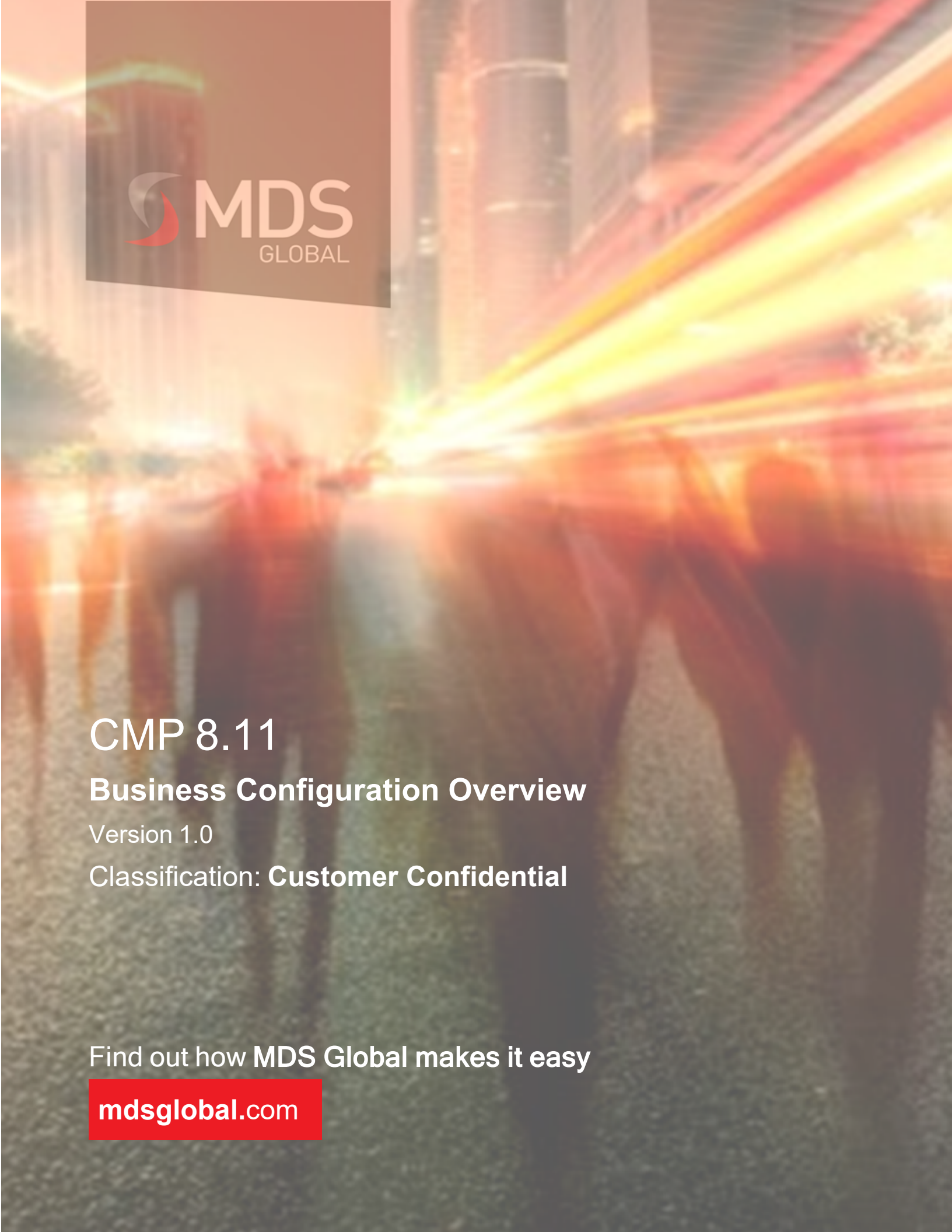

CMP 8.11

Business Configuration Overview

Version 1.0

Classification: **Customer Confidential**

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ISO 22301 standard is applicable to MDS Global Business Operations.

Table of Contents

Version Control

Version	Issue Date	Author	Comments
Version 1.0	25 May 2023	MDS	CMP 8.11 Release - No changes since the last release.

Terms Used in this Document

For definitions and explanations of the terms, abbreviations and acronyms used in this document, please see the *CMP Glossary* document.

1.0 About Business Configuration

Business Configuration is a module in the CMP Administration Console that enables you to configure business and user system settings. For example, you can configure:

Propositions

As part of the CMP's Integrated Product Catalogue, you can create customer offerings comprising price plans, tariffs, services, packages and discounts.

Communications

CMP supports outbound communications to customers in a variety of delivery methods. You can configure how and when communications are sent, set up communication preferences, and configure default fields to control the content of communications.

Customer Management

You can configure parameters used in customer management, such as reason types, codes and categories.

Billing

You can define configuration related to the generation and presentation of bills, such as nominal accounts and tax rates.

Payments

Control how payment requests to external payment platforms are handled by configuring mandate revision control and payment rejection control.

Usage Processing

Define how usage is classified for display on the customer invoice.

Credit Management

Define how outstanding payments are processed and controlled by, for example, creating account types and credit control procedures.

Workflow

Workflow events drive and record activity in CMP. Workflow events are typically aligned to business processes. You can configure workflows for network changes, account movements, and subscription services.

Network

Configure network features and network commands that are associated with network actions and define the type of command being sent to the provisioning adaptor for provisioning network components. Define network command groups to organise network commands.

System

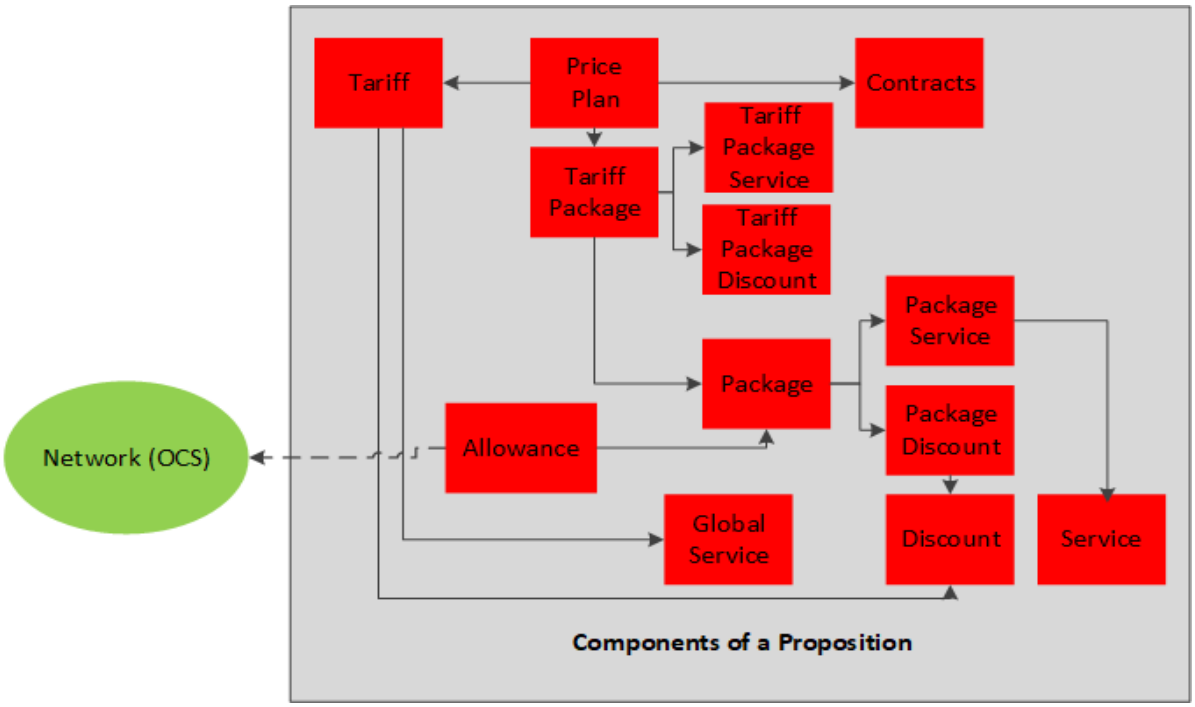
Configure system-wide parameters, application parameters and parameters for modules installed on the system.

2.0 About Propositions

> For more information on Propositions, see the *CMP Propositions Functionality and Configuration Guide*.

Business Configuration allows you to build propositions from the following components:

- Price Plans
- Tariffs
- Packages
- Allowances
- Services
- Discounts

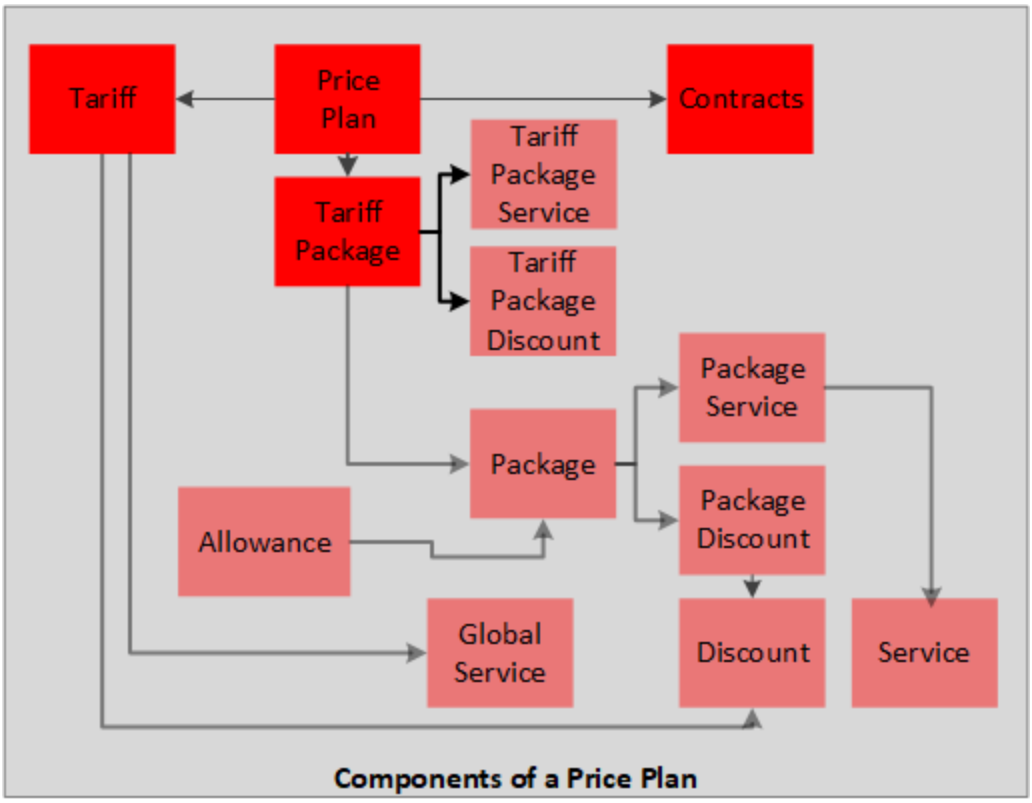


The components that make up propositions

Business Configuration also allows you to configure attributes that can be associated with components to provide more information about them.

2. 1 Price Plans

A price plan combines a tariff, connection type, contract and a package under a single price plan code.



A price plan combines a tariff, a package and a connection type

A price plan can be applied directly to an individual subscription or an agreement. Price plans can also be attached to a Corporate or Group entity, allowing the list of available price plans to be restricted for a given customer structure. Service providers can use price plans to offer customers specific discounts/offers when they connect to a particular tariff.

A price plan can be linked to a price plan group, which allows price plans to be categorised.

When you configure a price plan you can:

- Specify the price plan code and description.
- Set the time period during which the price plan is effective.
- Choose a billing type for price plan - prepaid or postpaid.
- Select the tariff that applies to the price plan.
- If applicable, select a default package for the price plan.
- Specify the price plan group that the price plan belongs to.
- Select terms and conditions for the price plan.

  For more information, see "Contracts" on the next page.
- Choose a contract for the price plan. The contract term, notice period and early upgrade term will be devolved to the price plan from the contract details.

- Select the connection workflow event that will connect a subscriber to this price plan to the relevant network.

  > The workflow event code is always CONNECTION. This is hard-coded. The Connection Type (CONN) uses the workflow event code as part of a Connection workflow event.

- If required, configure explanatory and tooltip text to help Business Configuration or CMP users to understand the price plan.

You can optionally associate a Product Template and a subscription attribute group with the Price Plan. The Product Template extends the basic Price Plan configuration with additional static attributes to further describe it. The subscription attribute group allows dynamic Price Plan attributes to be captured during the installation process.

2. 2 Contracts

CMP supports contracts at the agreement and subscription level for postpaid subscriptions. Contracts are linked with price plans. Typically, a provider defines a small number of contracts. These can then be associated with multiple different price plans via the Business Configuration console.

The following concepts and settings apply to contracts:

- Contract Term (Months): The total length of the contract.
- Early Upgrade Term (Months): The period at the start of a contract during which customers are not allowed to change their price plan.
- Maximum Termination Fee: Maximum monetary fee that can be applied as a termination fee.
- Min Period Days Free Termination : Termination fees are charged if the remaining days on a subscription's contract are greater than the termination fee days value.
- Minimum Contract Term (Months): The minimum time period of a contract that must be served. If a customer is outside of this period, they can change their price plan at no charge. If they are under the minimum contract term and outside the early upgrade term, the customer can change their price plan but may be subject to a one-off administration fee.
- Notice Period (Months): The period of notice a customer must give before a new price plan change takes effect.

Because contracts are linked to price plans, price plan changes are also contract changes and you cannot directly manipulate individual contract data. You link a contract to a price plan when creating that price plan in Business Configuration and when doing so, the following are defaulted from contract:

- Contract Term
- Early Upgrade Term
- Notice Period

When a price plan with a contract is linked to an agreement this means:

- A new contract
- All subscriptions on that agreement share the same price plan and contract values regardless of when they join the agreement.
- Subscriptions on agreement contracts are always associated with that contract even after it expires.
- Subscriptions on agreement contracts are not allowed direct manipulation of their price plans; this must be done at agreement level
- Agreement price plan changes can be scheduled immediately or at a future date. You can cancel a future plan change prior to it taking effect.

Terms and conditions also reside in the price plan. However, these are independent of the contract.

2. 3 Tariffs

A tariff is a pricing structure that is applied to units of usage for billing purposes. All subscriptions have a tariff. The tariff drives how a subscription is connected to a network prior to usage being consumed. Selecting a tariff, via the network and service code, ensures the subscription is connected to the correct network and service.

In an offline charging implementation of CMP, the tariff controls the charges that a subscriber incurs for both usage event records and non-usage events. A tariff comprises unit-based usage charges for the subscription service and can have services linked to it for which further charges can also be applied. These available service charges can be one-off charges, such as connection fees, or recurring charges, such as insurance. Tariffs can have a billing type of prepaid or postpaid. A postpaid tariff must have a full overage spend cap[1] defined to help prevent bill shock[2] for customers.

In an online charging implementation, usage event charges and usage-related discounts are driven by the Online Charging System (OCS).

When you configure a tariff, you can:

- Supply a unique alphanumeric ID and a meaningful descriptive name.
- Select a network type.
- Indicate the billing type - either prepaid or postpaid.
- If the billing type is postpaid, specify an overage full spend cap.
- Choose the OCS rating plan.

[1]A spend cap is a service for customers that applies a limit to how much usage a customer can consume outside of their allowances or bolt-on extras, preventing spending over a certain amount.
[2]In telecoms, bill shock is the negative reaction a subscriber can experience if their phone bill has unexpected charges.

- Specify the billing media, for example online billing, large print, braille, etc.
- Configure when the first and final bills will be sent, as well as bill frequency.
- Specify which terms and conditions apply to the tariff.
- Control termination charges based upon period of notice, termination fee days and maximum total termination fee.
- Control whether new subscribers can connect to the tariff.
- Provide explanatory text to help future users to understand the tariff.
- Select which day's pricing will apply to public holidays.
- Configure usage limits - daily, upper and lower - and the workflow event which is triggered if the daily limit is exceeded, for example a notification via text.

2. 3. 1 Tariff Links

Discount schemes, packages and price plans can be linked to tariffs. You can configure the following:

- Tariff Packages

  A CMP package is a collection of services and/or discounts that can be added to a subscription. Packages created in CMP must be linked to the required tariff to be picked when a tariff is selected. If a package and a tariff are not linked, the package cannot be selected. Services are added to the tariff package from the linked package; the service price can be amended when it is added to a tariff package. The added services are called *tariff package services*. Services that are not in the package cannot be added to the tariff package.

  > Note: Shared bolt-on packages cannot be linked to tariffs.

  Discounts are added to the tariff package from the linked package; the discount price cannot be amended when it is added to a tariff package. The added discounts are called *tariff package discounts*.

- Tariff Services

  Services are all chargeable and non-chargeable non-usage items in CMP. Services can be a one-off (connection fee) or recurring (line rental). Only one instance of a service can be active at any one time. Services can be global services, which can be added to any tariff, or a service that can only be applied to particular tariffs via a tariff package.

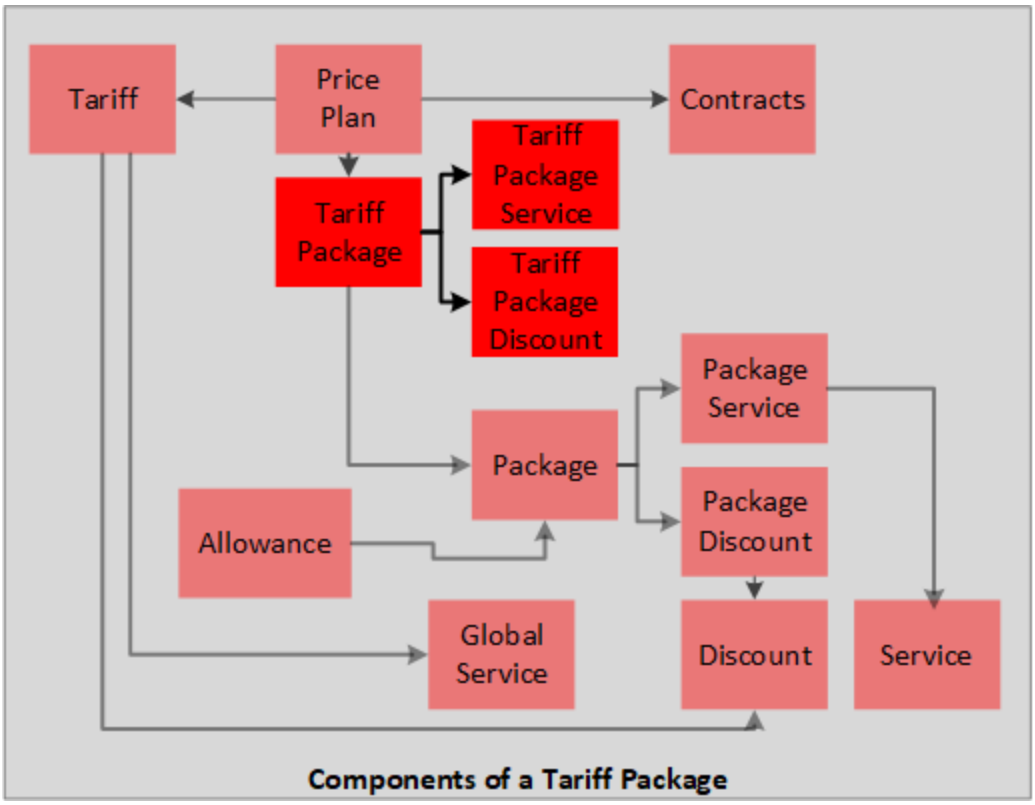
- Tariff Discounts

  Discount schemes reduce the price of services and call class groups by a percentage of the original amount or by a fixed value. Discount schemes do not alter the price of services or call class groups; instead a credit is added for the discounted amount. You can also configure a negative discount, which adds a surcharge to the subscriber.

- Tariff Spend Caps

  A spend cap is a service for customers that applies a limit to how much usage a customer can consume outside of their allowances or bolt-on extras, preventing spending over a certain amount. Tariffs with a postpaid billing type must be linked with an overage full spend cap.

  For more information, see "Spend Caps" on page 46.



Add services and discounts to a tariff via a tariff package

2. 4 Packages

A CMP package is a collection of allowances, services and/or discounts that can be added to a subscription. Users can use packages to add essential services and discount offers in a single action, rather than selecting individual services and discounts for each subscriber.

Package Services

Services determine the overall cost. Services can be either rolling[1] or non-rolling, but not a mixture of both for the same service.

[1] A rolling service is a recurring service.

For more information, see "Services" on page 18.

The services linked to a package are known as *package services*.

The price of the service can be amended when it is added to a package. This allows the same base building blocks of a package to be reused across many packages with the price being tailored in each.

For example, line rental service could be £20.00 but as part of the package the service may be charged at £15.00. Consequently, all customers could be paying different rates for the same service. This depends on the tariff the customer is on and whether the customer selected the service as part of a package. If a customer connects using a new package, they automatically receive the service in that package at the default price. When this standard package is added to a tariff, if this particular service is included in the tariff package, the price in the package deal overrides the price charged in the service code, or the tariff service code. For example, the package price of a service could be £15.00 but as part of the tariff package the service could be charged at £10.00. The services that are present within the package on the day a customer is connected are the services the customer automatically receives. Services with a future effective date can be present within the package, with the same service code, replacing a particular service with a new price.

Package Discounts

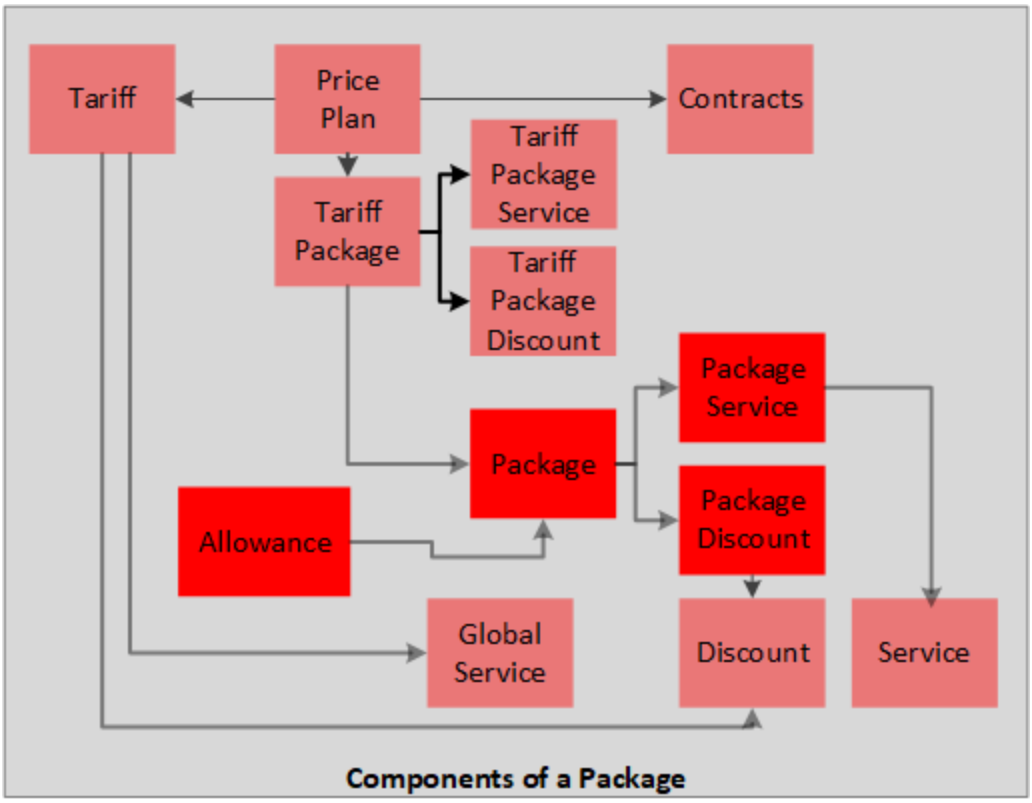
Discounts allow for a credit back on a service within a package. The discounts linked to a package are known as package discounts. Discounts cannot be changed when added to a package.

For more information see "Discounts" on page 19

Allowances

Allowances inform the Online Charging System (OCS) what to grant a subscriber in terms of voice, text, data or cash.

For more information see "Allowances" on page 20



Packages can be linked to package services and package discounts

There are three types of packages:

- A *base package* contains essential services and/or discounts needed to fulfil a subscriber's contract, such as their monthly recurring charge and services to drive their base allowances of minutes, data and/or texts.
- A *bolt-on package* contains supplementary services, allowances and/or discounts for additional purchases a customer may make.
- A *top-up* package, for additional services for prepaid subscribers only. This is used primarily to add credit to a prepaid balance. The service is simply the charge. It may optionally also include allowances.

2. 4. 1 Configuring a Package

When you configure a package, you can:

- Provide a package code and description.
- Classify the package as base, bolt-on or top-up.
- Choose the billing type for the package: prepaid, postpaid or both.
- Specify whether the package is recurring, and if so, set the recurring frequency.
- Indicate whether the package can be shared.

Only bolt-on packages can be shared and only account services can be linked to a shared bolt-on package. See "Shared Packages" below for more details.

- Set a package expiry date - this feature is particularly used with short term promotions.
- Control if the package is available to new subscriptions, by indicating whether the package is Active.
- Automatically raise a workflow event when the package is added, which can send a confirmation communication to the subscriber.
- View and manage links to package services, package discounts and allowances.
- View the tariffs that a package is associated with.

2. 4. 2 Shared Packages

You can designate a bolt-on package as a shareable package in Business Configuration. Shared packages can be linked only to account services and can be purchased only at agreement level.

The shared package is charged to the account at which the agreement is logged as an account service. Shared packages cannot be paid for out of a prepaid balance. Shared bolt-on packages have no link to tariffs and therefore are not impacted by a price plan change.

Any subscriber under an agreement structure can purchase a shareable bolt-on package via AgentView or a RESTful web service. At connection time, the shared structure is created and all subscriptions on the agreement are opted-in by default - this is the shared group. Subscriptions can belong to only one shared group at a time and subscriptions cannot move from that shared group once it is created. Shared limits for a subscription can be altered via REST web services.

Shared allowances cannot be transferred or transformed.

2. 4. 3 Package Rules

The following rules govern how allowances, discounts and services can be associated with packages.

Package Type	Recurring?	Shared?	Valid?	Type of Service Allowed	Type of Discount Allowed	Type of Allowance Allowed
Base	Recurring	Shared	Invalid	N/A	N/A	N/A
Base	Recurring	Non-shared	Valid	• Rolling & non-rolling • No restrictions on number of services • Recurring services • Category subscription service • Only non-global services can be added to the base package	No restrictions	• Voice, Text, Data allowed • Only one of each allowance is permitted • Allowance must be recurring • If package is prepaid, prepaid allowances only • If package is postpaid, postpaid allowances only
Base	Non-recurring	Shared	Invalid	N/A	N/A	N/A
Base	Non-recurring	Non-shared	Invalid	N/A	N/A	N/A
Bolt-on	Recurring	Shared	Valid	• Only account service allowed • Account services defined as quantities are not allowed • Non-rolling allowed • Recurring allowed • Global & non-global services can be added Note[1]	Not supported	• Voice, Text, Data allowed • Only one of each allowance is permitted • Allowance must be recurring • If package is prepaid, prepaid allowances only (Package cannot be paid for from a prepaid balance) • If package is postpaid, postpaid allowances only
Bolt-on	Recurring	Non-shared	Valid	• Only one service allowed • Rolling & non-rolling allowed • Recurring allowed • Global & non-global	Not supported Note[3]	• Voice, Text, Data allowed • Only one of each allowance is permitted • Allowance must be recurring • If package is prepaid, prepaid allowances only • If package is postpaid, postpaid allowances

[1]In the case of a global service, the service price cannot be overwritten and the service cannot be a rolling service.

[3]Discounts are not supported because for prepaid purchases the price based on the discount would have to be calculated.

Package Type	Recurring?	Shared?	Valid?	Type of Service Allowed	Type of Dis-count Allowed	Type of Allowance Allowed
				services can be added Note[1]		only
Bolt-on	Non-recurring	Shared	Valid	• Only account ser-vices allowed • Non-rolling allowed • Account services that are defined as quantites are allowed • Daily charge with no pro rata; only one allowed • Global & non-global services can be added Note[2]	Not supported	• Voice, Text, Data allowed • More than one of each allowance is permitted • Non-recurring bolt-ons can apply to prepaid and prepaid subscribers. (Package cannot be paid for from a prepaid balance.) Note[3]
Bolt-on	Non-recurring	Non-shared	Valid	• Category sub-scription service • Daily charge with no pro rata; only one allowed • Global & non-global services can be added Note[4]	Not supported	• Voice, Text, Data allowed • More than one of each allowance is permitted • Non-recurring bolt-ons can apply to prepaid and prepaid subscribers

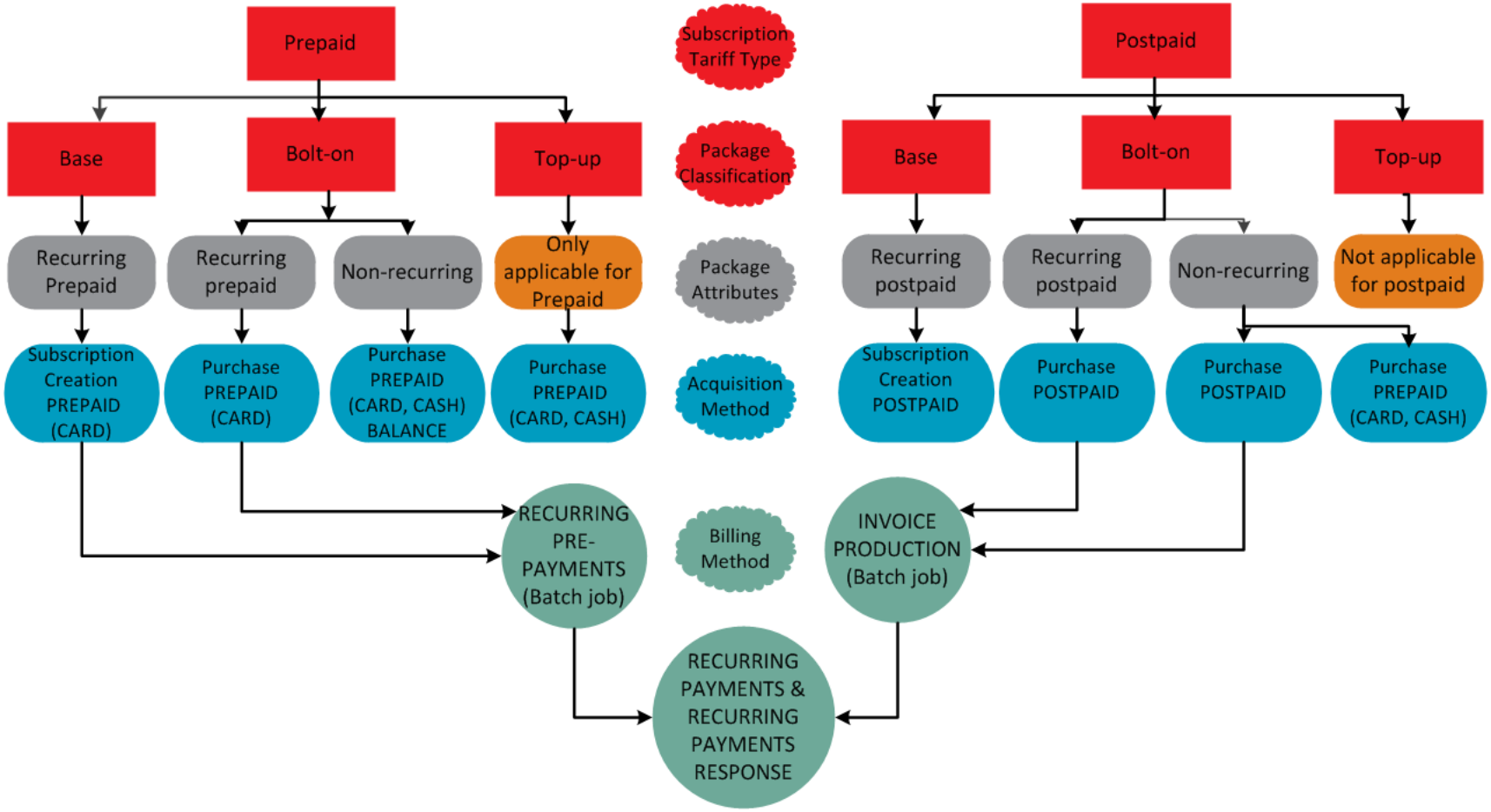
[1] In the case of a global service, the service price cannot be overwritten and the service cannot be a rolling service.
[2] In the case of a global service, the service price cannot be overwritten and the service cannot be a rolling service.
[3] No limit on the number of non-recurring bolt-ons that can be bought.
[4] In the case of a global service, the service price cannot be overwritten and the service cannot be a rolling service.

Package Type	Recurring?	Shared?	Valid?	Type of Service Allowed	Type of Dis-count Allowed	Type of Allowance Allowed
Top-up	Recurring	Shared	Invalid	N/A	Not supported	N/A
Top-up	Recurring	Non-shared	Invalid	N/A	Not supported	N/A
Top-up	Non-recurring	Shared	Invalid	N/A	Not supported	N/A
Top-up Note[1]	Non-recurring	Non-shared	Valid	Only one allowed per bill charge	Not supported	• Must have one Cash allowance • Voice, Text, Data allowed • Only one of each allowance is permitted • Allowance must be non-recurring

[1] Only applicable for prepaid customers

2. 5 Payments and Packages

The following diagram illustrates how packages are applied to subscriptions:



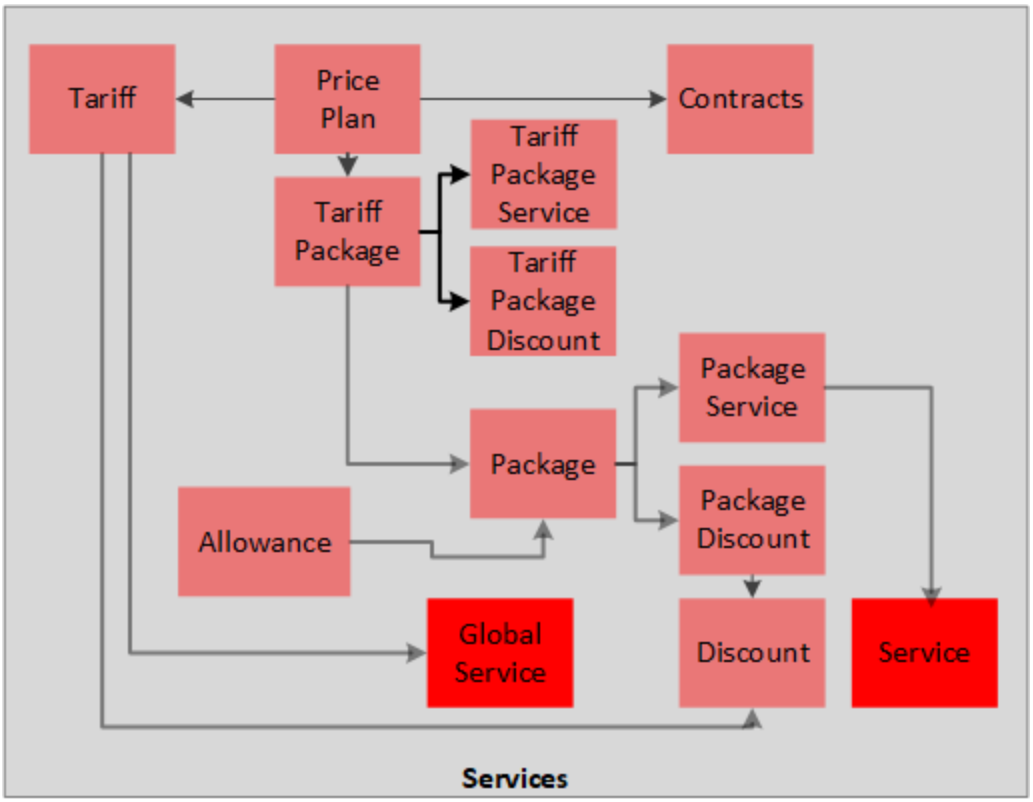
Packages and Payments

The following table interprets the diagram:	
Tariff > Package > Attribute	**Explanation**
Prepaid > Base	A prepaid subscription can have a base package. The package must be Recurring and Prepaid. The package is acquired during subscription creation. This is billed every month by the Recurring Prepayment batch job, which: • Creates a debit (pre-pay) transaction. • The transaction, when due, causes a payment to be taken by the Recurring Payment job.
Prepaid > Bolt-on > Recurring	A prepaid subscription can have recurring bolt-on packages; they do not have to run concurrently. The package must be configured as Recurring and Prepaid. The package is acquired via REST web services/AgentView purchase. This is billed by the Recurring Prepayment batch job, which: • Creates a debit (pre-pay) transaction. • The transaction, when due, causes a payment to be taken by the Recurring Payment job. Payment is taken when the bolt-on is due for renewal.
Prepaid > Bolt-on > Non-recurring	A prepaid subscription can have non-recurring bolt-on packages. The package must be configured as Non-recurring (the same non-recurring bolt-ons can be used for prepaid and postpaid subscriptions). The package is acquired via REST web services/AgentView purchase. Paid for up front with immediate posting of debit (prepaid) transaction and credit (payment).
Prepaid > Top-up >>>>	A top-up applies to prepaid subscriptions only. The package is acquired via REST web services/AgentView purchase. Paid for up front with immediate posting of debit (prepaid) transaction and credit (payment).
Postpaid > Base >>>	A postpaid subscription can have a base package. The package must be configured as Recurring and Postpaid. The package is acquired during subscription creation. The package is billed monthly by the Invoice Production batch job

The following table interprets the diagram:	
Tariff > Package > Attribute	**Explanation**
Postpaid > Bolt-on > Recurring	A postpaid subscription can have recurring bolt-on packages. The package must be configured as Recurring and Postpaid. The package is acquired via REST web services/AgentView purchase. The package is billed monthly by the Invoice Production batch job.
Prepaid > Bolt-on > Non-recurring > Purchase PREPAID	A post-paid subscription can have non-recurring bolt-on packages (pre-paid). The package must be configured as Non-Recurring (the same non-recurring bolt-ons can be used for pre and post paid subscriptions). This package is acquired via REST web service/AgentView purchase. Paid for up-front with immediate posting of debit (prepaid) transaction and credit (payment).
Postpaid > Top-up	Top-up is not applicable for a postpaid subscription.

2. 6 Services

Services are all chargeable and non-chargeable non-usage items in CMP. Services can be a one-off (connection fee) or recurring (line rental). They are most often applied against a subscription, although services can also be applied at account level. Only one instance of a service can be active at any one time.



A service can be a global service or applied to specific packages via a tariff

You can configure the following details for a service:

- Main

  Main details include the service code and description, the security level of the service and the service category. You can also define a service as a *global service*, which can be added to any tariff, or a service that can be applied to particular packages via a tariff. In addition, you can select a package for a customer-specific "build your own" type tariff, and choose whether a service applies to all subscribers or only the principal subscriber.

  You can also define whether an Account Service is quantifiable or not. That is, whether a quantity can be specified at the time of provisioning onto an account. For a quantifiable service, an agent can optionally enter a quantity at the point of provisioning an Account Service. This allows a number of services to be added in a

single operation, for example when a company wants to add a number of digital services to a set of subscriptions but have a single line on the bill for all the services.

- Billing

  When you configure billing information for a service, you can choose whether a service is listed on an invoice and set its maximum, minimum and default prices. You specify how long the service will run and control how dates appear on the invoice. You can also set whether services can be charged pro rata, and how to handle service charges when a customer terminates an agreement or migrates to another tariff.

- Network

  Network configuration settings include the workflow events that are automatically created when a service is added or deleted from a customer record. You also specify the service code sequence and the group code, if applicable, as well as whether the service charge depends on a connection, for example a line rental charge.

- Additional Details

  Additional details include service tax codes and service attributes. Service attributes include sequence numbers, to control the order in which services are displayed on invoices, and attributes such as service classifications.

2. 7 Service Categories

CMP has the following service categories:

- Unit - Calls (or units of electricity/gas) used by the customer.
- Sales Ledger - Used for any charges (fees) or credits (goodwill payments) made directly to the customers account; not relevant at subscription level. The user adds the service to the account via a workflow event.
- Subscription Serial No. - Used when assigning a customer with a telephone number that is chargeable, such as gold/silver numbers.
- Invoice Adjustments - Used to make adjustments against invoices, for example a credit or a charge.
- Account Service - Service added at the account level.
- Subscription Service - The most frequently used category; relates to each particular subscription such as line charge, itemised billing, etc.
- Discount - Used for services that offer discounts to customers.
- S.O.P - Sales orders.

2. 8 Discounts

Discount schemes reduce the price of services by a percentage of the original amount or by a fixed value.

Discounts schemes do not alter the price of services, instead a credit is added for the discounted amount.

A negative discount can also be configured – a debit figure is invoiced rather than a credit, which adds a surcharge to the subscriber. This allows a subscriber to be charged extra for a particular service or unit. Negative discounts can be used to encourage additional usage in order to reach a band threshold, which produces a credit amount.

Discounts are typically raised at subscription, account or agreement level. When a discount is raised at account or agreement level, all the subscriptions linked to the account or agreement benefit from the discount, regardless of their tariff. The discount scheme is applied to each attached subscription during invoice production. Setting account/agreement-level discounts minimise how many discount schemes need to be created.

A discount can be raised at subscription level only if the subscription is on an appropriate tariff. Only that specific subscription will benefit from that discount. The discount at subscription level can default from the package selected for the subscriber.

CMP supports the *Normal* type discount scheme, which allows a flat percentage or fixed value to be applied to the invoice. Discount schemes are linked to services. Normal discounts only apply to services whose category is subscription service. They cannot be configured for account type services.

To configure a discount scheme you:

- Provide a code and description for the scheme.
- Choose the discount type.
- Select a date from which the scheme will be effective.
- Indicate if the discount scheme is available to new subscriptions (i.e. Active).
- Link the discount scheme to services and usage class groups.

2. 9 Allowances

Allowances inform the real-time network what to grant a subscription in terms of voice, text, data or cash. The different types of allowance are:

- Voice
- Text
- Data
- Cash - Cash is special type of allowance used to top up a balance in the Online Charging System (OCS). This type of allowance can only be configured on a top up package.
- Rate - The rate plan that is to assigned to the subscription on connection and tariff change in the OCS.
- Balance - The money balance that is to be assigned to the subscription on connection in the OCS.

Allowances can be for a set amount of the above, for example 50 GB data, or unlimited, for example unlimited texts.

Allowances are used to provision propositions. They are linked to packages. The packages to which an allowance can link depends on the package classification. If an allowance is linked to a package, it must be unlinked before you can delete it.

> For more information on packages and types of packages, see "Packages" on page 7.

Subscribers can:

- Transfer allowances

  Both recurring and non-recurring allowances can be transferred from one subscription to another, if the subscriptions are both connected. This can take place via a selfcare app, for example, use RESTful web services. The transferred allowances are visible for the donor and recipient in AgentView in the Subscription **Billing** > **Adjustments** screen. There is no change to the expiry date of a transferred allowance. Unlimited allowances cannot be transferred.

- Transform allowances

  Available allowances can be converted to other types of allowance for the same subscription. For example, voice can be converted to data. The conversion calculation is stored in and performed by the online charging system (OCS). The donor and recipient allowances are adjusted by RESTful web services. The transformed allowances are displayed in AgentView in the Subscription **Billing** > **Adjustments** screen.

  Recurring and non-recurring allowances can be transformed. The subscription must be connected. Unlimited allowances cannot be transformed.

- Share allowances

  In Business Configuration, an allowance can be configured as Shareable. When this allowance is allocated to a bolt-on package, the package becomes shareable because a package cannot contain a mix of allowance types. For more information, see *Shared Packages*.

When you configure an allowance, you:

- Provide a meaningful description, for example 100 Minutes Voice Weekly.

  > CMP auto-generates a unique code for the allowance.

- Specify the type of allowance - voice, data, text, rate or balance.
- Indicate the network for which the allowance is applicable.
- To match this allowance with an allowance configured in the OCS, select the appropriate allowance name from the OCS.
- Choose the Usage Class Group that defines the specific usage that contributes to the consumption of the allowance.

- Indicate the Billing Type - postpaid, prepaid or both.
- If the allowance has a set amount, set the amount, for example 100 minutes. Or indicate that the allowance is unlimited.
- If the allowance is recurring, set the frequency, for example once a month.
- Specify whether the allowance is pro-ratable, and can be provided and/or billed for proportionally if applied for only a portion of the regular time period.
- If the allowance is to be rolled over, provide the number of times it can be rolled over.
- Specify whether the allowance can be shared between subscribers.
- Provide a priority to indicate the order in which similar allowances should be consumed.

Allowances do not have an effective or expiry date that is configured in Business Configuration. However, recurring allowances can be expired in AgentView.

2. 9. 1 Allowances and Variable Consumption Rates

A provider may require flexible allowance units, for example for international call minutes to consume minute allowances at a faster rate than domestic call minutes. This allows providers to bring simplified offers to the market, reducing the number of minute offers while reflecting the underlying wholesale price. It allows customers to purchase minutes without needing to understand how they will be used in advance.

When CMP is being used in conjunction with Openet PCC as an Online Charging System (OCS), the OCS supports the use of flexible units to represent an allowance such as data or voice for example. An allowance of flexible units allows different rates on unit consumption to be defined on the OCS for different call types. For example, a domestic call may consume 10 units per minute, whereas an international call may consume 25 units per minute. A CMP adaptor allows a flexible units offer defined in the OCS to be linked to a voice or data allowance configured in CMP.

CMP can present these units in any way deemed suitable, such that 100 units can be represented as 100MB or 100 minutes for example. This means that a voice allowance with a unit definition on the OCS can consume seconds at different rates based on the type of call. The end user still sees their balance as voice minutes but the balance will be consumed faster for a 1 minute call to Europe than a 1 minute local call. A balance enquiry returning units from the OCS is rendered in AgentView based on the type of allowance – data or voice. Call Detail Records (CDR) show both the charged and actual consumption of the service on the OCS, for example charged 10 minutes against the balance, when actual duration was 5 minutes. The Openet CDR provides both the actual usage and the billed usage of the call or session.

2. 10 Attributes

Attributes are characteristics and qualities that are ascribed to an entity which help to define what it is and how it behaves. In CMP, attributes are a configurable list of values that can be associated with price plans and packages to provide more information about them.

Product templates allow you to apply a default set of attributes to a price plan or package.

Attribute groups are used to group a number of attributes according to their use, for example descriptive attributes.

3.0 About Communications

Recommended Reading: The *CMP Communications Functionality and Configuration Guide* describes the CMP communications in detail.

CMP supports outbound communication to the customer. The CMP Communications module handles all types of delivery methods for communications:

- online notifications
- external systems
- emails
- letters
- SMS
- Android/Apple push notifications

It can also support multiple languages.

Communications can be triggered by a workflow event using linked communications. Communications can also be associated with triggers from external systems.

The Communications module also enables you to configure preferences that allow customers to:

- Opt in or out of certain communications.
- Request time exclusions for communications.
- Specify preferences for delivery methods, for example email, letter or SMS.

You can configure the following components for communications:

- **Communications**

  You can define templates for new end user communications, including the intended recipient level and communication method, based on an internal or external trigger.
- **Triggers**

  A trigger is an event from an external source or from CMP that results in a communication to the customer. You can define trigger sources and associated actions.
- **Preferences**

  You can define preferences for whether a customer wishes to receive communication.
- **Aliases**

  Aliases[1] can be used for communication to end users.
- **Default Fields**

[1]You can configure a number or name to be displayed to the recipient rather than an actual phone number or email address, for example.

Define and maintain customer-specific attributes that may be included in *merge fields* in communication to end users.

You will also need to configure the `sabre-comms` module. This module allows you to configure a range of properties need for CMP 8 communications, for example SMTP server details, server directory locations needed for files used in the communications process, and enabling/disabling of communications triggers. You can configure the module in the Administration Console. For more information, consult the online help for the console as well as the *CMP Communications Functionality and Configuration Guide*.

3. 1 Communications Process Flow

Each communication results in the comm being sent to one target. Multiple targets, such as sending an email to all subscriptions on an account, is not currently supported.

The communications process is as follows:

3. 1. 1 A communication request is triggered.

The Communications process starts when a communication request is triggered. A trigger can be:

- Internal - for example a CMP workflow event, raised either manually or automatically.
- External - a request from an external system. A communication request can be created automatically on receipt of a notification from an external system.

When a trigger is invoked, CMP creates an entry in the core table in Communications, the Comms Request Header table.

When a Workflow Event is created, irrespective on whether the WhenToCreate is set to OnCreate or OnResolve, an entry in created in the Comms Request Header.

3. 1. 2 Communication details are gathered

When an entry is created in the Comms Request Header table, the Comms Monitor Job is triggered to process the Comms Request Header and produce a Comms Request Detail. This job:

- Works out the appropriate delivery method and target, for example a mobile number, email address etc.
    - The Delivery Method chosen depends on:

      The delivery methods that are associated with the communication. So if only one delivery method is configured then that is the chosen delivery method.

- The Communications Preference selected by the customer. This is relevant if there are multiple delivery methods associated with a communication. For example, if SMS and Email are configured as delivery methods, and the customer preference is SMS, then they will receive an SMS.

- Derives the values of the default fields[1] that are associated with the communication.

  Each default field is associated with a bean, which is the software object that retrieves the customer information for the default field from CMP. One or more parameters are configured for the bean, which tell the bean exactly what information to retrieve.
- In the case of push notifications, online notifications and SMS delivery methods, the job also merges the data of the derived fields with the message template to produce the actual message. For letters and email, this merging is carried out by separate jobs.

3.1.3 SMS and push and online notifications are sent

After the Comms Monitor Job has completed, dedicated daemons pick up the requests to distribute them to the destination:

- Comms SMS Daemon
- Comms Push To Handset Daemon
- Comms Push To External Daemon

3.1.4 Letters and emails are created and sent

Email and letter communications require additional processing to merge data from default fields gathered from CMP with document templates to generate the required document type. The Comms Monitor job gathers the data; the Comms Email Monitor and the Comms Letter Monitor jobs merge the data.

The Comms Email Monitor and Comms Letter Monitor jobs are triggered automatically when the Comms Monitor job has finished gathering data for Comms Requests relating to emails or letters.

These jobs uses external frameworks - for example, Velocity and Prince XML - to generate documents. Generated documents are subsequently detected by the following downstream daemons for transmission to the customer:

- Comms Email Daemon
- Comms Letter Daemon

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[1] Default fields are contain customer-specific attributes stored in the CMP database. This customer data can be merged into communications. For example, a customer account number and account balance can be sent in a bill reminder SMS.

3. 1. 5 Letters and emails are stored

This is a distinct step carried out by the Comms Storage Daemon. This allows the documents to be placed into storage on any machine, for example, in systems such as Amazon S3 or on a machine via SFTP. Storing the documents in a long-term storage directory allows them to be viewed in AgentView.

3. 1. 6 External systems update communications status

An API allows external systems to update the status in CMP of communications that were sent externally for processing and/or distribution.

3. 2 Communications Templates (Comms Codes)

To define communications to customers in CMP, you create communication templates (comms codes) via Communications configuration. A communication template defines the following:

- The code and description for the communication.
- The CMP hierarchy level at which the communication can be invoked.
- The delivery method - for example email, SMS, letter, external system, or push notification.

  Once you configure a delivery method, you can configure the form and content of the message by specifying the static text and default fields to include in the message. Depending on the delivery method, you can also specify targets, external systems, email subjects and languages for the communication.
- The trigger - whether internally from CMP or from an external source.
- Preferences - for example, marketing material sent via email.
- The security level - the roles that have the authority to select and edit the communication in CMP.
- Whether the communication is visible and selectable in AgentView.
- Whether the communication is active and thus available to new subscribers.
- The sender and the recipient(s), or *target*.

  When the console is operating in B2B mode (system property CONSUMER.MODE = false) and an email, SMS, or push communication is defined at agreement level, the target for a communication can be the agreement administrator that is defined for the relevant agreement. For example, a company could have an employee who handles all financial matters for mobile phones, so all communications about invoices and payments could be sent to them as the agreement administrator.

Some communication formats, for example letters and emails, must be associated with an additional external template that determines the format, style and layout of the correspondence. Templates are created using external frameworks such as Velocity and

Prince XML. Templates contain elements such as static text, images, headers and footers, and dynamic text or *merge fields*, which can be populated with customer-specific data from the CMP default fields to create personalised communications.

For more information, see About Email and Letter Templates.

3. 3 Communications Triggers

A trigger is an event from CMP or an external source that results in a communication being sent to a customer. In Business Configuration, you can view trigger channels[1] and configure associated actions.

Trigger actions can be:

- Communications (Comms) - a communication such as an email, push notification or letter.
- Workflow events - such as an account movement notification.
- Other - for example, a communications request from an external system, such as a provisioning notification.

When the console is operating in B2B mode (system property CONSUMER.MODE = false) and the trigger action is defined at subscription level, you can define a trigger action that will send a communication to the agreement administrator that is defined for the relevant agreement.

When you configure a trigger action, you:

- Supply a trigger ID and description.
- Indicate whether the subscriber or account is passed from the external source.
- Set a priority for the trigger action.
- Select the associated action.

  Actions can be either comms or workflow events. If the trigger action is at Subscription level, you can configure both an action and an administrator action.

Trigger actions can have attributes associated with them.

3. 4 Communications Preferences

In Business Configuration, you can define preferences that allow you to create profiles for whether and when a customer wants to receive communications. You can configure a preference for a communication that enables a customer to:

- Opt in to receiving the communication by default.
- Opt out of receiving the communication.

[1] Trigger channels are the sources for triggers. They can be internal (CMP) or external.

- Request a time exclusion for the communication - a time period in which they will not receive the communication.

You can also configure a preference as the default preference and whether it is available to new subscribers.

Communication preferences are available at account and subscription level. Preferences such as language, particular requirements, preferred delivery method, and time exclusions are visible on the same AgentView screen as the preferences for each communications preference.

Opt In and Opt Out are based on the customer's communication preference at the level in the CMP hierarchy at which the communication was raised. However, if no preference exists at subscription level, Opt In and Opt Out will go up from subscription to account level.

Opt In/Out is not available at corporate or group level.

Agreement Opt In/Out is based on the logging level.

Time exclusion is based on the level in the CMP hierarchy to which the communication is being sent. However it will go up from subscription to account if no subscription preference exists.

3. 5 Communications Aliases

You can define aliases to be used in email, push, external, and SMS communications to end users. For example, instead of displaying a full email address, you can configure an alias that is your company name. To configure an alias, you:

- Provide the alias.
- Select the delivery method.
- Depending on the delivery method, provide one the following:
  - For external and push methods, the identity of the sender.
  - For email notifications, the email address.
  - For SMS notifications, the telephone number.
- Specify whether the alias is the default to be used.
- Specify whether the alias is to be available to new subscribers.

3. 6 Communications Default Fields

Default fields contain customer-specific information from the CMP database that can be included in communications with end users. Business Configuration allows you to define and maintain these default fields.

Default fields are associated with beans, which are the software objects that retrieve the data from CMP. When CMP processes a communication, it checks which fields need to be populated for that particular communication and then invokes the associated beans, which fetch the data from the CMP database according to the configured parameters. The bean parameter identifies the exact piece of information that the bean should retrieve. For example, the parameter SubscriptionUserName to the *Subscription* bean is used to retrieve the SubscriptionUserName field from the Subscription table. Parameters can be any customer-specific attribute supported by the bean, such as a field, static text, a value, or a date. For example, the WORKFLOWBEAN supports the following parameters:

- Event
- Total SL Adjustments
- Resolved Date
- Resolution Required By Date

A list of sample default fields is provided in "CMP Default Fields" on the next page.

When CMP is being used in conjunction with Openet PCC as an Online Charging System (OCS), the OCS sends notifications to subscribers when they have exceeded their allowance or balance threshold, depending on what thresholds have been configured. The CMP OCSNOTIFICATIONATTRIBUTES bean allows the attributes provided within the Openet notification to be used to enrich the outbound communication with subscriber information held within CMP. The following CMP attributes can be used:

- Allowance Description
- Allowance Type (Data, Voice, Text or Cash)
- Spend Cap Description
- Formatted values for entitlement size, usage amount and remaining quota. Formatting is based on the type of allowance.

A list of default fields that use the OCSNOTIFICATIONATTRIBUTES bean is available in "OCS Notification Default Fields" on page 33.

Default fields can be configured with beans that have multiple parameters. When you supply multiple parameters for a bean, they must be separated with commas.

Configuration of a default field requires the following:

- Supplying a code and description for the default field.
- Specifying a category for the information in the field, for example static text, account or financial.
- Selecting the bean (the software object) that will retrieve the field information from CMP.
- Specifying a parameter that tells the bean what information to retrieve. Beans can have multiple parameters.
- Specifying whether the field is available to new subscribers.

Some communication formats, for example letters and emails, must be associated with an additional external template that determines the format, style and layout of the correspondence. Templates are created using external frameworks such as Velocity and Prince XML. Templates contain elements such as static text, images, headers and footers, and dynamic text or *merge fields*. The merge fields are populated with the attributes from the CMP default fields. When you compose an external template, you must reference the default fields correctly. For information on how to do this, see *CMP Communications Functionality and Configuration Guide*.

3. 6. 1 CMP Default Fields

The following table lists and describes the available default fields in CMP.

Default Field	Description
ACCOUNTAMOUNTDUE	This returns the balance on the account that is currently due.
ACCOUNTAMOUNTINARREARS	This returns the amount on the account that is in arrears.
ACCOUNTAMOUNTINQUERY	This returns the value of the balance on the account which is in query.
ACCOUNTATTRIBUTE1	This returns the value of account attribute number 1.
ACCOUNTBALANCE	This returns the full balance on the account.
ACCOUNTNUMBER	This returns the account number of the account or of the subscriptions account.
ACCOUNTSERIALNUMBER1	This returns the value of account serial number 1.
CHANGINGSUBSERIALNUMBER1	This returns the value of subscription serial number 1.
CORPORATETOTALAMOUNTDUE	This returns the total amount due at the Corporate level.
CORPORATETOTALBALANCE	This returns the total balance at the Corporate level.
CURRENTPRICEPLAN	This returns the current price plan.
DEARSIRMADAM	Static text to appear on letters: *Dear Sir/Madam*.
EVENTNUMBER	This returns the workflow event number.
FUTUREPRICEPLAN	This returns the future price plan.
GROUPTOTALBALANCE	This returns the total amount due at the Group level.
LATESTPRICEPLAN	This returns the latest price plan.
MOBILELONGESTSUBONACCOUNT	This returns the mobile number of the longest non prepay sub where smsAllowed is True on the network type.
NETWORKSUBCODE1	This returns the value of subscription network sub code 1.
NONMANSERIALNUMBER1	This returns the value of non-managed serial number 1.
NONMANSERIALNUMBER2	This returns the value of non-managed serial number 2.
OCSABSOLUTETHRESHOLD	This returns the absolute value of the threshold that the notification relates to e.g. 200(MB).
OCSBALANCEID	This returns the identifier of the specific allowance balance that the notification relates to.
OCSCYCLEENDDATE	This returns the end date of the allowance allocation that the notification relates to.
OCSCYCLELENGTH	This returns the length of the refresh interval for the allowance that the notification relates to e.g. 1 Month.
OCSENTITLEMENTNAME	This returns the name of the OCS Entitlement that the notification relates to.
OCSENTITLEMENTSIZE	This returns the overall inclusive allowance amount that the notification relates to.
OCSOFFERNAME	This returns the name of the OCS Offer (allowance name) that the notification relates to.
OCSREMAININGQUOTA	This returns the remaining allowance amount that the notification relates to.
OCSSUBSCRIPTIONID	This returns the identifier of the OCS subscription that the notification relates to.
OCSUSAGEAMOUNT	This returns the amount of allowance consumed that the notification relates to.
OCSVOLUMETHRESHOLDVALUE	This returns the amount of allowance consumed that the notification relates to.

Default Field	Description
PAYCARDLAST4DIGITS	This returns the last four digits of the credit card that made a payment.
PAYMENTACCNUM	This returns the CMP account number associated with the payment.
PAYMENTAMOUNT	This returns the amount of the payment.
PAYMENTDATETIME	This returns the date and time a payment was made.
PREVIOUSPRICEPLAN	This returns the previous price plan.
RECURRINGPAYMENTREJECTIONAMT	This returns the rejected recurring payment amount.
RECURRINGPAYMENTREJECTIONDATE	This returns the date on which the recurring payment was rejected.
RESOLUTIONREQUIREDBYDATE	This returns the Resolution Required By Date of a workflow event.
RESOLVEDDATE	This returns the Resolved Date for a workflow event.
SUBCONTRACTENDDATE	This returns the ate that the contract on the subscription is due to end.
SUBCONTRACTSTARTDATE	This returns the date that the current subscription contract commenced.
SUBPASSWORD	This field may be used to store a PIN depending on CMP implementation but it will not store a password of any sort.
SUBSCONNECTEDDATE	This returns the date that billing commenced.
SUBSCRIPTIONATTRIBUTE1	This returns the value of subscription attribute 001.
SUBSCRIPTIONNUMBER	This returns the subscription number of the subscription.
SUBSDISCONNECTEDDATE	This returns the date that billing stopped.
SUBSERIALNUMBER1	This returns the value of subscription serial number 1.
SUBSERIALNUMBER2	This returns the value of subscription serial number 2.
SUBSERIALNUMBER3	This returns the value of subscription serial number 3.
SUBSERIALNUMBER4	This returns the value of subscription serial number 4.
SUBSERIALNUMBER5	This returns the value of subscription serial number 5.
SUBSTERMINATIONDATE	This returns the date that the termination invoice was produced.
TOTALSALESLEDGERADJUSTMENTS	This returns the Total Sales Ledger Adjustments.
YOURBILL	Static text *Your Bill*.

3. 6. 2 OCS Notification Default Fields

The following table lists the default fields that use the OCSNOTIFICATIONATTRIBUTES bean:

Default Field	Description
SUBALLOWANCEAMOUNT	This returns the initial allowance amount allocated for the period on the OCS.
SUBALLOWANCEAMOUNTREMAINING	This returns the amount of the allowance that is remaining on the OCS.
SUBALLOWANCEAMOUNTUSED	This returns the amount of the allowance that has been consumed on the OCS.
SUBALLOWANCEDESCRIPTION	This returns the description of the allowance associated with the OCS notification.
SUBALLOWANCETYPE	This returns the type of the allowance associated with the OCS notification.
SUBUSAGECAPAMOUNT	This returns the initial spend cap amount defined for the period on the OCS.
SUBUSAGECAPAMOUNTREMAINING	This returns the amount of the spend cap that remains to be consumed on the OCS.
SUBUSAGECAPAMOUNTUSED	This returns the amount of the spend cap that has been consumed on the OCS.
SUBUSAGECAPDESCRIPTION	This returns the description of the spend cap associated with the OCS notification.

4.0 Customer Management

Customer Management allows you to configure parameters used in the process of managing customers. These include Reason Types, Reason Categories, Reason Codes and Contracts.

4. 1 Reason Types

Reason types are used to group reason codes. Reason codes are linked to reason types, for example, a Direct Debit Amendment reason type could be linked to a number reason code.

Reasons are typically used for reporting purposes to identify the source of requests for change. Reason types add an additional layer of classification for workflow events. They are typically the same as or similar to reason codes, but less granular. Reason types are identified by a code (up to six letters) and a short description.

For example:

> Reason type: DDAMND Direct Debit Amendment
>
> Associated reason types: DD01 Direct Debit Amend- New Amount, DD02 - Direct Debit Amend - Bank Account Change, DD03 - Direct Debit Amend - Customer Request

You associate a reason code with a reason type when you create or edit the reason code, although this is not a mandatory setting.

To create a reason type, you need to:

- Provide an alphanumeric reason type code of up to six characters.
- Provide a meaningful description.

4. 2 Reason Categories

Reason categories are used to categorise reason codes to identify the source of change requests and for easy retrieval of reason codes, for example, a Workflow Reasons or Payments Reasons category. When you configure a reason code, the reason category is a mandatory setting.

To create a reason category, you need to:

- Provide an alphanumeric reason type code of up to six characters.
- Provide a meaningful description.

4. 3 Reason Codes

You can configure reason codes that can be used against a workflow event type.

For more information, see Workflow Event Types.

Once you have configured reason codes, you can configure a list of reason codes against a workflow event type and this list will be available to all workflow events with that workflow type. This enables users in AgentView to select a reason code from a drop-down list when they raise a workflow event.

The reason codes are predominantly used for reporting purposes and to identify the source of change requests. Reason codes are identified by an alphanumeric code (up to six characters) and a brief descriptive name.

To configure a reason code, you:

- Provide an alphanumeric reason code.
- Choose the reason category to which the reason code belongs.
- Supply a meaningful description.
- Select the security level of the user who can configure and view the reason code.
- Specify whether the reason is available to new workflow events.
- Provide an optional explanation for the reason code.
- Optionally, link reason types to the reason code.

4. 4 Contracts

You can define contracts for postpaid customers. Contracts outline the agreement to which a customer must adhere for the service provided. CMP supports contracts at the agreement and subscription level for postpaid subscriptions. Contracts are linked with price plans. Typically, a provider defines a small number of contracts. These can then be associated with multiple different price plans via the Business Configuration console. You link a contract to a price plan when creating that price plan and when doing so, the following are defaulted from the contract:

- Contract Term
- Early Upgrade Term
- Notice Period

When a price plan with a contract is linked to an agreement this means:

- All subscriptions on that agreement share the same price plan and contract values regardless of when they join the agreement.
- Subscriptions on agreement contracts are always associated with that contract even after it expires.

- Subscriptions on agreement contracts are not allowed direct manipulation of their price plans; this must be done at agreement level.
- Agreement price plan changes can be scheduled immediately or at a future date. You can cancel a future plan change prior to it taking effect.

Terms and conditions also reside in the price plan. However, these are independent of the contract.

In the Business Configuration console, you can add new contracts, view and/or edit the following settings:

- Contract Code - A unique alphanumeric code for the contract (View only).
- Contract Description - A brief meaningful description name for the contract of up to 30 characters.
- Effective Date - The date from which the contract applies (View only).
- Term of Contracts - The total duration of the contract in months.
- Minimum Contract Term - The minimum time period (in months) of a contract that must be served. If a customer is outside of this period, they can change their price plan at no charge. If they are under the minimum contract term and outside the early upgrade term, the customer can change their price plan but may be subject to a one-off administration fee.
- Early Upgrade Term - The period at the start of a contract (in months) during which customers are not allowed to change their price plan.
- Notice Period - The period of notice (in months) that a customer must give before a new price plan change takes effect.
- Maximum Termination Fee - Maximum monetary fee that can be applied as a termination fee.
- Min Period Days Free Termination - Termination fees are charged if the remaining days on a subscription's contract are greater than the termination fee days value.
- Active - Whether the contract is available to be selected for a price plan.

5.0 Billing

Billing allows you to configure settings related to generating and presenting customer bills. This includes Nominal Accounts and Tax Rates.

Nominal Accounts

You can specify codes that can be used to group financial transactions for the Sales Ledger.

In accounting terms, a nominal account is an account recording the financial transactions of a business in a particular category, rather than with a person or other organisation. Nominal Accounts are accounts related and associated to losses, expenses, income or gains, for example rental, usage, insurance, discounts, and so on.

Nominal codes are the unique reference numbers given to each nominal account for a business. Accounting transactions use these nominal codes so that money can be accurately allocated to the correct nominal account. For example, when you add a service to a tariff, the service has a specific nominal account code associated with it so that the charges for the service can be accurately recorded.

To create a nominal account, you:

- Supply a nominal account code.
- Provide a meaningful description for the account.

Tax Rates

You can configure tax codes and associated tax rates to apply tax to services and usage. For example, configuring a service involves setting the associated service tax codes.

To configure a tax rate, you:

- Provide a unique alphanumeric tax code.
- Provide a meaningful description for the tax code.
- Indicate whether the tax rate is inclusive or exclusive.
- Associate the tax code with a tax rate, expressed as a percentage.

6.0 Payments

The Payments module enables you to control how payment requests to external payment platforms are handled. This includes Mandate Revision Control and Recurring Payments Rejection Control.

Mandate Revision Control

You can configure mandate revision codes that are supplied in the mandate file from the bank and control whether an inbound file triggers mandate cancellation or amendment.

When customers choose to pay by direct debit, CMP users configure direct debit instructions to send to the customer's bank, which are known as *mandates*.

New, amended or cancelled direct debit instructions are extracted daily from CMP in the Automated Direct Debit Instruction Service (AUDDIS) extract. The AUDDIS extract is sent to a third party payment handler to be transmitted to Bankers Automated Clearing Service (BACS) for processing. If no response is received from BACS, the direct debit instruction is successful. If a direct debit instruction is unsuccessful, details of the failure including a mandate revision code are returned from BACS, via the third party payment handler, in the Automated Direct Debit Amendment and Cancellation Service (ADDACS) extract. CMP processes ADDACS files, taking the appropriate configurable action against the account, which can include:

- Cancelling the direct debit.
- Requesting that direct debit details are changed and resubmitted.

The Payments module allows you to configure the mandate revision codes that the banks supply in the ADDACS extract. To do this, you:

- Provide a unique alphanumeric code for the mandate revision code.
- Supply a brief descriptive name for the mandate revision code.
- Specify whether the action to take will be to amend or cancel the direct debit instructions (the mandate).
- Provide a reason for the workflow event that will handle the mandate revision by selecting a reason type and reason code.
- Configure the workflow event to raise to handle the mandate revision by specifying an event type and event code.

Recurring Payments Rejection Control

You can define recurring payment rejection codes to be supplied in the recurring payment file from the bank for both rejected recurring card payments and direct debit payments to control how the rejection is handled.

When recurring payment and refund transactions are sent to an external payments system, some transactions can fail, for example due to insufficient funds or lost and stolen cards. These rejected transactions must be processed by CMP.

The Recurring Payments Rejections job can be run for direct debit and recurring card payments. It generates a batch that contains records to reverse each failed transaction from the sales ledger. Once this batch has been created, it is detected by dedicated daemons, which format the batch and transmit it to the target sales ledger. This job also generates workflows, for example, to send a communication to the customer, processes soft declines to temporarily exclude the account from the automated payments process and processes hard declines to revert the account to the default (manual) payment to make alternative arrangements for collection of amounts due.

How the job handles the payment rejections are specified by *recurring payment rejection codes*, which the banks include in the rejected payment extracts that are sent to CMP. You configure these code in the Payments module.

Each recurring payment rejection code must include:

- A unique alphanumeric code.
- A brief meaningful description.
- The reason code and reason type.

Further configuration depends on whether the rejection is a soft decline or a hard decline:

Soft decline

Soft Declines are a result of a temporary error. Payments with soft declines can be retried a specific number of times by including the failed payment on a future recurring payments extract. The number of retries and a specific reason code is configurable. The retries have an associated workflow event and the appropriate actions are automatically completed. You can also configure the number of days that the account is suspended from the automated payments process. Once the maximum number of retries is reached, recurring payment is cancelled and treated as a hard decline. A workflow event is configurable for this because the recurring payment will be cancelled.

Hard Decline

Hard declines are permanent errors and the recurring payment is not retried. A hard decline results in CMP automatically changing the customer's Payment Type to the configured default and the payment is reversed in the CMP Ledger, for which a refund workflow event can be configured in the recurring payment rejection code.

7.0 Usage Processing

In Usage Processing you can define how usage is classified for display on a customer invoice. This includes configuration of Usage Classes and Suppressed Numbers.

Usage Classes

You can define how usage record types received from network components are classified into meaningful usage descriptions.

CMP is integrated with an Online Charging System (OCS) for real-time rating and balance management. In an online charging implementation, rating and usage-based discounting are handled by the Online Charging System (OCS) in real time as the service is consumed.

Every time a subscriber uses their handset to make a call, send a text, browse the web or carry out any other activity, the network records this activity and makes the information available for collection in event files - External Data Representation or xDR files. The CMP Usage Interface handles and processes these externally priced usage event records (calls messages and data) and non-usage items (line rental, connection fees and insurance) so that usage data can be included in a subscriber's detailed bill, available to Call Centre Staff via AgentView or via a self-care application.

CMP performs supplementary classification to support the bill presentation and any reporting requirements of the service provider. This classification involves configuring *usage classes* so that meaningful usage descriptions can be applied to the usage record types received from the network, and included in a customer's bill.

To define a usage class, you:

- Provide a unique alphanumeric code for the usage class.
- Supply a meaningful description.
- Specify the network from which the usage record type comes.
- Identify the usage record type - for example voice, text or data.
- Choose a default unit of measure for the usage of value, volume or duration.
- Select the pricing service that applies to the usage class.
- Select the discount service that applies.
- Specify whether the usage class is to be displayed on the customer's invoice.
- Select the security level of the user who has access to the usage class.
- Indicate whether the usage class is available to new subscriptions.
- Add any explanatory text required to help future Business Configuration users understand the usage class.

Suppressed Numbers

In Usage Processing you can configure suppressed phone numbers that do not appear on the customer bill. For example, you may want to ensure that calls for which there are no charge do not appear explicitly on the invoice. You can suppress specific phone

numbers or just a prefix.

To configure a suppressed number, you:

- Select the network to which the suppressed number belongs.
- Supply the number to be suppressed.
- Specify whether the suppressed number is an entire phone number or a prefix.

8.0 Credit Management

In Credit Management, you can define how outstanding payments are processed and collected. This includes configuration of Account Types, Credit Control Procedures, Debt Recovery Agencies and Spend Caps.

Account Types

You can configure account types to classify customers to enable different credit control procedures to be employed for each account type.

When MVNOs take on post-paid customers they need to define a threshold of risk for the customer, usually based on a credit score from a Credit Reference Agency (CRA) and other factors such as a customer's salary. To do this, they define credit classes to classify their customers. In CMP these credit classes map to *account types*. Each account has an associated account type, such as High Risk, Medium Risk, Low Risk or VIP, for example.

When invoices are produced, payment is usually required within a configurable number of days. If payment is not made within this time frame, the subscription enters the applicable credit control procedure. The credit control procedure is driven by the account type. For example, you may not want to handle a VIP customer in the same way as a high risk customer.

If payment cannot be recovered by credit control procedure, the account is usually handed over to a Debt Recovery Agency (DRA). The debt recovery process is also driven by account types.

Changing an account type is via a workflow action.

To configure an account type, you:

- Specify a unique alphanumeric code for the account type and a brief meaningful description.
- Define how the account type is to be used, for example to designate a medium risk customer, a standard account type, an account in debt recovery or a fraudulent account, etc.
- Associate a credit control procedure with the account type.
- Specify whether this account type is to remain in credit control.
- Indicate if this account type is available to new accounts.
- Specify if accounts of this account type are to be included in the CRA extract and/or the DRA extract.

If an account type is to be included in the DRA extract, you must apply further configuration:

- Supply the code for the DRA.
- Indicate the position of the DRA in the debt recovery process. Is it the first DRA to handle this account? The second?

- Specify whether this account type is to be used for new/existing accounts in the DRA extract or in the final extract for an account.
- Specify the event type and event code for the workflow event associated with this account type.

Credit Control Procedures

You can define the steps and actions in recovering outstanding invoice amounts from customers.

If a customer has not paid their invoice after a configurable number of days, they usually enter an applicable credit control procedure. A credit control procedure is a pre-configured, automated, and time-defined set of activities. This procedure, sometimes called *dunning*, methodically communicates with customers to ensure the collection of accounts receivable. Actions typically involve automatic generation of correspondence - SMS, email, calls, letters - or automatic provisioning activity such as applying bars. Communications can progress from gentle reminders to strongly-worded correspondence and restriction of service.

Credit control procedures are linked to account types, allowing different procedures to be carried out for different classes of customer.

Credit control procedures advance through stages. Workflow events associated with each stage enable automatic actions to be carried out as defined in Business Configuration. The number of stages and the actions associated with each stage can be varied according to the account type.

An example credit control procedure is as follows:

- Account Balance becomes overdue (Day 0).
- Stage 1 (Day 3) - Letter generated to customer reminding of overdue balance and confirming ways to pay.
- Stage 2 (Day 7) - Workflow Event Generated for CSA to telephone customer.
- Stage 3 (Day 9) - Automated Provisioning Activity to apply full bar.
- Stage 4 (Day 30) - Send Account Details to Debt Recovery Agency.

When an account is first placed onto a credit control procedure, it goes onto the first stage of the procedure. If the debt is not settled, subsequent credit control runs will advance the account through the stages, issuing the associated actions as it goes. If the debt is settled, workflow events are also configured to handle this, for example removing any sanctions and restoring services. A stage can have no workflow configured, in which case there is no action performed. In this scenario the procedure stage is being used for holding purposes.

To configure a credit control procedure, you:

- Supply a unique alphanumeric code for the credit control procedure and a meaningful brief description.
- Define a minimum qualifying balance amount. Each credit control procedure is configured to apply only if a minimum amount of money is owing. This avoids the

potentially alienating of customers by sending them reminder letters, or barring their service for small amounts of money.

- Set the procedure status as Released or Held. If a procedure is Held it means that no customer goes onto or moves through that procedure. They may come off it, however.
- Define the security level for users who have access to the procedure.
- Stipulate whether the credit control procedure is available to new subscribers.
- Add explanatory text to help future CMP 8.11 users understand the procedure.
- Configure the credit control procedure stages as follows:
    - Specify the procedure stage - the position of the stage in the sequence of stages for that procedure.
    - Provide the minimum number of days that must elapse since the account was placed on its current stage before it can be progressed onto this stage. In the case of the first stage it is usually the number of days after the invoice became due.
    - Select the type of amount that must be recovered - for example a full balance or the balance due.
    - Define whether progression from this stage requires a termination invoice or has no such restrictions.
    - Define the workflow events to take place when an account enters this stage and when payment is received at this stage.

Debt Recovery Agencies

You can specify what Debt Recovery Agencies (DRAs) are used to collect outstanding debt directly from customers.

If, at the end of a credit control procedure, the amount owing has not been recovered, an account typically enters a debt recovery process in which the account is handed over to a Debt Recovery Agent (DRA). Debt Recovery Agencies are companies who specialise in collecting debts where the original creditor cannot get arrears repaid.

CMP generates a file, the Debt Recovery Agency (DRA) extract that includes accounts to be referred to the debt collection agency including details such as:

- The amount of money to recover from the customer.
- The amount that was recovered since the last extract.
- Contact information such as postal address, email address and telephone numbers.

The agency in turn can provide feedback such as the amount recovered. When CMP receives debt recovery response files, these are automatically detected and processed. You can configure override workflow events to be used for specific DRA response codes that have been received.

For more information on Debt Recovery in CMP, see the *Debt Recovery* sections in the *Business Configuration Overview* and the *Batch Jobs and JSON Schemas Guide* documentation.

Whether an account enters debt recovery is linked to its account type and whether accounts of that type are included in the DRA extract that CMP produces for DRAs. You configure this when creating an account type. You also configure the DRA to which the extract will be sent. To do this, you first need to have configured DRAs as follows:

- Provide a unique alphanumeric code for the DRA and a brief meaningful description.
- Provide a company ID and a company type which will appear in the credit extract. This is usually decided with the DRA beforehand.
- Identify the sender (the company sending the DRA extract).
- Choose a default response event type.
- Indicate whether this DRA is available to new accounts.
- If required, configure override workflow events used for specific DRA response codes received.

Spend Caps

A spend cap is a service for customers that applies a limit to how much usage a customer can consume outside of their allowances or bolt-on extras, preventing spending over a certain amount. This can help avoid overspending and *bill shock*. Spend caps can be for:

- Value - applies to monetary/overage. This can be defined in CMP.
- Volume - applies to data usage. This can be defined directly in the OCS.
- Duration - applies to voice/SMS usage. This can be defined directly in the OCS.

There are two types of value spend cap:

- Full - this applies to all usage and is concerned with money overage only.

  

  A postpaid subscriber must always have full cap.

- Partial - this applies to specific usage with money overage only.

In Business Configuration, you can define, edit and remove spend caps that you can also link to usage class groups.

To configure a spend cap, you:

- Provide a unique alphanumeric code for the spend cap and a brief meaningful description.
- Specify the type of cap - whether full or partial usage.
- Define the default cap amount (in £) and the maximum amount.
- Choose the name for the spend cap in the online charging system (OCS).
- Configure the workflow event types and codes for when a spend cap is added, removed or altered.
- Specify whether the spend cap is active.
- Add optional explanatory text to help the understanding of future Business Configuration users.

You can also view the network that the spend cap is associated with and the Usage Class Group that defines the specific usage that contributes to the consumption of the spend cap, as well as any notification thresholds associated with the spend cap.

9.0 About Workflows

Workflow events are a key element of CMP functionality. They can perform many functions, using the following mechanisms:

- Actions: for provisioning, subscription services, or account type movements.
- Communications: for outbound communication with customers via email, letters, SMS and push notifications.

Examples of workflow events performing functions include:

- Triggering provisioning commands to a network, either immediately or on a scheduled date.
- Performing automated activities related to preconfigured credit control procedures, such as applying a bar.
- Sending an SMS to a customer to tell them they are connected to a network.
- Connecting or disconnecting subscribers.
- Adding a subscription service, such as an airtime top-up.

Each workflow event must be individually configured to perform the required functions. Actions are the main mechanism for a workflow event to do something. Each workflow event must be configured to perform the actions by either adding default actions[1] to the workflow event or adding actions manually in AgentView. When a workflow event with an unresolved action is processed, one or more *actioned items* are automatically created. Actioned items are processed in the background by separate components of CMP or third party systems.

CMP workflow events are highly flexible and configurable. This allows service providers to automate commonly performed business processes and network provisioning. A number of workflow events can be linked in a sequence to create *linked* workflow events. Linked workflow events can be used to automate the creation of workflow events.

CMP Business Configuration allows you to configure workflow events by creating and maintaining the following components:

- **Event Types**

  Create categories of events to support user interactions and reporting. Workflow events are identified by event types and event codes.

- **Event Codes**

  Configure event codes so that you can define workflow events to perform or track system activity and customer contact. Associate actions and communications with workflow events and create linked events.

- **Action Types**

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[1] Default actions are those that are configured to be automatically triggered when a workflow event is raised or resolved.

Actions are the mechanism for a workflow event to do something. Create categories of action types to drive action behaviour and provisioning.

- Action Codes

  Configure action codes to define event-driven activities; including provisioning, account type movements and subscription services.

9. 1 Workflow Event Types

A workflow event is identified by an *event type* and an *event code*.

Event types are used to classify individual workflow events in conjunction with event codes. They represent categories of events or departments, for example Credit Control, Customer Service or Provisioning. Each event type is a 3-character or 4-character code, plus a longer, more user-friendly description, for example Credit Control (CRED).

An event type can have one or more associated event codes.

When you configure an event type, you:

- Provide a code, which should be meaningful to the user, for example BAR, QRY (query), or CUST (customer).
- Provide text description. This text is visible in AgentView, so it must be meaningful.
- Specify the levels of the CMP customer hierarchy at which the workflow event can be raised.

9. 2 Event Codes

A workflow event is identified by a combination of an *event type* and *event code*. An event type can be associated with more than one event code, but an event code uniquely identifies a workflow event. Event codes represent events or procedures within a business, such as a credit control disconnection.

The event code subdivides the event type and contains information used to produce customer communications, control workflow event entry and to carry out default actions. It is a 3-character or 4-character code plus a more user-friendly description, for example Add Data Bar (DBAR). If the associated event type is Bar Feature (BFEA), then for this example, CMP identifies the workflow event as **Bar Feature - Add Data Bar** or **BFEA DBAR**.

Event codes can be linked to communications to send communications such as letters, emails, push notifications and SMS messages to customers.

9. 2. 1 Workflow Event Reason Codes

Workflow event reason codes provide an additional layer of classification for workflow events. They are mostly used for reporting purposes. Reason codes allow an AgentView user, when raising a workflow event, to select a reason from a drop-down list. For example, if a user raises a workflow event to note details of a complaint from a customer, reason codes can be made available to classify the type of complaint, such as invoice error, customer service, or network coverage. If a list of reason codes is configured against an event type, every workflow event with that type has the same list of reason codes.

9. 2. 2 Workflow Event Configuration

CMP Business Configuration allows you to configure the following for event codes and workflow events:

- The associated event type.
- The event code and event description.
- The status when the workflow event is raised and after it is confirmed.
- Whether a reason code is mandatory and if required, a default reason code.
- A date by which the workflow event should be resolved, and whether a date is mandatory.
- Whether a contact name is required when raising the workflow event.
- The CSA to whose worklist the event is assigned by default.

Once you have configured a workflow event, you can:

- Assign default actions to it.

Typically, a workflow event is preconfigured to have a default set of actions, so that every instance of the workflow event performs the same set of actions. Default actions are those that are configured to be automatically triggered when a workflow event is raised or resolved. Each default action is given a sequence number. The first action attached to the event has a sequence number of 10; the second is 20, and so on. CMP sends the actions to the network, which then attempts to process them in their sequential order.

- Link communications to it.

Communications can be linked to workflow events to support outbound communication to customers.

- Link it to other events to create linked events.

You can link a series of workflow events to create a sequence of linked workflow events. Linked workflow events can be used to automatically create another workflow event once a workflow event has been resolved.

For example:

1. Workflow A: Moves an account from a nursery account to a business account.
2. Workflow B: Removes the data cap from the account.

An error with Workflow A will prevent Workflow B being created.

Any number of workflow events can be linked as long as every workflow event in the sequence is configured to be raised at the same level of the CMP customer hierarchy. For example, all workflow events are to be raised at account level.

The first workflow event in a sequence is referred to as the *initiating* event. All linked workflow events are linked to the initiating event only. You cannot link another initiating event to the first initiating event. For example:

- Allowed: Workflow A is the initiating event. Workflow B and C are linked to A.
- Not allowed: Workflow A is the initiating event. Workflow B is linked to A. Workflow C is linked to B.

When you define linked events, you give each workflow event a sequence number, which determines the order in which the linked workflow events will be created. When the first workflow event is resolved, the second will be created. When the second is resolved, the third will be created, and so on. Typically the sequence numbers 10, 20, 30 are used so that changes can be made in the future by using the numbers in between. For example:

1. Workflow A is the initiating event. Workflow B has sequence number 10 and will be created when Workflow A is resolved.
2. Workflow C has sequence number 20 and will be created when Workflow B is resolved.

Linked workflow event functionality is independent of other workflow event functionality, making it entirely optional. Linked event functionality runs as a background process. It identifies any workflow events that have linked workflow events predefined where one or more of predefined linked workflow events have not been created. It then checks if the preceding workflow event in the sequence has been set to Resolved. If it has, the next workflow event in the sequence is created. Linked workflow events are created in exactly the same way as workflow events created manually. Standard workflow functionality is then responsible for processing the workflow event.

9. 3 Action Types

Actions are the main mechanism for a workflow event to do something.

Typically, a workflow event is preconfigured to have a default set of actions, so that every instance of the workflow event performs the same set of actions. Default actions are those that are configured to be automatically triggered when a workflow event is raised or resolved. Each default action is given a sequence number. The first action attached to the event has a sequence number of 10, the second is 20, and so on. CMP sends the actions to the network, which then attempts to process them in their sequential order.

When a workflow event with an unresolved action is processed, one or more *actioned item* are automatically created. Actioned items are processed in the background by separate components of CMP or third party systems.

CMP users can also manually add actions to a workflow event. Any action can be added to a workflow event if it is configured to be:

- Manually selectable.
- Allowed at the level at which the workflow event has been raised.

Each unique action is identified by an *action type* and an *action code*. CMP has the following standard types of actions to which action types belong:

Network Action

This action type sends commands to the network, for example bars and disconnections.

Account Movement

This action type automatically transfers an account from one account type to another, for example a Nursery account to a Business account.

Subscription Service

This action type automatically applies a service to the subscription, for example, itemised billing.

When you configure a new action type, you provide:

- A 3-character or 4-character alphanumeric code for the action type.
- A longer text description of the action type, up to 25 characters.
- Rules for duplicates – whether duplicate actions with the same action type are allowed, and duplicate actions with the same code are allowed.

9. 4 Action Codes

Each unique action is identified by an action type and an action code. Each action type has a number of corresponding action codes to identify specific actions, such as applying a specific bar or transferring a particular account. For example, suppose action type ACCM indicates an account movement action type, and action code 008 indicates a move to account type 008. For the action ACCM 008, a subscriber is moved to account type 008.

When you configure an action code, you:

- Select an action type to associate with the action code.
- Provide a meaningful unique alphanumeric action code, up to six characters long.
- Provide appropriate information for the type of action:
    - Network Action

      For example, you need to specify the type of network action, such as a connection, disconnection, bar or network service; the network command, for example, a port in; and whether the processing will be a batch job or

interactive. You can also enter the code for the confirming subscription service action and set a priority for the action. In addition, you can indicate whether to inform the network of the action, whether the related actioned Item should display a **Pending** status, and whether to ignore network errors.

- Generic Provisioning

  For example, you need to specify the type of network action, such as a connection, disconnection, bar or network service; the network command, for example, a port in; and whether the processing will be a batch job or interactive. You can also set a priority for the action. In addition, you can indicate whether to inform the network of the action, whether the related actioned Item should display a **Pending** status, and whether to ignore network errors.

- Non Network Action

  For example, you need to specify the type of network action, such as a connection, disconnection, bar or network service; the network command, for example, a port in; and whether the processing will be a batch job or interactive. You can also set a priority for the action. In addition, you can indicate whether to inform the network of the action, whether the related actioned Item should display a **Pending** status, and whether to ignore network errors.

- RTC Provisioning

  For example, you need to specify the type of network action, such as a connection, disconnection, bar or network service; the network command, for example, a port in; and whether the processing will be a batch job or interactive. You can also set a priority for the action. In addition, you can indicate whether to inform the network of the action, whether the related actioned Item should display a **Pending** status, and whether to ignore network errors.

- Account Movement

  You need to select the account type to which the subscriber is moving.

- Subscription Service

  You need to specify the service, for example monthly line rental charge.

- Supply a descriptive name for the action code.
- Set the security levels for adding the action code to an action and processing the action.
- Indicate whether the action code is available to new subscribers and can be selected in AgentView.

10.0 Network

In the Network module of Business Configuration you can define network commands, configuration and other network parameters. This includes:

- Network Commands
- Network Command Groups
- Network Features
- Network Feature Defaults

10. 1 Network Commands

Commands are used in CMP to send specific information to the required network in order for the network to carry out the required behaviour (the network action) - for example, to apply a bar when a customer has lost their phone, to provision a new subscriber or to apply a change of tariff.

Network commands can be organised in command groups, for example by type of command or by network. In Business Configuration, you can create, edit and remove network commands. You can also configure network command attributes.

To create a network command, you:

- Provide a unique alphanumeric code for the command and a brief meaningful description.
- Choose the network action type: connection, disconnection, bar, unbar, network service, number change, tariff change or other.
- Indicate if there is to be a parallel command.
- Specify whether the command is an admin bar.
- Indicate whether the command is active and is thus available to new subscriptions.
- Provide an optional explanation to help future Business Configuration users understand the network command.

10. 2 Network Command Groups

You can create network command groups to organise network commands, for example by grouping all the commands for a particular network together. This can simplify adding multiple commands to other CMP components.

To create a network command group you:

- Provide a unique alphanumeric code for the command and a brief meaningful description.
- Indicate whether the command group is active.
- Provide an optional explanation to help future Business Configuration users under-

stand the network command group.
- Add network commands as group members.

10. 3 Network Features

Network features are subscription features that can be provisioned onto the underlying service provider network to offer additional network capabilities for the subscriber. These can include, for example, bars, spend caps or premium services. Features can correspond to network attributes or OCS attributes.

To make the feature available to a subscriber, the feature is then enabled via AgentView or the Set Feature web service. Features can also be disabled in the same way.

So for each feature, you need to define either:

- Enable and disable workflow events.

Or

- Bar and unbar workflow events.

Regardless of the workflow event you configure, features appear only as enabled or disabled in AgentView or by web services. Only one action is allowed on a feature workflow.

Example:

A feature called International Calls Bar can be configured with enable and disable workflow events. The same feature could be configured with bar and unbar workflow events.

Alternatively, the same feature can be named International Calls and configured with enable and disable workflow events, or bar and unbar workflow events.

A feature can be configured to daily charge when the feature is enabled.

A feature can be barred or unbarred. These are normal subscription bars, that is, visible from AgentView Subscription Summary. Features cannot be manipulated by adding or removing a service.

To create a network feature you:

- Provide a six-character code for the feature and a meaningful descriptive name.
- For an online charging implementation, select the network.
- Optionally provide additional descriptive text.
- Specify whether the feature is a bar feature.
- Select the corresponding feature name in the OCS.
- Indicate whether the feature can be controlled by the subscriber.

- If the feature is a bar feature, specify the following:
  - Event type and code for the bar workflow event.
  - Event type and code for the unbar workflow event.
- If the feature is not a bar feature, specify the following:
  - Event type and code for the enable workflow event.
  - Event type and code for the disable workflow event.
- Choose whether the feature enables a charge.
- Indicate whether the feature is active, that is, available to new subscriptions.

10. 4 Network Feature Defaults

You can configure default behaviour for network features for specific network, for example whether a bar is enabled by default for one network, but disabled by default for a different network. Network feature defaults provide AgentView and web services with a default view of the expected state that network features should be in at connection. These are not provisioned at connection time.

To configure a network default, you:

- Select the network (for online charging implementations only).
- Specify the network type - postpaid or prepaid.
- Choose the network feature.
- Select the default state for the feature.
- Indicate whether the feature is active, that is, available to new subscribers.

10.0 System

System configuration enables you to configure system-wide application parameters and parameters for installed modules. This includes:

Descriptive Titles

Descriptive titles are useful general-use descriptors that can be applied to CMP entities in multiple business and system configuration areas such as:

- Language, for example English, Spanish, Arabian or Japanese.
- Country of Origin, for example USA, United Kingdom, Turkey or Venezuela.
- Transactions, for example direct debit, unapplied cash, adjustment or payment received.
- Communications, such as descriptive titles for distribution methods, external targets, and default fields.

Descriptive titles are organised in groups for ease of use, for example all descriptive titles for financial transactions are grouped together.

In Business Configuration, you can view, create and edit descriptive titles.

To create a descriptive title, you:

- Choose or create a group to which the descriptive title will belong.
- Provide a unique alphanumeric code for the title and a brief meaningful description.

Workflow Properties

In Business Configuration, you can configure workflow event properties by setting the event type and event code for the associated workflow event. For more information, see Workflow.

System Properties

You can configure the value and default value for system parameters.