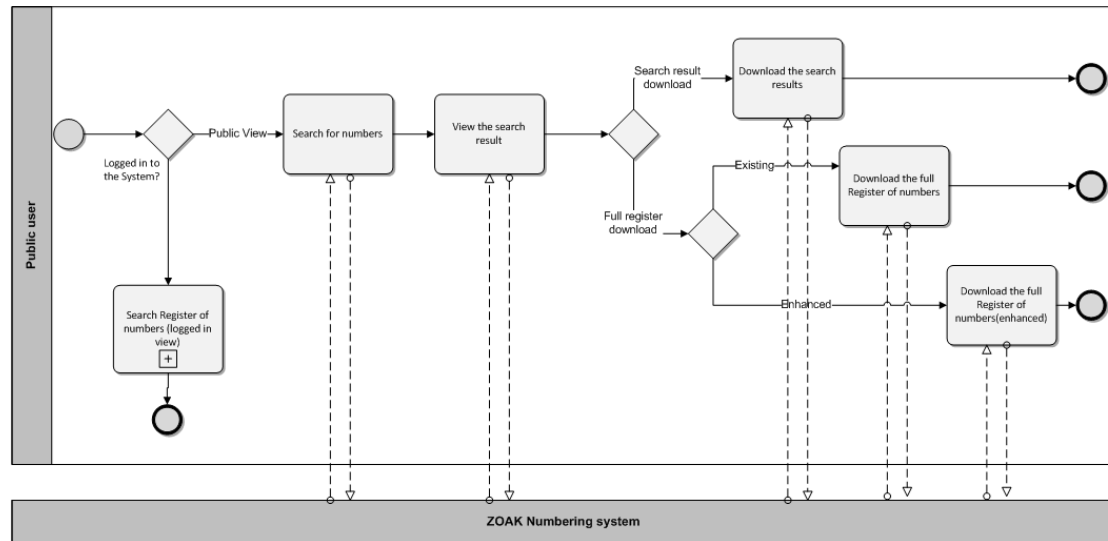
16.8 Geographic numbers planning report

Activity name	Business rules
Generate geographic number report	<p>ACMA users will be able to access the geographic number report which allows ACMA to determine when a certain Standard zone unit (SZU) is close to running out of numbers based on the total prefixes assigned to a specific SZU.</p> <p>The report can be generated for a single SZU or any number of prefixes. Specifying a prefix will produce a report containing all SZU's that the prefix is assigned to and any other prefixes assigned to the same matching SZU.</p> <p>The calculation collects the number of available numbers for a prefix and divides this by the numbers that have been allocated in the last 10 years from the date the report is run. This avoids skewing the results from old allocation patterns and take-up from previous numbering systems.</p> <p>The report allows the ACMA to decide when to release more numbers in a certain SZU based on the expected run out, measured in years.</p>
View geographic number report	<p>The geographic number report contains:</p> <ul style="list-style-type: none">▪ Report generated date▪ Report generated by user <p>The columns in the geographic number report include:</p> <ul style="list-style-type: none">▪ Number prefixes▪ Standard Zone Unit (SZU)▪ Expected prefix run out (years)

17 Register of Numbers

The Numbering system is required by legislation to provide two public registers; The Register of Numbers and Register of smartnumbers (Register of Enhanced Rights of Use). The Register of Numbers shows the availability of all numbers as well as transaction history. The Register of smartnumbers tracks the enhanced rights of use (EROU) holder for a smartnumber.

17.1 Search Register of Numbers (public view)



Note : The register of numbers provides the search facility to search for all numbers to the public user. If the user is logged in to the Zoak numbering system then depends on the permission level they will be able to use the advanced search.
This Register of number also includes the Smartnumber but Register of Smartnumber provides the facility to search for the Smartnumber with reserved price etc.

Figure 6.1: Search Register of Numbers (Public)

Activity name	Business rules
Search for numbers	<ul style="list-style-type: none"> ▪ The search page will be available to the public. ▪ The Register of Numbers will contain all numbers except 'Quarantined' numbers. ▪ A user can search for a number using the following criteria: <ul style="list-style-type: none"> ▫ Number ▫ Number range ▫ Allocation date to/from date range ▫ Number status (Allocated or Spare) ▫ Service type ▫ Allocatee ▫ Current Holder ▫ EROU holder
View the search result	<ul style="list-style-type: none"> ▪ Lists the numbers matching the entered search criteria in the previous activity. ▪ The following fields will be shown for each number returned: <ul style="list-style-type: none"> ▫ Service type ▫ Prefix ▫ Number length ▫ Number range (from) ▫ Number range (to) ▫ Number status (refer to "Number status translation" worksheet) ▫ Quantity ▫ Allocatee ▫ Allocation date ▫ Current holder ▫ Latest transfer date ▫ SZU (only populated for local service numbers)

	<ul style="list-style-type: none"> ▫ Current EROU holder ▫ EROU assignment date <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ Assigned smartnumbers are not aggregated. This permits the EROU holder information to be accessible. ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add SZU. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated.
Download the results	Not implemented
Download the full Register of Numbers	<p>The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers in the same format as the ACMA's NUMB system accessible by the public. The Register of Numbers full download will be kept the exactly same format as provided by the ACMA's NUMB system to maintain backward compatibility with CSP systems. The file name of the download will be "InquiryFullDownload.csv".</p> <p>The columns contained in the download are listed below:</p> <ul style="list-style-type: none"> ▪ Service type ▪ Prefix ▪ Number length ▪ From ▪ To ▪ Quantity ▪ Allocatee ▪ Allocation date ▪ Latest holder ▪ Latest transfer date ▪ Numbering area ▪ Allocatee's exchange service area ▪ IP use ▪ Nomadacity ▪ Declaration <p>Aggregation rules</p> <ul style="list-style-type: none"> ▪ Allocated numbers: <ul style="list-style-type: none"> ▫ All allocations where all the fields are the same should be aggregated. The fields used for aggregation are Service type, prefix, number length, Status, Allocation date, Current holder and last transfer date. For local service numbers add Numbering area and Allocatee's exchange service area. ▪ Spare numbers: <ul style="list-style-type: none"> ▫ All numbers or blocks where the service type and status are the same should be aggregated.

<p>Download the full Register of Numbers (Enhanced)</p>	<p>The Numbering system is to create a downloadable CSV formatted file once per day containing the full contents of the Register of Numbers that is accessible by the public. The columns contained in the download are listed below:</p> <ul style="list-style-type: none">▪ Service type▪ Prefix▪ Number length▪ Number range (from)▪ Number range (to)▪ Number status (refer to "Number status translation" worksheet)▪ Quantity▪ Allocatee▪ Allocation date▪ Latest holder▪ Latest transfer date▪ Current EROU holder▪ EROU assignment date
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17.2 View Allocation History (public view)

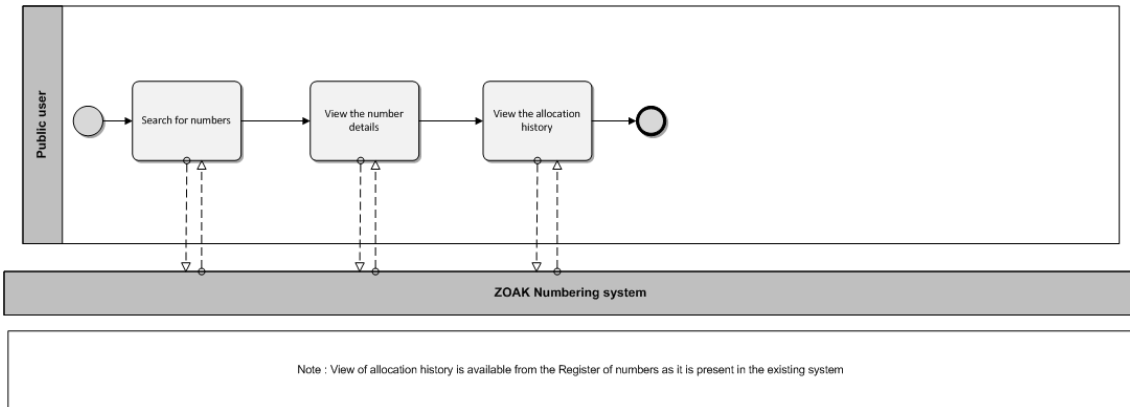


Figure 6.2: View Allocation History (Public)

Activity name	Business rules
Search for numbers	As described in the Search Register of Numbers (public view) “Search for numbers” activity.
View the search result	As described in the Search Register of Numbers (public view) “View the search results” activity.
View the allocation history	<p>The allocation history of numbers must be available to all public users.</p> <p>When a number is selected to view the allocation history, the following details of the number will be shown:</p> <ul style="list-style-type: none"> ▪ Number/Number Range ▪ Quantity ▪ Service type ▪ Prefix/ Length ▪ Current EROU holder (populated only in case of smartnumbers) <p>Transaction history has the following details:</p> <ul style="list-style-type: none"> ▪ Transaction (the list of transaction actions is provided below). ▪ Transaction date (date of the transaction not including time). ▪ Allocatee (the initial CSP to whom a number was allocated – this will be blank when the number is surrendered). ▪ Current holder (CSP holding the number now. In case of initial allocation the Allocatee and the current holder will be the same, only in case of transfer the current holder will be different to the allocatee). <p>The transaction history will list all the following actions:</p> <ul style="list-style-type: none"> ▪ Allocation (including allocation of FLRPRN with Withheld/extended, Reserve/Extended and allocation without reservation and smartnumber allocation to CSP). ▪ Transfer (transfer of FLRPRN and smartnumbers between CSPs). ▪ Surrender (surrender if FLRPRN/smartnumber by CSP). ▪ Withdraw (regulator Withdraw of a FLRPRN/smartnumber from a CSP). ▪ If the number is a smartnumber then the allocation history will keep track of initial CSP allocation and immediate surrender. ▪ Excludes smartnumber EROU assignment, EROU waived and system cancellation of EROU (no active service).

17.3 Search Register of Smartnumbers (public view)

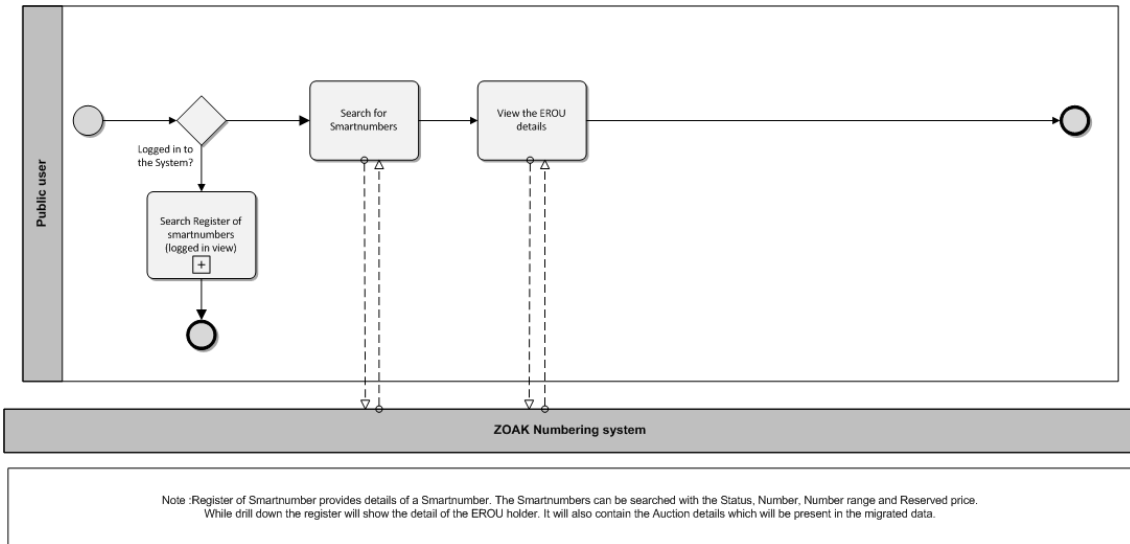


Figure 6.3: Search Register of Smartnumbers (public)

Activity name	Business rules
Search for smartnumbers	<p>A public user will be able to access the Register of smartnumbers (public view) and search for the smartnumbers with the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber ▪ Price – All, \$0 -\$250, \$251 - \$1,000, \$1,001 - \$15,000 and > \$15,001 <p>The search result will contain the following details:</p> <ul style="list-style-type: none"> ▪ Number ▪ Status ▪ Price ▪ Current EROU holder ▪ EROU assignment date

Check the EROU holder details	<p>From the Register of smartnumbers, a public user can access the following information about a smartnumber:</p> <ul style="list-style-type: none">▪ Number▪ Price (reserved price)▪ Status▪ EROU Holder details (the EROU holder can control allowances on the public register):<ul style="list-style-type: none">▫ Name of EROU Holder▫ Australian Business Number▫ Australian Company Number/Australian Registered Body Number (ACN/ARBN)▪ Assignment details:<ul style="list-style-type: none">▫ Type – Auction, Over the counter▫ Date▫ Winning Bidder (Name of account that purchased the number through the ACMA's smartnumber auction system)▫ Winning Amount (the amount the winning bidder paid to acquire the EROU through the ACMA's smartnumber auction system)▫ Initial Allocatee
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17.4 Search Register of Numbers (logged in view)

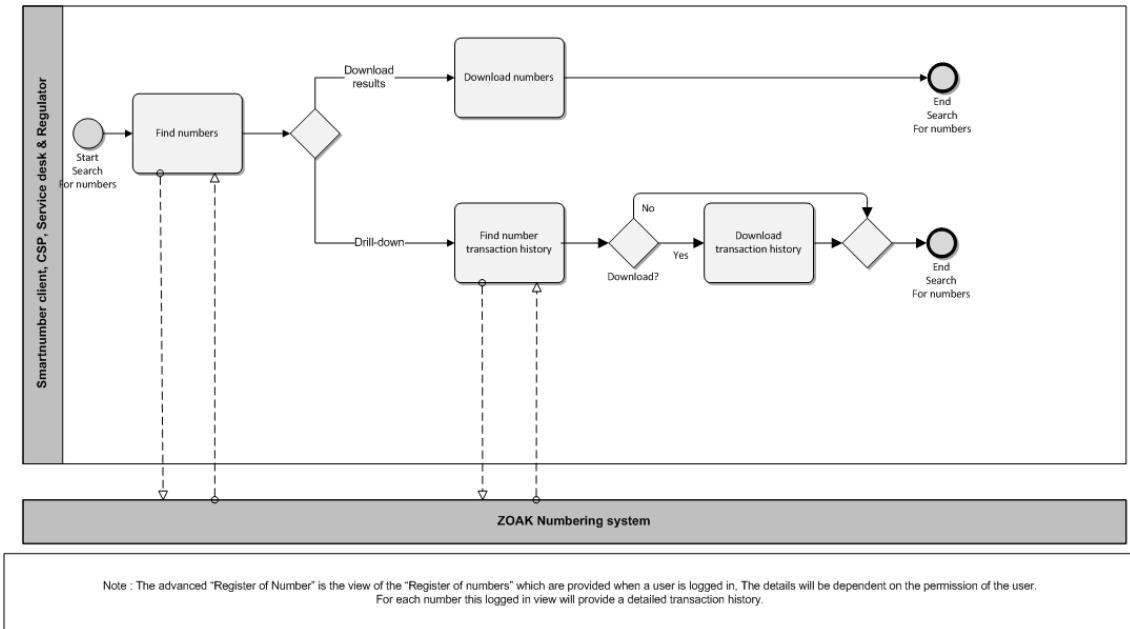


Figure 6.4: Search Register of Numbers (Logged In)

Activity name	Business rules
Find numbers	<p>Can be accessed by a user that is associated with one of either: smartnumber, CSP, Service Desk or Regulator account.</p> <p>The following search criteria is to be provided:</p> <ul style="list-style-type: none"> ▪ Number ▪ Number range To/From ▪ Service type ▪ Allocatee ▪ Current Holder ▪ Allocation date from ▪ Allocation date to ▪ EROU holder ▪ Status: <ul style="list-style-type: none"> ▫ Available ▫ Withheld ▫ Withheld Extended ▫ Reserved ▫ Reserve Extended ▫ Allocated ▫ Quarantined ▫ Available smartnumber ▫ Assigned smartnumber ▫ Allocated smartnumber ▫ Unavailable <p>A user will be able to search for and view number's with a status of Quarantined or Unavailable if the user has been granted the Advanced number search including quarantined numbers.</p>

	The columns shown in the search results is same as the Register of Numbers (public view).
Download the numbers	<p>In the Register of Numbers (logged-in view) three download options will be accessible:</p> <ul style="list-style-type: none"> ▪ Download search result – download the results returned by search into a CSV formatted file. ▪ The full download – the full download will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers"). ▪ The full download enhanced – the full download enhanced will be exactly the same as "Search Register of Numbers (Public view)" ("Download the full Register of Numbers (Enhanced)").
Find number transaction history	<p>Transaction history is a more detailed version of Allocation history and is similar to existing Transaction history provided by INMS system. The transaction history will show any numbering transaction (e.g., allocation) that modifies an attribute (e.g., status) of the number.</p> <p>The following information is recorded for each numbering transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account and username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>The transaction history can be filtered with following criteria:</p> <ul style="list-style-type: none"> ▪ Number ▪ Number range ▪ Service type ▪ Transaction type ▪ Transaction date range (to/from) ▪ EROU Holder ▪ Initiating account (this search filter is available when the user has been granted the Service desk transaction history or Regulator transaction history role) <p>The following information is shown for each transaction:</p> <ul style="list-style-type: none"> ▪ Date and Time the transaction occurred ▪ Transaction Name ▪ Initiating account ▪ Initiating username ▪ Result status ▪ Holder ▪ EROU Holder ▪ SZU <p>Due to privacy, the initiating username is populated for the Regulator, Service Desk and to the users of the account the initiating username belongs too.</p>
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.

17.5 Search Register of smartnumbers (logged in view)

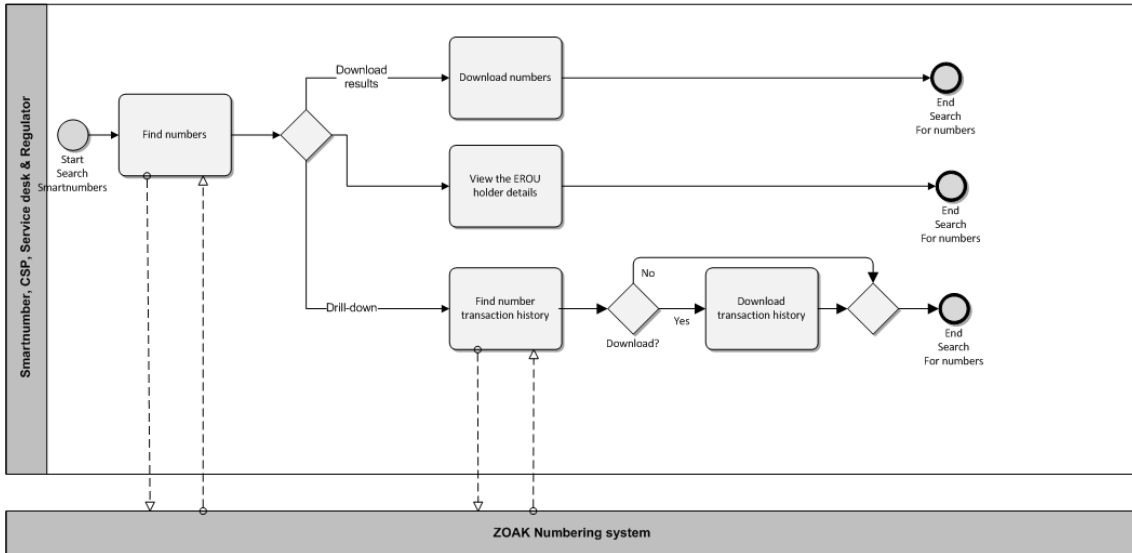


Figure 6.5: Search Register of smartnumbers (Logged In)

Activity name	Business rules
Find numbers	<p>An authenticated user belonging to Smartnumber, CSP, Service Desk or Regulator account will be able to access the Register of Smartnumbers (logged-in view). smartnumbers can searched for using the following search criteria:</p> <ul style="list-style-type: none"> ▪ Prefix 13/1300/1800 <ul style="list-style-type: none"> ▫ Number ▫ Phoneword ▪ EROU Holder ▪ Status – All, Available smartnumber, Assigned smartnumber, Allocated smartnumber, Unavailable. ▪ Price – All, \$0-250, \$251-1,000, \$1,001-15,000 and > \$15,001 <p>The “Include quarantined numbers” role is to be granted to permit a user to search and view “Unavailable” smartnumbers. The search result will contain the following details</p> <ul style="list-style-type: none"> ▪ Number ▪ Status ▪ Price ▪ Current EROU holder ▪ EROU assignment date
Download the numbers	An authenticated user belonging to a smartnumber, CSP, Service Desk or Regulator account can download search results from the Register of smartnumbers to a CSV formatted file.
Find number transaction history	The transaction history will be exactly the same as it is captured in "Search Register of Numbers (Logged in view)" ("Find number transaction history").
Download transaction history	Download the transaction history returned from the find number transaction history and write the transaction history to a CSV file.

View the EROU holder details	<p>From the Register of smartnumbers, a public user can access the following information about a smartnumber:</p> <ul style="list-style-type: none">▪ Number▪ Price (reserved price)▪ Status▪ EROU Holder details (the EROU Holder can control allowance on the public register):<ul style="list-style-type: none">▫ Name of EROU holder▫ Australian Business Number▫ Australian Company Number/Australian Registered Body Number (ACN/ARBN)▫ Trading name▫ Industry type▫ Industry classification▪ Assignment details:<ul style="list-style-type: none">▫ Type - Auction, Over the counter▫ Date▫ Winning Bidder (name of the account that purchased the number through the ACMA's smartnumber auction system)▫ Winning Amount (the amount the winning bidder paid to acquire the EROU through the ACMA's smartnumber auction system)▫ Initial Allocatee
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17.6 Reference

17.6.1 Number status mapping for Register of Numbers

Internal number status	Register of Numbers (public view)	Register of Numbers (logged in view)
Available	SPARE	Available
Withheld	ALLOCATED	Withheld
Withheld Extended	ALLOCATED	Withheld Extended
Reserved	ALLOCATED	Reserved
Reserve Extended	ALLOCATED	Reserve Extended
Allocated	ALLOCATED	Allocated
Quarantined	Not shown in Register of Numbers	Quarantined
Available EROU unassigned	SPARE	Available EROU unassigned
Pending Payment	SPARE	Pending Payment
Assigned Allocated	ALLOCATED	Assigned Allocated
Assigned Unallocated	SPARE	Assigned Unallocated
Unavailable Unassigned Unallocated	Not shown in Register of Numbers	Unavailable Unassigned Unallocated

17.6.2 Transaction mapping for transaction history

Transaction	Appears in transaction history (public view)	Name of transaction as shown in transaction history (public view)
Allocation	Yes	Allocation
Allocation with withheld	Yes	Allocation
Allocation with withheld extended	Yes	Allocation
Allocation with Reserve	Yes	Allocation
Allocation with Reserve extended	Yes	Allocation
Surrender	Yes	Surrender
Automatic system withdraw(for FLRPRN expiring Withheld/Reserve)	Yes	Withdraw
Allocation under special circumstances	Yes	Allocation
System release from quarantine	No	
Transfer	Yes	Transfer
Regulator Withdraw	Yes	Withdraw
EROU allocation	No	

EROU trade	No	
Waiver of EROU	No	
Regulator-cancellation of EROU (False statement)	No	
Cancellation of EROU-no active service	No	

18 Annual Numbering Charge

The Numbering System assists the ACMA in its requirement to annually collect a set amount of revenue from carriage service providers that hold certain types of telephone numbers. This charge is known as the Annual Numbering Charge (ANC).

The following business processes and the rules provide further details about how the Numbering system supports the ANC process.

18.1 Set the ANC Billing Year

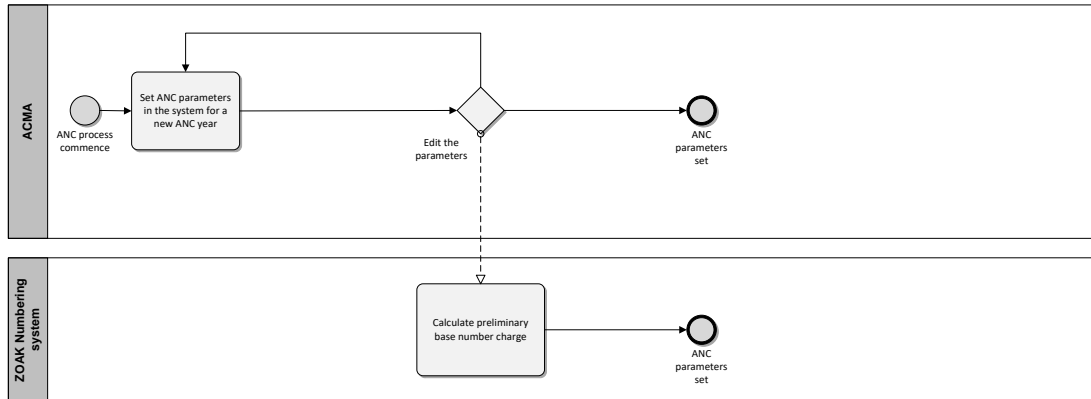


Figure 10.1: Set the ANC Billing Year

Activity name	Business rules
Set ANC parameters in the system for a new ANC year	<p>ACMA will be able to set the following parameters when creating the ANC billing year:</p> <ul style="list-style-type: none"> ▪ Billing year ▪ Census date ▪ Pay by date ▪ Maximum charge ▪ Target revenue <p>Billing year status - the possible values are:</p> <ul style="list-style-type: none"> ▪ New <ul style="list-style-type: none"> ○ Once a billing year has been created it is set to 'New' status. Details of the billing year can be updated. ▪ Published <ul style="list-style-type: none"> ○ A billing year must be set to 'Published' status before the Census date as the system will use the billing year details to calculate the BNC on the Census date. ○ To update the details of a billing year after it is published ACMA must unpublish the billing year to revert back to 'New' status. ACMA can make the required changes before changing the status back to 'Published'. ○ A billing year cannot be unpublished once the Census date has been reached as the BNC is calculated at this point. ▪ Closed <ul style="list-style-type: none"> ○ Setting the billing year to 'Closed' status triggers the generation of the final ANC Statements and invoices. ○ CSPs are notified that ANC Statements and invoices are available.

18.2 Generate the draft ANC statements and distribution report

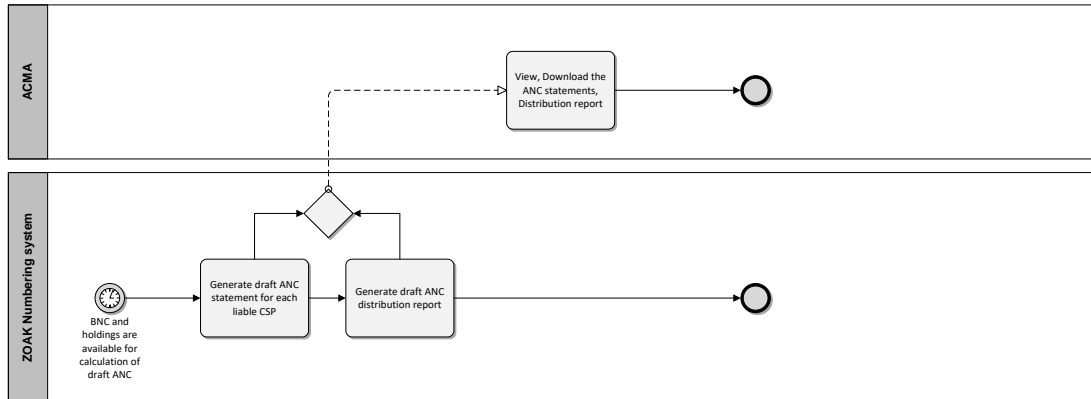


Figure 10.2: Generate the draft ANC statements and distribution report

Activity name	Business rules
Generate draft ANC statement for each liable CSP	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft ANC statements are made available to ACMA and ZOAK.</p> <p>Basic details include:</p> <ul style="list-style-type: none"> ANC Billing year Issue date Due date Total ANC charge <p>The ANC Summary details provide a breakdown of the total ANC for a CSP by service type.</p> <p>The detailed ANC Statement includes:</p> <ul style="list-style-type: none"> Service Type Prefix Charges – Quantity of numbers in a prefix and price per number Total - Total cost of numbers within a prefix
Generate draft ANC distribution report	<p>When ACMA has set the ANC parameters and the BNC is calculated, the draft ANC distribution report is made available to ACMA and ZOAK.</p> <p>The distribution report contains:</p> <ul style="list-style-type: none"> Report generated date Report generated by user ANC Billing year <p>The columns in the distribution report include:</p> <ul style="list-style-type: none"> Holder Service Type Liability (%) Liability amount (AUD) Total Liability of the holder (AUD)
View, Download the ANC statements, Distribution report	<ul style="list-style-type: none"> ZOAK Operations and ACMA are able to view and download the Draft ANC Statements and Distribution report. Draft ANC Statements and Distribution reports reflect the current state of the Register of Numbers in real time. After midnight on the Census date, only the Port out report and Charges redistribution reports will change the distribution of ANC between CSPs.

18.3 Reconcile and finalise the dataset

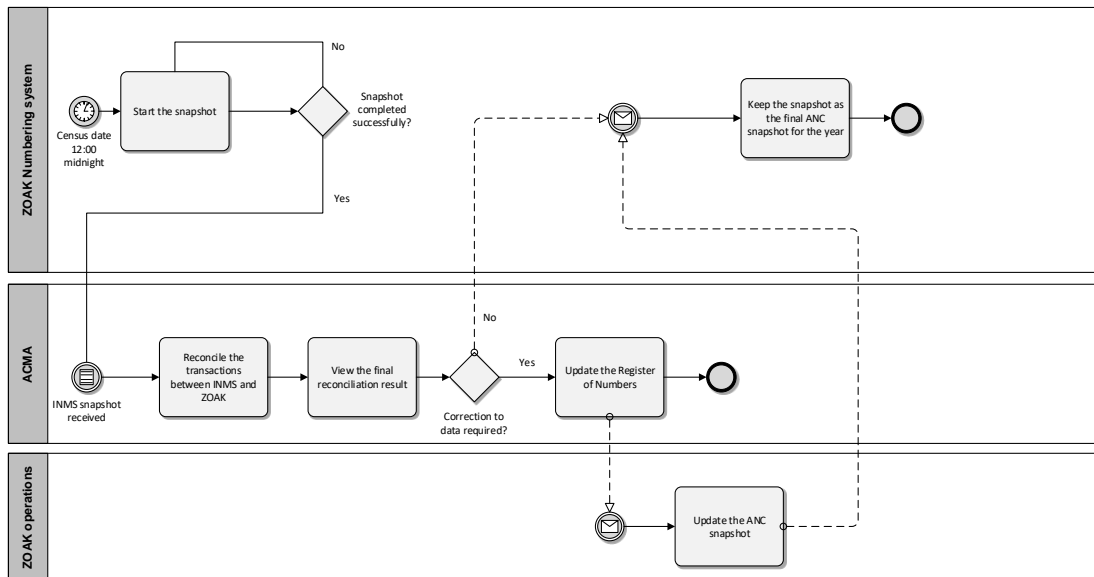


Figure 10.3: Reconcile and finalise the dataset

Activity name	Business rules
Start the snapshot	<p>At 12:00AM Midnight on the Census date, the system takes a snapshot of the entire Register of Numbers which is used to calculate ANC.</p> <ul style="list-style-type: none"> The snapshot includes the state of all numbers at exactly midnight on the Census date. Transactions completed after midnight on the Census date will not be reflected in the snapshot. There is no embargo period, the system will remain online while the snapshot is taken. Each year’s snapshot is stored in the database indefinitely.
Reconcile the transactions between INMS and ZOAK	<ul style="list-style-type: none"> INMS will make available the reconciliation file taken at 01:00AM on the Census date. The daily reconciliation file from INMS (taken on the census date) must be used for the reconciliation. CMA must upload the reconciliation file into the system.
View the final reconciliation result	<ul style="list-style-type: none"> The reconciliation results will display any inconsistencies between ZOAK and INMS.
Update the Register of Numbers and ANC snapshot	<p>If any discrepancies are found which need to be corrected for the year's final ANC then ACMA will inform ZOAK and advise ZOAK about the changes required to the snapshot.</p> <ul style="list-style-type: none"> To update the production database the "Regulator update" function will be used by the ACMA to update the Register of Numbers. ZOAK operations will prepare a script to update the snapshot to reflect the updates made by the ACMA.
Keep the snapshot as the final ANC snapshot for the year	<ul style="list-style-type: none"> This will be treated as the "Final ANC snapshot". ZOAK Operations can provide the ANC snapshot to the ACMA on request.

18.4 Upload Port out and Charges redistribution reports

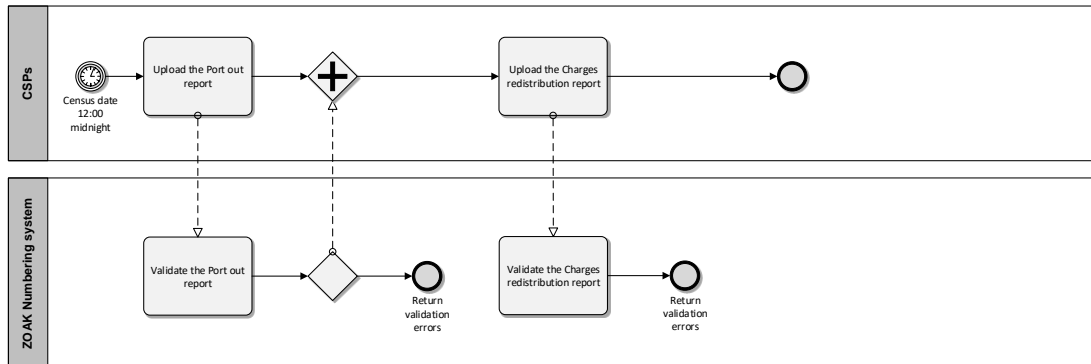


Figure 10.4: Upload Port out and Charges redistribution reports

Activity name	Business rules
Upload the Port out report	<p>A CSP has 17 calendar days from midnight on the Census date to upload the Port out report</p> <ul style="list-style-type: none"> Can be uploaded from midnight on the Census date until midnight on the 17th day. A Port out report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holdings. The report does not change the BNC.</p>
Validate Port out report	<p>The file must be in CSV format and include a header row. Each column heading must be labelled with the heading given in bold and be in the order listed.</p> <ul style="list-style-type: none"> Allocated Prefix - Column 1 - the five digit prefix that numbers have been ported out from. Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers. Held Quantity - Column 3 - the quantity of numbers which have been ported out. The quantity must be at least 1 and not exceed either 100,000 or the total count of numbers held by the CSP in the Allocated Prefix. Reporter - Column 4 - the MNP code of the CSP submitting the report. Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name. Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none"> Each validation error corresponds to the line number in the report. Row 2 for example is the first row of data considering that Row 1 is the header row. Additional information is returned to assist the CSP in correcting their report.
Upload Charges redistribution report	<p>A CSP has 3 days from the end of the 17th day from the Census date to upload the Charges redistribution report.</p> <ul style="list-style-type: none"> A Charges redistribution report can only be uploaded after the period for uploading the Port out report has ended. Can be uploaded from midnight of the 17th day until midnight of the 20th day from Census date.

	<ul style="list-style-type: none">▪ A Charges redistribution report may be uploaded multiple times, the last uploaded report will be treated as final. <p>The report does not update the Register of Numbers or change a CSP's holdings. The report does not change the BNC.</p>
Validate Charges redistribution report	<p>The file must be in CSV format and include a header row. Each column heading must be labelled with the heading given in bold and be in the order listed.</p> <ul style="list-style-type: none">▪ Allocated Prefix - Column 1 - the five-digit prefix that numbers have been ported out from.▪ Holder - Column 2 - the MNP code of the CSP which is to be charged for the numbers.▪ Held Quantity - Column 3 - the quantity of numbers which have been ported out. The quantity must be at least 1 and not exceed either 100,000 or the total count of numbers held by the CSP in the Allocated Prefix, taking into consideration port out reports.▪ Reporter - Column 4 - the MNP code of the CSP submitting the report.▪ Holder Name - Column 5 - the name of the CSP which is to be charged for the numbers. The name of the CSP must be an exact match (including case) of the CSP account name.▪ Reporter Name - Column 6 - the name of the CSP submitting the report. The name of the CSP must be an exact match (including case) of the CSP account name. <p>Validation results are displayed on screen to assist the CSP in correcting the report.</p> <ul style="list-style-type: none">▪ Each validation error corresponds to the line number in the report. Row 2 for example is the first row of data considering that Row 1 is the header row.▪ Additional information is returned to assist the CSP in correcting their report.

18.5 View Portability report and Mobile number holdings statement



Figure 10.5: View the Portability report and Mobile number holdings statement

Activity name	Business rules
View Portability report	<ul style="list-style-type: none"> ▪ ZOAK Operations and ACMA are able to download the Portability report. ▪ The Portability report is a combined list of all Port out and Charges redistribution reports that have been uploaded by CSP's. ▪ Viewing the report allows the ACMA to determine those CSP's who have distributed their mobile number holdings to other CSP's and their resellers. ▪ The Portability report is updated in real time based on CSP activity during the upload period of the Port out and Charges redistribution reports. ▪ The portability report is considered final when the upload period for the Port out and Charges redistribution reports have ended. The portability is then considered as final.
View Mobile number holdings statement	<ul style="list-style-type: none"> ▪ ZOAK Operations, ACMA and CSP's are able to download the Mobile number holdings statement. ▪ The Mobile number holdings statement reflects the state of all held mobile numbers in the system as of midnight on the Census date.

18.6 Close the ANC billing year

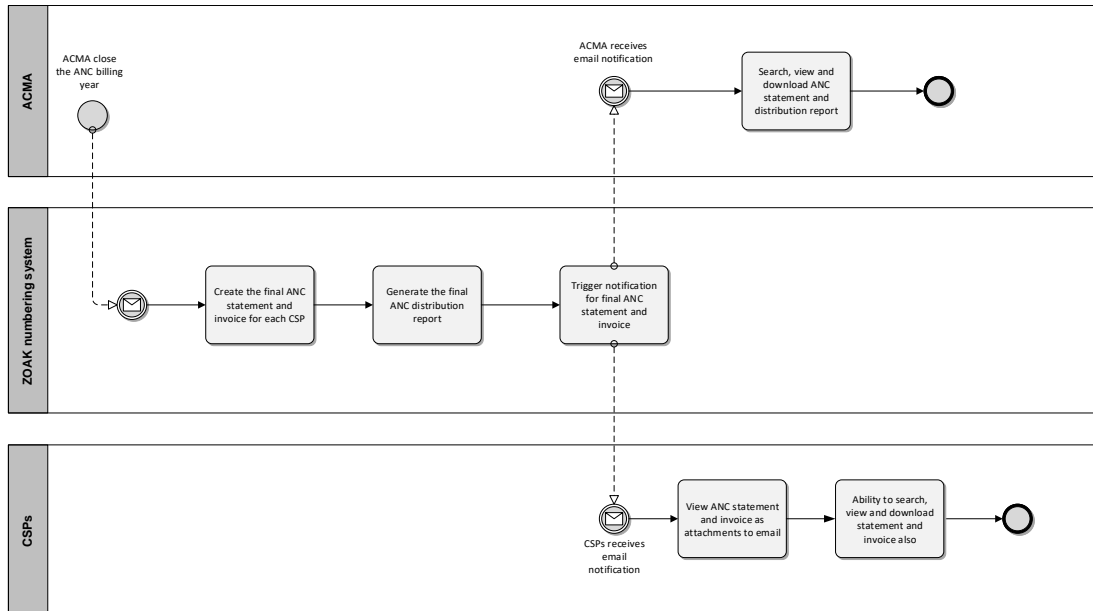


Figure 10.6: Close the ANC Billing Year

Activity name	Business rules
ACMA close the ANC billing year	<p>Setting the billing year to ‘Closed’ status triggers the generation of the final ANC Statements and distribution report.</p> <p>Only ACMA can perform this action.</p> <p>CSPs liable for the charge are provided an email with the ANC Statement and ANC invoices attached. The email includes other important ANC information.</p>
Create the final ANC statement for each CSP	<p>The system generates the final ANC statement for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and applies adjustments from the Port out and Charges redistribution reports.</p>
Generate Final ANC distribution report	<p>The system generates the final distribution report for each CSP.</p> <p>The format is the same as the draft report.</p> <p>The final report uses CSP holdings as of midnight on the Census date and applies adjustments from the Port out and Charges redistribution reports.</p>
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that have the “View my ANC statements” permission checkbox selected) with the ANC Statement and ANC invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements and the final ANC invoices have been issued by the system and ACMA can access these.</p>
View ANC statement and distribution report	<ul style="list-style-type: none"> ▪ ZOAK Operations and ACMA are able to download the final ANC Statements and Distribution report.
CSP view ANC statement	<ul style="list-style-type: none"> ▪ CSPs are able to download their final ANC Statement from the ANC tab if they have the required permissions

18.7 Create final ANC invoice

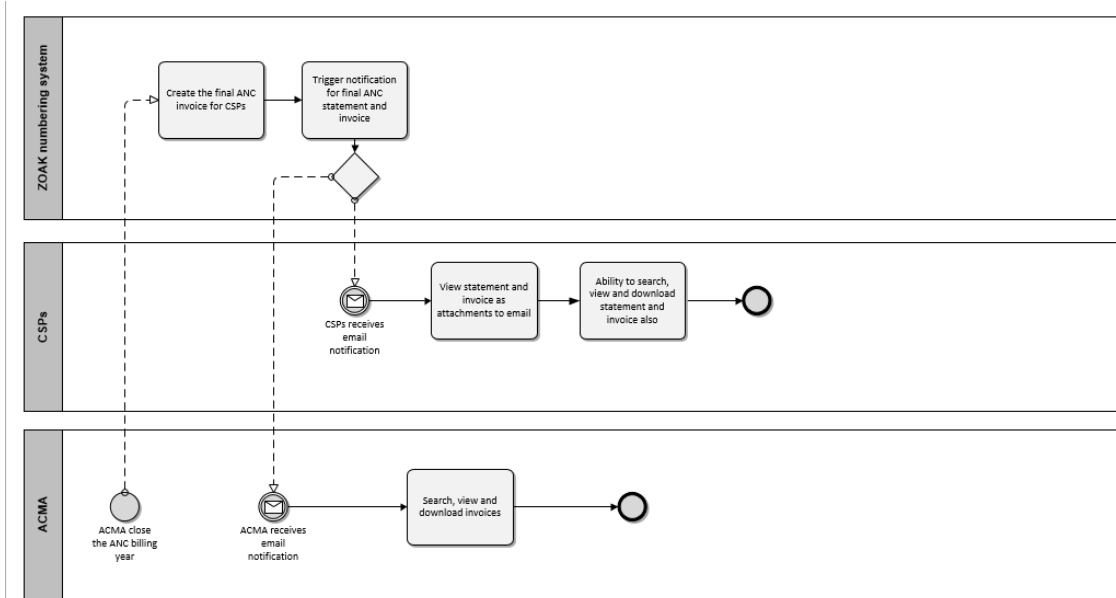


Figure 10.7: Create final ANC invoice

Activity name	Business rules
Create the final ANC invoice for CSPs	<p>Setting the billing year to 'Closed' status triggers the generation of the final ANC invoices.</p> <ul style="list-style-type: none"> The invoice due date will be either the default pay by date as configured when creating the billing year, or 30 calendar days from the day invoice is generated (whichever is greater).
Trigger notification for final ANC statement and invoice	<p>An email is sent to all liable CSPs (both account administrators and users that have the "View my ANC statements" permission checkbox selected) with the ANC Statement and ANC invoices attached along with other important information.</p> <p>A similar email is sent to all ACMA users indicating the final ANC statements and the final ANC invoices have been issued by the system and ACMA can access these.</p>
Search, view and download invoices	<ul style="list-style-type: none"> ACMA and ZOAK Finance will be able to identify the ANC invoices by the fee type 'Annual Numbering Charge' and the creation date. CSPs will be able to view and download their own ANC invoice.

18.8 Record payment against ANC invoices

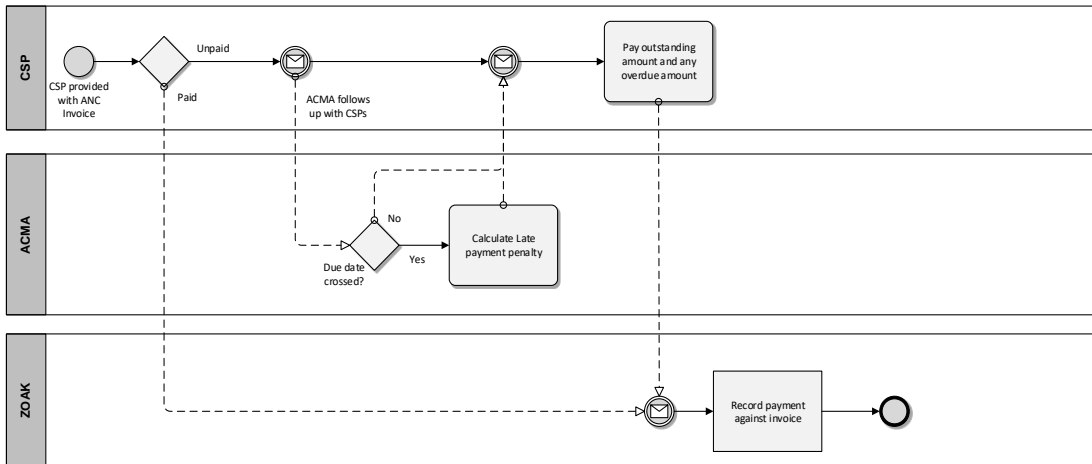


Figure 10.8: Record payment against ANC invoices

Activity name	Business rules
Record payment against invoice	ZOAK Finance will record the payment against each individual ANC invoice which is paid. The late payment penalty is not captured against the invoice in the system.
Capture late payment penalty	Calculation of the late payment penalty is handled by ACMA outside of the system. ZOAK Finance will identify the late payment penalty as an unmatched transaction to be reconciled with ACMA.
Restrict allocation to CSPs when ANC is unpaid	If any CSP account has an overdue ANC invoice (Only after 3 months from the due date) then ACMA can set an allocation override on the account to prevent the CSP from allocating numbers. The CSP is provided with a message upon login to the system to indicate the account has been blocked from applying for allocations of numbers.

Appendix A

Address validation rule for the registration process

This document describes the rules applied to validate addresses captured by the Numbering system. The address validation rules are to be applied consistently whenever the Numbering system is required to capture an address.

Mandatory fields

Address Type	Street Name	Town/ Suburb	State	Postcode	Country
Physical	M	M	M	M	Aus
Physical	M	M			Other than Aus
Postal	M	M	M	M	Aus
Postal	M	M			Other than Aus

M = Indicates mandatory field

Field rules

- Street Name allows printable characters
- Town/Suburb allows printable characters
- State one of the following values:
 - ACT
 - QLD
 - NSW
 - VIC
 - SA
 - TAS
 - WA; or
 - If country code not set to AU then free text field allowing the entry of printable characters e.g., “WLD”
- Postcode – 4 digit postcode. When country code not set to AU postcode is free text field allowing printable characters. A number of existing overseas smartnumber clients hasn’t provided a postcode
- Country – contains the ISO country list or similar. Defaults to AU

Town, suburb and postcode validation

Town/Suburb, Postcode and State are validated using the Auspost postcode search web service (<https://developers.auspost.com.au/apis/pac/reference/postcode-search>). If the search determines the Town/Suburb, Postcode and State are not a valid combination then the validation fails.

No validation of the Town/Suburb, State or Postcode values occurs when the country is a country other than Australia (AU).

Permission matrix

Functional Group	Account Type	Role	Delegated by account administrator	Functions
<p>Public Numbering system functions are accessible by unauthenticated users</p>	N/A	Public	N/A	Login, Recover username, Recover password, Search Register of Numbers, View allocation history, Download complete Register of Numbers, Download enhanced Register of Numbers, Search register of smartnumbers, View EROU smartnumber details, Apply for a CSP account, Apply for a smartnumber account, Apply for a registered inquirer, FAQ's (Phase 2), Contact Us (Phase 2)
<p>Account Administration This group is given to all accounts to enable delegated account administrators to manage their account's configuration Users granted the account administration role can grant/revoke the account administration role to other users in their account</p>	CSP, Smartnumber, Service desk, Regulator	Account administration	Yes (automatically granted to the first user created in the account)	Update account details, Create account user, Update account user, Update an account users email preferences, Grant or revoke permissions to an account user, Remove an account user, Reset password, Receive ANC email with ANC statement and invoice attached
<p>Users All numbering users are automatically given the following permissions enabling the user to update their details, inquirer alert subscriptions, and change password.</p>	CSP, Smartnumber, Registered inquirer, Service desk, Regulator	Self	No (default role)	Login, Logout, Update my user, Update my email preferences, Change my password, Change my secret question, View my permissions

Functional Group	Account Type	Role	Delegated by account administrator	Functions
Manage clients Allows Service Desk users to provide support services to CSPs, and smartnumber and Registered Inquirer accounts	Service Desk	Manage accounts	Yes	Update account details, Close account
	Service Desk	Manage users	Yes	Create any user, Create XML interface user, Update any user details, Update XML interface user details, Update any user email preferences, Grant or revoke any user permissions, Remove any user, Remove XML interface user, Reset any user password
	Regulator	Manage accounts	Yes	Update account details, Allocation override
Advanced Register of Numbers An authenticated user will have access to an advanced search option on the Register of Numbers	smartnumber, CSP, Service desk, Regulator	Advanced search of the Register of Numbers	No (default role)	Advanced search Register of Numbers, View transaction history, Download advanced Register of Numbers
Include quarantined numbers in advanced Register of Numbers If an authenticated user is granted this permission the user will be able search and view for "Quarantined" numbers in the Register of Numbers	CSP, Service desk, Regulator	Advanced number search including quarantined numbers	Yes	Advanced search Register of Numbers including quarantined numbers
Freephone, Local rate, premium rate numbers	CSP	Allocation	Yes	Allocate with reservation, Allocate without reservation
	CSP	Bulk allocation	Yes	Bulk allocation
	CSP	Special allocation	Yes	Special allocation
	CSP	Surrender	Yes	Surrender
	CSP	Transfer	Yes	Offer transfer, Cancel transfer, Accept transfer, Reject transfer

Functional Group	Account Type	Role	Delegated by account administrator	Functions
Freephone, Local Rate and Premium Rate Numbers Controls who within a CSP account can perform allocations, special allocation, surrenders and transfers	Regulator	Manual top-up	Yes	Manual top-up
	Regulator	Withdraw	Yes	Withdraw
Smartnumbers EROU Defines the activities that a smartnumber client or CSP account type can perform on the smartnumber EROU	CSP, Smartnumber	Initial Allocation	Yes	Apply for EROU
	CSP, Smartnumber	Trade EROU	Yes	Offer EROU transfer, Cancel EROU transfer, Accept EROU transfer, Reject EROU transfer
	CSP, Smartnumber	Waive EROU	Yes	Waive EROU
	Regulator	Cancel EROU	Yes	Cancellation of EROU
Smartnumbers Defines the activities that a CSP account type can perform on smartnumbers	CSP	Allocation	Yes	Allocate without reservation
		Surrender	Yes	Surrender
		Transfer	Yes	Offer transfer, Cancel transfer, Accept transfer, Reject transfer
	Regulator	Withdraw	Yes	Withdraw
Geographic numbers	CSP	Allocation	Yes	Allocate
		Surrender	Yes	Surrender
		Transfer	Yes	Offer transfer, Cancel transfer, Accept transfer, Reject transfer
		Vary allocation	Yes	Vary allocation
	Regulator	Assess allocation	Yes	Assess vary allocation
		Withdraw	Yes	Withdraw
Mobile numbers	CSP	Allocation	Yes	Allocate
		Surrender	Yes	Surrender
		Transfer	Yes	Offer transfer, Cancel transfer, Accept transfer, Reject transfer
		Special allocation	Yes	Special allocation
	Regulator	Assess allocation	Yes	Assess special allocation
		Withdraw	Yes	Withdraw

Functional Group	Account Type	Role	Delegated by account administrator	Functions
Other numbers	CSP	Allocation	Yes	Allocate
		Surrender	Yes	Surrender
		Transfer	Yes	Offer transfer, Cancel transfer, Accept transfer, Reject transfer
	Regulator		Yes	Withdraw
Finance Allows a CSP or smartnumber account to pay invoices as well as ZOAK Operations to process receipts and refunds	smartnumber, CSP	Finance	Yes	View invoices Download invoice, Pay Invoice
	CSP	Freephone invoice Notifications	Yes	Freephone invoice
	CSP	Local Rate invoice Notifications	Yes	Local Rate invoice
	CSP	Premium invoice Notifications	Yes	Premium rate invoice
	Service Desk	Finance	Yes	View Invoices, Load bank statement, Load BPAY statement, Record payment, Reconcile receipt, Handle refund
	Regulator	Configure	Yes	View Invoices, Record payment, Configure fees
Number planning Allows the regulator to manage service types and prefixes	Regulator	Number Planning	Yes	Update service type, Update prefix, Release prefix, Withdraw prefix, Add SZU to local service prefix, Remove SZU from local service prefix Number planning report Geographic numbers report

Functional Group	Account Type	Role	Delegated by account administrator	Functions
Annual Numbering Charge (ANC) Allow the Regulator to configure ANC billing years and view the ANC distribution and breakdown of each CSP. CSP's can upload their ANC reports and view their final ANC statement.	Service Desk	ANC	Yes	View ANC billing years, ANC Reconciliation, Distribution report, ANC statements, Mobile number holdings statement, Mobile portability report
	Regulator	ANC	Yes	Configure ANC billing years, ANC Reconciliation, Upload non-contiguous surrender report, Distribution report, ANC statements, Mobile number holdings statement, Mobile portability report, Receive ANC email indicating ANC year closed
	CSP	ANC	Yes	Upload Port out and Charges redistribution report, ANC statement, Receive ANC email with ANC statement and invoice attached, Mobile number holdings statement

ZOAK Pty Ltd, trading as ZOAK Solutions

ABN 68 161 531 880

ACN 161 531 880

Definitions

We, us and our means ZOAK Pty Ltd, its related entities and their respective officers, employees, contractors or sub-contractors.

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