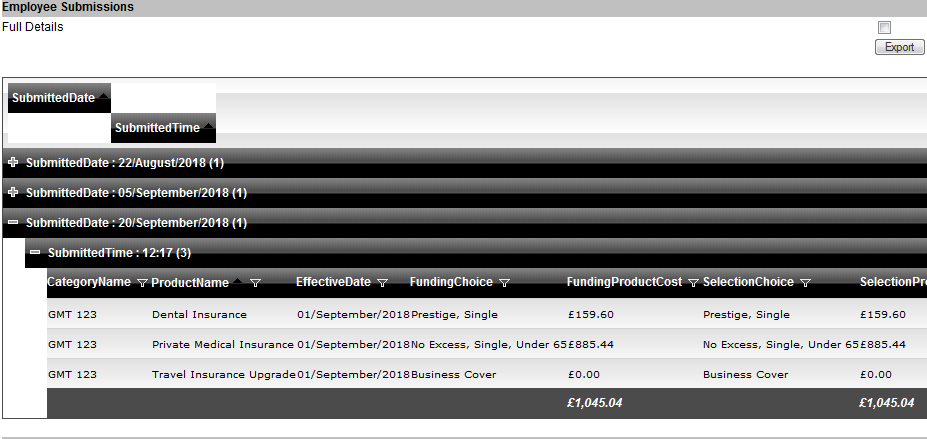
**Pro-Rated Costs**

**Intro**

The system needs to be able to handle pro-rating of costs for mid-year joiners or employees making lifestyle event changes. As part of this it should also be able to cater for contract benefits that have costs going beyond the scheme year.

Currently the system always uses the annual costs from the rates to display and report on. Monthly costs are also derived from this value.

The current Future & History tab submission records could be used as a starting point for this functionality:



**Requirements Summary**

**Client Config**

* User should be able to add/amend mandatory field “Scheme Start Date” in the client configuration screen.
* User should be able to add/amend mandatory field “Scheme End Date” in the client configuration screen.
* User should be able to add/amend mandatory field “Cut-Off Date” for each month in the client configuration screen.

[**Tatvasoft**] Add 3 new fields:

1. Scheme Start Date (mandatory filed)
2. Scheme End Date (mandatory filed)
3. Cut-Off Date (mandatory filed)

on “Client Registration” screen (i.e. Admin – Client - Details)

**Benefit Config**

* User should be able to add/amend mandatory field “Benefit Cost Type” in the benefit configuration screen drop-down with options One-off Cost, Fixed Cost, Monthly Cost or Contract.
* User should be able to add/amend field “Contract Length (Months)” in benefit configuration screen should be an integer.

[**Tatvasoft**] Add 2 new fields:

1. Benefit Cost Type (mandatory filed)
2. Contract Length

on “Create/Modify Benefit Details” screen (i.e. Admin – Products - Benefits)

Currently “Create/Modify Benefit Details” screen contains “**Fixed Cost**” field. Do you want to replace this field with “**Benefit Cost Type**”?

**Screen 1:**



**Screen 2:**



Let me know your views on the same.

**Benefit Selection Record (BSR)**

* When the user submits changes, is landmarked or has a leave date entered relating to a benefit selection or the benefit doesn’t already have a BSR for the scheme year the system should create a benefit selection record. For always open benefits the BSR will have to be checked/updated anytime the user saves a new selection.

[**Tatvasoft**]

**Our understanding**: BSR means current employee benefit selection process….

System create new record while there is no any previous benefit selection for relevant employee and employee select any choice option.

**Case 2:** Update record if record exists

**Case 3**: No any change with data if nothing select with benefit option

**Please correct me if I am wrong?**

**Query**:

1. BSR is a new feature of functionality like TRS where employee’s selection related calculation/management perform separately or it means employee benefit selection process which currently works with BenefitSummaryUI page.
2. Do you want the BSR functionality to work for all employee states? (***i.e. Open, Submitted, Renewal, Lifestyle and Landmark***)

* System generated BSR should store Benefit Choice, Projected Scheme Year Cost, Outstanding Cost, Monthly Cost, Selection Effective Date, Months Remaining, Contract Length and Contract End Date.

[**Tatvasoft**] For this, we have to store all values in database. FYI. Currently, we are storing only “Selection Effective Date” & “Benefit Choice” fields. So, we have to add other fields in existing “**tblEmployeeProduct**” table.

**Query**:

1. Can you please elaborate on **outstanding cost** and the **calculation** for the same?

* System generated BSR should replace any existing record for the associated benefit that has the same effective date.
* System generated BSR shouldn’t be generated for a contract benefit if there is already an existing record and the contract end date of that record is after the new selection effective date.

[**Tatvasoft**] Can you please elaborate with example?

* Fixed cost BSR should have their values calculated according to examples below and the examples in ‘Pro-Rate Calcs and Fields.xlsx’.
* Monthly cost BSR should have their values calculated according to examples below and the examples in ‘Pro-Rate Calcs and Fields.xlsx’.
* Contract BSR should have their values calculated according to examples below and the examples in ‘Pro-Rate Calcs and Fields.xlsx’.
* Annual Costs should be calculated using the values in BSR.

[**Tatvasoft**] Can you please elaborate with example? I checked excel files but cannot identify the calculation for Annual Costs.

* Monthly Costs should be calculated using the values in BSR.
* Funding Costs should be calculated using the values in the BSR.

[**Tatvasoft**] Can you please elaborate with example?

* Costs used in reports should be calculated using the values in the BSR.
* Costs displayed to users should be calculated using the values in the BSR see example in ‘Pro-Rate Calcs and Fields.xlsx’ *Benefit Options* tab.
* AJAX functions that return benefit costs should return values based on the BSR.

[**Tatvasoft**] You want to implement this new business logic with BenefitSummaryUI screen and AJAX functions. **Right**?

**Admin**

* Admin users should be able to edit BSRs when they view/edit employees.

[**Tatvasoft**] As you know, currently Admin user can view/edit employee(s) related benefit information and also able to load data for the same. Do you want to use existing screen (i.e. BenefitsummaryUI)

Or

Do you want a new screen where employee’s BSRs would be editable?

If yes then do you want all the fields to be editable in this screen?

(i.e. Benefit Choice, Projected Scheme Year Cost, Outstanding Cost, Monthly Cost, Selection Effective Date, Months Remaining, Contract Length and Contract End Date)

* Admin users should be able to upload BSR data.

[**Tatvasoft**] I think Admin user can upload data through “Load new employee” or “Employee renewal” screen **Right**?

* Admin users should be able generate a report of BSR data.

[**Tatvasoft**] You want to make changes with all report(s) – Dynamic/Static **Right**?

* Changes to BSRs should be logged in the audit trail.

[**Tatvasoft**] Need to add audit event for the changes made by admin from new BSR screen.

Please correct me if I am wrong.

**Descriptions and Examples**

To handle the pro-rating of costs new fields need to be added to the client configuration:

* Scheme start date – the date the scheme year starts
* Scheme end date – the date the scheme year ends
* Monthly cut-off date – Selections before this date each month will be effective the following month, selections after this date will be valid for the month after that.

New fields will also need to be added to the benefit configuration page:

* Benefit cost type – whether the benefit is fixed cost, monthly cost or contract
* Contract length – Length of the benefit contract in months

For each benefit selection we need to store the following data:

* Benefit Choice – the benefit selection the user has made.
* Projected Scheme Year Cost – how much the benefit selection will cost in total at the end of the scheme year if all selections remain the same.
* Scheme Cost – the annual selection costs at that point in time i.e. with any deductions from previous selections taken into account.
* Monthly Cost – the monthly cost of the selection at that point in time
* Selection Effective Date – the date on which the selection should take effect or date on which employee leaving should take effect.
* Months remaining – months remaining in the scheme or in the case of contract benefits till the contract ends
* Contract length – the duration of a contract in months
* Contract end date – if it is a contract benefit the date at which the selection is set to end

This should happen for relevant benefits when a submission occurs. If there is already a benefit selection with the same effective date this should be replaced with the new one. For fixed cost and monthly cost benefits this should only occur if the benefit choice has changed. For a contract benefit this should only happen if the contract end date is in the past.

[**Tatvasoft**] Please refer “***Pro-Rate Calcs and Fields\_TatvaSoft Understanding.xlsx***” document. I would like to request you to verify the test cases added for all benefit cost types.

**Selection Values**

(see Pro-Rate Calcs and Fields.xlsx *Benefit Selection Costs* tab)

**Fixed Cost Benefits**

* Projected scheme year cost = scheme cost + total paid
* Scheme cost = annual rate cost – total paid, for leavers this should be 0
* Monthly cost = scheme cost / months remaining
* Selection effective date = if the date the selection is submitted is <= monthly cut-off date 1st of the following month otherwise it should first of the month after that. If a leave date is entered for the user the selection effective date is the 1st of the same month as the leave date (See date charts below):

e.g.

**Submission before cut-off**

monthly cut-off date = 10

selection submission date = 09/04/2018

selection effective date = 01/05/2018

**Submission after cut-off**

monthly cut-off date = 10

selection submission date = 19/04/2018

selection effective date = 01/06/2018

* Months remaining = difference between selection effective date and scheme end date

*NOTE: this includes the month the benefit is effective from*

e.g.

selection effective date = 01/05/2018

scheme end date = 31/12/2018

months remaining = 8

* Contract length = for a fixed cost benefit this can default to 0
* Contract end date = for a fixed cost benefit this can default to blank (null)

**Monthly Cost Benefits**

* Projected scheme year cost = (monthly cost \* months remaining) + total paid
* Scheme cost = annual rate cost, for leavers this should be 0
* Monthly cost = scheme cost / 12
* Selection effective date = if the date the selection is submitted is <= monthly cut-off date 1st of the following month otherwise it should first of the month after that. If a leave date is entered for the user the selection effective date is the 1st of the same month as the leave date (See date charts below):

e.g.

**Submission before cut-off**

monthly cut-off date = 10

selection submission date = 09/04/2018

selection effective date = 01/05/2018

**Submission after cut-off**

monthly cut-off date = 10

selection submission date = 19/04/2018

selection effective date = 01/06/2018

* Months remaining = difference between selection effective date and scheme end date

*NOTE: this includes the month the benefit is effective from*

e.g.

selection effective date = 01/05/2018

scheme end date = 31/12/2018

months remaining = 8

* Contract length = for a monthly cost benefit this can default to 0
* Contract end date = for a monthly cost benefit this can default to blank (null)

**Contract Benefits**

* Projected scheme year cost = annual rate cost
* Scheme cost = annual rate cost – total paid
* Monthly cost = scheme cost / months remaining, for leavers this would be scheme cost
* Selection effective date = if the date the selection is submitted is <= monthly cut-off date 1st of the following month otherwise it should first of the month after that. If a leave date is entered for the user the selection effective date is the 1st of the same month as the leave date (See date charts below):

e.g.

**Submission before cut-off**

monthly cut-off date = 10

selection submission date = 09/04/2018

selection effective date = 01/05/2018

**Submission after cut-off**

monthly cut-off date = 10

selection submission date = 19/04/2018

selection effective date = 01/06/2018

* Months remaining = difference between selection effective date and contract end date

*NOTE: this includes the month the benefit is effective from*

e.g.

selection effective date = 01/05/2018

contract end date = 30/04/2019

months remaining = 8

* Contract length = input in benefit configuration by admin user, this is contract length in months
* Contract end date = (selection effective date + contract length) – 1 day

e.g.

selection effective date = 01/05/2018

contract length = 12

contract end date = 30/04/2019

**One-off Cost Benefits**

* Projected scheme year cost = annual rate cost + total paid
* Scheme cost = annual rate cost
* Monthly cost = annual rate cost
* Selection effective date = if the date the selection is submitted is <= monthly cut-off date 1st of the following month otherwise it should first of the month after that. If a leave date is entered for the user the selection effective date is the 1st of the same month as the leave date (See date charts below):

e.g.

**Submission before cut-off**

monthly cut-off date = 10

selection submission date = 09/04/2018

selection effective date = 01/05/2018

**Submission after cut-off**

monthly cut-off date = 10

selection submission date = 19/04/2018

selection effective date = 01/06/2018

* Months remaining = 1
* Contract length = for a monthly cost benefit this can default to 0
* Contract end date = for a monthly cost benefit this can default to blank (null)

[**Tatvasoft 23.10.2018**] I would like to request you to verify the test cases added for all benefit cost types for leavers in spreadsheet “***Pro-Rate Calcs and Fields\_TatvaSoft Understanding for leavers.xlsx***”

**Already Paid**

In order to show accurate costs for employees changing selections mid-year we will need to account for the amount the employee has already paid. For each type of benefit we would expect:

**Fixed Cost Benefits**

Mid-year selection change

Initial Selection (selection rate cost = £600)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £600
* Annual cost = £600
* Monthly cost = £50
* Months remaining = 12
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £300)

*Deductions of £50, previous selection’s monthly cost…*

*…have been made for 4 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/05/2018
* Projected scheme year cost = £300
* Annual cost = £100
* Monthly cost = £12.50
* Months remaining = 8
* Contract length = 0
* Contract end date = null

[**Tatvasoft 23.10.2018**]

1. To calculate “Selection effective date”, “Projected scheme year cost”, “Monthly cost”, “Months remaining” and “Contract end date” we need to use same equations as shown above. Right? However, we are unable to identify the calculation for “**selection rate cost**” and “**Annual Cost**”. Hence ***can you please provide an example for Mid-year selection change(s)?*** (Note:- For all other Benefit Cost Types)
2. Will there be any restriction on number of mid-year selection(s) or employee can change selection for (n) number of times during the scheme period?

Mid-year new selection

Initial Selection (selection rate cost = £0)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £0
* Annual cost = £0
* Monthly cost = £0
* Months remaining = 12
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £300)

*Deductions of £0, previous selection’s monthly cost…*

*…have been made for 4 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/05/2018
* Projected scheme year cost = £300
* Annual cost = £300
* Monthly cost = £37.50
* Months remaining = 8
* Contract length = 0
* Contract end date = null

Two mid-year selection changes

Initial Selection (selection rate cost = £0)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £0
* Annual cost = £0
* Monthly cost = £0
* Months remaining = 12
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £600)

*Deductions of £0, previous selection’s monthly cost…*

*…have been made for 2 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/03/2018
* Projected scheme year cost = £600
* Annual cost = £600
* Monthly cost = £60
* Months remaining = 10
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £300)

*Deductions of £60, previous selection’s monthly cost…*

*…have been made for 2 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/05/2018
* Projected scheme year cost = £300
* Annual cost = £180
* Monthly cost = £22.50
* Months remaining = 8
* Contract length = 0
* Contract end date = null

**Monthly Cost Benefits**

Mid-year selection change

Initial Selection (selection rate cost = £600)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £600
* Annual cost = £600
* Monthly cost = £50
* Months remaining = 12
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £300)

*Deductions of £50, previous selection’s monthly cost…*

*…have been made for 4 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/05/2018
* Projected scheme year cost = £400
* Annual cost = £300
* Monthly cost = £25
* Months remaining = 8
* Contract length = 0
* Contract end date = null

Mid-year new selection

Initial Selection (selection rate cost = £0)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £0
* Annual cost = £0
* Monthly cost = £0
* Months remaining = 12
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £300)

*Deductions of £0, previous selection’s monthly cost…*

*…have been made for 4 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/05/2018
* Projected scheme year cost = £200
* Annual cost = £300
* Monthly cost = £25
* Months remaining = 8
* Contract length = 0
* Contract end date = null

Two mid-year selection changes

Initial Selection (selection rate cost = £0)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £0
* Annual cost = £0
* Monthly cost = £0
* Months remaining = 12
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £600)

*Deductions of £0, previous selection’s monthly cost…*

*…have been made for 2 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/03/2018
* Projected scheme year cost = £500
* Annual cost = £600
* Monthly cost = £50
* Months remaining = 10
* Contract length = 0
* Contract end date = null

Mid-year selection (selection rate cost = £300)

*Deductions of £50, previous selection’s monthly cost…*

*…have been made for 2 months, difference between previous selection’s months remaining and the new selection’s months remaining*

* Selection effective date = 01/05/2018
* Projected scheme year cost = £300
* Annual cost = £300
* Monthly cost = £25
* Months remaining = 8
* Contract length = 0
* Contract end date = null

**Contract Benefits**

Start of year selection

Initial Selection (selection rate cost = £600)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £600
* Annual cost = £600
* Monthly cost = £50
* Months remaining = 12
* Contract length = 12
* Contract end date = 31/12/2018

Mid-year new selection

Initial Selection (selection rate cost = £600)

* Selection effective date = 01/05/2018
* Projected scheme year cost = £400
* Annual cost = £600
* Monthly cost = £50
* Months remaining = 8
* Contract length = 12
* Contract end date = 30/04/2019

*NOTE: contract benefits cannot be changed until after the contract end date*

**One-off Cost Benefits**

Start of year selection

Initial Selection (selection rate cost = £600)

* Selection effective date = 01/01/2018
* Projected scheme year cost = £600
* Annual cost = £600
* Monthly cost = £600
* Months remaining = 1
* Contract length = 0
* Contract end date = null

Mid-year new selection

Initial Selection (selection rate cost = £600)

* Selection effective date = 01/05/2018
* Projected scheme year cost = £1200
* Annual cost = £600
* Monthly cost = £600
* Months remaining = 1
* Contract length = 0
* Contract end date = null

**Example Submit Date Charts**

Employee submits

Selection effective

*Employee submits before monthly cut-off :*

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

March

April

May

*Employee submits after monthly cut-off :*

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

March

April

May

**Example Leave Date Charts**

Employee leave date

Selection effective

*Employee leave date before monthly cut-off :*

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

March

April

May

*Employee leave date after monthly cut-off :*

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

HR report in

Internal Reporting Cut-off

March

April

May