Computer Sciences Corporation
Financial Services Group

LIFE/Asia

Base System Guide v11.0

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CSC FSG Asia

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1. Introduction

1.1 Purpose

The purpose of this document is to give an overall introduction to the CSC LIFE/Asia base system and to briefly explain the functionality and subsystems. It has been designed so individuals who are newly introduced to the system can refer to this document for background information. This document could also be an accompaniment either to the CSC LIFE/Asia Educational Course or to assist them during the practical "hands on" training that is normally provided by the CSC Consultants just prior to and during a Business Requirements Study. In addition to this, the document can be used for the base training material and reference guide for Life Office's staff after the completion of the initial structured training.

This document covers both Traditional and Unit Linked business and has been structured in such a way that subsystems can be referred to independently therefore, for those who read the whole document they will find that certain items are duplicated.

In some instances, where it was felt appropriate, several subroutines and procedures that are recognised as being fundamental to the Life Office's business are explained in greater detail. However, this document is just an introduction to the system and it is not intended to replace the SMART, FSU/Asia and LIFE/Asia manuals provided with the base software. This report is a condensed version of the system manuals. Should any individual require additional information then it is suggested that a study be made of the particular subsystem manual(s). These manuals will include the program descriptions together with the actual program format itself, a clerical guide and in the majority of instances and explanation, description and examples of required system tables

1.2 System Structure

The system has been designed so that it is Client Driven, Table formatted and On-Line Real Time basis. (If any of these terms is unfamiliar they will be explained later in greater detail.) In addition to this the system may accommodate the requirements of a composite Life and General Insurance Office. This is achieved by a modular design of the system and the result of this approach is that there are three distinct parts, SMART, FSU/Asia and the Application either or both LIFE/Asia, GROUP/ASIA, or POLISY/Asia, LIFE/Asia, GROUP/Asia respectively.

1.2.1 SMART

SMART stands for System Methodology for Applications in Real Time and is a collection of methods and tools that enable the technical team to develop the system in a short time scale. These tools include screen design, report design, program compilations, etc.

In addition to these program tools SMART contains other aspects of the system such as Security and controlling system environments so that the Development of new code can be completed whilst the Life Office is writing new business, etc. It also controls Accounting periods, Batch Processing and automatic Financial Batching.

As mentioned earlier SMART is normally the domain of the computer technical side of a company's operation. However, administrators will find that a certain amount of SMART knowledge will be required to be able to fully consider the options related to you when a system change is requested.

1.2.2 FSU/Asia

FSU/Asia, Financial Services Umbrella, this area contains the Client Database, General Ledger, Receipts, Media Payments, (Direct Debit and Credit Automatic Cheque Production), Group Billing and Standard Letters.

One of the main differences between this system and computer system of the past is that it is Client Driven rather than contract. This means that everyone that has any dealing with the Life Office is registered as a Client. This means that all the policyholders, beneficiaries, payees will all be registered as a Client in the Client Database. In addition to the normal policy dealings all suppliers of stationery, utilities and normal accounting style transactions will be also required to be clients of the system. The amount of information collected on these clients is of a basic nature, name, address, contact numbers, email, etc. However, in the case of lives assured, extra information like the date of birth and gender will be required. Clients can be a Corporate or Individual.

To distinguish between clients and their dealings with the company the system records Client Roles. These roles are such things as just a Client or could be an Agent, Beneficiary, Trustee, Payee, etc. The advantage of having a Client based system is that your marketing functions can be centralised, notices and direct debit bills can be collated, etc.

As mentioned above FSU/Asia in addition to the Clients Database holds the General Ledger and Payment System. This enables a composite office to have two, or more if developed, applications using the same General Ledger and Payment System.

1.2.3 LIFE/Asia Application

The application is the lowest level within the system and will hold all the rules relating to the contracts, such as Product Definition, Method of Payment Change Rules, Commission Calculations and Commission Payment Release Patterns, Surrender Values, Loan interest rates and so on.

In the base system all the rules are held on tables and hence the term table driven. The reason for these tables is so that a flexible approach can be made maintaining contracts and any changes to contract rules can be accommodated by amending tables rather than hard coded programs. The obvious advantage of this system is that changes can be accommodated easily and new products

can be designed and set up in a very short period of time, assuming no new programming features are required.

On-Line Real Time is an expression describing a transaction completing as you commit the change by pressing the enter key fully updating the database immediately. Such things as Beneficiary Change can be completed and you can review the results immediately rather than waiting for overnight processing of a batch system. However, there are some transactions that whilst complete in the same day as input there could be a delay prior to reviewing the results, normally only a couple of minutes. The reason for this situation is that transactions, such as, policy issue will need to write a large number of records, accounting, policy history and more and if this was in "real time" it would hold the record on the screen and inhibit the clerk's efficiency. To assist this, the transaction will go into a background queue freeing up the screen for further input. This background queue is referred to as processing in Asynchronous Thread or AT and will be explained further in the SMART section.

Therefore, the system has three methods of processing, On-Line Real Time, Asynchronous Thread and the common overnight batch processing for things like General Ledger Update.

LIFE/Asia has optional modules available for a Simplified Chinese or Traditional Chinese version. The following entities of LIFE/Asia (excluding SMART) used by business users are translated into Simplified Chinese and Traditional Chinese:
− Screens
− Printer Files
− Error messages
− Table Description
− Help text for screen and include help text for fields and error codes used by the screen

1.3   System Structure Diagram

SMART
DIARY (Optional)
FSU/Asia

LIFE/Asia	POLISY/Asia	GROUP/ASIA
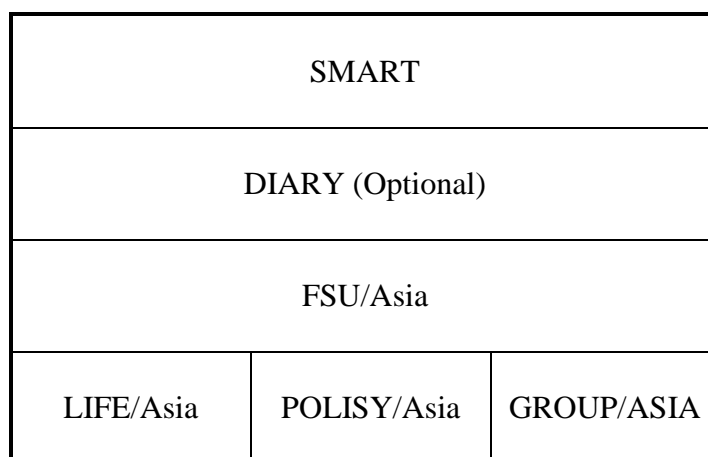
Table Number Ranges for the various modules of the system are as follows:

SMART   T0001 to T1999

Country	FSU/Asia	LIFE/Asia
General	T2000 to T3799	T5000 to T5799 T6000 to T6799
Asia	R200 – R3ZZ	R500 – R6ZZ H500 – H6ZZ
Hong Kong	H200 – H3ZZ	H700 – H7ZZ
Indonesia	D200 – D3ZZ	D500 – D6ZZ
Malaysia	M200 – M3ZZ	M500 – M6ZZ
Singapore	N200 – N3ZZ	N500 – N6ZZ
Taiwan/ Philippines	W200 – W3ZZ	W500 – W6ZZ
Thailand	T200 – T3ZZ	T500 – T6ZZ
India	J200 – J3ZZ	J500 – J6ZZ
Vietnam	V200 – V3ZZ	V500 – V6ZZ

2. SMART

2.1 Introduction

This chapter is not intended to explain SMART in any great detail, as this is normally the domain of the technical side of the operations, but it is to give individuals on the business side a flavour of what SMART is and what is its purpose.

However, as a person involved in the system there are some terms and concepts that you will encounter during either the Business Requirement Study, Initial Training or when you discuss problems with the technical personnel. In this part of the document we will cover a selection of these common terms together with an explanation of how the system is structured.

2.2 SMART

SMART (System Methodology for Applications in Real Time) is a collection of methods, standards and tools that enable computer systems to be methodically developed in a short time scale. In addition to these development tools there are other aspects to SMART and these are as follows:

2.3 Security

In every computer there is an obvious need for security and in SMART this facility can control access at various levels as follows:

- Company (System Company not a Life Company - see below)

    Users of the system must be sanctioned to input and access data on a company by company basis, in each environment (environments explained later) in which they are required to work. Although all information for all companies is kept on the same database, users are unable to access information relating to companies for which they are not sanctioned.

    Companies can be used to separate and protect data. A good example of this is that Company 0 is reserved for the SMART system development utilities and this is an area unlikely to be required by a normal administration individual. Central information such as the Client database and General Ledger that may need to be shared by several companies are held in the FSU normally company 9.

- Branch (Not necessary a Branch or Sales Office)

    Branches can be used to isolate areas of business such as Traditional and Unit linked business. Therefore, if a clerk is sanctioned to the

traditional business branch as a New Business input clerk he would not be able to enter Unit linked new business

- Master Menu, Submenu and Transactions

    To gain access to the on-line system the user has to be authorised to the appropriate Master Menu, Submenu and Transaction. These are three distinct levels and to get to the lowest level all three sanctions must be granted. So the Manager of the Department has complete flexibility and can sanction all his staff to the Main Menu and Submenu but limit the transactions so that say, the Manager and Supervisor are sanctioned to every transaction within the appropriate menus but lowest level of clerk can only use the enquiry transaction and is therefore, unable to complete any processing.

- FSU (Financial Services Umbrella)

    Information such as receipt sanctions and bank codes.

- Secured Data Access

    Secured Data Access (SDA) is the capability to authorise specific entities within the FSU/Asia, LIFE/Asia, POLISY/Asia and GROUP/Asia. An application entity could be a contract, an agent and so on depending on application. A user can only access the entity to which they are authorised. An intermediary file (ENRLPF – Entity Relationship file) is used to keep the links between application entities and SDA users.

    In Release v7.6, a common FSU design for SDA is adopted across LIFE/Asia, POLISY/Asia and GROUP/Asia. The new SDA design allows:
    - A new routine that requires only 4 input parameters to maintain the Entity Relationship records, The input parameters needed are the User ID, Company Number, Entity Prefix (CH – Contract, AG – Agent, CN – Client, CL – Claim) and Entity Number, e.g. Contract Number.
    - The creation and updating of Entity Relationship to be done in a "Online" or "Asynchronous" Mode,
    - Life Office to specifies eligible client roles' contracts that SDA users can access.
    - A new windowing program on Entity Relationship to cater windowing for Client, Agent, Contract and Claim and with ability to locate Number for Contract, Claim, Client and Agent, Name and Client ID.
    - The auto creation and sanctioning for Secondary User.

2.4 System Environments

In any computer system installation there is a need to have separate areas in which to work and these areas are referred to as environments. There are normally three environments as follows:

- Production or Release - Environment Code PROD

    This is the environment that holds the real system and where, when business commences, all your data will be held, clients, contracts, general ledger, etc.

- Acceptance or Model Office Environment - Environment Code XACT

    During the installation process there must be a separate area so that the administration of a company can evaluate and test the system prior to starting business.

- Development Environment - Environment Code XDEV

    This is the area where the programmers work developing or amending code as directed by the Life Office. All three environments have their own unique security sanctions system so that you can control who has access to any environment at any time. It is also possible to have more than one development in progress at one time and therefore, SMART will allow duplication of the Acceptance and Development environments. For example if a Life Office is developing their own programs and amending the LIFE/Asia base system but at the same time they wish to prepare for the conversion of existing business this is possible as follows:

Production or Release

Acceptance or Model Office   Acceptance or Model Office

Development - New Products   Development - Conversion
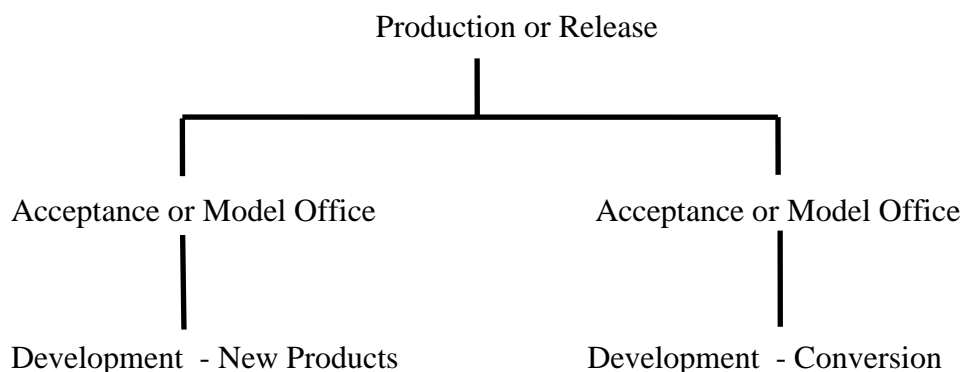
You will note from the diagram above that there is only one Production Environment although it is possible to have any number of Acceptance and Development environments linked to that Production Environment.

It is important to understand that when the system is delivered, all base programs are held at the highest environment level, Production. When the programmer is required to amend a particular program he will bring a copy of the program down to the Development Environment and make the necessary changes. When the programmer is satisfied that the amendments are correct and tested the program is ready for moving to the next level, Acceptance.

When the transfer has been completed successfully the program is available for testing in the Acceptance area normally by the Model Office Team. If there are any problems and for whatever reason, either the original fix is not correct or another change is required, the programmer by referencing it in the Development area will automatically bring a copy of the programme down to

Development. Therefore, after the programmer has amended the program again, and prior to the promotion, there will be three copies of the program in the system. The original base programme, the first amendment that is in the Acceptance environment and the copy held in Development.

Eventually it is hoped that the Model Office Team will agree the programme changes and therefore, the code can be transferred to the next level, Production.

2.5 Accounting Periods

All business events are entered into accounting periods. Within an accounting year, SMART provides support for up to thirteen periods. Typically, the first twelve periods are used to group each month's events, with period thirteen being used for year-end adjustments within the accounting year.

It is recognised that as accounting periods and financial years can be different between Life Office's and for these reasons Accounting Periods are held on table T1698. It is also known that if a Life Office has an accounting period based on the calendar month there will be instances where items will be received on, say, the seventh of the month that have to be accounted for in the previous accounting period. Again this situation is catered for, as it is possible to have overlapping accounting periods. An example is as follows:

Date from	Date to	Accounting Period	Accounting Year
01/04/94	31/05/94	1	1994
01/05/94	30/06/94	2	1994
01/06/94	31/07/94	3	1994

If the table is set as in the above example when the 1st of May 1994 is reached then all transactions into the system, on and after that date, will be flagged as accounting period 2. However, you have up to and including the 31st of May should any financial transaction require to be posted into accounting period 1. This is achieved by manipulation of the financial transaction date, which is a very straightforward on-line action.

2.6 Audit Groups

The entry of all data into the system can be managed by 'Batching' it into Audit Groups. This management system is provided by SMART and is mandatory for all business events that involve the entry/creation of financial information and/or will be processed asynchronously by AT.

These are the only types of events that are batched in the base delivered system. However, SMART may be asked to batch other events by changing the appropriate Batching Flag on the Submenu definition table item.

It is the placing of a business transaction into an audit group that defines the accounting period to which it belongs, not the processing or effective date of an event.

The Audit Group is defined as a set of business events for a:
- Company
- Branch
- System user
- Transaction type
- Accounting Period

2.7   Asynchronous Thread (AT)

In the system there are three types of processing, on-line, AT and batch. On line processing is actually updating records immediately the user has completed the transaction and striking the enter key. Batch processing is where the records are normally updated overnight through a batch job, normally run overnight as it would be inefficient to complete these on-line as they would considerably slow down the system response time.

AT processing is in between the previously mentioned processes where you require the record to be updated as soon as possible but if it was a pure on-line transaction it would affect your system performance. A good example of an AT transaction is Contract Issue. You would not want this to be run overnight but the AT processing is used executing the on-line transaction in the background allowing the user to continue working.

Whilst the record is in the AT queue it is protected by the system so that no one can attempt to modify, add or delete the same contract prior to the AT processing completion. The protection is called a Softlock. If a person attempts to complete some processing on a Softlocked contract the system will inform you that the contract is "softlocked".

2.8   Diary Processing

Diary processing is very similar to AT processing. The Diary System provides an efficient method of processing scheduled transactions on an entity in background, rather than in the overnight batch run. As such, the Diary System can replace or work in conjunction with the current Processing System.

An entity is an object on which a transaction is performed, such as a contract, agent or client. Transactions which are scheduled for an entity, for example contract billing, are defined on Diary Control Header and Diary Transaction Detail records which are created or updated whenever a transaction which triggers scheduled batch processing takes place on an entity. The Diary System uses these records to determine when and how to process the next scheduled transaction on an entity.

The current Processing System programs must be converted to subroutines which can use the Diary Control Header and Diary Transaction Detail records. These subroutines perform the required processing and schedule the next transactions, if required.

The Diary System processes a single entity in each invocation of a subroutine. The entity, for example a contract, is soft locked while it is being processed so

that on-line clerical transactions cannot take place until the diary processing is completed and the soft lock is removed.

The Diary System runs in multiple threads. The number of threads can be manipulated to suit individual requirements and to optimise the speed of batch processing. This manipulation can be dynamic using provided table and monitor features.

On-line monitoring and reporting is provided allowing the user to control the Diary System processing, to maintain entity information and to inquire on Diary System information.

An on-line testing tool is provided which enables the user to test Diary System functions for an entity or a range of entities, and to perform Diary System database housekeeping.

The current Processing System programs that have been diarized are:

- Renewal Diary Processing (Release v6.5)
  The Regular Processing batch schedule, known as Renewals, forms a fundamental part of LIFE/Asia and handles most of the scheduled events that are likely to take place within a contract. The entire Regular Payment Processing Batch Programs have been converted into Diary System Subroutines.This involves converting most of the Renewal Batch Programs of the L2POLRNWL and L2RENEWALS processing into diarized subroutines. These diarized processes include Re-rating, Billing, WOP Re-rating, Regular Premium Collection, Flexible Premium Collection, Pending Automatic Increase, Actual Automatic Increase, Facultative Reassurance Report, Flexible Premium Overdue Process, Anniversary Process, Fund Statement Process, Benefit Billing, and Premium Notice Creation. Now renewal transactions can be scheduled as a background process rather than in a batch run.

- Cash Dividend Allocation Diary Processing (Release v7.5)
  In Release v7.5, the entire Cash Dividend Allocation Batch Programs of L2DIVALOC have been converted into Diary subroutines.

- Regular Payments Diary Processing (Release v7.6)
  The Regular Payment Processing batch schedule, like the above Regular Processing forms a fundamental part of LIFE/Asia system and handles most of the scheduled events that are likely to take place within a contract. The entire Regular Payment Processing Batch Programs of L2REGPAY have been converted into Diary System Subroutines. Now the regular payment transactions can be scheduled as a background process rather than in a batch run.

- Anticipated Endowment Release Diary Processing (Release v7.6)
  Release v7.6 also includes the conversion of the Anticipated Endowment Release batch process (L2ANENDRLX) into a Dairy subroutine.

2.9 Batch Processing

A batch job consists of a schedule and a collection of processes within that schedule. Each batch job must be defined as a process. Process dependencies and priorities within the schedule are defined and multi-threading (more than one batch job processing at any one time) is available to give maximum control and efficiency to batch processing.

Batch Processing in a SMART environment is a system in its own right, so the user must be authorised to the Master Menu, Submenu's and transactions in order to gain access. Each individual batch schedule has a transaction code to which the user must be sanctioned or authorised to in order to submit the schedule.

The Batch processing system allows the user to define schedules and processes and to monitor and maintain submitted batches. If required, parameter prompt screens are defined to provide an on-line interface between the schedule and the user, this giving the user more control over schedule submission. In Release v7.6, the parameter prompt screens have been re-created based on Post SMART 9311 parameter prompt screen skeleton so that the screen can work the pre-load feature. To distinguish between post SMART 9311 and pre SMART 9311 parameter prompt screens, the field 'Job Name' used in the pre SMART 9311 has been change to 'Schedule Name' in the Post SMART 9311 screens.

Batch processes are written to conform to a formal processing cycle. The processing is controlled by Managers and monitors who are responsible for submitting and running the processes. Normally the responsibility of the Computer Operations area of a Life Office.

Explanation of the base system Batch Jobs will be given in the LIFE/Asia section of this manual.

2.10 Financial Batching

Accumulating critical amounts and counting numbers of transactions within each batch controls the processing of financial information in a traditional batch system. These accumulations and transaction counts are then compared with totals calculated by the computer. Batches that do not balance are rejected. This helps detect cases when, for example, one transaction is accidentally keyed twice or amounts within transaction are mis-keyed.

All items for accepted batches hold details of their origin. These may include such things as accounting periods and/or batch numbers. This allows transactions that make up an account balance, for example, to be traced and audited if required.

On-Line systems may be used to enter transactions as and when required. No formal Batching is used, as it may not be possible to predict the number of transactions to be processed. The information entered is used to immediately update master files. All too often, these types of on-line systems lose the controls that are inherent in a batch system.

Sometimes, even when an on-line system is being used batches of information are required to be entered. For example, a sub branch may send transactions to a central office for processing if it does no have any direct access to the system. In this case, it is useful to have input controls as provided by a traditional batch system.

This SMART subsystem enables the user to have all the benefits associated with a batch system but without the need to always physically batch transactions for input. If specific batches are required, the clerk may use the batch control block facility to manually control them; otherwise the system will assign them automatically.

A range of enquiry programs has also been included in this subsystem. These will assist in auditing the system by identifying the batches and transactions that have been entered by various users for a given accounting period.

2.11 Alternate Language Capability

This is the ability to support other languages beside English, namely Simplified Chinese and Traditional Chinese version for LIFE/Asia. The system is able to toggle between languages set up with the use of Function Keys.

2.12 Business Objects Repository

The Business Objects Repository is an optional module that packages together a number of SMART Business Objects useful to existing users of LIFE/Asia.

These SMART Business Objects will allow existing users of LIFE/Asia to undertake projects to "open up" their back office system for many projects some of which include the following:

- Integrating Insurance Brokers data for quick new business data entry
- Integrating a CRM package (including Multi-channel, Contact Centre, Web Channel, WAP, etc)
- Integrating a Web Portal for Consumers or Business Partners
- Integrating a Workflow package

3. FSU/Asia

3.1 Introduction

FSU/Asia, Financial Services Umbrella forms the nucleus of the CSC AS400 Product Range. It provides the central Client Administration, Accounting and Statistical services that are common to all commercial and financial applications. The FSU/Asia provides the single central Client Database. This database holds details of all entities that have dealings with the system. This includes Agents, Brokers, Policyholders, Life Assured's, Beneficiaries, Reassurers, etc. (Although throughout the system we refer to these as Clients this can become confusing and maybe it would be clearer to think of these Clients as Interested Parties to the system.) Each Client is defined to the system only once, but he/she may have many roles. For example, an individual may be a Life Assured on one contract and a Beneficiary on his wife's contract therefore; in this situation he has one Client number but two roles.

A General Ledger is integral to any financial system whether it is manual or computerised. In order to meet the many and varied demands of Financial Institutions, FSU/Asia provides a highly flexible, table driven, hierarchical, multi-currency General Ledger. Accounts are established by the Life Office and are linked together in a hierarchical structure to form a Chart of Accounts. In this way, multiple Chart of Accounts can be established. These Charts can be totally independent or can be linked for group or summary reporting. The bulk of the General Ledger postings are automatically generated by other parts of the system. These postings are automatically batched and posted to the General Ledger as often as required, daily, weekly, etc. The rules defining the postings required are table driven thus ensuring total flexibility to implement any type of accounting practice that a Life Office may wish to adopt.

Statistical Reporting is also important to any company but especially to Life Insurance Company's. For example, Government Regulations require Statutory Reports that must be supplied accurately and on time. These reports may vary however, from state to state and country to country, and their requirements may also change on occasions. Rather than amending hard coded programs, FSU/Asia uses tables to specify the extraction criteria. All extracted information is summarised in a Statistical Dissection Database. Details from this database may be combined with the General Ledger account balances and reported in the required format. In many ways, the Statistical Dissection Database may be viewed as an extension to the General Ledger, except that it is used to hold non-financial as well as financial information.

As well as Client Management and the support of Financial and Management Accounting, FSU/Asia provides the basic contract administration to all types of Life Assurance business. This is achieved by using a Contract Header concept. The Contract Header holds all the information required driving the basic financial administration of the contract throughout its life cycle. The administration functions supported include capturing new business proposals,

issuing contracts, amendments and endorsements, one off and regular billing including manual and automatic renewals, manual cash collection and Receipting, direct debit control and maintenance, etc.

FSU/Asia is designed to allow each Application Product, LIFE/Asia, GROUP/ASIA and POLISY/Asia to be "plugged in". FSU/Asia controls the overall administrative life cycle and provides common financial services, whilst the Application Products control the unique details and processing required for the individual Applications.

3.2   Clients Subsystem

3.2.1   Introduction

The variety of products offered by Financial Institutions is being widened and one of the objectives is to provide a full range of financial services to a well-defined "client."

In the traditional situation various subsidiaries of an insurance company may have sold their products independently to the same individual. With a client emphasis that individual would be identified as a single customer or "client."

The client service administration system in essence places an umbrella over the operating entities. It provides the ability to easily view the total relationship between a company and its clients. It is a powerful tool that enables them to analyse and personalise such functions as:

- Sales   -   by identifying clients as future prospects

- Risk Selection   -   by analysing the value at risk of all contractual relationships with the client

- Client Accounting   -   by consolidating billing and application of funds for all contracts and services

- Reassurance   -   by determining the amounts at risk for each client as well as placements to reassurance companies

- Correspondence   -   by providing complete reporting activity to clients, agents and reassurers

A client is more than just a policyholder or bank account holder is each person or business with whom a Financial Institution has a contractual or service relationship is a client. This includes beneficiaries, agents, reassurers and other companies for such things as services, rent, heat and light, etc. A Client can therefore, be either personal or corporate.

Depending on their type, slightly different information is held. This includes such details as full name and address plus optional information such as occupation, place of birth and social and economic group category, etc. This information is held in a simple easy and accessible format.

All applicable client data fields have been double byte enabled. Flexibility was added to allow entering of the full name into the Surname field (60 characters) to support Thai language considerations.

If required a client may have multiple addresses and multiple names or aliases. When it is discovered that the same client has been accidentally entered twice into the system, these details can be either merged to produce one client or linked such that one client number becomes an alias or alternative address to the other. Details entered accidentally can be deleted.

Details of a client's bank account(s) may also be held when required. This information is used by the system when generating automatic payments to and from the client.

Full window facilities are available from within on-line transactions to search for, view and retrieve client information. These windows' facilities can also be used to add new details, set up alternate addresses or aliases and so on assuming that the individual completing these transactions has the authority to do so.

For example when entering a proposal it is not necessary to check to see if the client already exists within the system, via the Client Enquiry screen. The window facility from the proposal screen can be used to search the client database, narrowing down the task by entering full or partial surname. If located, the client number will be brought into the proposal screen however, if the client has not been previously registered you have the facility to create the client registration without having to leave the proposal transaction.

The Client Administration System is made up from the following sub systems:

- CLIENTS   Client Maintenance. This maintains the central client register, including details of roles, which the client has within the system.

- CLNTBNK   Client Bank Details. This subsystem provides the facilities to maintain bank details for a particular client.

- CLNTREG   Client Register. This gives a detailed report of all clients for a nominated company.

3.2.2   Client Maintenance

The Client Maintenance subsystem provides all the facilities required entering and controlling a central client database. This includes client creation, modification, deletion and enquiry, and more sophisticated ones such as alternate address and alias maintenance, client merging and client linking.

A client may be either a Private Client or a Corporate Client. A Private Client is an individual person. A Corporate Client is a company or organisation. Details such as date of birth, sex and so on are not captured for a Corporate Client.

Once a client has been created, alternate addresses and/or aliases or alternate names can be added. These are added as part of the client modify transaction. When an alternate address or alias is created a full client record is actually written. Therefore, an alternate address for a client will have its own client number. This new number is used anywhere in the system where the client wishes his alternate address to be used. A practical example of this is where the client requires one contract correspondence to be addressed to his home but on another the client requires all correspondence to be addressed to his Accountant.

With the alternate address record the system attaches an alternate address role to the original client. The role information consists of the number of the client that has the role and the 'foreign key' of the element for which the role applies. For certain rare roles a flag can also be set on the client master record. This enables clients with this specific role to be selected efficiently, without the need to read large numbers of client records. Up to ten roles may be classified as rare. See FSU/Asia Client Manual Number 1.

There is no limit to the number of roles a client may have at any one time, or the number of times he may have a specific role. Role information can be seen as a logical extension to the basic client details set up and maintained by the subsystem.

The system will not allow an active client, (one that has any role within the system) to be deleted. If two client records are accidentally set up for the same entity, references to the unwanted client must be first removed. That is all non-financial service roles must be 'backed out' by using the relevant administration transactions. Once the unwanted client number has only financial service roles, it may be merged into the required client number. As an alternative the second client may be linked to the first. In this case the system will change the second client to be the alternate address of the first. An enquiry is provided to display a given clients roles.

As well as accessing the basic maintenance facilities from a standard submenu they can also be accessed from a maintenance window. This maintenance window provides the facility to list current clients in alphabetical order of surname or corporate name. Personal and corporate clients are merged into one list. In order to assist finding the required client any one of a number of filters can be used. The more information given the more exact the filtering. For example a clerk may use the first letter of the surname and you will get the client list from that point. However, if you search on the first three letters of the client surname then this narrows down the hunt.

As this window performs in exactly the same way as the submenu client maintenance transactions can be performed, such as client create, modify, etc. Throughout the administration systems covered by the client umbrella, FSU/Asia, there are many client-related windows. For example, if you wish to locate a client's policy you can window the clients' records via Policy Enquiries. Using the scroll facilities you can locate and select the appropriate client who will either return the contract number to the enquiry screen or if the client has more than one contract then you are given the option to select the relevant contract number. There is also a facility to inquire a client by ID number.

Previously, no history of changes to the client record is maintained when the client's name, address, or bank details are changed other than in system journals. LIFE/Asia version 7.3 was enhanced to amend all client level files to add a VALIDFLAG field for identifying historical records. Existing data will no longer be overwritten, but will be marked as historical data by means of this new data field. It will also be used to identify the current client record by storing a different value.

With the release of SMART 1004, SMART now includes the Audit Trail facility to automatically log changes to the files. Life Office can now determine if the client file and related files are to be set as logging enabled. Hence, in Release v7.6 it is decided to undo the client history enhancement made in Version V7.3. That is, the client and agent related files stores the current record and historical records will be logged in the history logging file (if enabled). Only records to be deleted are set to valid flag '2' (invalid). The valid flag field introduced in Version 7.3 will be kept to identify the current record. Hence there is no change in file structure in this release. Furthermore, in Release, v7.6, we have enabled Client file (CLNTPF) to maintain history logging file.

3.2.3   Validation on Thai Salutation

Thai clients can use the subsystem with Thai salutations and Thai characters.

Tables used by Subsystem

T3583	-	Client Salutations
T3585	-	Post Codes
T3645	-	Country Codes

Transaction Codes

M202	-	Client Master Menu
S240	-	Client Maintenance Submenu
T329	-	Client Create
T331	-	Client Modify
T332	-	Client Delete
T333	-	Client Enquiry
T334	-	Client Merge
T335	-	Client Role Enquiry
T336	-	Link Clients
T218	-	Client Create from Window
T219	-	Client Modify from Window
T220	-	Client Enquiry from Window
T330	-	Client Deletion from Window
T337	-	Client Selection Filter
T338	-	Address Scroll
T340	-	Alias Scroll

3.2.4 Staff Discounts

Many companies offer their staff a discount on the premium of policies where the staff is a contract owner or joint owner. This discount can be on the final instalment premium or basic premium of the component. This is applicable only for routines that calculate premiums.

The facilities provided by LIFE/Asia for this requirement include:
- The ability to tag a personal client as a staff.
- An indicator to enable/disable this feature.
- An option to calculate the discount either on the final instalment premium or on the basic premium.
- The ability to capture the percentage of discount product-wise.

To achieve the above objectives, the following has been done:
- A new field to capture whether the client is a staff or not in the client additional details. This field is maintainable like other fields in the additional client details.
- The product related settings table TH609 has been enhanced to check on the basis for the discount, whether on final instalment premium or on basic premium. The percentage of discount is also captured here.
- Those premium routines that calculate the premium have been changed to incorporate this discount feature.

3.2.5 Client ID Number

In Asia, the National Identification Number (ID No.) is a very important key for identifying individual. ID Number has been changed to be mandatory field. However, if the ID Number is not known, enter a pre-defined 'dummy' value to enable easy identification. The 'dummy' numbers can be any similar 1st 5 characters e.g. "DDDDD", "SSSSSxxx". For non-dummy numbers, the existing validation by the system will be maintained to ensure that duplication is not allowed.

Validation of the ID Number is dependent on the 'Nationality' field, which is optional in Version 3. The field, which is windowable to the Country Code table (Company 9, T3645), defines whether or not the 'ID' field is to be mandatory. So, in order to ensure that the ID is always validated, the 'Nationality' field has now been changed to be mandatory.

The default of "Name Format' (used for printing purposes) has been changed to 'Asian' format (i.e. Surname followed by Given Name), value "1", subject to overriding, as most countries in Asia use this format.

Corporate ID number (License Number) can be set as mandatory at the Country Code table (Company 9, T3645).

3.2.6 Salutation Indicator

Salutation indicator is used to determine the client salutation printing. This indicator is held on table TR393. The valid option is 'I' or 'S'.

Option 'I': Salutation will be printed from Item table (or the same as in Client file), and

Option 'S': Salutation will be printed from client salutation short description

3.2.7   Special Character Sets Validation

Additional special character sets in table T3716 to allow user to enter more valid characters into the system. For example, Thai characters are required for Insurance business in Thailand; therefore Thai User could set all their characters in the special character lines by setting up an item ET in T3716.

3.2.8   Client Default & Validation

To allow flexibility on client defaults and mandatory fields for client screen validation, a new table TR393 is introduced. This table should set-up in FSU Company with key as FSU Company.

3.2.9   Client Relationships

An insurance company may have a wide range of clients with whom it has contracts. These clients are all separate entities and are therefore maintained separately. It is however, possible for a client to be some way connected to other clients of the company; for example, partners in a business or relatives.

FSU/Asia provides facilities to link two client records together forming a relationship between those clients. For example, a husband and wife may be registered as separate clients for contractual purposes but you may wish to define the relationship between these clients for recording and reporting purposes.

The Client Relationship subsystem facility accommodates full functions for the creation, maintenance and enquiry of client relationships.

This function is quite distinct from the link functionality provided in Client Maintenance. It is important to realise the difference between these two facilities.

Table used in Subsystem

     T3584   -   Client Relationships

Transaction Codes

M202	-	Client Master Menu
S235	-	Client Relationship Submenu
T308	-	Establish Client Relationship
T307	-	Enquire on Client Relationships

3.2.10 Client Reporting

This subsystem caters for the generation of a report that shows all clients on file for a nominated company, detailing name and address together with any relationships a client may have within the database.

A number of parameters may be input on the on-line parameter screen to specify the selection of clients and therefore, determine the details to be printed.

Transaction Codes

     M003   -   Batch Job Sub Master Menu
     S006   -   Batch Job Submenu
     B214   -   Client Register

3.2.11 Client Status

The valid values for the Client Status field are 'AC' for Active, 'DN' for Deceased and 'BL' for Blacklisted. An option in Client Maintenance submenu has been provided to update this client status. Currently, this client status is used for information purpose in LIFE/Asia.

3.2.12 Client Bankruptcy Indicator

In FSU Release 7.1, an indicator has been added to the screen Client Maintain - Personal (S2465) to capture extra information if the client is bankrupt or discharged from bankruptcy and the effective date. Screen Bankruptcy History (SR22R) is used to maintain and enquire the bankruptcy history of client. The system will also cater the deletion of bankrupt history file when a client record is deleted.

3.2.13 Client Profiling

FSU Release 7.4 introduces a new facility to store client risk profiling and establish various proofs. A new AML profiling option has been added into both Personal and Corporate Client Maintenance screen. This new option allows the users to capture the following information:
- Risk Indicator
- Reason for change in Risk Indicator. History of the reasons will be kept when there is any change in risk indicator.
- Address Proof
- Identity Proof (including identity number and date of issuance)
- Income Proof

System can also be configured to validate the Client Risk and various proofs information during the pre-issue validation and cross check product validation for Component Add and Modify. The validation can be activated by product type by adding the new Client profiling validation routine (VLPDCLPR) in the Product Validation by Contract Type table (TR50X) and setting up the validation rules in the Client Profiling and Various Proof table (TR52J).

3.3   Bank/Branch Maintenance

The Bank/Branch Maintenance subsystem provides the facilities required for entering and controlling details of all banks and their numerous branches. This includes the facilities for creation, modification, deletion and enquiries.

On-Line input of branches for all banks would be a long and tedious task and we would suggest that a magnetic tape of this information is obtained from the insurance company's trading bank and "loaded" into the database using AS400 off-line facilities.

This subsystem is more efficiently used for maintaining the bank branch details. The subsystem contains a scroll enquiry of all banks with filters on the bank sort code, bank description and branch description.

Transaction Codes

M202	-	Clients Master Menu
S231	-	Bank Branch Main Submenu
T296	-	Bank Branch Create
T297	-	Bank Branch Modify
T298	-	Bank Branch Enquire
T299	-	Bank Branch Delete

3.3.1   Client Bank Account Maintenance

This area store's bank details for a client and a client may have numerous sets of bank account details.

These bank details are used for direct transfer of debits and credits to a client's bank account. These methods are by far the most effective means of money transfer. Automatic debits and credits are generated within the system and a tape is created which is passed to the bank. The bank then automatically adjusts the balance in the client's bank account accordingly.

The options available in this subsystem are Create, Modify and Enquire.

Transaction Codes

M202	-	Client Master Menu
S227	-	Client Bank Account Submenu
T273	-	Create Client Bank Account
T274	-	Terminate Client Bank Details
T275	-	Enquire on Client Bank Account

3.4   General Ledger

3.4.1   Introduction

A General Ledger is integral to any financial system whether it is manual or computerised. In order to meet the many and varied demands of Financial Institutions, the FSU/Asia provides a highly Flexible, table driven, hierarchical, multi-currency General Ledger. The Life Office establishes

accounts and these are linked together in a hierarchical structure to form a Chart of Accounts. In this way, many charts of accounts can be established and these charts may be totally independent or could be linked for group summary reporting.

The bulk of General Ledger posting is automatically generated by other parts of the LIFE/Asia system. These postings are automatically batched and posted to the General Ledger as often as required, daily, weekly, monthly, etc. The rules defining the postings required are also table driven, thus ensuring total flexibility to implement any type of accounting practices that a company may wish to adopt.

The following is a brief introduction and overview of the functionality of the General Ledger Subsystem:

3.4.2　General Ledger Initialise

During testing and early processing of the system, it is a possible requirement that the General Ledger database, or parts thereof, will need re-initialisation.

It may not be desirable to initialise all the accounts on the General Ledger files so FSU/Asia provides an on-line parameter session to restrict this to a range of months or a specific month could be specified.

The initialisation of General Ledger Accounts is performed according to the parameters input from the on-line parameter screen. Month and year details are required to specify either a particular month or a range of months. The company is also required, but this is defaulted from the company in use when the parameters are entered.

To initialise the brought forward figures, a month of 0 (zero) is specified, and to initialise the carried forward figures, a month thirteen is specified.

For each account that meets the parameters required, all currency codes and types are reinitialised. These include TY (this year), CU (current), and RE (revised).

Transactions Codes

M209	-	General Ledger Master Menu
S006	-	Batch Jobs & Reports Submenu
B223	-	General Ledger Initialise

3.4.3　General Ledger Account Maintenance

A General Ledger is a set of financial accounts and this will include such areas as assets, liabilities, expenses and revenue. These accounts are used to record and control the finances of the company. Each transaction that involves finance of any kind must be reflected in the General Ledger.

Many General Ledger systems are designed for specific industries needs and can require extensive modification to suit different Client requirements. The

system provided as part of the FSU/Asia however, has been designed for use in any environment.

The basic foundation of any General Ledger is the account. Traditionally, a set of accounts is maintained using double entry bookkeeping. The balance of these must be summarised to produce a Trial Balance. This ensures that the book's balance and the information within them can be used for financial reporting. In order to produce financial reports these accounts must again be summarised. In all, it is probable that the information must be extracted from these basic 'books' in several different ways.

To cater for these requirements two distinctly different types of accounts can be created, Posting and Summary Accounts. Posting Accounts are the most elementary type that the double entry account transactions is posted to. Summary Accounts on the other hand are used to summarise the balances stored in the Posting Accounts and/or other Summary Accounts. This enables a highly flexible hierarchy of accounts to be set up to cater for both on-line enquiries and Management Reporting.

The subsystem provides the facilities to create and maintain General Ledger accounts. When creating or modifying accounts various flags are set on the account record to identify its characteristics to the system. These provide the necessary validations to ensure that postings are completed to the correct type of accounts.

Its company, account code and currency identify a General Ledger account. These accounts are then linked together to form one or many Chart of Accounts. This enables one Chart of Accounts per company per currency to be set up. Accounts can be linked across companies for consolidation 'group' reporting but not across currencies. Consolidated, single currency reporting is achieved by converting and combining amounts from accounts of the same company and account code. Thus, an account that is to be maintained in more than one currency should use the same account code for both currencies.

Traditionally, the set up of the CSC AS/400 products is to have different applications such as LIFE/Asia, GROUP/ASIA and POLISY/Asia run under separate companies. Each company is actually a separate entity with its own set of general ledger books to record business transactions. POLISY/Asia is usually set up in Company '1", LIFE/Asia in Company '2', and GROUP/ASIA in Company '3'.

However, this organisation is not how some of the CSC potential clients who are considering using all of three applications want to control their accounting. They would prefer that the LIFE and GROUP business be controlled as a single business unit, with non-LIFE business set up as a second business unit. The system caters for this, however it should be pointed out, that this is an optional feature. So, a specific client may either set up the LIFE and GROUP business under a single company or under separate companies.

Each account created is assigned an account number type. All valid account types are held on table T3668. Indicators on this table define the type of processing that may be associated with that type of account. This is used to

validate the actual processing flag entered for the account. These processing flags are:

Post Flag	-	Summary or Posting Account
Balance Forward Flag	-	Roll balance forward or clear to zero
Activity Code		Active or closed
Reconciliation Flag	-	Open item reconcilable or not
Auto Posting Flag	-	To receive manual or automatic postings

This subsystem enables users to create, modify and enquire upon Account details as described above. Accounts may be flagged as 'logically' deleted, but not actually physically deleted by this subsystem.

Table used by Subsystem

T3668	-	General Ledger Account Types

Transaction Codes

M209	-	Master Menu
S208	-	Submenu
T240	-	General Ledger Account Create
T241	-	General Ledger Account Modify
T242	-	General Ledger Account Enquiry
T315	-	General Ledger Account Delete

3.4.4   General Ledger Chart Maintenance

The accounts that make up a General Ledger do not perform in isolation from each other. They are related to one or more accounts for reporting or accounting. They must be consolidated in order for the Trial Balance, Profit and Loss Statement and the various other reports to be produced.

For this reason a method of linking the accounts is required and this subsystem provides the means for establishing and maintaining relationships between different accounts. The validity of a link is checked to ensure that only related account types are linked to each other.

A chart consists of two distinctly different types of accounts. These are Posting and Summary Accounts. Posting Accounts will be at the bottom of the chart structure as they are the most elementary items in the Chart of Accounts and any financial balances posted to the General Ledger will be added to this accounts first.

Summary Accounts, on the other hand, are the accounts used to create the chart hierarchy and they will always have one or more accounts (either posting and/or summary accounts) below them. Any number of Summary Accounts may be linked to give an unlimited number of reporting levels.

The design of the General Ledger system allows any number of relationships to be set up between accounts and these relationships can be added or removed giving Accountants and Financial Managers a greater control over their financial reporting requirements.

The chart structure is used in the following way:

- During an accounting period an amount is added to an elementary level Posting Account. That amount is then added to all Summary Accounts bearing any relationship to the Posting Account. This method of automatic summarisation is fundamental to the system. The relationship that can be set up by the user between accounts gives rise to this summarisation.

- The correct application of various summarisation levels gives the user access to current information both in the form of reports and on-line enquiries. Net amounts and year to date balance for this year, last year and budget figures are available at any level. Users can incorporate each separate account numbering structures to derive a system that performs as if it is specifically designed for them.

User can inquire on GL Account Balances through the GL Chart Structure Inquiry screen.

Transaction Codes

M209	-	General Ledger Master Menu
S209	-	GL Chart Maintenance Submenu
T245	-	Add Account to Chart
T246	-	Remove Account from Chart
T247	-	Transfer Account within Chart
T248	-	Add Account from another Company
T249	-	Remove Account (another Company)
T250	-	Transfer Account (another Company)
T251	-	Enquire on Chart Structure

3.4.5   General Ledger Explosion/Implosion Report

Having established the Chart of Accounts it is often useful to be able to produce a hard copy listing of part or all of the structure. On-Line enquiries are also available for examining the Chart of Accounts.

The subsystem provides the facilities necessary to produce either an implosion or explosion of a specified account. An explosion will list all accounts that are linked below the specified account, while an implosion will list all the accounts above the specified account. The account identifier is entered via an on-line parameter session and validation takes place to ensure that it is a valid account before the batch job may be submitted for processing.

Transaction Codes

M003	-	Batch Submission Master Menu
S006	-	Batch Submission Submenu
B212	-	General Ledger Implosion Report

B213 - General Ledger Explosion Report

3.4.6 General Ledger Unlinked Accounts

Keeping the General Ledger and Chart of Account structure in order is quite vital to every Accountant and Financial Controller. As the General Ledger can be considerably complex it is not easy to keep track of every account linked or not linked to it.

As a result the need arises for a report that will provide a listing of all the unlinked accounts so that an Accountant can, at a glance, detect that an account that should be linked to the Chart of Accounts has been.

The base system has this facility by running the batch job GLUNLNK that produces a full listing all the posting accounts that are not linked to summary accounts, and all the summary accounts that are not linked to posting accounts.

To produce the report no parameters are required. The report will include all the unlinked accounts in every currency and company. The report will print all the unlinked posting accounts in part one and all the unlinked summary accounts in part two. The account flags, description and alternate reference will be printed as well for clarity.

Transaction Codes

M209 - General Ledger Master Menu
S006 - Batch Job Submission Sub Menu
B249 - G. L. Unlinked Accounts Report

3.4.7 General Ledger Account Cloning

It is very common for an insurance company to have its General Ledger accounting system structured in such a way that the chart construction is composed of a number of substructures classified by its various classes of business. These substructures however, bear a high degree of resemblance to each other.

In order to facilitate the creation of a Chart of Accounts a subsystem has been developed for cloning accounts and to handle the situation suitably it was felt beneficial to have a number of cloning functions working on different scopes of substructures.

Taking the FSU/Asia General Ledger account configuration into consideration, three levels of substructures are identified.

They are:
- all accounts within a company
- all accounts within a currency within a company
- any number of accounts within a currency within a company

On the basis of these classifications this subsystem has been devised to perform cloning.

As the volume of processing is most likely to be enormous it is better to complete it in batch mode. Three job streams have therefore been set up. Extra parameters are needed to specify more precisely the source and destination for cloning. For this reason, extra parameter screens are used to capture the basic data.

On each successfully completed run, a control report would be produced to list out what new accounts have been generated.

Transaction Codes

M003	-	Batch Job Master Menu
S006	-	Batch Job Submission Submenu
B242	-	General Ledger Structure Clone
B243	-	G. L. Account Clone for Currency
B244	-	G. L. Account Clone for Company

3.4.8   General Ledger Account Enquiries

At any one time an account will have a set of entries that add up to give a balance. Traditionally, to access this information meant running reports that involved delays for the production and printing of details required. FSU/Asia has overcome this problem providing on-line enquiries.

Enquiries may be made on account balances and account postings. It also provides the facility to compare two sets of balances; these may be for the same or different accounts and/or be in different currencies. Variances between accounts in different currencies will be calculated at any required exchange rate.

An accounting year is divided into twelve accounting periods. A brought forward balance, a balance for each period and a carried forward balance are maintained for four balance types for each account. These types are defined in table T3626 and are currently the actual amounts for both the current year and previous year and the current year's budgets, for both the original and revised figures. Table T3627 is used to define which accounting period is in which calendar month. Entering the name of the month against the relevant accounting period does this. An entry must be set up for each language to be used in the system.

The Budgets and Actual enquiry (sometimes referred to as simply the account balance enquiry) provide facilities to compare corresponding figures. These figures may be for one account, actual verse's budget or one accounting year against another. Alternatively, these figures may be from two different accounts, in the same or different currencies. If the accounts are in different currencies, an exchange rate can be entered to enable the account's variances to be calculated.

The Account Posting enquiry, often referred to as the General Ledger Transactions enquiry, lists all postings for the account requested.

The information displayed on the screens will be as accurate as the last general ledger posting run GLUPDATE. In the case of budgets, the general ledger is updated when the records are posted, so enquiries for these transactions will accurately reflect the true state of the system.

FSU/Asia has the ability to split enquiry for posted and not posted transaction. GL transaction inquiry is defaulted to the current accounting period transaction and enables the user to inquire on different accounting period transaction with an option to change the accounting period. Furthermore, summary of balance for ZTRN transaction is included in the GL posted transaction inquiry to ensure the total balance in the posted transaction inquiry tie with the from GENV file.

FSU/Asia has the GL transaction enquiry as follows:
- Include a different heading for GL transaction for posted and not posted to the GL Account distinguishing the two different types of enquiry.
- Display the document number and description in place of the existing 'Entity' field. Not all GL transactions have associated document number. Some of it may have a summary amount and displayed as 'U/W Summary'.
- The Description shall display the 'Dissection Description' of the dissection account (sub account code and sub account type) for the transaction with document and display the 'Description of the transaction code' for transaction without attached document.
- A 'Select' field is provided for the user to select the document for detail enquiry.

Tables used by Subsystem

T3627	-	Accounting Month Descriptions

Transaction Codes

M209	-	General Ledger Master Menu
S212	-	Account Enquiry Submenu
T243	-	G. L. Enquiry on Account Balance
T244	-	Gen. Ledger Enquiry on Transactions
TR2Q	-	GL Enquiry on unposted Transaction

3.4.9 General Ledger Automatic Allocation

When a company receives a bill, such as a utility bill, it may wish to spread the expense over different departments as part of their expenses. In most companies this allocation must be done manually which is time consuming and prone to errors.

To avoid this there is an automatic facility for allocating these amounts and these can be allocated in one of three ways, fixed amount, fixed percentage or relative percentage (ratio of accounts).

The allocation rules for the calculation are maintained in real time but the actual calculations and subsequent postings are processed in the batch

environment that provides extensive validation and control functions that are applied prior to updating the database.

The allocation feature is more than an arithmetical tool as the fixed amount method allows for the generation of recurring journal entries.

As mentioned earlier there are three methods of transfer:

Fixed Amount

Fixed Percentage

Relative Percentage

The first two are self-explanatory; the third involves dividing the balance of two accounts and then applying the derived percentage to the base account to obtain the amount to be assigned.

Rules are grouped into rule sets and only the set is specified when the allocating posting run is completed. This saves having to specify each individual rule and gives a greater degree of control and accuracy.

Transaction Codes

M209	-	General Ledger Master Menu
S211	-	Automatic Allocation Submenu
T265	-	Create Allocation Rules
T266	-	Modify Allocation Rules
T267	-	Enquire on Allocation Rules

3.4.10 General Ledger Allocation Report

As mentioned above automatic allocations provide a method of dividing an amount between several accounts without having to calculate the amount each account is to receive. There are two distinct parts to automatic allocations. Firstly, the rules must be established for defining the methods and accounts to be used. Once these have been defined, and the base amount entered, the automatic posting run may be done.

This subsystem provides the facilities for the posting and reporting automatic allocations. A variety of reports are produced to provide the user with a complete trail of allocations performed, and the rules that determined those allocations. The effect on the chart structure balances is also shown.

This posting run is submitted via an on-line parameter screen. One rule set may be specified to be used for the allocations or all sets may be used. A listing of all the rules being used is printed first as a guide to the postings to be performed.

An audit trail of the details as they will be used in the postings is then produced. This report fulfils the same function as the Cashbook Receipt List listing all details entered via the Cash system. The posting programs are then

initiated to validate the information, and if acceptable to post it. These programs are fully documented in the General Ledger Postings Manual.

The final step in this posting run produces an implosion report, beginning from the posting accounts that have been updated and continuing up through the chart structure. This provides the user with a complete audit trail of the balances that have been affected.

Transaction Codes

M003	-	Batch Job Submission Master Menu
S006	-	Batch Job Submission Submenu
B208	-	Automatic Allocations Rule Listings
B225	-	Automatic Allocation Postings
B232	-	Automatic Allocation Reports

3.4.11 General Ledger Year to Date Statements

During the financial year Accountants and Managers may wish to review their financial position to determine how the business is functioning. It is clearly not feasible to wait until the end of the financial year when the Balance Sheet and Profit and Loss Statements are produced.

The Year to Date Statement provides a report on the actual monthly balances as compared to a set of figures chosen by the user. This may be the year to date or last year to date for example. Therefore, this allows Accountants and Managers to determine how well the company is doing and provides the basis for deciding any strategies that may need to be implemented.

To produce this report, a number of details must be entered on an on-line parameter screen. The user specifies the account at which to begin the report and all accounts, to a specified explosion level, which are linked under it in the chart structure will also be printed. Once all the information entered has been correctly validated, the report request is submitted, and the report is produced.

As well as printing month to date and year to date actual balances, the report also shows the last year to date balances. These may be used for comparisons of the performance this year as against last year.

Transaction Codes

M209	-	General Ledger Master Menu
S006	-	Batch Submission Submenu
B210	-	Gen. Ledger Year to Date Statements

3.4.12 General Ledger Multi Currency Functionality

With de-regulation of industries, and the tendency for insurance companies to become multi-national, it is possible for a variety of currencies to be used within the framework of a company's business.

Clients in different countries will, in the majority of cases, wish to make payments in their local currency that may not be the currency that the insurance company uses for its ledgers and Trial Balance.

The usual method of catering for this situation is to convert the foreign currency to the local currency used by the insurance company. However, FSU/Asia system has been designed with multi-currency functionality and these transactions can be automatically processed as the insurance company has the flexibility of using daily, weekly or monthly "book rates" as these are table driven.

However, as most people are aware conversion rates between currencies fluctuate, sometimes on a daily basis. Rates applied on different days can severely affect the amount of local currency obtained from such a conversion. This can mean a significant difference in the profit and loss for the company over a period of time.

One of the problems in analysing the effects of foreign exchange is extracting the information in a readily usable form. To overcome this the system provides a Multi Currency Statement. The report provides details of the conversions actually performed and also the conversions that would apply if the transactions were entered with current rates. The differences in these two calculations are also printed on the report to enable the user to see at a glance what the effects are.

The Multi Currency Statement also has the facility to print either month to date or year to date transactions, depending on the criteria specified by the user when the report request is submitted. Another report criterion is the General Ledger Account that is to be used as the starting account. An explosion of the General Ledger Chart is performed on this account; all accounts linked under it in the chart are included in the analysis. This enables the report to be as specific or general as the user requires.

Transaction Codes

M209	-	General Ledger Master Menu
S006	-	Batch Jobs Submenu
B235	-	G. L. Multi Currency Statement

3.4.13 General Ledger Monthly Statements

Financial Managers require a variety of reports to enable them to do their job proficiently and more easily. The need is to obtain details of expenditure, statements of the financial balance for the year to date, etc.

The monthly comparative statement is another such report to enable Managers to fulfil the above. It provides them with the financial state of the company's balances for the month and this can be compared with other types of balances for the same account. Type of balances includes budgets, revised budgets, and year to date and last year to date balances.

To produce a report a number of details must be entered on an on-line parameter screen. The user specifies the account at which to begin the report

and all accounts, to a specified explosion level, which are linked under it in the chart structure will also be printed.

The user must also specify the type of balance to be used for comparisons against the actuals. Once all the information entered has been correctly validated, the report request is submitted and the report is produced. As well as printing the balances requested by the user the differences between the two balances are calculated and printed.

Transaction Codes

M209	-	General Ledger Master Menu
S006	-	Batch Submission Submenu
B209	-	General Ledger Monthly Statement

3.4.14 General Ledger Bulk Journals

For each financial year it is essential for budgets to be established for each division or department within a company. In conjunction with this it is also necessary to monitor the actual expenditures against these budgeted amounts.

It would be possible to load these budget figures using the normal on-line journal functionality. However, this would create several problems. With Direct Journals a primary and secondary account is required which is not applicable to budgets. In addition to this it would mean a great deal of repetition to load all these figures for a year. Direct Journals do not provide facilities for calculation methods and for using existing data as a base for these calculations.

For these reasons the FSU/Asia provides a separate subsystem for Bulk Journals that includes facilities to automate some of the required calculations and, as already mentioned, to use existing data as the basis for these calculations. The whole years' data may be entered on one screen and this avoids having to enter the account name into a multiple of screens.

In addition to budgets, the system provides two more facilities and these are Bulk Actuals and Accruals. Bulk Actuals are used for take up purposes when the system is first installed so that you have the historical data from which to make comparisons. Accruals are used when a payment or receipt has not been received but must be accounted for in the current accounting month.

Therefore, this system provides means of loading take up figures, setting and revising Budgets and accruing balances and because these transactions are financial in nature, they are batched for revision and auditing purposes. (Full batch block facilities are part of the base system.)

The Accounts Journal System provides for the maintenance of financial balances stored against General Ledger accounts. As mentioned earlier the bulk actuals option is used initially for loading balances when the system is installed. Once the production environment has stabilised this option may be made unavailable to prevent inadvertent use that would cause a loss of integrity to the files.

There are two options for loading budget details. The original and revised budget details are kept separately to enable managers to compare the accuracy of their estimations and projections. Facilities are provided to use existing details as the basis of calculations for new budget records.

These three options, actuals, original budgets and revised budgets are not commonly used throughout the year. The bulk actuals is used on a one off basis; the budget facilities are used heavily at the beginning of the financial year, and then rarely used for the rest of the year. For this reason, their details are reflected immediately onto the General Ledger database rather than waiting for a batch posting run therefore, details are immediately available

As mentioned earlier Accruals are used in situations where money has not been received or paid but must be accounted for in a particular month. An accrual is entered into the system and a reversal record is automatically generated for the following month to ensure the integrity of the files.

Therefore, when creating an accrual journal, two batches will be created. One will be for the current accounting period and will contain the entered transactions. The other batch will be for the following accounting month and will contain the reversed transaction amounts. As a result the accrual journal transactions will be reversed automatically the following month. Unlike the other options, accruals are only reflected in the General Ledger when a posting run is completed.

In Release v7.6, when the General Ledger Accrual journal does not contain any errors, a new confirmation screen, controlled by T3605, will be displayed. This confirmation screen allows users to choose whether to continue to create the accrual or go back to the General Ledger Accrual Journal screen (S2147) to perform further actions before creating the journal.

Another new feature in Release v7.6 is a "Remark" check box, controlled by TR377, is added to the General Ledger Direct Journal option. When the Remark check box is invoked, new pop-up screen will be returned for user to capture remarks, comments or description information or the pop-up screen will show the existing remarks information. As there is no need to maintain historical remarks information, new remarks information will overwrite the old remarks information.

Transaction Codes

M209	-	General Ledger Master Menu
S210	-	General Ledger Submenu
T259	-	General Ledger Accrual Journals
T260	-	General Ledger Bulk Journals
T261	-	General Ledger Original Budgets
T262	-	General Ledger Revised Budgets

3.4.15 General Ledger Direct Journals

With any system, computer or otherwise, mistakes can sometimes happen. Concerning a General Ledger, amounts may be posted to the wrong account or may be entered using the wrong currency and therefore, these errors somehow

must be corrected and this process should be made as easy as possible. Situations can also arise where an amount must be posted to an account, but it is not catered for in existing processes such as Cash Receipting or Disbursements.

The FSU/Asia Direct Journal subsystem allows such postings to be done simply and quickly on-line. Different currencies and exchange rates may be specified to cater for all situations where errors have occurred.

As these are financial transactions they follow the system standard of being batched for audit purposes and these batches can be reviewed whenever necessary ensuring the security and integrity of the system.

Direct Journals may only transfer actual amounts (as opposed to budgets, accruals, etc.) between accounts. They may be transferred between different currencies as well as different companies if necessary. The General Ledger accounts will only be updated with the journal transactions after a posting run has been completed.

Direct Journal transactions will be batched for audit purposes. Batch numbers will be assigned automatically if the user chooses not to assign them manually. A document number will also be assigned to each journal entered to provide a unique identifier for each transaction.

In Release v7.6, when the General Ledger Direct journal does not contain any errors, a new confirmation screen, controlled by T3605, will be displayed. This confirmation screen allows users to choose whether to continue to create the direct journal or go back to the General Ledger Direct Journal screen (SP008) to perform further actions before creating the journal.

Another new feature in Release v7.6 is a "Remark" check box, controlled by TR377, is added to the General Ledger Direct Journal option. When the Remark check box is invoked, a new pop-up screen will be returned for user to capture remarks, comments or description information or the pop-up screen will show the existing remarks information. As there is no need to maintain historical remarks information, new remarks information will overwrite the old remarks information.

Transaction Codes

M209	-	General Ledger Master Menu
S232	-	G. L. Direct Journals Subsystem
T301	-	G. L. Direct Journal Create
T302	-	G. L. Direct Journal Enquiry

3.4.16 General Ledger Postings

The General Ledger provides for the means of recording and controlling the finances for a company. However, the movement of financial amounts both in and out of the company may take various forms. For example, payment for a premium may be in cash or a cheque; payments outward may be for claims, medical expenses, etc. These amounts may enter the system by different

methods however; they must all be reflected in the General Ledger for accounting and reporting purposes.

The process of updating General Ledger accounts is known as "posting." Transactions that are entered into the system during the day are usually posted to the General Ledger in an overnight batch run (this process could be weekly, monthly depending on the company's requirements). Therefore, the effects of the transaction will only be reflected in the General Ledger accounts once this posting run has been completed.

This posting run fulfils two functions; the first is to post manually entered direct journals such as cash, cheques (disbursements), journals. The second is to perform automatic postings such as premium payments. This is necessary where transactions of this nature enter the system without a specified General Ledger account so that the system determines the posting account by reference to tables.

The General Ledger Posting run, GLUPDATE is responsible for updating the General Ledger with all the financial movements recorded since the last posting run.

This General Ledger update consists of three stages;

The first step extracts financial records for posting to the General Ledger accounts based on the extract rules specified for the particular job on the Batch Extract Rules table T1697. For each accounting movement, ACMV (Accounting Movement) and RTRN (Cash Receipt or Disbursement) a single General Ledger GEXT record will be created.

The second step creates summary transactions, GTRN's, by sorting the individual GEXT records created in the preceding step into Batch, General Ledger Accounts and Effective Date order. It is also the step in which automatic balancing entries will be created against an error account. Balancing entries will be created in the following circumstances:

- where a debit accounting movement does not have a corresponding credit and vice versa

- inter company transfers, where the corresponding General Ledger company dissection was not created during the original transaction

- multi-currency transactions, where the foreign exchange ledger balances were not created during the original transaction

- multi-currency transactions where, due to fluctuations in exchange rates or rounding, an imbalance exists

- where an attempt is made to post a transaction to a Summary Account instead of a Posting Account. In this case the transaction GL Account Map will be overwritten with the error account from table T3698, item ****GL. All associated movements for this transaction will also have their GL Maps revised and will be posted to the error account. That is, if

one RTRN dissection had an Account Map that was a Summary Account, that dissection would be rewritten using the error account, as would any other dissections associated with the RTRN, even if they had a valid Account Map originally.

Where such errors are found, a balancing ACMV will be written, irrespective of the type of accounting movement that generated the error. These ACMV's will be batched, as above and will be posted to an error account. A report of all such transactions will be generated by this step. The user then can then investigate the reason behind the imbalances and correct them via the General Ledger Journal option.

To allow these error transactions to be correctly processed, the following action is required beforehand:

- An error account must be created in the General Ledger Chart of Accounts and linked to the Trial Balance

- a Sub Account Type of BL must be created on the Sub Account Type table T3695

- item ****GL in the General Ledger Dissection Rules table, T3698 must include a dissection to the error account, with a Sub Account Type of BL

- a Trial Balance Account must be created in each currency in table T3629. This is required to facilitate Subsidiary Ledger balancing. The General Ledger Update step will fail unless these accounts are created.

The third step in the General Ledger Update process posts the transactions to the General Ledger Accounts specified for the particular Transaction Type and Sub Account Type combination using the General Ledger Account Map defined in the relevant Posting Table.

3.4.17 Enhancements to the General Ledger Update Procedures

In the May 1993 Release the system was delivered with the first stage of the Accounting Period enhancement that will eventually allow the Life Office to select into which accounting period the transaction is to be posted.

This flexibility is provided via two fields attached to the financial records, POSTMONTH and POSTYEAR, which indicates the Accounting Period into which the relevant transactions will be posted. The POSTMONTH and POSTYEAR values are allocated by the POSTYYMM subroutine that is called as part of ADDxxxx subroutines, (where xxxx is ACMV or RTRN) and is determined by the entry for the Sign On Company in table T3605. Three options will be available:

(1) POSTYEAR and POSTMONTH will equal the batch accounting period. This is the way that the original system worked. Transactions will be posted immediately to the General Ledger in the accounting period of the batch in which the transaction is held.

(2) POSTMONTH and POSTYEAR will be derived from the Accounting Period Table, T1698, using the transaction effective date. Where the transaction effective date is less than the first day of the batch accounting period defined in T1698, the batch accounting period will be used. Where the transaction effective date is greater than the last day of the batch accounting period defined in T1698, the accounting period into which the effective date falls will be used. Therefore, transactions can be posted into future accounting periods, but not into past ones. Transactions will be posted immediately to the General Ledger but in the Accounting Month and Year defined by the fields POSTMONTH and POSTYEAR.

(3) POSTMONTH and POSTYEAR will be left blank until such time as posting to the General Ledger is performed. Posting to the General Ledger will take place when the effective date of the GL Update batch job is greater than or equal to the transaction effective date. At the time of posting, the POSTMONTH and POSTYEAR values will be derived from the Accounting Period Table, T1698, using the transaction effective date as a parameter in the same way as method two.

However, please note that method two and three are not yet available only method one is supported.

Tables used by Subsystem

   T1697 -   Batch Extract Rules
   T3605 -   Financial Posting Parameters

Transaction Codes

   M209 -   General Ledger Master Menu
   S006 -   Batch Job Submission Submenu
   B211 -   General Ledger Postings
   B233 -   General Ledger Audit Reports
   B234 -   General Ledger Journal Postings

3.4.18 General Ledger Substitution Codes

Currently the base system life accounting has broadly 6 life categories or Sub account codes namely:

- LE - Life Element (Component) only for Component Level Accounting
- LC - Life Contract only for Contract level accounting
- LA - Life Agent for accounts related to Agents
- LN - Loans and APL
- LP - Life payor ledger or Life Policy related accounting
- LR - Life Reassurer accounting

The connotations of the substitution codes with the specific sub account code are explained below:

(1) For sub account code 'LE', the special characters '##'' and '====' are substituted as follows:

##	- Contract Branch
====	- Component Code

(2) For sub account codes 'LP' and 'LN' the special characters are substituted as follows:

##	- Contract Branch
====	- Cannot be supported as the sub-account codes here are contract-level in nature.

(3) For sub account code 'LA' the special characters are substituted as follows:

##	- Contract Branch if entity is contract number

(4) For sub account code 'LR the special characters are substituted as follows:

##	- Reassurer Branch

This is table driven so that if there are future sub account codes introduced and they fall into one of these categories, the system need not be modified.

This facility can then support a GL code structure as follows:

Contract Branch	Stat Fund	A/C Header	Yr	Pol Cpt	Prem	Spare
##	$	*Text* (4 chars)			====	Blank (2 chars)

##	-	## is the contract branch
$	-	Statutory fund set for the component in T5687 (windows to T5686).

3.4.19 General Ledger Audit Reports

The General Ledger Audit process provides the reporting facility of the transactions extracted by the General Ledger Update procedures. This report has been designed so that the user can define the type of report required, specify the data to be extracted and the order in which the data will be sorted and displayed. This is done via the batch job parameter screen. These reports can be run as often as is required and in the format required from the options available. In addition the file created by the extract can be accessed via the QUERY/400 command and is used to display the figures extracted in a variety of formats for different departments or members of staff.

The following report types are available:
- all transactions in a Batch, split by Branch, Accounting Period, Transaction Type and Batch ID
- all transactions for a specified currency
- all transactions in a specified General Ledger Update run

- all transactions in a specified Accounting Period
- all transactions which make up a particular Account Balance
- all transactions performed by a user in a specified Accounting Period

When the report is requested the user can choose the sort criteria to be used, that is, by General Ledger Account, Batch, Effective Date, and so on, and can define control totals and page breaks where required.

The General Ledger Audit job consists of two phases. The first phase loads the duplicate; SMART maintained physical file based upon the parameter selections. The second phase will optionally create the requested report, depending on the parameters made on the parameter screen.

Transaction Codes

M209	-	General Ledger Master Menu
S006	-	Batch Submission Submenu
B233	-	General Ledger Audit Reports

3.4.20 Account Reconciliation

The Accounts Reconciliation subsystem provides the following functions:

- Reconciliation of ACMV records for a specified sub account, entity, currency combination. Reconciliation can be performed on all records or on individual records

- Partial reconciliation on individual ACMV records

- Enquiry on the effect of any reconciliation performed, prior to actually updating the ACMV records. Running totals of debits and credits are displayed

- Enquiry on non reconciled ACMV records

    The process of reconciliation consists of attempting to match all of the debit and credit items to achieve a zero balance. Partial reconciliation can be used to indicate that an item has been reconciled when the credit amount received is less than the debit amount. This would result in a negative sub account balance.

    ACMV amounts are displayed as credits CR, or debits, DR, according to the following rules:

ACMV Amount	ACMV GLSIGN Field	Debit or Credit
Positive	- (minus)	CR
Positive	+ (plus)	DR
Negative	- (minus)	DR
Negative	+ (plus)	CR

Thus, in the normal way, a cash receipt is a credit; a contract item is a debit. However, where the ACMV amount is negative and the field GLSIGN is a '+', the amount is displayed as a credit, albeit a negative credit.

A Reconciliation Reference as allocated to the system and is used to identify the ACMV's being reconciled. This prevents another user from trying to reconcile the same ACMV's. A temporary file, ACRCPF, is used to hold copies of the unreconciled ACMV's for the entity specified on the Account Reconciliation submenu. The ACRC file is updated with any reconciliation actions performed and the ACMV records are updated when the reconciliation is submitted to AT.

The position To field, STMTSORT, is currently only used in Group reconciliation's for entry of the Statement Sort criteria that is defined when the Group was created by selection of a code from within table T3700, Group Billing Sort Order. Entry of this field allows rapid access to specific lines for the account. Client customisation is necessary if this field is to be used for other types of reconciliation.

Note that no ACMV updates take place until the user performs the required reconciliation's to achieve a zero difference between debits and credits and then presses enter. No updating of ACMV's actually takes place until the reconciliation is submitted to AT.

The option is provided to cancel reconciliation. This option will only undo reconciliation performed on the Account Reconciliation screen; it will not cancel any reconciled ACMV's. The remaining function of the actual reconciliation process is to exclude reconciled items from further reconciliation's. Updating ACMV records does this.

A trigger module can be used to perform particular ACMV postings if required. The name of the trigger module is held on the ACMV record and is an entry on table T3701, ACMV Trigger Module. For example, in Group reconciliation's, those ACMV's related to a reconciled contract billed items carry a Trigger Module Name. When such records are processed within AT, two additional accounting records are created; the first to clear the premium billed credit raised during billing, and the second to credit the amount reconciled to the contract.

Associated Tables

T1660	-	Option Switching Descriptions
T1672	-	Batch Reconciliation Rules
T3616	-	Sub Account Codes
T3620	-	Billing Channels
T3695	-	Sub Account Types

T3698	-	Dissection Codes

Transactions codes

S256	-	Account Reconciliation Submenu
B300	-	Group Statement
T321	-	Account Reconciliation
T322	-	Account Reconciliation Enquiry

3.4.21 General Ledger Year End Rollover

At the end of each financial year, the brought forward balance for the General Ledger account must be "rolled over" to the next financial year. This is to provide the ongoing financial position for the company as balances may not be required to be erased simply because the end of the financial year has occurred. To have to calculate and re-enter these balances manually would be a time consuming and error prone task.

Another problem of end of year processing is that commonly, nothing may be processed for the new year until last year's balance has been calculated and "rolled". As this is normally the last function to be performed it can be very expensive in terms of time and business.

FSU/Asia system has overcome these problems in two ways. Firstly the balances are "rolled" automatically by the system into the new year's totals and secondly it allows transactions to be posted into the new year without these balances being in place. When last year's balances are ready for posting, the company has the facility to specify that this year's balances are to be re-initialised or updated, depending upon the requirements. This allows business to continue functioning effectively when the year end processing is being completed, while ensuring the integrity of the General Ledger is not lost.

Each general Ledger Account has fourteen associated balances, one for each accounting period in the current year. One holds the Brought Forward balance from the previous Accounting Year and one that holds the Carried Forward balance to the next Accounting Year. The addition of General Ledger amounts into the new accounting period 'balance' is not dependent on the existence of a Brought Forward balance.

When the end of the year is reached, that year's balances must be calculated and the Carried Forward figure derived in order that it can be rolled over into the coming Accounting Year to maintain financial integrity. However, it is important to note that Carried Forward balances will only be calculated for General Ledger accounts that have their Balance Forward Flag set to "F", Balance Sheet Accounts. Those with Balance Forward Flag of "Z" will simply have their balances set to zero at the beginning of the new Accounting Year; Profit & Loss Accounts.

The Carried Forward and Brought Forward balances will only be calculated when the General Ledger Year End Rollover batch job is processed. The process of performing a Year End Rollover will update the Appropriation Account in the General Ledger structure, creating a posting equal to the sum

of the rolled over balances. The sign is reversed thereby ensuring that the ledger Trial Balance remains in balance.

The Rollover job can be run any number of times for a particular Accounting Year, provided the relevant year is active on the Accounting Period table, T1698. Each time the Rollover is submitted, it will recalculate the Brought Forward balances to include any General Ledger postings or Journals made in the old year accounts since the last Rollover.

Tables used by Subsystem

T3698	-	General Ledger Dissection Rules
T3695	-	Sub Account Types

Transaction Codes

M209	-	General Ledger Master Menu
S006	-	Batch Submission Submenu
B224	-	General Ledger Year End Rollover

3.4.22 General Ledger Base System Batch Jobs

This section will give a brief description of the General Ledger Batch jobs and any comments on run dependencies or other factors.

Most batch jobs can be run as often as required however, some have an impact on the on-line system and should only be run when the on-line system is inactive. The majority of jobs need to complete satisfactorily before than can be submitted again but in some situations this is not the case and this flexibility can be provided in the Batch Job definitions subsystem.

A job that updates files must complete properly (for example, GLUPDATE), but a report only task that does not complete any updating, can be submitted into the batch queue without any dependency of the success of a previous job. (E.g. GLUNLNK)

(The batch jobs are listed in alphabetically order)

Job Name & Description

GLALOCL

General Ledger Automatic Allocation Rules Report. There is an option within the General Ledger Submenu to allow for automatic methods so that it is possible to transfer moneys between accounts. The report will list all Automatic Rules within the system. This report is a read only report and will not post any items to the General Ledger and therefore, can be run at anytime.

Program	B2122
Table	T3629

GLALOCR

This batch job extracts records from the "ALOC" file and uses them for the basis for automatic journal creation for the General Ledger. Each allocation record that is extracted contains the details of the allocation method, required figures and calculation basis. This is then used to calculate an amount that will actually be posted to the appropriate General Ledger account. This report again is a "read only" and as such it will not post any items to the relevant accounts. It is suggested that this batch job be run prior to the GLALOCU as part of the General Ledger controls.

    Programs   B2122 B2123
    Tables   T3626 T3629

GLALOCU

This is the batch job that actually posts the automatic allocations as explained above and can be run daily, weekly or monthly. It is important that this job is run when the business day is over so that the job can run without data being added as may happen during the working day. It will actually post the extracted records to the appropriate account(s) and provide a report for audit purposes.

    Programs   B2122 B2123 B2124
    Tables   T3626 T3629

GLAUD

General Ledger Audit Report. This report extracts data created from the GLUPDATE, General Ledger Update or Posting Batch Job. The purpose of this report is to allow the user access to this information in a number of ways by completion of a parameter screen. Therefore, a number of Audit Reports can be processed against the same data file but extracting different combinations of data and displaying it in several different ways.

This job can be run anytime but if it is important to have Audit style reports on the most up to date information then obviously these should be run the next business day after GLUPDATE.

    Programs   B3614 B3615
    Tables   T1692 T1693

GLBALST

General Ledger Balance Statement requires a parameter to be entered normally the Trail Balance or Profit & Loss Account. The report will list all entries for the entered account number and all those accounts linked below it in the Chart of Accounts. It will display this information showing current month to date and year to date actuals together with last year to date results.

As this job does not process any information it can be run at any time.

    Program   B2150

Table   T3629

GLCLONCO

This is the batch job to clone the General Ledger structure from one company to another within the system. This job can be run at any time if required.

Programs   B2428 B2429 B2430 B2431

GLCLONCU

General Ledger Account Clone for Currency. This job will clone a General Ledger structure from one currency to another. If required this job can be run at any time.

Programs   B2427 B2429 B2430 B2431

GLCLONST

This is the batch job to clone a new General Ledger structure from an existing one within the same company. If necessary this job can be run at any time.

Programs   B2426 B2429 B2430 B2431
Table   T1680

GLCMPST

General Ledger Comparison Statement enables you to obtain a hard copy of any account figures to compare to the corresponding budgets or last year's performance, etc. As this report is a read only and therefore, does not complete any processing it may be run at any time.

Program   B2148
Tables   T3626 T3629

GLCMYST

General Ledger Multi Currency comparative statement. This report has been designed so that the effects of foreign exchange can be analysed. The report provides details of currency conversions actually performed and compares these with conversions that would apply if the transactions were performed at current rates. This job can be run at any time.

Program   B2415
Tables   T3629 T3626

GLEXPLR

General Ledger Explosion Report requires that a valid General Ledger account is entered at the parameter screen and all accounts below that account in the Chart of Accounts are listed showing the relationship. This batch job can be run at anytime.

Program	B2136
Table	T3629

GLEXPSL

The General Ledger Expense Sub Ledger Report is run on accounts specified in table T3669. The report lists all the activities in accounts specified and all accounts linked below the account within the Chart of Accounts. This report is designed to report on Expense type entries. Again as this job does not complete any data processing and is just a report it may be run at anytime.

Program	B2108
Tables	T3629 T3669

GLIMPLR

General Ledger Implosion Report requests that a valid General Ledger account be entered into the parameter screen and all accounts above that account are listed showing the relationship. This job can be run at anytime.

Program	B2138
Table	T3629

GLINIT

This batch job initialises accounts according to their account types. This job is normally completed during the Development and Customisation process so that when the Model Office testing commences all accounts have been initialised and ready for receiving data.

Program	B2139
Table	T3629

GLMTHST

General Ledger Monthly Statement is similar to GLBALST with the difference being the showing of the Year to Date figures against budgeted figures. This batch job is a read only and therefore, can be run as when and when required either during on-line processing or in overnight run.

Program	B2148
Tables	T3626 T3629

GLUPDATE

General Ledger Update (Replacement for GLPOST). This job can be run daily, weekly or monthly and will extract batches to post to the General Ledger accounts in accordance with the item B3610 in table T1697. Once extracted these batches are "flagged" as having been processed so they are not selected again. The extract information is restructured into GTRN's and then the amounts are posted to the General Ledger.

In addition this job will create balancing transactions, should a one sided entry enter the system and create accounts should an account be used that is not set up in the Chart of Accounts. However, before the system can complete these actions certain information has to be entered into the appropriate tables and Chart of Accounts. Please refer to the section on General Ledger update procedures where these entries are explained in more detail. Due to the sensitivity of this data this job should only be run when the on-line system is inactive.

Programs	B0237 B3610 B3611 B3612
Tables	T1692 T1693 T3572 T3605 T3629

GLROLL

This job "Rolls Over" the accounts that have an appropriate balance forward flag to show the brought forward balance as the new opening amount. It also initialises those accounts with a Balance Brought Forward flag of Z. This job requires an Appropriation Account be entered in table T3698 item ****GL. This job is run at the end of the financial year and can be run any number of times. However, it is strongly suggested that this job be not run until the on-line system is inactive.

Program	B2609
Tables	T3629

GLUNLNK

This job extracts all the accounts that exist in the General Ledger, whether created manually or by batch run, that are not linked within the Chart of Accounts. The criteria are that posting accounts that are not linked to summary accounts are listed, as are summary accounts that do not have posting accounts linked below them. This job can be run at anytime.

Program	B2507
Tables	T3629

GLYTDST

This is the General Ledger Year to Date Report. It lists transactions in the specified account, and any subsidiary accounts, for the current month and year. This job can be run as and when required.

Program	B2150
Table	T3629

3.4.23 Sun Accounting System Interface

Due to the increasing demand for FSU/Asia General Ledger to be able to interface with the Sun Accounting System, a facility was provided to extract General Ledger Account figures at the end of the month for downloading to the Sun Accounting System.

It should be noted that although specific reference is being made to the Sun Accounting System, this functionality is actually applicable for the CSC Midrange products GROUP/ASIA, POLISY/Asia, and LIFE/Asia and any third party accounting system.

No detailed transaction data is downloaded. Instead, only the summarised total of each Sun General Ledger Account is extracted. The General Ledger Journal transactions once posted to the General Ledger will also be extracted for downloading as long as they correspond to a Sun General Ledger Account Number.

An Audit Trail Report listing the summarised value extracted and downloaded for each Sun Account Number is generated at the end of the batch job for the user's attention and verification. The file SACCSAnnnn[1] is only created for downloading if the FINAL TOTAL extracted for all accounts equals ZERO (ie Debits = Credits).

The 'Alternate Ref.' Field in FSU/Asia General Ledger Account maintenance (S2116), is used as a Cross Reference for the Sun General Ledger Account.

To avoid duplicate extraction of values, users should ensure that only Posting accounts have non-blank 'Alternate Ref.' fields. All Summary Accounts and Posting Accounts (eg. APPROPRIATION) which are not required to be downloaded to the Sun Accounting System should leave the 'Alternate Ref.' field blank.

3.4.24 Multi-lingual Support

FSU/Asia has been enhanced to support multi languages. Thus the hard coding of the month description is removed and the month description is retrieved from Accounting Month Description table T3627, in Product Company.

In addition, the date formats for multi-lingual are handled as follows:
- Language 'E' – English, date format remains as Day, Literal, Month and Year. E.g. 01st May 2000
- Language 'S' – Simplified Chinese, date format is Year, Literal (年), Month, Literal (月), Day and Literal (日).
  * Month and Literal (月) are taken from table TR386
- Other Language – date format is Day, Month and Year

3.5   Direct Debit Subsystem

3.5.1   Direct Debit Mandate

The basic concept of the Direct Debit subsystem is that a Mandate Record is required for all contracts or Groups to be paid by this method of payment. Mandate records can be created in one of four ways:
- From the Client Subsystem
- During New Business Proposals

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[1] SACCSAnnnn – Download file created by the batch job where 'nnnn' is the Batch Job Run Number

- When a Group Payer is created or modified
- From Billing Changes

Each mandate consists of five key areas that uniquely identify these records. These key details are the Mandate Reference number, Status Code, Effective Date, Bank Details (sort code, account name and number) and the Mandate Amount. The Mandate amount is only required for Fixed Mandates.

The 'Direct Debit Approval Access Number' field is a 20-character field, which allows users to enter information like Bank Access Card number. This number can then be extracted as part of the information required by the bank to approve and credit the direct debit of amounts from the client's account.

During New Business Proposals, Group Maintenance and Billing Changes involving Direct Debits, the system will prompt selection or creation of a Mandate. The ability to select existing Mandates is based on the Mandate Effective Date being prior to the first Billing Date of the Proposal, or earlier than the next Group Billing Date, or prior to the Billing Renewal Date of a Premium Paying contract. The Direct Debit batch schedule will extract these cases and transfer the relevant information required by the clearing bank to tape. On the expected funds transfer date, the Direct Debit Apply batch schedule will debit the requested amounts from the individual client's bank account.

The system will allow for a Mandate to be used on more than one contract or Group for the Payer Client. When the debit is processed these individual debits will be summarised and only one amount debited to the clients account. However, if the local conditions only allow one mandate to be linked to one contract then each time the Client or Group require a further contract then a fresh mandate must be created.

Once a contract paid by Direct Debit is in force and premium paying, the Billing and Collection processes occur on the Billing Renewal dates for each contract. All contracts and Groups due for Billing and Collection are identified by the relevant batch schedule, RENEWALS, while the debiting from a client's bank account result from the Direct Debit batch schedule.

When Billing occurs on contracts paid by Direct Debit a Billing Extract record, BEXT is created. Once the Direct Debit batch job is processed, with a date greater than or equal to the Billing Renewal Date of the contract, or next Billing Date for Group, the batch job will use the BEXT records for producing reports. The data to be written onto the magnetic tape for submission to the Factoring House comes from DDBT records. The contract or Group suspense sub account is updated with the amount due. In the case of individual contracts, those that are not part of a Group, the subsequent running of the RENEWALS batch job, on the due date of the premium, will then cause the payment to be debited from the suspense and credited to the contract premium.

When a Group Reconciliation is performed, this causes cash deemed as received to be posted to the appropriate individual contracts suspense sub account from where, as above it is applied to the contract via the RENEWALS batch job.

There will be occasions when Direct Debits raised will be refused. Therefore, the ability to Dishonour a Mandate Payment has been incorporated into the system. The results achieved by Dishonours are very much dependent upon the details held in the various tables. This will be explained in greater detail under the heading Dishonours.

Dishonouring a mandate payment is a two-stage event. The first of which is the registering of the Dishonoured Payment (the system has been designed so that Dishonour can be made against the last payment processed for the contract and Mandate in question). The second stage is the running of the Dishonour Processing batch job, DISHnn, which when completed give the ability to automatically re-bill and collect the sum dishonoured.

During the Dishonouring of a Mandate Payment, the Mandate Status code held on the Mandate will not be amended. This will allow the Mandate to be selected for other contracts for the client. To comply with the BACS regulations (Banker's Automated Clearing System - UK Requirements) if re-presentation is to occur, an immediate Status code will be updated to produce the required warning code of 18.

Subsequent dishonouring of a Mandate may lead to automatic cancellation of the Mandate by setting its status code to 91, for example depending on the table settings. For premium payments to recommence a new Mandate must be created and all contracts using the now defunct Mandate must be amended by Billing Changes to the new record.

3.5.2 Direct Debit Maintenance

The Direct Debit Maintenance Subsystem provides the facility of setting up and maintaining direct debit mandates for use on contracts billed and paid by this method. An option to enquire upon the details of a mandate is provided, as is an option to modify one. Once created a Mandate may not be deleted.

An existing Mandate may be enquired upon or modified by entering the Client number and Mandate Reference number. If the Mandate Reference number is not known then it may be left blank and a scrolling selection screen will appear which will provide a list of all the Mandates currently in existence for the selected client. The user may select any number of Mandates and these will be dealt with in turn and passed to the transaction screen for modification or display.

The transaction screen itself will capture the necessary details of the Mandate, bank sort code, account number. On creation the initial status of the Mandate may be left blank and it will be defaulted by the system to the Initial Status held on table T3684. This table holds two pieces of information about the Mandate, firstly the default initial status and secondly what the Mandate type is. The initial status may be set up as a 'Go' status type 10. This means that the users always create the Mandates as usable if it transpires that the Clients Bank refuse to accept the Mandate. In business environments where the Bank prior to its use must approve the Mandate by the Life Office the Mandate status table should have default of 00, not authorised. When the bank confirms that they are willing to accept the Mandate the Life Office will need to amend the 00 'No Go' status to 10 'Go' status.

The Mandate type on table T3684 defines whether or not all Mandates for a particular Factoring House are to be variable or fixed amounts. The values of the mandate types are as follows:

(1) Fixed Amount. The mandate amount must be recorded on the mandate. That mandate should only be used on one contract and the total due on that contract each time it is billed must equal this mandate.

(2) Variable Amount. The mandate will be used for variable amounts and so there will be no amounts stored on the mandate record. This will mean that it may be used on a contract with any premium amount and it may be used on any number of contracts.

(3) Optional. This means it is up to the input clerk, when setting up the mandate, whether or not to enter an amount. If an amount is entered the mandate is treated like a fixed amount mandate, but if the amount is left blank it will be treated as a variable amount mandate.

Payment Basis (Assumed Paid /Non Assume Paid Basis)
The Assume Paid basis is at Factoring House level and defined here in FSU Company Table T3684.

The other table particularly associated with the Mandate Maintenance system is T3678. All the valid mandate status codes are held on this table and against each status code some extra data is held. This information is the 'Go' or 'No Go' state and mandates with a 'No Go' state will not be picked up by the Direct Debit batch process however, it will report on mandates that the job was unable to use. This table also contains the default next status to which a mandate is set should dishonour occur and the type of letter that should be dispatched to the client in those eventualities.

Tables used by Subsystem

T3678	-	Mandate Status Codes
T3684	-	Factoring Houses
T5689	-	Method & Payment Combinations

Transaction Codes

M202	-	Client Master Menu
S248	-	Direct Debit Mandate Submenu
T223	-	Create direct Debit Mandate
T228	-	Modify Direct debit Mandate
T233	-	Enquire on Direct Debit Mandate

3.5.3   Direct Debit Mandate Approval

The Direct Debit Maintenance subsystem also provides a facility to maintain the Direct Debit Approval (DDA) details for the client's bank account for a specific bank. The DDA status maybe pending, approved or rejected. For rejection cases, the rejection reason code (defined in a system controlled table) must be specified.

3.5.4   Direct Debit Extract

The Direct Debit Extract subsystem is a batch process (DDnn) that will create the required data for the magnetic tape and will ensure that all the Direct Debit details are held within the system if any future processing, such as Dishonours, is necessary.

This Direct Debit extraction process will be done for each bank account with a different banking partner (called factoring house) since the extraction rule and direct debit tape formatting may be different for different banks. Hence, a different batch schedule should be set up for different factoring house.

Direct Debit Exclusion
• User can choose to exclude records which will otherwise be picked up by Direct Debit processing

Direct Debit batch processing contains the following steps:
• This can be a report only job where only listings are generated but the records not actually processed
• Exception listings are generated for invalid cases
• Extract the billing request records excluding those flagged off
• Use the extracted information to create the file used in the creation of the bank tape
• Receipts can be generated for Assume Paid basis

The schedule is driven by Billing Extract records, BEXT, which are in their turn created by other subsystems, Policy Billing, etc. The Direct Debit extraction operates on the basis that all billing records that have been created for a particular factoring house and billing channel are to be extracted and processed. Therefore, the system parameters passed to the extraction process will specify the Billing Channel and the Factoring House. The base system is set as 'D' for Billing Channel representing Bank Direct Debit and '01' for the Factoring House.

The extract process (B2498) will select all billing records matching these criteria and then the mandates associated to those payers are checked to see if the system allows them to be processed. The mandate associated with the contract is identified by the paying client and the mandate number so the full identification is Payer Client Company, Payer Client Number and Mandate Reference Number

The mandate is accessed and the mandate's status is checked against the Mandate Status table, T3678. If the status indicates that it is in a 'Go' state then the debit details will be created. Those mandates that are rejected, for whatever reason, are skipped and reported.

A mandate may be used to provide direct debiting facilities for multiple contracts as long as the same client pays all those contracts. Once this has been established, all those contracts must be satisfied from the same bank account as the mandate only points to one client bank account. Contracts may be billed on separate days and these too may be paid by the same mandate.

The extract job will summarise the billing details that are for the same client and mandate even if they do not share the same billing day. The system will combine all these records giving them a billing date that is the greater of the highest due date in the records that are combined and the effective date of the run.

For all contracts that satisfy these criteria the premium details will be accumulated and only one record written to the Direct Debit Details file, DDBT, which will eventually find their way onto the tape. The system will maintain complete details of all the data that went into the construction of the DDBT file. Two files will also be output from the Direct Debit Extract, Direct Debit Summary, DDSU, and Direct Debit Detail, DDDE. The Direct Debit Summary file will have a one to one relationship with DDBT; there will be one summary record for each direct debit record sent to the bank. The summary records may themselves be the accumulation of several contracts' premiums, that is, several Billing Extract or BEXT records.

Therefore, so that the system can maintain a proper track of the billing details for each contract, there will also be a detail record written to DDDE, for each BEXT record that went to make up the DDSU record. There will, therefore, be a one to one relationship between BEXT and DDDE and one to many relationships between DDSU and DDDE. The DDDE record itself will contain, among other things, a full copy of the BEXT record.

After the extract step, running CRTTMPF creates 2 temporary files, BACTPF and BACOPF. The subsequent process, BR359, extracts records from the DDBT file using the factoring house of each of the record to create a generic bank tape record in temporary file BACTPF. The output format for the tape record will be based on the field and length setting in the Bank Tape Detail Format table (TR371).

The subsequent process BR360 will then sort the records in temporary file BACTPF based on file number and record type order and then write them into another file BACOPF. This BACOPF is the file that will be sent to the banking partner. It is then followed by process B3289 that will delete the DDBT records so that they are not picked up a second time.

Finally, process BR22E will check the existence of Direct Debit bank output file (BACO) for each thread number. If the particular thread number of BACO exists then it will copy the data into a new file with file format PFxxxxNNN, where
    'P'   = Product (Life),
    'F'   = Factoring house (1,2,3,4,5,6,7,8,9,A,B,...,Z)
    'xxxx' = Batch schedule number.
    'NNN' = Thread number,

Tables used by Subsystem

T1671	-	Batch Control Totals
T1672	-	Batch Reconciliation Rules
T3678	-	Mandate Status Codes
T3684	-	Factoring Houses
T3699	-	Calendars for Media Runs
TR371	-	Bank Tape Details Format
TR372	-	Files for Bank Tape Details
TR376	-	Bank Tape File Attributes

Transaction Codes

M003	-	Batch Processing Master Menu
S006	-	Batch Submission Sub Menu
B253	-	Direct Debits Extraction

3.5.5   Direct Debit Apply

The Direct Debit Apply subsystem is a batch process (DDAPLYnn) that will extract outstanding billing extract requests (BEXT) and recognising them as paid via the creation of psuedo cash receipts. After the receipt has been created, the corresponding BEXT record is deleted so that it will not be used again in subsequent Direct Debit batch jobs.

Please note that for the "Assume Paid" case, this Direct Debit Apply job should be run directly after the Direct Debit Extract job. As for the non Assume Paid case, it should only be run after the Direct Debit Dishonour job.

Tables used by Subsystem

T1671	-	Batch Control Totals
T1672	-	Batch Reconciliation Rules
T3678	-	Mandate Status Codes
T3688	-	Bank Account Code Details
T3699	-	Calendars for Media Runs

Transaction Codes

M003	-	Batch Processing Master Menu
S006	-	Batch Submission Sub Menu
B254	-	Direct Debit Apply Access Code

3.5.6   Direct Debit Returns

The banks may return the Direct Debit tape in 3 formats that is containing only approved records, containing only rejected records or containing both approved and rejected records. Hence, 3 different batch schedules have been developed to handle such situations.

All 3 batch schedule will basically copy the bank return file into a temporary file (BACRPF). Based on the format setup in Bank Tape Format table (TR371), the data on bank return file is then mapped and written into another

extract file (BACIPF). Each BACI record will have the "Respond Type" field that will indicate whether the deduction is successful or not. This field is updated based on the respond code from the bank and the setting on the Deduction Response Code table (TR22A).

RETAPPnn
This batch schedule should be used to process bank return file containing only approved records. Besides updating the "Respond Type", this schedule will also generate the following reports:
- Approved Debited Listing
- Discrepancy Listing

RETREJnn
This batch schedule should be used to process bank return file containing only rejected records. For each "Rejected" request, this schedule will automatically register Dishonour transaction for the Direct Debit request. It will then generate the following reports:
- Auto-Dishonour Listing
- Unsuccessful Auto-Dishonour Listing

RETBNKnn
This batch schedule should be used to process bank return file containing both approved and rejected records. For each "Rejected" request, this schedule will automatically register Dishonour transaction for the Direct Debit request. It will then generate the following reports:
- Auto-Dishonour Listing
- Unsuccessful Auto-Dishonour Listing
- Auto-Dishonour Listing
- Unsuccessful Auto-Dishonour Listing

Tables used by Subsystem

T1671	-	Batch Control Totals
T1672	-	Batch Reconciliation Rules
T3678	-	Mandate Status Codes
T3684	-	Factoring Houses
TR22A	-	Deduction Response Code
TR22B	-	Deduction Response Text
TR371	-	Bank Tape Details Format

Transaction Codes

M003	-	Batch Processing Master Menu
S006	-	Batch Submission Sub Menu
B253	-	Direct Debits Extraction

3.5.7   Direct Debit Dishonour

The online Direct Debit Dishonour subsystem handles the registration of all dishonours received from the bank. It will make the required contra postings to the RTRN account to balance the original postings that were made when the direct debit was originally extracted. It will also automatically request a letter

via the Standard Letters interface and it will register the details of the dishonour in the dishonour file, DSHN.

Each Direct Debit extraction will create data on tape, in BACS format in the UK, and the Payer Client, Mandate Number and Billing Date will identify these details. The combination of these fields is unique to a particular Direct Debit extraction run. This means that the system can identify a job number of the original Direct Debit batch job and therefore, these details are entered into submenu for the on-line transaction.

There are two ways in which the system can be set up, with and without the Dishonour Scroll Screen, S3283. So depending on the system set up the sequence of dishonour registration events will differ. To register the dishonour the clerk enters the Client Number and Mandate Reference of the payer together with the Direct Debit billing date. The bank on the dishonour documentation should provide (all this information). Assuming that this information is valid, the system either displays the details of the debit, or a scroll, in Client Number sequence, commencing from the Client number entered at the submenu, from which one or more debits may be selected.

If operating in the scroll mode the system will continue to present the screen for each Client selected. Once all have been processed, the scroll screen is again shown, with each line flagged with an asterisk. Such lines may not be reselected. However, other unflagged lines may be selected, or, by pressing the exit function key, the submenu will be returned. If the scroll mode is not in use, each dishonour must be done from the submenu to the dishonour screen separately.

Once the required details are entered, the clerk need not enter any other information. The system will use the mandate's current status to check the Mandate Status table, T3678, and this will provide the next status to which the mandate will be set. (This is, however, only a default and if necessary this progression may be overwritten by simply entering the mandate status required after the dishonour.) Existing details of the mandate will be displayed for confirmation if the refresh function key, F5, is pressed otherwise the dishonour will be registered and the screen cleared for another entry.

Another default action is determined by the 'Lapse Days' item that is also stored on the Mandate Status table. The system will take the item that the mandate is being set To, not From, and if this is a resubmit item then the re-submission to the bank will be made after a lapse period calculated in days from the effective date of dishonour. The default of this lapse day period is held on the table but it may be overwritten during registration.

Periodically the dishonour details held on the Dishonour File, DSHN, are processed by functions that belong to the LIFE/Asia Application and not FSU/Asia. These functions will carry out the reversal procedures necessary that are associated with the billing and collection. They will also update the DSHN records so that the system recognises that they have been processed. The dishonour registration has a modify option that may be used to alter certain details on the DSHN records up to the time that they have been processed by the dishonour batch job. These modifications include, the next

mandate status, effective date and this in turn will recalculate the next submit date.

Letters such as Reminder Notices and Cancellation Notices are also generated.

Besides the online Direct Debit Dishonour facility, system also provides a batch schedule (DISHnn) to process Direct Debit Dishonour cases. Please note that this batch schedule replaces the old DISHPROC batch schedule. The schedule will read the failed deduction details from "Dishonour File" (DSHNPF) and then generate the following failed deduction files that can be used for printing purposes:

- "Bank/ Direct Debit Deduction Failure" file (BKDFPF)
- "Credit Card Deduction Failure" (CCDFPF)
- "Second Deduction Failure" file (SDDCPF)

The schedule will then update the DSHN and DDSU records to denote that they have been processed. It will also update the mandate status in MAND record. Then, based the "Go - No/Go Flag" set in the Mandate Status Codes table (T3678) for the mandate status it will either create another Direct Debit billing request (BEXT) for Representation or print the exception report. It can also generate Reminder letters and Cancellation Notices if they are setup in T3678.

Lastly, this schedule will print the following reports:

- Dishonour Transaction report
- Dishonour Exception report

Tables used in Subsystem

T3678	-	Mandate Status Table
T3684	-	Factoring Houses
TR22B	-	Deduction Response Text

Transaction Codes

M609	-	Dishonour Master Menu
B471	-	Dishonour Processing
T350		Create Dishonour Records
T351	-	Modify Dishonour Records
T352	-	Enquire on Dishonour Records

3.5.8   Direct Debit Schedules Flow

The Direct Debit processing can be summarised into 2 types depending on whether it is Assume Paid or not. Attached are the batch schedules flows for the 2 different types.

Assumed Paid
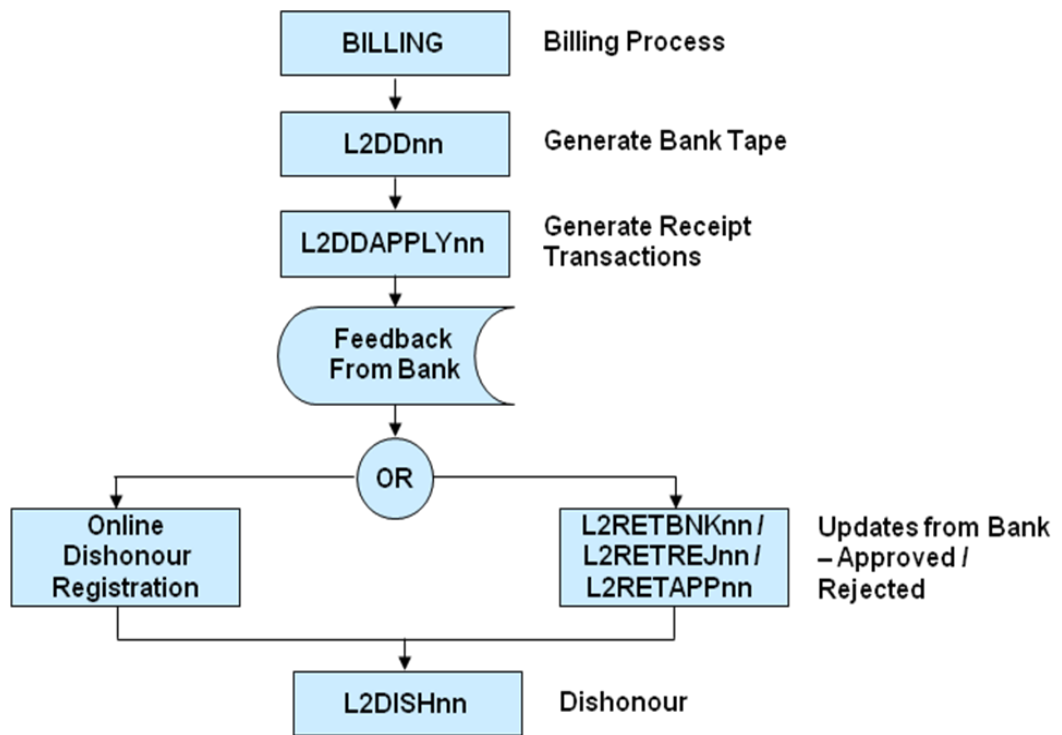
Non Assumed Paid
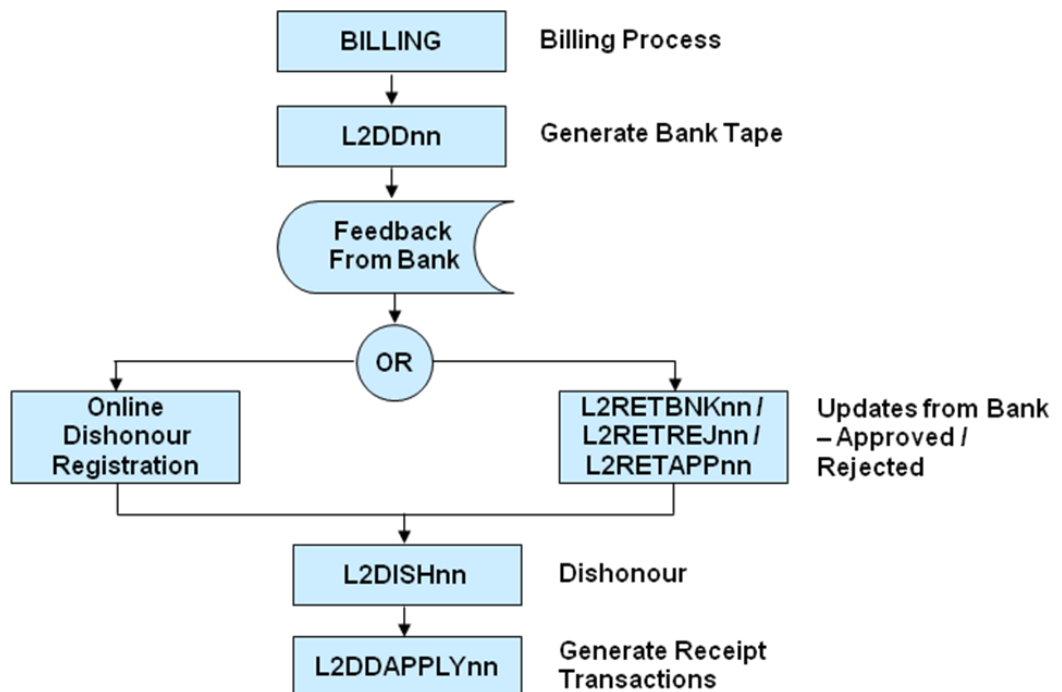
3.6 Credit Card Processing

3.6.1 Overview

Using credit card to pay the initial premium, regular premium and even single premium is becoming more and more popular.

The current Base system does contain some rudimentary support for credit card processing via factoring houses; however this is really just an extension of Direct Debit processing, without true credit card functionality, such as credit card maintenance, rejections and refunds processing, etc.

In Release v7.6, enhancements and new functionalities have been added to enable an end-to-end payment of premium by credit card.

Every credit card payment transaction involves multiple parties. The followings descriptions will give you a good understanding of who's who in the credit payment transaction process:

- Merchant - The Insurance company (Life Office) that accepts payment by credit cards acts as a merchant. A merchant needs to enter into a contract with an Acquiring Bank.
- Acquiring Bank - Provides credit card payment processing services and also extends a line of credit to the merchant.
- Issuing Bank - A financial institution that issues credit cards, e.g. Citibank and maintains a contract with the cardholder for repayment.

For each payment processing agreement with an Acquiring Bank will assign the merchant with a unique Merchant Identification Number (MID). Each MID must be maintained as a Factoring House. Each Factoring House is linked to one currency only.

Regardless of the payment method use (e.g. point-of-sale terminal, batch file) by the merchant to capture the transactions, processing the credit card payment transactions involves a 2-step process - Authorization and Settlement.

Authorization and settlement process for batch files payment method is described below:
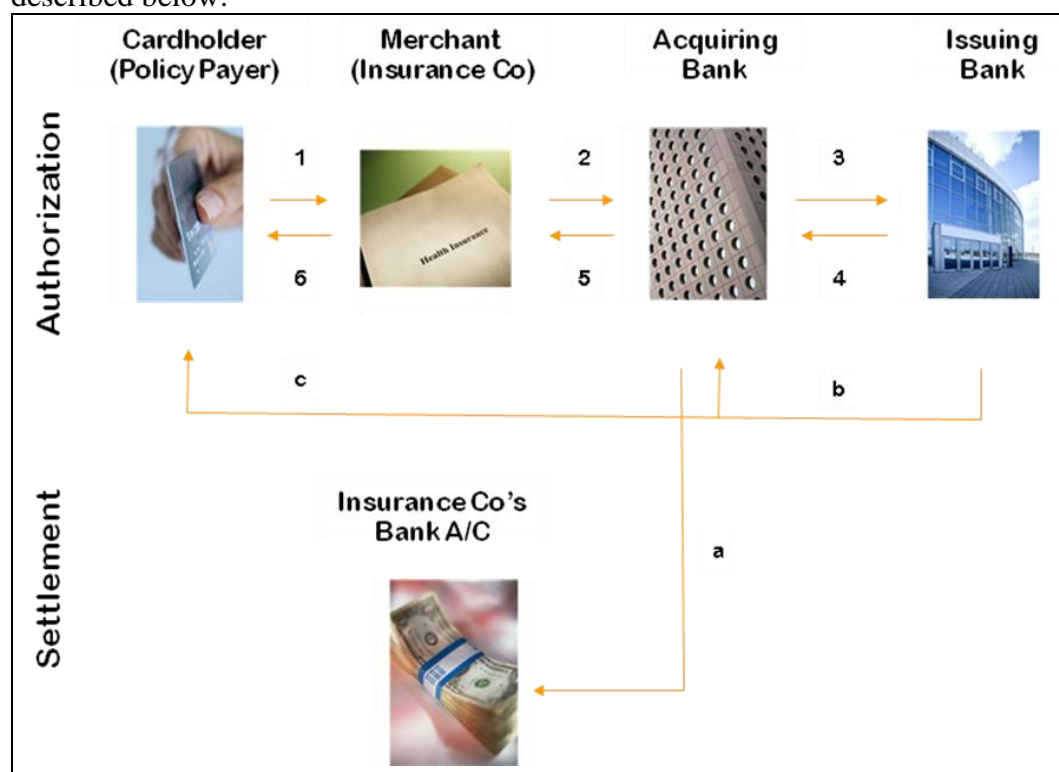
Authorization:
- The merchant prepares and submits the batch file of payment transactions

to the Acquiring Bank.

- The Acquiring Bank routes the transaction to the cardholder's Issuing Bank.
- The Issuing Bank approves or declines the transaction and passes the transaction results to the Acquiring Bank
- The Acquiring Bank relays the results back to the merchant. If authorized, the Batch Authorization ID, Batch Settlement ID and Approval ID for each approved transaction or a reject reason for the decline transaction is included in the returned batch file.

Settlement:

- The Acquiring Bank pays the amount, less service charges, into the merchant's bank account and then submits settlement file to the Issuing Banks for reimbursement.
- The Issuing Banks post the transaction to the cardholder's account and send the cardholder a monthly statement.
- The cardholder receives the credit card statement and pays the Issuing Bank.

3.6.2 Credit Card Maintenance

In order for a client to use his Credit Card for paying premium, the credit card details must first be created in LIFE/Asia. The Credit Card Maintenance submenu (SR25I) allows the creation, modification, enquiry of all the credit card details of a client. There is also a function to assign a new Factoring House to a credit card.

The client can use more than one credit card created for paying premium of different policies. The name of the cardholder, the credit card number, credit card type, start date and end date are the details required. Since approval of mandate is not required, the status of the credit card is defaulted as in force at creation and is ready for use.

The Factoring House (Acquiring Bank) selected for the credit card must be a valid code on the Factoring House Table T3684. Each Factoring House is linked to one billing currency only. Sometimes, the Life Office appoints more than one Acquiring Bank for their credit card payments processing service. This happens when the new Acquiring Bank's processing charges are cheaper than the existing Acquiring Bank. Hence during the credit card creation, the correct Factoring House which the Life Office intends to send the credit card payments for processing must be selected. The Merchant (Merchant Identification Number) and Currency will be defaulted from the Factoring House details in T3684. Furthermore, the Credit Card Maintenance submenu provides the option of assigning other Factoring House to an existing credit card.

The modification option enable user to inactivate the status of the credit card when the credit card is lost or stolen. When the client notifies the Life Office that the expiry of the credit card has been extended, user can modify the Expiry Date with the new date.

When option C (Inquire on Credit Card Details) is selected, it will window to the Credit Card List (SR25J), which display for each Factoring House all the

active and inactive credit cards of the client. The Credit Card Details screen (SR25K) for a selected credit card will displayed all the information entered on creation. Additional information displayed in the enquiry screen is the code of other Factoring Houses that have been assigned to this credit card and the expiry date in DD/MM/YYYY format. The 'DD', displayed in the 'Valid Until' field is assumed to be the last day of the expiry month.

3.6.3 Credit Card Mandate

The automatic transfer of funds from the policyholder's credit card on a one-time or regular basis must be strictly controlled. The Credit Card Mandates subsystem allows user to create, modify and enquire on the mandates. Each credit card mandate is identified by a Mandate Reference Number. The Mandate Reference Number of a client is assigned sequentially from the same series and hence unique. The mandate also provides the connection between the policy billed and the credit card used.

The credit card mandate creation screen (SR26J) holds all the details needed for billing the due premium of a policy that has chosen credit card as the payment method. These details are the Credit Card Number, Name on Credit Card, Credit Card Status, Credit Card Type, Factoring House, Mandate Status and Effective Date.

Unlike direct debit, pre-approval of payment using the credit card before any payment request can be processed is not required. Instead, the Issuing Bank validates and authorize each and every credit card payment request as and when it is presented by the Acquiring Bank. Hence, the Life Office will set the mandate status as in force (Mandate Live) during the mandate creation.

Depending on the set up in the Factoring House, a mandate may be used for a single policy or for multiple policies. The processing charges levy by the Acquiring Bank on the Life Office for processing credit card payments is based on the total amounted collected versus basing on the total number of transactions presented in Direct Debit. This been the case, it is preferable to use a different mandate for different policy paying with the same credit card. This avoids summarization of the amount paid in the client's credit card statement.

3.6.4 Credit Card Flagging

Billing transactions that are ready for Credit Card processing will be stored in BEXTPF file before it is extracted into the Bank Tape. The Credit Card Flagging submenu (SR342) allows user to exclude the credit card transactions kept in BEXTPF file from being extracted in the next Bank Tape Extract and Create submission. This facility is useful when the policyholder reports that the credit card has been stolen or gives instruction to hold the billing, after the credit card transaction has been extracted.

The Exclude Billing Selection screen (SR343) is used to exclude the billing for a particular policy. User needs to enter the particular Factoring House code and a list of billing records generated for the factoring house will be displayed. A rejection reason code for the excluding the billing record must be entered.

The Credit Card Flagging submenu also allows user to reactivate a previously 'excluded' transaction and cause it to be included in the next processing cycle. To reactivate an excluded billing record, remove the rejection reason code and the record will be extracted by the Bank Tape Extraction batch run.

3.6.5   Credit Card Dishonours

The Credit Card Dishonour Register submenu (S3282) provides user a facility to register dishonoured cases where the return status from the Acquiring Bank is in the form of a hardcopy and not in a softcopy file that Life/Asia can process. The dishonour can only be made against the last credit card processed for a client and mandate. The user can also modify an existing dishonour record. Modification is allowed only if the Dishonour Processing Part II job has not completed.
There is also an option for user to view the dishonour records that have been maintained in the system. In the enquiry mode, all the fields are protected and no updating is permitted.

3.6.6   Credit Card Payment Processing

The credit card processing can be summarised into two types depending on whether it is Assume Paid or Non-Assume Paid basis. Below are the batch schedules flows for the two different types of processing.

NEW Credit Card Assume vs Non-Assume

Assume Pay		Non-Assume Pay

Assume Pay

Billing ← --- Billing Process --- → **Billing** **Non-Assume Pay**

L2CC07
Credit Card Extract -
Fact House 07
(B253)
← --- Generate Bank Tape --- →
L2CC07
Credit Card Extract -
Fact House 07
(B253)

L2CCASMP07
Credit Card Assume
Pay - Fact House 07
(BRAU)
← --- Generate Receipt **(DP)**

Authorization
Update Receipt status
- RL: Successful
- CU- Un-successful
Authorization

L2CCRET07
CCard bank return -
Fact House 07
(B253)
← --- Create Dishonor record --- →
L2CCRET07
CCard bank return -
Fact House 07
(B253)

L2CCDISH07
Batch Dishonour for
CCard Fact Hse 07
(B350)
← ---
- Update MAND status
- Re-bill for the rejected case
--- →
L2CCDISH07
Batch Dishonour for
CCard Fact Hse 07
(B350)

Generate Receipt
(RL)
--- →
L2CCAPLY07
Credit Card Apply -
Fact House 07
(B254)

In Asia, most Life Offices adopt the Non-Assumed Paid basis for direct debit and credit card processing. As such, the description for credit card processing is based on the Non-Assumed Paid basis.

Based on the billing renewal dates of in force policies, the batch schedule L2RENEWALS will identify the policies that are due for billing and collection processing. During the billing process, the Billing Channel Details Table and the number of lead days in the Billing Control Table will be referenced to determine when to produce a Billing Extract record, BEXT.

In the next process, the Credit Card Extract batch job, L2CC07, will extracts all unprocessed BEXTs for a particular factoring house. One Credit Card schedule definition is expected for each Factoring House handling credit card payment processing services. In the batch job, L2CC07, '07' is the factoring house code and it is embedded within the extraction schedule for easy identification. The extract process will select all the unprocessed billing records for factoring house 07 and checked the credit card mandate to determine if the system allows the billing records to be processed. Concurrently, the billing records belonging to the same payer and having the

same mandate reference will be amalgamated into a single entry. The selected billing records are then written to the Credit Card Details file, CCBT and the BEXT records are updated with the job information so that it will not be extracted again in the next run. In the next step, the billing records CCBT file will be output to a temporary bank media file, BACTPF. The output format for the media record will be based on the field and length setting specified.

Subsequently, the records in the BACTPF file are sorted and written into another file BACOPF. It is this file that will be passed to the selected Card Authorisation and Payment Request (CAPR) software of the factoring house for authorisation and payment processing. The Issuing Bank will validates and authorise all the credit card payment requests presented by the factoring house. Validations are performed on the credit card number, the expiry date and the amount order against available credit. If authorised, the amount order is reserved from the total available credit for the payment. After processing, the CAPR returns the authorised and rejected credit card payments within the same file. The response code field in the return file will indicates whether the record is approved or rejected.

The next batch job L2CCRET07, will updates the records that have been authorized for payment so that these records can then be processed by the subsequent batch job L2CCAPLY07. For those records that have been rejected, the batch job will automatically write the dishonoured records to the Dishonour file for processing by the subsequent batch job L2CCDISH07. For Non-Assume Paid basis, receipts have not been created and hence no reversal of receipts in RTRN.

The batch job L2CCDISH07, should be submitted only after the online dishonours for the day has been completed. This batch job will extracts all the data required for producing the letter for the rejected credit card payments via the Standard Letters interface. This batch job will also update the mandate status in the MAND record. Basing on the 'Go' or 'No Go' Flag, set in the Mandate Status Codes table (T3678) for the new mandate status, it will create another credit card BEXT for representation. Once this part of the dishonour processing is completed, online modification via the Credit Card Dishonour Register submenu will not be allowed.

In the case of Non-Assume Paid processing, the next batch job L2CCAPLY07 should be processed only after the L2CCDISH07. The batch job, L2CCAPLY07 will generate receipts for all the successful credit card payments. The receipt status will be defaulted as 'Realised'.

3.7 Cryptographic of Credit Card Number

3.7.1 Overview

There is a growing demand to have sensitive data (e.g. credit card number) to be encrypted in the Application Systems. According to the Payment Card Industry Data Security Standard (PCI DSS), merchants (Life Offices) who have a legitimate business reasons to store cardholder data, must comply with

the technical and operational guidelines (below) for protecting stored cardholder data.

	Cardholder Data	Data Element	Storage Permitted	Render Stored Account Data Unreadable per PCI DSS Requirement
Account Data		Primary Account Number	Yes	Yes
		Cardholder Name	Yes	No
		Service Code	Yes	No
		Expiration Date	Yes	No
	Sensitive Authentication Data	Full Magnetic Stripe Data	No	Cannot store
		CAV2/CVC2/CVV2/CID	No	Cannot store
		PIN/PIN Block	No	

In Release v7.6, the solution adopted is to make use of encryption and decryption APIs supplied by the operating system without incurring additional cost.

The Encryption and Decryption APIs allow you to store information or to communicate with other parties while preventing uninvolved parties from understanding the stored information or understanding the communication. Encryption transforms understandable text (cleartext) into an unintelligible piece of data (ciphertext). Decrypting restores the cleartext from the ciphertext. Both processes involve a mathematical formula (algorithm) and secret data (key).

In V5R3 and i5OS IBM introduced APIs that support Triple DES and AES encryption. These APIs are a starting point for developing a field level encryption strategy.

3.7.2   Encryption/Decryption Routine

To allow the flexibility of the encryption/decryption routine, the routine name will be table driven. Client can define his/her own encryption/decryption routine with stronger algorithm. However, if no routine is entered in the table, there will be no encryption/decryption done.

When the Credit Card Number is entered via online transaction, the data will be encrypted by scrambling the data into a secret code that cannot be deciphered. The encrypted data is then stored in the database. In this way, the data is protected.

In user sanctioning (Normal User or Secondary User), there will be a parameter to determine whether user can view the encrypted data for Credit Card Number in 'Additional Sanctioning'.

When the Credit Card Number is accessed from the file and displayed on the screen, if user is allowed to view the encrypted data, the actual value will be shown on the screen. Otherwise, only the last 4 digits of the credit card number (***********nnnn) will be shown.

During maintenance of Credit Card Number, the actual value will be shown.

When the Credit Card Number is accessed from the file and shown in the reports/letters, there will be additional checking on the user ID that submitted the job. If user is allowed to view the encrypted data, the actual value will be shown. Otherwise, only the last 4 digits of the Credit Card Number will be printed.

3.8 Group Billing

3.8.1 Introduction

Group Billing enables the collection of premiums from a Group, usually a corporate client or employer on behalf of his employees. Such premium amounts are posted to a Group Suspense sub account and the actual receipt of the money is via the collection channels. For example Direct Debit, Direct Cheque, etc.

Individual contracts are linked together by belonging to a Group. A contract can be attached to a Group either at Proposal or later on in its contract life by means of Billing Change. Equally a contract linked to a Group method of premium payment can be detached from this method of payment, again by Billing Change.

These contracts are billed individually in the normal way however, there are some differences. No Billing Extract (BEXT) records are produced for these individual contracts, unless they are paid by Direct Debit, but since Group Billing implies On Account reconciliation, accounting entries (ACMV's) are written.

A bill or Statement of Account is produced prior to each Group's Due Date. The statement includes all amounts not yet reconciled for each Group billed and gives full details of each item. These amounts will most frequently be the amounts generated for all individual Contract billings but it will also include other monetary amounts, Cash Receipts, payments received from the particular Group from Direct Debit Payments and any direct journals.

The printed Statement should be returned to the Life Office with all the changes, permanent or temporary. Using this information, when the premium due is received the system presents all of the unreconciled items to permit a reconciliation to be performed. A facility is provided to indicate that each and every item in the bill has been reconciled with the amount received, when the amount received matches the amount billed.

The function allows for the existence of negative balances in a Group Suspense sub account, if the Life Office so desires. In other words, if the amount received is less than billed, it is possible to indicate that every item on the bill has been reconciled, and the Group Suspense sub account debited with the total amounts actually billed. This is achieved by means of a partial reconciliation facility, which may be an under or over reconciliation of an item. This leaves the Group Suspense sub account in negative cash position. This deficit would be added to the next bill.

Once reconciliation has been achieved, the system then allocates money from the Group Suspense sub account to each individual contract suspense account. This would then be processed in the normal way by the application Collection batch routines.

Relevant alteration to contracts, included in a Group Statement of Account, result in adjustments to amounts billed or outstanding. Any reversal transactions, that include the reversal of Group Billed Contracts billing, result in the reversal of all accounting derived from the actual billing and any Group reconciliation. Thus the Group Suspense sub account is credited.

The base system also provides "hooks" for two functions for that Life Office's who may wish to make use of them in their normal customisation of the system.

They are:

- The ability at Group level to point to a form of discount for premium calculation for individual contracts linked to a Group.

- The ability to register cash discount at the Group level, which reflects the administrative savings of bulk collection. Such a discount would not be directly attributable to individual contract premiums within the Group, but would be borne by the Life Office as an expense item, typically offset by some commission savings.

3.8.2   Group Maintenance

The Group Maintenance subsystem provides the following functions:

- Create Group details. The Group number is automatically allocated by the system

- Modify Group details

- Delete Group details. Deletion is not allowed if members or contracts are linked to a Group

- Enquire on Group details

- Enquire on Group members. This function provides a list of all contracts attached to a Group

Group details are held on the GRPS file, they are as follows:

- The Method of Payment for the Group must be a valid code on T3620 Billing Channels. The Billing Frequency for the Group must be a valid code within table T3590.

- Currency codes define the Group's operating currency. When modifying a Group, this may not be amended. A Contract attached to a Group must

have a currency billing (contract currency can differ from billing currency) which is the same as the Group currency.

- Anniversary Month defines, for non-monthly Groups, the month in which billing is to occur, according to the frequency. For example, an anniversary month of 02 in conjunction with a quarterly billing frequency would result in Group billing occurring in months 02, 05, 08 and 11. When modifying a Group, the Anniversary month may not be amended.

- Group Due Day is a day of the month nominated by the Group Administrator to control production of the Group's bills. It is used in conjunction with Anniversary Month and Billing Frequency to control due dates and must therefore, be a valid combination with Anniversary Month.

- Last Billing Statement date is calculated by the system and is the date that is maintained on Group records. When creating a Group the system sets the date to what would have been the previous Billing Date based on frequency, Group Due Date and Anniversary Month. The date cannot be modified.

- Billing Lead Days is the number of days in advance of the Group's Due Date that Group Billing is to occur. The Group's due date is calculated as the Last Statement Billing Date plus the number of months represented by the billing Frequency.

- A Member Reference may be defined as mandatory. The Member Reference can be used to highlight or reference members of a group when, for example, Group Bills are printed. If a Member reference is mandatory, all proposals entered for that Group and all contracts attached to the Group must have a Member Reference. If a Member Reference is not mandatory, contracts cannot be assigned a Member Reference.

- Billing Sequence Code must be a valid sequence on table T3700. The code defines the sequence in which Group Bills are printed, for example a Member Reference. Note that if the sequence is changed the new sequence will only apply to newly raised contracts' bills; existing contracts will still have the previous sequence that may cause problems with reconciliation.

Tables Used by Subsystem

T1685	-	Subsystem Register
T1693	-	Company Table
T3000	-	Currency Conversion
T3590	-	Frequencies
T3616	-	Sub Account Codes
T3620	-	Billing Channels
T3629	-	Currency Code Details
T3642	-	Automatic Number Allocation
T3678	-	Mandate Status Codes
T3695	-	Sub Account Types
T3698	-	Dissection Codes

T3700	-	Group Billing Sort Sequence
T3702	-	Group Premium Discount Method
T3703	-	Group Cash Discount Method

Transaction Codes

M214	-	Group Master Menu
S255	-	Group Maintenance
T316	-	Group Create
T317	-	Group Modify
T318	-	Group Delete
T319	-	Group Enquire
T320	-	Group Member Enquiry
T323	-	Group Mandate Create

3.8.3 Group Statement of Account Production

The GROUPSMT batch schedule is used to produce a printed report on schedule dates, according to each Group's billing frequency, to be sent to the Group's Administrator. The report has two main functions:

(1) To advise the Administrator of the amount of money expected by the Life Office

(2) To provide a checklist of the amount expected from each contract within the Group

It is intended that the Administrator uses the report to advise the Life Office of changes.

Since the report consists of all unreconciled items, it will show, in addition to contract amounts, any payments not fully reconciled outward payments and direct journals. Each report shows a "Total to Pay". For Direct Debit Groups this amount, if positive, will be collected by Direct Debit. A Billing Extract record, BEXT, will be created.

For other Methods of Payment, the Group will not necessary pay the amount shown on the Group Bill but amount adjusted by the Administrator on the basis of new contracts (ons), contracts no longer in the Group (offs) and changes. All of these movements will be those not yet processed by the Life Office.

The actual list is printed in sequence requested by each Group Administrator to suit their particular administration. It is possible to define the sort order for the Group Statement, for example by Client, Member Reference number, etc. Note that multiple records with the same key, for example, Members Reference number, would appear in due or effective ascending sequence. This sort order is held in the STMTSORT field on the ACMV record and is defined on table T3700.

After completion of this batch schedule the GRPS record is updated with the new billed to date to show that the Group has been billed.

Tables used by the Subsystem

T1671	-	Batch Control Tables
T1672	-	Batch Reconciliation Rules
T3620	-	Billing Channels
T3629	-	Currency Codes
T3698	-	General Ledger Dissection Rules

Transaction Codes

B300	-	Group Statement

3.8.4   Group Dishonours

The Group Dishonours batch schedule process dishonour records after they have been registered in the system by the on-line dishonour function. The on-line portion of the dishonour transaction reverses the accounting as necessary, posting a credit to the bank account and a debit, via ACMV, to the Group. The batch schedule DISHGROUP completes the dishonour for Group cases, recognised by means of their FSA coded Servicing Unit.

The schedule runs on the job numbers allocated during the Direct Debit batch jobs. The user can enter a range of direct debit batch job numbers. All the dishonour records for the entered job number(s) are extracted for processing providing the service unit of the records is set to Group.

Records extracted will be updated with a processed flag for this schedule run so that they will be ignored for subsequent runs. The Direct Debit Summary record is updated with a new status and the system will re-bill the premium.

Please note that there is no separate on-line processing for a Group Direct Debit reversal.

Tables used by this Subsystem

T1671	-	Batch Control Tables
T3678	-	Mandate Status Codes

Transactions Codes

B302	-	Group Dishonour Processing

3.9   Receipts and Payments

3.9.1   Introduction

In any organisation there has to be Cash In and Payments Out procedures and these have to be controlled in order that the organisation can operate efficiently. These procedures are part of FSU/Asia and this section will give an overview of the base system procedures.

3.9.2   Receipts - Cash In

The Cash Receipt system is capable of recording different types of revenues that an organisation is likely to receive. For example a typical Insurance Company may have to process any of the following:

- Individual Premiums
- Automatic Premium Loan Repayments (APL's)
- Contract Loan Repayments
- Interest on Contract Loans or APL's
- Expense Refunds
- Income on Investments
- Commission Refunds
- Reassurance Recoveries
- Group Premiums

As well as dealing with recognisable categories occasionally the system has to deal with revenue whose destination is unknown at the time of the receipt. An example of this is cheques received without any supporting documentation or accompanying remittance advice. Another example is the receipt of a deposit premium accompanying a proposal/application that cannot be allocated to the contract number, as it has not yet been entered into the system.

The Application Form Number assigned to a proposal or application can be entered on the Receipt Entry Screen to link the receipt of monies to the corresponding proposal or application.

Under these circumstances the revenue must be recorded in an appropriate suspense account until its posting details are known, at which in time it can be transferred by journal. Regardless of whether the revenue is posted to a known account or suspense the system has to eventually perform some background functions.

The system has been designed around the concept of "batches" this term should not be confused with batch processing as all the receipts are completed in "real time" but this term indicates batches of on-line transactions.

It is suggested that the first stage is to separate cash receipts that have been banked from those that require banking. The system can distinguish between the two. The principle difference between these types of cash receipts is that the system will on request produce a Deposit List report that can be used to accompany the cash received to your bankers as supporting documentation for the deposit. For both types of receipts the system will produce a Cashbook Receipt List Report that provides the details of all of the revenue received and their posting details.

Having decided to sort the receipts into banked and not banked it is advisable to further sub-divide the cash receipts in various major types, cash, postal orders, journals, etc. Each batch of these should be entered into the system, the batch closed and the new batch started. The benefit of this is that the Cashbook Receipt List Report totals are provided for each type and therefore, control is made easier for balancing.

A Cash Receipt transaction entry screen can be considered to consist of two distinct parts. In the upper half of the screen is the "header" and it is here where you record the details of the individual or company the revenue was received from, Client or Agent and in what form cash, cheque, etc. In many instances the receipt will be accompanied by a remittance advice that will have quoted the client and contract number. However, in some cases this will not be so and in this instance you have the ability of "windowing out" into the client details to establish the relevant details.

Recognizing that Life Office issues a huge volume of receipts every day, Release v7.6 allows the default of the Payor's Name, Payment Type and Cheque Type when this functionality is switched on. A "Policy Number" field is added in the Cash Receipt Submenu (S2067) for Action A (Cash not Banked) and Action B (Banked Cash). When the policy number is entered,
- the Payor's Name in the Receipt Header screen (SR289) is defaulted to the Payor of the policy,
- the Payor's Name in the "Dissection Description" field of the receipt dissection screens (S2610), is also defaulted to the Payor of the policy.
Furthermore, the first Payment Type and Cheque Type in the Receipt Header screen (SR289) can be defaulted with the value defined in Table TR377 for these fields.

In the second half of the screen is an entry line into which is entered the codes designating what the received revenue represents. This is done through a sub ledger code and type together with the account number in respect of a general receipt or a contract number.

Since one receipt can actually pay for a number of different items there is a dissection indicator that allows you to enter any number of dissections until the item has been processed. The system will check the validity of all input fields and further more the header and the dissection amounts must balance.

In Release v7.6, a "Remark" check box, controlled by TR377, is added to the Receipt Header (SR289). When the Remark check box is invoked, a new pop-up screen will be returned for user to capture remarks, comments or description information or the pop-up screen will show the existing remarks information. As there is no need to maintain historical remarks information, new remarks information will overwrite the old remarks information.

Furthermore, in Release v7.6, when the receipt dissection screen (S2610) does not contain any errors, a new confirmation screen, controlled by T3605, will be displayed. This confirmation screen allows users to choose whether to continue to create/cancel the receipt or go back to the receipt dissection screen to perform further actions before creating the receipt.

The Cash In system has been designed to handle multi currency and allows companies to receipt cash on behalf of other companies defined within the system. In these cases extra details will be displayed on the screen for exchange rates and accounting, or local, currency equivalents. When these details are not required they will not be displayed. The "triggers" to display these fields are controlled by the bank account details, which are held on a table.

As mentioned earlier once all the receipts have been completed there needs to be a record in some way so that at the end of the day banking can be completed for all those payments that have not yet been banked. To do this a list must be drawn up of the deposits that will be made at the bank.

The base Receipts Subsystem is responsible for producing these reports and should be run on a daily basis after all the batches has been closed for the day as only transactions belonging to closed batches will be recorded in the report. The batch job CASHLIST produces the Bank Deposit List Report together with the Cashbook Receipt List and Official Cash receipts.

The Deposit List Report is produced so it can be used to accompany the cash and cheques to be deposited at the bank. This saves the need for the Life Office to document this manually. The report lists only those batches of cash transactions that have been entered into the system through the Cash Not Banked option.

The Cashbook Receipt List Report is produced to provide, as the name implies, a complete Cashbook Receipt List of all cash receipts' transactions throughout the system. All batches of cash receipt transactions are included whether banked or not banked options are used to enter the system.

The Official Cash Receipts are produced for all cash receipts entered into the system whether banked or not banked. An Official Receipt contains all the relevant details entered at the receipt creation stage.

The Receipting function accepts multiple cheques, or combination of cheque(s) and cash in single receipt.

3.9.3   Receipt Status

The receipt life cycle involves many stages and each stage has an impact on policy issuance, payouts and bank reconciliation. From Release v7.6, the Online Receipt functions will show the current status of the receipts in the Receipt Header screen. To use the Receipt Status updating and related receipts enhancements, the company code (Company 2) must be enabled in table 9TSR29S.

Some of the reasons why Life Office requires Receipt Status codes are:
- Ability to enforce Policy issuance rules according to the Receipt Status. The issuance rules needs to be defined in LIFE/Asia.

- Ability to enforce validations / controls of payouts based on realization rule.

- Bank Reconciliation of inflows i.e. to distinguish which receipts has already been banked-in or 'realised' or which ones has been dishonoured.

- To find out which receipts qualify for extraction for the file to be sent to the bank for acknowledgment.

The receipt status codes available for use are:

        EN   - Entered
        DP   - Deposit Slip Printed
        RL   - Realised
        RE   - Re-presented
        CS   - Auto cancelled by System
        CU   - User initiated Cancelled
        HS   - Auto Held by System
        HU   - User initiated Hold
        RR   - Reversal Receipt

3.9.4   Receipt File Exchanges with Bank and its Processing

Receipt information will be passed back and forth between the Life Office and the Bank in order to determine and reflect the status of the receipt according to the stage it is currently in.

A new batch job, SNDBNK will extract all the receipt with the status of 'DP' and 'RE' into a file, BKSNPF for sending to the Bank. Credit card receipts, direct debit receipts, post-dated receipts are excluded. The extract file will include a reference number which will identify the unique receipt record. This same reference number will also be included in the acknowledgement file return by the Bank.

There is another new batch job, RCVBNK, which will handle the processing of the receipts in the acknowledgement file return by the Bank. This batch job will determine and update the receipt status to 'RL', 'RE', 'CS' or 'HS'.

3.9.5   Receipt Modification, Hold/Un-hold Functions

With the introduction of the receipt status, new functions to modify the receipt and to hold/un-hold the receipt is also made available. Receipt modification can be done on fields that will not have any impact to the accounting postings e.g. cheque number, cheque type, cheque date, bank branch and account. For post-dated cheques, which have no financial impact yet, any fields are allowed to be modified.

Only status EN, HU, HS is allowed to be put on Hold/Un-hold. Held receipts will not be extracted and sent to the bank for reconciliation purposes.

3.9.6   Post Dated Receipt

Release v7.6 also allows post-dated receipts to be printed for cheques whose date is greater than the current date. Post-dated receipt will not generate any accounting entries. Only a single payment instrument (RBNK) will be allowed for a post-dated receipt. The printing of post-dated receipts will have the same validation as "regular receipts". If the receipt is post-dated, it will not be picked-up for conversion into a regular receipt However, a post-dated receipt can be converted anytime via the on-line receipt modification function by changing the cheque date to a date less than or equal to the current date. Alternatively, post-dated receipts can be converted into a regular receipt via a new batch job PDCHQCNV. During the conversion, the corresponding

updates of the Bank Balance and posting of the accounting entries will be performed.

Another new batch job F9POSTLIST will extract post-dated receipts, based on a date range, into a file which can be used to produce post-dated cheques listing.

Both batch jobs CASHLIST and F9DEPSLIP will not include post-dated receipts in their processing.

3.9.7 Receipt Cancellation

Upon entering the cheque number or the receipt number, the corresponding receipt details will be automatically displayed. No changes to the receipt details are allowed during cancellation. Option 'I' on the Cash Receipt Submenu invokes Receipt Cancellation.

3.9.8 Receipt Enquiry by Cheque Number

Receipt Enquiry by cheque number is now available via option 'H' on the Cash Receipt Submenu.

3.9.9 Receipt Enquiry by Client

In Release v7.6, a new functionality has been added to allow enquiry of receipts via client. The Receipt Scroll screen (SR25F) can be invoked by pressing F4 at the "Receipt Number" field in the Cash Receipt Submenu screen (S2067) and then selecting the desired client. The receipts that will be shown in the receipt scroll list are:
* receipt of policies where the selected client is the Payor,
* receipt of policies where the selected client is the Owner,
* receipt of policies where the selected client is the Life Assured and
* receipt of policies where the selected client is the Agent.

The list is sorted by Receipt Date, with the latest receipt issued at the top.

3.9.10 Receipt Enquiry by Bank Code

Furthermore in Release v7.6, Option C (Cash Enquiry) of the Cash Receipt Submenu screen, has been enhanced to show receipts of the selected Bank Code. The receipts shown in the Receipt Scroll screen (SR25E) is sorted by Receipt Date, with the latest receipt issued at the top of the list

Tables used in Subsystem

T3616	-	Sub Account Codes
T3688	-	Bankcode Details
T3698	-	Cash Dissection Codes

Transaction Codes

M201	-	Cash Master Menu
S200	-	Cash Receipts Submenu

T204	-	Cash not banked
T205	-	Cash Banked
T238	-	Cash Enquiry
T287	-	Balance Enquiry

3.9.11 Bulk Receipts

LIFE/Asia introduced in V1.0 the feature of Bulk Receipts. This enhancement is to facilitate the situation where a company receives large numbers of premiums, normally from Collector Agents, which is a common feature in countries such as Indonesia. Therefore this functionality has been designed with only receipting of contract premiums being renewal or initial and that the monies is in one currency and that this currency is the ledger currency.

In addition to the receipting transaction this functionality, if required, can also deduct from the amount entered for each contract the appropriate amount of stamp duty. It is not possible, however, to only deduct stamp duty for some of the contracts entered; it must be all or none.

This new feature is very similar to the base system receipting except that there is two new transactions, TA67 and TA68, denoting Bulk Receipts Banked and Bulk Receipts not Banked respectively.

3.9.12 Post Dated Cheque Maintenance

A module is available in FSU Release 7.1 to administer post-dated cheques that have been received from policyholders. This Post-Dated Cheque module has functions to register, modify, cancel and enquire on the post-dated cheques.

The Modify and Cancellation screens will only display post-dated cheques with "Pending" (PN) status whilst the Enquiry screen will display all post-dated cheques, irrespective of their statuses, with 2 filter options, by cheque date and cheque status.

The batch job, PDCHQPOS, will automatically post the cheques and generate the corresponding receipts when the cheque dates fall due.

A new type of Automatic Number Allocation is created in table T3642 to cater for Post-Dated Cheque receipt numbers.

3.9.13 AML Checking

FSU Release 7.4 introduces a new validation to the existing online Receipts subsystem to detect Anti Money Laundering cases. The system provides a validation on the receipt amounts to make sure that they do not exceed a certain amount that can be defined in the new Money Laundering Limit Check table (TR24A). The rule can be defined by payment currency and payment type.

If a receipt amount exceeds or equal to the Money Laundering Limit for a particular payment type & currency then system will display a message box for user to confirm whether to proceed with the receipting or not. If the user

chooses to continue then system will store the suspected AML cases into a file for printing purpose.

3.9.14   Disbursements - Payment Outwards

Every business has a wide range of expenses that must be paid, for example, Utilities, Rates, Rent, etc. For Life Assurance Company's there is another category of expenses and these are payments made to clients in respect of Claims, Premium Refunds, Regular Withdrawals, Agents Commission, etc.

The main aim of any payment system, whether it is manual or automated, is to provide an easy method of creating payments whilst ensuring sufficient safeguards exist against misuse of the system.

The FSU/Asia Payments Subsystem provides such a facility allowing you to Create, Maintain and Enquire on Payments and control and monitors their progress through the Payments cycle from initial request until final payment. In addition the details of any Payment processed are reflected in updated Policy, Agent and Claim records to ensure that accurate information is available at all times.

In Release v7.6, a "Remark" check box, controlled by TR377, is added to the Payment Maintenance screen (S2200). When the Remark check box is invoked, a new pop-up screen will be returned for user to capture remarks, comments or description information or the pop-up screen will show the existing remarks information. As there is no need to maintain historical remarks information, new remarks information will overwrite the old remarks information.

Furthermore, in Release v7.6, when the payment maintenance screen (S2200) does not contain any errors, a new confirmation screen, controlled by T3605, will be displayed. This confirmation screen allows users to choose whether to continue to create/cancel the payment or go back to the payment maintenance screen to perform further actions before creating the payment. The confirmation screen is also present in 'Modify Payment', 'Remove Payment Request' and 'Clone Payment' transactions.

Each payment request is automatically allocated a unique requisition number. The numbers used are controlled by the Automatic Numbering System. This number is used to identify the Payment Record at all stages of its progress through the payment cycle.

Recognizing that Life Office processes a huge volume of payments every day, Release v7.6 allows the default of the Payee's Name, when this functionality is switched on in T3605. When a client number is entered in the "Payee" field of the Payment Submenu (S2201), the Payee's Name will be defaulted in the "Dissection Description" field of the Payment Maintenance screen (S2200). If this functionality is not switched on, the Sub-Account Type Description, as entered in Table T3695, will be defaulted in the "Dissection Description" field instead of the Payee's Name.

The on-line system functions provide by this subsystem is;

- Create Payment Request
- Modify Payment Request
- Authorise Payment Request
- Remove Payment Request
- Payment Enquiry
- Clone Payment
- Block Authorisation
- Approve Payment
- Approve in Block
- Print Express Cheque

A Payment is made using a specified Payment Method. This method defines the type to be created, Cash, Automatic Cheque, Direct Credit or Manual Cheque. The Ledger to which the payment credit will be posted, whether the postings generated should occur immediately and whether the payment is pre-authorised. Flags on the extra data screen of Payment Method Table, T3672, complete these definitions. It is essential that these flags are set correctly for Payment Method to ensure that the correct processing is carried out and that the relevant amounts are posted to the Ledger.

The following Payment Methods are currently supported by the FSU/Asia Payments subsystem;

- Cash
- Automatic Cheques
- Manual Cheques
- Payment Reversal
- Direct Credit

The rules for the currently supported Payments Methods are as follows:

- Sub Ledger Code and Type

  The codes entered here will determine the Subsidiary Ledger and section of that Ledger to which the whole payment amount is to be posted. They will also, when used with the Transaction Code, define the General Ledger Account to be used, via a read of table T3698.

- Bank Details Required

  When set to 'Y' any Payment of the Method specified will need the Payee Bank Details to be attached. An obvious example is a Direct Credit Payment. In all other cases this should be set to 'N'.

- Cheque Number Required

  This should be set to 'Y' where the Payment Method being specified needs a cheque number entered as part of the Payment Request process. For example requesting payment by Manual Cheque or reversing a Payment

originally made by Cheque. In all other cases this flag should be set to 'N'.

- Reversal

  This flag should only be set to 'Y' when the Payment Method being defined is intended to be used to reverse a Payment that has already been processed; for example where a Cheque is destroyed and needs to be cancelled and reproduced. If a Payment Method with a reversal flag of 'Y' is input the system will restrict the processing that can be done for that request. It will ensure that an existing Payment is being reversed, that the amount of the request is an exact reversal of the original amount and that the Sub Account Code and Type input are the same as on the original record. This ensures that a true reversal is processed and all Accounting records are correctly updated.

- Immediate Post

  This flag determines whether the Accounting entries generated by the Payment should be posted to the Ledger immediately the Payment is Authorised or whether a separate posting function is to take place. Where the Payment Method indicates that a follow up media run is to be performed, as with Automatic Cheques, this flag must be set to 'N' since if not, the subsequent media run, for example, Cheque Production, will find no transactions to extract as the postings will already have been made. This would result in Payments being posted in the General Ledger and updated on the database, but no physical documents, cheques, would be produced.

  Where the Payment Method indicates that no follow up media run is to be performed, as with Manual Cheques, this flag must be set to 'Y' since if the accounting transactions are not posted immediately, they will never be extracted. This will result in payments being made to customers which will never be reflected in the database. Therefore, for the Payment Methods currently supported this flag must be set accordingly:

Cash	Y
Automatic Cheque	N
Manual Cheque	Y
Payment Reversal	Y
Direct Credit	N

- Pre-Approved Only

  This flag indicates whether the payment requisition will be pre-approved upon creation or not. Value 'Y' indicates that payment requisitions of this payment method will be automatically pre-approved upon creation. Please note that if this flag is set to 'Y' then the next 'Pre-Approved & Pre-Authorised' flag should be set to 'N'.

- Pre-Approved, Pre-Authorised

  This flag indicates whether Payment of the Method specified will be authorised at the time they are requested or whether a separate transaction must be processed before they are eligible for extraction and posting. Where the flag is set to 'N' separate authorise transaction must be processed. The system is set such that the payment is unable to be authorised by the same person who completes the payment. Where the flag is set to 'Y' an authorisation routine will be automatically invoked when the request is created, providing that the user requesting the Payment is sanctioned to authorise Payments of that amount. Where they are not, the authorisation will be blocked and the Payment Request will be left unauthorised. It can then be authorised by a user with the appropriate sanctions. (All sanctioning is held within SMART as part of the Security System.)

- On Account

  This flag is reserved for future development and has no bearing on the current Payment Process.

- No. of Months to Keep

  This field is used in conjunction with data archiving process and indicates the number of months that a Payment record will be retained on the system once it has been processed. It should however, be noted that the number of months should be set to a value other than 00 since any Payment Methods with his value will be deleted when they have been processed. Once deleted, they cannot be retrieved. This means that no audit trail for such records, incorrect payments cannot be reversed and no enquiry facility will exist for processed payments.

Following facilities are available:
- Print payment voucher online;
- Produce report on the requisition awaiting approval;
- Produce report on the requisition awaiting authorisation.

3.9.15 Payment Status

The payment requisition authorization process is a 2-step authorization level. After a payment requisition is created, it needs to be approved and then authorized before it can be processed by the system as a payment. The position a particular record has reached in the Payment Cycle is identified by the Payment Status that can be determined via the Payment Enquiry option. That valid status is as follows:

RQ	-	Payment Requested
AQ	-	Payment Request Approved
AU	-	Payment Request Authorised
RC	-	Payment Request Cancelled
PR	-	Payment Request Processed

The first stage is creating the Payment Request. In addition to the normal sanctioning to prevent unauthorised access to the subsystem, additional sanctions are applied to restrict bank accounts from which a user can draw a Payment and to restrict the amount that may be withdrawn from a particular account. Multiple dissections may be made for each Payment Request to ensure the integrity of the database. Dissections can be in any currency supported by the system.

There is a facility to approve the payment transaction before it handed over to the finance department for authorising the payment.

3.9.16 Payment Sanctioning

Under FSU Release 6.6, an optional sanctioning has been incorporated to display those payment requisitions of which the users are sanctioned to the corresponding bank codes. A new indicator (Payment Bank Code Validation) has been added to the Company Level Default table (T3711) to determine whether the payments to be filtered by bank code sanction or not.

If the indicator is set to 'Y' then payments created under the sanctioned bank codes can be enquired upon and they will be available for selection at the Payment Scroll as well. On the other hand, if the indicator is set to 'N', enquiry can be made on all payments created irrespective of bank code. Likewise, Payment Scroll will display all payments created for selection but the authority for payment maintenance is still subjected to the users sanctioning to the respective bank code.

3.9.17 Direct Debits

The automatic transfer of funds between bank accounts is becoming more and more popular. This includes not only deducting amounts from client's bank accounts on a regular basis but also paying moneys direct to clients or agent's bank accounts.

In order to safeguard the public and maintain confidence in the system the uses of the direct debit facility into the client's account must be strictly controlled. Mandates are used to control direct debit authority and only when a mandate is set up and in force will the system allow direct debits to be requested. For direct credits you do not need this form of control only detail of the destination bank account is required.

A 20 alphanumeric field is provided to hold a Direct Debit Approval access Number. This information can be extracted as part of the information required by a bank to approve and credit the direct debit of amounts from the client's account.

The use of this method of automated fund's transfer cannot guarantee that moneys will be paid. If there is an error in the bank or mandate details used, or there are no funds to meet the request, the transfer will be rejected by the bank. In the case of a direct debit the payment may be represented and in the case of a direct credit the payment must be reversed and re-issued.

The system provides the facilities required to:
- maintain mandate information
- produce direct debit transaction tapes
- handle direct debit dishonours, including representations
- produce direct credit transaction tapes

All movements to the same account and mandate are amalgamated into single transactions; this keeps bank charges to a minimum. Debits and credits can be handled separately, but can be combined if the Factoring House being used is defined for this action.

The system does not provide the routines to produce the finally formatted tape records outside the UK and these have to be completed at the client site as these routines vary from region to region.

An important thing to note of the base system with Direct Debits is that the process assumes that the Premium will paid. Therefore, the internal working of the Direct Debit Batch schedule will actually produce the premium amount for updating the contract prior to the Life Office receiving confirmation that the debit has been honoured. If the Life Office is subsequently informed that the Direct Debit has been dishonoured then the Life Office will need to register that fact within the system, automatically reverse the premium and re-submit the Direct Debit, subject to certain rules contained in tables. It is appreciated that outside the UK, and especially in Asia, that the normal practice is to have the tape returned from the bank confirming or dishonouring payments. This tape is then fed into the system to update the individual contracts. What is described in this section, as with the whole document, is the base system functionality.

The base system Direct Debit processes are explained in greater detail in section 3.4 of this document.

3.9.18 Direct Credits

The Direct Credit extraction process is B2499. The Payment Details File, CHEQPF, drives the job Payment Requests will be created by other subsystem, for example, on line payment requests or batch jobs such as NEWAGTPY.

The Direct Credit extraction operates on the basis that all Payment Records that have been created for a particular internal Bank Code and Branch are to be extracted and processed. Therefore, the internal parameter passed to the extract process is the Internal Bank Code. As the base system is set up the parameter is likely to be 01 for this Internal Bank Code. A Direct Credit record is distinguished from a Cheque by the Payment Indicator code table, T3672. The payment record must also have the status of AU, authorised, to signify that it is ready for payment. All payment records matching these criteria are selected and then the Payment Requisition file, PREQPF, is accessed to obtain the sub account ledger from which the payment originates, for reporting purposes.

The authorised payment is posted using the standard routine PAYPOST. This routine will read the Payment Requisition details from the requisition and then

will post an RTRN or ACMV, depending on the setting of table T3616. The payments record CHEQPF will be updated with the AU authorised flag changed to PR, to signify a processed record.

Direct Credits are amalgamated from the Bank Sort Code and Account number that are due for payment on the same date. The extract job will summarise all payment records but if payment requisitioned for dates prior to the effective run date are authorised, the payments for the same Bank and Account will be amalgamated even if they do not have the same payment day. The system will combine all such records allocating a payment date that is greater of the highest payment date in the records that are combined and the effective date of the run plus one day for the run. The run effective date is moved on by one day to allow a day for the created tape to be delivered to the local bank clearing system. Table T3699 is accessed to see if the due date specified is a working day or not if not then the due date is recalculated to be the first available working day before the due date.

For all contracts that satisfy these criteria, the payment details will be accumulated and only one record written to the Direct Credit Tape file, DCBT, which will eventually find their way onto a magnetic tape.

After the extract step, a temporary file BACSPF is created. This file is used by the subsequent process B3288 to store the details from the DCBT file, which will be used in the creation of the tape. The subsequent process B3289 then deletes the DCBT records. The final process in the schedule is to copy the information on the TAPE file to the magnetic tape. This final stage is independent of the previous processes and can be performed, for example, at the end of the daily batch processing. It is not necessary to load the tape prior to performing the extract and tape creates stages.

3.9.19 Direct Debit/Credit Bank Charges

In some cases in the Direct Debit and Credit Processing, bank charges are to be levied, and the rates for these levies to be captured on the system.

For cases, where the Direct Credit is used for Agents Payments the cost of the transaction may be borne by the Agent during the Agent Statement/Payment run. The Agent Payment Batch Jobs will be modified to include the deduction of Bank Charges if applicable.

Table TR392 allows users to key in the relevant bank charges for direct debit and direct credit. Create new items on TR392 with 6 characters length. First three characters indicate the bank charge area code and the last three characters are currency code.

Two additional fields in the factoring house table T3684 specify the Minimum bank charges for direct debit and direct credit.

3.9.20 Direct Debit/Credit Amendments for Thailand

The direct debit and direct credit media format is different for each commercial bank within Thailand.

The direct debit process will:

- Print a Cover Letter.

- Create the Extract Direct Debit Text File with the required format for the respective banks. The media format for following banks are prepared: Thai Military Bank, Thai Farmer Bank, Siam Commercial Bank, Krung Thai Bank, Bangkok Bank, Siam City Bank, Bank of Asia, Bank of Ayudhaya and Thai Dhanu Bank.

- Upload Dishonour Transactions.

  For Bangkok Bank, Krung Thai Bank and Siam City Bank, the direct debit is processed on the 10th of every month.

  For Thai Military Bank, Siam Commercial Bank, Thai Farmer Bank, Bank of Asia, Bank of Ayudhaya and Thai Dhanu Bank, the direct debit is processed on 10th, 20th, and 30th for every month.

3.9.21 Tape Creation UK Specification

B3288 looks at tables T1692 and T1693 to obtain the Branch and Company descriptions. The FSU/Asia table T3684 holds the company bureau details and the originating accounts. As it is possible for an organisation to have several accounts and separate bureau numbers for debiting and crediting, the first two items on the table are for registering these two details. Item 01 should contain details for Direct Debits and item 02 should contain details for Direct Credits. If only one bureau and account number are used the same information must be entered for both items.

The Processing day is defined as the day before the account is due for debit or credit and the dates on the extracted file DDBT or DCBT at the point are in due date order. Therefore, all records read have a day taken away for processing. Table T3699 is accessed to tell if the date calculated is a working day, if not, the date is recalculated to the first available working day before the original date. T3629 holds the currency details.

Tables used in Subsystem

T3678	-	Direct Debit Mandate Status
T3699	-	Media Run Working Days Table

Transaction Codes

M609	-	Direct Debit Dishonour Master Menu
S350	-	Register Dishonours Submenu
T350	-	Create Dishonour Records
T351	-	Modify Dishonour Records
T352	-	Enquire on Dishonour Records
B253	-	Direct Debit Extraction
B273	-	Direct Credit Extraction

3.9.22 Machine Cheques

The most common media used for payments is the cheque. Once a business has a requirement to raise more than a small number of cheques on regular basis the production of cheques will benefit from being mechanised.

Automatic cheque production requires strict control in order to eliminate the potential for fraud. This is achieved by enforcing strict requisition and authorisation procedure before a payment is released to an automatic cheque production system. The system provides the facilities necessary to control and produce cheques automatically. Cheques are produced on pre-printed stationery. This stationery has the unique cheque numbers already printed on it and this cheque number is recorded against the payment details held once the cheque is printed. Any attempt to use the same cheque number will be invalidated by the system.

An alternative bank cheque stub format is provide with the following information printed:

- Issue Date
- Payer Name
- Amount in words
- Amount

FSU/Asia also has the ability to print cheques in alternate languages such as Simplified Chinese and Traditional Chinese.

3.9.23 Cheque Reconciliation

These sub-systems provide both on-line and batch facilities to reconcile the 'Present' status of cheques that have been issued. The functions within the Payment Reconciliation Submenu enable the Users to change the 'Present' status of a payment requisition record manually. The available options are for the 'Present' status to be changed to Cancelled, Presented or Unpresented. Report of the changes made within a transaction day can be generated on the request of a batch job.

On the other hand, a batch reconciliation schedule is set up to perform batch cheque reconciliation using a predefined external file as input. A control report will be printed to list the results of the batch run.

3.9.24 Receipt/Requisition Number

FSU/Asia Release 6.1 enhanced the number range allocation to incorporate alphanumeric prefixes into the numbering.

With the new introduction of receipt and payment numbering format, the item key structure on the receipt and payment in Auto Allocation table T3642 have to be changed.

The new format of the item key for receipt and payment is SSXX, where:
SS   -   'CA' for Receipt
        -      'RQ' for Payment

XX   -   for receipt, the value should be as entered in T3688, 'Receipt Nbr Group/Pfx'. If it blank, then the bank code used.

    -    for payment, the value should be as entered in T3688 'Requisition Nbr Group/Pfx'. If it blank, then spaces are used.

3.9.25 Express Auto Cheque

FSU/Asia Release 6.1 introduced Print Express Cheque function in payment submenu. The payment cycle of the express cheque is to create payment request, approve payment, print express cheque and then followed by payment authorisation with cheque number.

3.10   Agent Commission and Production Processing

3.10.1 Introduction

The LIFE/Asia Agent System administers Agents and other intermediaries responsible for selling Life Assurance contracts for a company. All Agent details are held within the Agent Record including the Agent type and Area. The Agent can be set up in a hierarchical chain and this information can be viewed on-line. Commission is paid to an Agent per contract and each type of commission is shown, Initial or New Business, Renewal and Service Commission, and whether it is split and a percentage paid to his or her superior in the Agent chain.

Processing premiums paid on a contract creates payment of commission due to an Agent but commission will be reversed if the contract is cancelled from inception, unearned commission may be recovered if a policy lapses or is surrendered. The accounting entries for these transactions are also generated at the same time.

The payment to the Agent is by machine cheque, manual cheque or Direct Credit, and statements are produced giving the contractual breakdown, by coverage and rider if required, of commission paid. The records of commission due are held in the currency of the contract. If the Agent record indicates that the payments are to be made in a specific currency, the amounts are converted at the latest exchange rates designated within the system.

3.10.2 Agents Record

The subsystem provides the facilities to define an Agent's details to the system, to modify those details and to enquire on them. In addition is the facility to enquire on Agent's reporting structures.

Agents' details held include:
* The Agent's Company and number
* The Agent's Client Company and number
* Agent Type, Broker, Tied Agent, etc.
* Agent Branch/Area
* Commission and Payment details
* Bank Account details
* Agent Hierarchy Reporting details

- Agent License number and Expiry date

If an Agent has an exclusive agreement with the Life Office, this must be indicated. The Agent Type is validated against table T3692. Agent Area Codes are set up in table T5696 and indicate the area to which the Agent is appointed. Table T5628 is checked to ensure that a valid Agent Type/ Reporting Level combination is used and that a valid Branch Code/Area code combination is used.

Commission details and any Bonus Commission are entered along with the Payment Method and frequency for commission payments. Table T5629 is checked to ensure that a valid Payment Method/Frequency is used. New Business and Renewal commission rates are set up in tables T5644 and T5694 respectively. Commission rates may be enhanced, both positively and negatively, according to the class of an Agent set up in table T5699. The currency in which commission payments are to be made can be specified. Commission and Payment details such as taxation, if tax is to be deducted from an Agent's account, Superannuation and Instant Credit payable from initial commission can be recorded. However, the processing of automatic tax deductions, etc. is not carried out by the system.

Additional details for Agent Bank Accounts, Broker Contacts and Tied Agent may be entered on subsequent screens if required. Where payment of commission is to be by means of Direct Credit, the recording of the payee's bank account is mandatory.

Tables used in Subsystem

T3629	-	Client Roles
T3692	-	Agent Type
T5628	-	Agent Branch/Area Combinations
T5629	-	Agent Pay/Method Frequencies
T5696	-	Agent Area Codes
T5699	-	Agent Class Commission Ratings

Transaction Codes

M601	-	Agent Maintenance Master Menu
S601	-	Agent Maintenance Submenu
T601	-	Agent Create
T602	-	Agent Modify
T603	-	Agent Enquiry
T604	-	Agent Enquiry - Higher Levels
T605	-	Agent Enquiry - Lower Levels

3.10.3 Agent Movements

An on-line Agency Movements functionality is provided to promote, demote and transfer from one agency structure to another plus a Promotion History enquiry.

Transfer will allow reporting to information on agents currently reporting to an agent to be updated to a new agent. No other processing will take place and

it will not be possible to automatically reverse the transaction unless a new transfer transaction is completed.

The promotion/demotion will cater for four levels. The agency leader of the agent being promoted or demoted will be updated by these transactions, while the agency leader of any "downliners" should be considered on an individual basis.

The user is required to maintain ORC processing using the OR details.

3.10.4 Agent Payments

Payment of commission is completed within the system by batch jobs. There are two processes within the base system, NEWAGTST, New Agent Statements and NEWAGTPY, New Agent Statement Payments. Both jobs will produce agent statements that will summarise the details of all outstanding transactions for an Agent. This is all NEWAGTST does. This means that this batch job can be run as often as required, during the working day or overnight, each run accumulating transactions since the previous NEWAGTPY run.

LIFE/Asia version 7.3 enhanced the Commission Payment process to use tables to control the overriding commission calculation for each commission type as well as calculating the overriding commission at the transaction level instead of at the batch portfolio process.

The Agent Payment file (AGPY) will keep the unpaid commission information whenever there is commission or overriding commission posting into the Account Movement file (ACMV).

To minimize unnecessary checking already done during the statement processing, the Agent Commission Payment Balance file (AGPB), which also stores the deductible amount, will be used to process only Agents with commission at least equal to the minimum amount payment. The Agent Statement has also been enhanced to include the additional remark at the end of the statement i.e. "No Payment will be made, Agent with insufficient commission!" for agents wherein the commission for the period is less than the minimum amount before a payment can be made.

The NEWAGTPY run will also produces Agent's Statements and once processing is completed for a transaction, that is, NEWAGTPY has completed successfully, the AGPY record will be deleted so that it is not extracted again for payment. It also generates the actual Payment Requisitions for the Agent depending on their chosen payment method. Agents' payments by cheque or Direct Credit are written to the payments file, CHEQ, in FSU/Asia for later processing by the output media runs.

Transaction Codes

      B609   -   Agent Statements
      B618   -   Agent Payments

3.10.5 Agent Change Processing

The Agent Change Subsystem consists of two transactions that can be used to modify the Agent details on contracts or proposals. The change occurs at the contract level and will have an impact upon the sums of commission generated on the relevant contracts.

The Agent Change is an on-line transaction accessed via the entry of the required contract number, whilst the Agent Portfolio Transfer transaction is achieved by running a batch job, AGENTCHG, inputting the Agent number whose portfolio is to be transferred. The purpose of both transactions will be to replace one Agent on the applicable contract(s) with the details of the new Agent entered during the transactions. All or some of the commission types, Initial, Renewal and Servicing, can be transferred from the old to the new Agent (the transferring of at least one commission type will be required). This transaction can additionally modify the Servicing Agent details held on the contract. Where the commission on a contract has been split, that is, more than one Agent is present, the new Agent record will replace the old with the same percentage split.

These transactions will have an impact on the payment of commissions, which may also include 'clawback' of commission from the Agent replaced. An additional impact is on any override commission payable, as the transaction will transfer generation of overriding commissions to the new Agent's hierarchy. It is also important to note that the generation of commission to the new Agent and his hierarchy will only commence from the next premium paid after transfer. Adjustments can be made to Agent pay records by Direct Journals should a transfer of contract be delayed and payments due to the new Agent have been paid to the old agent.

Tables used by Subsystem

T5645	-	Transaction Accounting Rules
T6688	-	Agent Change Processing

Transaction Codes

M601	-	Agent Maintenance Master Menu
S601	-	Agent Maintenance Submenu
B501	-	Agent Portfolio Change
T521	-	Contract Agent Change

3.10.6 Agent Number at Company Level

LIFE/Asia has agent numbering which is allows the system to check the agent auto allocation number at branch level and if it not found then looks up at the company level. In order to have company level, the Auto Allocation Number table T3642 for agent prefix 'AG' has to set as 'AG**' where '**' represent all branches.

3.11 Standard Letters

3.11.1 Introduction

The XML Printing Subsystem provides an interface for the automatic triggering of letters and allows for the maintenance of these letter requests. This includes direct maintenance of the system generated letter requests and the control and printing of the requested letters.

Basically, this sub system provides a facility to create letters and other documents from the Midrange applications, using XML data extraction routines and associated XSL style sheets to create documents in a pre-defined format. Currently PDF and HTML documents are supported.
Additionally, it also provides a facility to enter data manually at the point of printing the letter request is also available for on-line printing. Users have the ability to choose printer for printing and to create different language for the PDF according to client's language.

This printing functionality consists of the following:
- Automatic letter request creation within the midrange applications
- Document resolution in batch, diary and online mode
- Document printing in batch and interactive mode
- Email facility for resolved documents

The resulting documents can be created in multiple formats although currently the focus is on Portable Data Format (PDF). The creation method is based on merging variable data with document templates resulting in PDF output.

The basic processing involves the following steps:
  (1) On-line transaction, batch transaction or Diary process create the letter request (LETC)
  (2) A letter request is received, either via an on-line transaction or a batch schedule.
  (3) The required data for the letter is extracted from the relevant database files and is formatted into an XML data file.
  (4) The XML data is merged with the XSL style sheet of the letter to produce a PDF file.
  (5) The resulting PDF file can then be printed when required, either immediately or deferred.

Please note that currently system does not support both Traditional Chinese and Simplified Chinese together in the same environment because system only supports one CCSID for the XML temporary file (XMLTPF). This is a system constraint.

3.11.2 Letter Types and Groups

A register of all standard letter types in the system are maintained in the Letter Control table (T2634). Sometimes several related letter types may be grouped into Letter Groups. All the Letter Groups are maintained in the Letter Group table (TR383). For example, Policy Schedule letter group may contain several letter types like Cover Letter, Policy Certificate and Acknowledgement Slip.

The letter type and letter group are used by any application functions that use SMART interface to identify which standard letter it is requesting. Please note that the letter request is generated at the Letter Group level. Hence, the Letter Group must always be defined even though there is only 1 letter type to be printed.

3.11.3 Letter Request Triggers

The Midrange applications generate letter requests in accordance with the rules defined in the Automatic Letters table (TR384) or other system defined tables. TR384 allows up to 10 letter groups to be generated for a particular product type and transaction. System provides a standard letter request routine (LETRQST) to create the Letter Request (LETC) record for each letter type required.

It is possible to control the creation and processing of letter request for a given letter type. It may happen that the data extracted for a letter becomes outdated or obsolete by the time it is processed thus making it necessary to intervene by either stopping the creation of certain letter requests or actually modifying the contents of some letter requests.

Intervention in creating or processing of a letter request is two-fold. Automatic intervention is possible through the use of validation subroutines to validate the creation and processing of letter request records. Manual intervention is provided in the XML Printing submenu functionality where sanctioned users can modify or add to the contents of existing letter requests.

3.11.4 Data Extraction and Document Creation

When a request is received to print a letter, data extract routines are called to obtain the data required for the letter. The extraction details are defined in the Letter Field Extraction Definition table (T2635). The extracted data is formatted into an XML data file and stored for further processing.

The XML data is then merged with an XSL stylesheet to generate the required document type. The resulting document will be stored into the designated Integrated File System (IFS) directory of the *iSeries,* in a location relevant for the environment being used.

3.11.5 Online Document Functions

An on-line facility has been developed to create, enquire upon, print and email resolved letters. Where the letter request is still pending, requesting the print option will invoke the data extraction, formatting and document creation outlined previously. The document may then be displayed to the user in an appropriate window. It is also possible to enquire upon, print and email all letters created for a contract from within Contract Enquiry.

3.11.6 Batch Document Functions

System provides the XMLPRT batch schedule to process any pending letter requests where the request date is on or before the batch effective date entered. The parameter prompt screen also provides a facility to refine the selection

criteria further like to include or exclude certain letter groups. This batch process will invoke the data extraction, formatting and document creation outlined previously and will store the documents. It will not print the documents; this must be done using the Bulk Printing commands described in the next section or using the on-line print transaction.

3.11.7 Bulk Printing

Once the documents have been created and stored in the designated IFS directory, they can be printed individually using the on-line print request facility. They can also be printed in bulk using a command line facility and associated parameters. When bulk printing is used, the workstation is locked for the duration of the printing, so consideration needs to be given to use a dedicated network PC for this task.

3.11.8 Base System Standard Letters

Examples of Standard Letters are Policy Surrender Letter, Fund Withdrawal Letter, Premium Notice & Reminder, Fund Transfer Letter and APL Letter.

Policy Surrender Letter - When a contract is surrendered, providing it a net cash value, it is the function of the Policy Surrender Letter to inform the client of the surrender value, presented in the contract currency.

Fund Withdrawal Letter - After a unit-linked type contract acquires a surrender value, the client may decide to perform fund withdrawal or partial surrender. The function of Fund Withdrawal Letter is to acknowledge the client the amount withdrawn from each fund, as well as only permitting this action to be performed on a valid Transaction Date.

Fund Transfer Letter - The function of the Fund Transfer Letter is to be sent to the client confirming the fund switching arrangement and the amounts transferred across funds.

APL Letter - After a successful Automatic Premium Loan (APL), an APL Letter will be generated by the system to inform the Client.

Premium Notice A letter is sent to the client one calendar month before the premium is due, informing him of the amount that will be collected.

The amount quoted on the letter reflects any annual alterations to the premium amount that may be applied as a result of re-rating or automatic increases and is presented in contract currency and billing currency, (when the later is

different). However, this notice does not apply to Flexible Premium contracts.

If the premium is still outstanding after the collection date, a reminder notice is sent to the client.

The Premium Notices and Reminders will be incorporated within the Renewals batch job, which is run daily and printed via the existing off-line Standard Letters procedure.

UL Warning Letter

A warning letter is sent to the client when the available Fund Value for a Unit Linked (UL) contract is less than 'X' number of times of the Benefit Billing Charges.

This letter is triggered from the renewal batch job when 'X' number of projected Benefit Billing Charges > Fund Value. The projected Benefit Billing Charges will be calculated from the latest benefit billing charges multiplied by the number of times as specified in TH506 and is then compared with the Fund Value.

UL Insufficient Letter

An insufficient letter is sent to the client when the available Fund Value for a Unit Linked (UL) contract is less than 'Y' number of times of the Benefit Billing Charges.

This letter is triggered from the renewal batch job when 'Y' number of projected Benefit Billing Charges > Fund Value. The projected Benefit Billing Charges will be calculated from the latest benefit billing charges multiplied by the number of times as specified in TH506 and is then compared with the Fund Value.

Tables used in Subsystem

T2634	-	Letter Type
T2635	-	Fields for Letter Type
T2636	-	Field Extraction Rules
T2652	-	Document and Data Location
T2656	-	Printing Parameters for User
T2657	-	Conversion Types for Printing
T2658	-	Online Letter Types
T2659	-	Letter Status table
T2667	-	Letter Type Email Details
T2670	-	Manual Field Rules
T2671	-	Manual Field Types
T2672	-	Manual Data Reference
T3609	-	Standard Letter Control Table
TH506	-	Contract Additional Details

TR381	-	Footer Details Information
TR383	-	Letter Group Table
TR384	-	Automatic Letters Table

Transaction Codes

M001	-	SMART Master Menu
S262	-	Standard Letters Sub Menu
T252	-	Standard Letters Create
T253	-	Standard Letters Modify
T254	-	Standard Letters Delete
T255	-	Letter Requests - Enquire
S006	-	Batch Submission Submenu
B325	-	Batch Printing Solution

3.12   Notepad

3.12.1 Introduction

During the normal course of business, there is often a need to make occasional notes. This may be in the form of annotating, for example, detail associated with a new agent to indicate that the agent is currently on probation.

Most notes, however, are reminders to carry out an action at a later date. Using the above example, it is more probable that the note attached to the new agent would say that the agent is on probation and that situation should be reviewed in three months time.

The Notepad System enables notes and reminders to be added to any type of entity from which the system holds details. The entity is defined to the system as a key field on an individual transaction screen, for example, the Agent Number field on the Agent Create transaction screen.

Notes can be defined for an entity by pressing the Notepad function key (F20) on the transaction screen and entering the note details on a Notepad Window screen. Within this window, any number of notes and reminders can be maintained. The system automatically attaches these notes to the entity associated with the screen from which the Notepad function is requested.

All notes entered onto the system for an entity can be enquired upon using the Notepad Entity Enquiry function.

Batch processing provides the facility to report on all notes and reminders set up via the Notepad Window. These reminders can be 'one off' or automatically repeated for the requested frequency, for example every month.

A generalised on-line notepad reference enquiry is provided which displays all the notepad references held within the system.

3.12.2 System Functions

A notepad type that must be set up in the Notepad Types table T1658 in both the system and sign-on companies defines each notepad reference. This table holds the two character prefix which is quoted on all notepad references used to identify the notepad to which a given note or reminder belongs. Valid prefixes are held on the Notepad Prefixes table T3714.

Each note can be directed to a particular destination, for example a company department or manager. Valid destinations must be set up on the Reminder To table T3592.

In the base system, the Notepad Maintenance function is set up in the System Company on the Development Utilities Master Menu. Notepad Entity Enquiry is an FSU/Asia function, which is set up in the sign-on company on the Clients and Group Master Menu, but can be added to whatever Master Menu is desirable.

The base system is delivered with the following screens enabled for Notepad.

S2465	Personal Client
S5004	Life Proposal
S5035	Life Agent
S5220	Life Annuity Proposal
S6261	Life Reassurer
S6378	Life Pre-Issue Validation

Should further screens be necessary this can be achieved but it requires intervention from the technical team as the Notepad function key needs to be added to the defined screen and this screen will then need to be recompiled.

Notepad Report

The Notepad batch job (NOTEPAD) consists of two processes, B3711 and B3710. B3711 extracts relevant NOTE records and writes them to the Notepad Print File (NOTPPF). B3710 produces the Notepad Reminder Report using NOPT as the input file.

Tables used by Subsystem

T1658	Notepad Types
T1673	Reminder Frequencies
T3592	Reminders To
T3714	Notepad Prefixes

Transaction Codes

M002	Development Utilities Master Menu
M202	Clients & Group Master Menu
S026	Notepad
S261	Notepad Entity Enquiry
T101	Notepad Reference Create
T102	Notepad Reference Modify

T103	Notepad Reference Enquiry
T375	Notepad Entity Enquiry
B024	Notepad Update
B025	Notepad Report

3.13   Contract Archiving

3.13.1 Introduction

9811 introduced archiving programs relating to the management and processing of Contract Archiving on FSU/Asia and LIFE/Asia programs. This new functionality consists of contract archiving process, reporting functions and enquiry and restore processing.

All the archiving processing programs are FSU/Asia objects but there are specific LIFE/Asia file processing subroutines. Essentially, new programs, files, tables, etc cater for all functionality. Exceptions to this are the amendment to LIFE/Asia Contract Header Enquiry Submenu and the addition of an extra data screen to Table T3623.

3.13.2 System Functions

The functionality is broadly divided into two main categories:
- Archiving and Reporting and Enquiry and Restore
- Archiving and Reporting

These are batch functions associated with the selection and extract of contract or proposal records from the database, the copying of these records to an Archive Library and the deletion of the records from the database, together with reporting of these details.

Enquiry and Restore
These are on-line functions, which run on an individual Archived Contract/Proposal, assuming that the Archive Library, which has been used, is still on the system. Enquiry encompasses access to the actual archive details and access to LIFE/Asia Contract/Proposal Enquiry functions. Restore allows selection of a contract to be restored from the Archive Library to the database.

The Archive Process as a whole contains essentially no business level integrity checking. It processes Contracts file by file according to individual record selection criteria. There is a facility to process multiple files at the same processing point, but the design premise is such that the files are processed generically.

Tables used by Subsystem

T3623	Contract Risk Status
T3723	File Processing Methods
T3724	Archiving Files by Method
T3725	Archive/Restore Routines/Files
T3726	Archive Views
T5679	Status Requirements by Transactions

Transaction Codes

M613	Archiving Master Menu
S656	Archive Contracts Sub Menu
T101	Notepad Reference Create
T102	Notepad Reference Modify
T103	Notepad Reference Enquiry
T375	Notepad Entity Enquiry
B024	Notepad Update
B025	Notepad Report

3.14 Work with Output Queue

The Work with Output Queue is provided for users to look at their output queue from SMART driver.

3.15 Output Database to CSV Format

FSU Release 7.4 introduces a CLP that can output iSeries database files to a file in IFS directory in CSV format so that the data can be used by Microsoft Windows application like Microsoft Excel.

The following illustrates how the calling program makes use of the CL programs.

FCSVSTDCL : This CL program will validate whether the IFS path name is valid or not

```
 *Call FCSVSTDCL  to validate path name.

      CALL 'FCSVSTDCL'        USING WSAA-STATUZ
                                    WSAA-LOC.
```

FCSVSTD1CL : This CL program will generate the specified iSeries database file into the specified file in the IFS directory in CSV format.

```
*Call FCSVSTD1CL to generate CSV report.
     CALL 'FCSVSTD1CL'        USING WSAA-STATUZ
                                    WSAA-LIB
                                    WSAA-FILE
                                    WSAA-ADDREP
                                    WSAA-FORREP
                                    WSAA-IFSPATH
                                    WSAA-TEMPLATE
                                    WSAA-MEMBER.
```

Parameter	Description	Mandatory/Optional
WSAA-LIB	Database Library Name	Mandatory
WSAA-FILE	Database File Name	Mandatory
ADDREP	Add/Replace Indicator. If the output file name exist, 'A': Append data to existing file 'R' or ' ': Replace data in existing file	Mandatory Valid values: 'A','R' or ' '
FORREP	For Replacement Indicator. If error is	Mandatory

Parameter	Description	Mandatory/Optional
	encountered when copying to IFS then whether remove the existing one or recreate a new IFS directory 'Y': Re-create a new IFS file 'N' or ' ': Do not re-create IFS file	Valid values: 'Y','N' or ' '
IFSPATH	IFS Path Name	Mandatory
TEMPLATE	This is the IFS name for the template. The template can be used when column field names are pre-defined in the CSV file	Optional
WSAA-MEMBER	Database file member name	Optional. If ' ', *FIRST member is assumed

4. LIFE/Asia Calculation and Processing Methods

4.1 Introduction

Within the base system there are various calculation methods that form the basis of the delivered functionality. These methods need to be understood by the client prior to commencing the Product Definition and Integration Analysis process as it is important that the relevant people are aware of the base system prior to commencing the Development Phase. This may seem to be an obvious statement but experience has proved that very little time is spent investigating the base system prior to the Development Phase commencing.

The following items are some of the main methods that are further explained in the relevant functionality and Batch Processing areas of this document.

4.1.1 Rounding of Monetary Amounts

Currently in and LIFE/Asia, most values are computed to two decimal places. Only for premium amount, the actual premium calculation can be controlled to the value of dollar or cents. The rounding of premium is based on the rounding factor from table T5659. Beside, the existing premium calculation rounding, there are still many other transactions where the computation of values derives cents.

Monetary amounts of some Asia countries, like Taiwan (New Taiwan Dollar) and Japan (Japanese Yen) is rounded to the nearest dollar, especially when the amount is printed on documents sent to customers and for accounting purposes. As such, in Release v7.6, Life/Asia has included the functionality to compute figures without decimal places. Furthermore, for different countries, companies and LIFE/Asia's transactions may have different rounding rules, i.e. round up always, round down always or round up.

Excluding premium calculations, all other monetary amounts will be rounded by making use of the existing subroutine, ZRDECPLC, when:
- The final calculation amount involves multiplication and division.
- The monetary amount prints on reports, or display on screens.
- The monetary amount stores to files.
- The monetary amount posts to GL account.

LIFE/Asia, Release v7.6 provides the flexibility to vary the rounding depending on the different transactions and currencies. The subroutine, ZRDECPLC was modified to handle the various rounding types. Table T1667, has been enhanced to allow user to enter the required number of integers to round up to. For examples:

No. of Decimal	Rounding Type Figures	D Round Down Always	U Round Up Always	R Round Up
1	2342.444	2342.400	2342.500	2342.400
2	2342.555	2342.550	2342.560	2342.560
No. of Integer				
1	2342.444	2342.000	2343.000	2342.000
2	2342.555	2340.000	2350.000	2340.000
3	2342.444	2300.000	2400.000	2300.000

The maximum value for integer is 9, which is rounding at hundred million places.

In addition, a new table, TR25R, has been introduced to define rounding by transaction level. The table is keyed by the transaction code, A generic item, '****' (4 asterisks), can be created to define the default rule that covers all transactions in the company. The system will display the premium, contract amount, commission, payment amount, receipt amount, fund amount and accounting posting amount, policy loan, surrender value etc, according to the tables' setup. The related files, letters and reports will be modified to display the rounded amount. The rounding fields will also be written to the CHDRPF, UTRNPF, ACMVPF, RTRNPF, LOANPF, SURDPF, CLMDPF, COVRPF, AGCMPF, etc files.

The following items are some of the main methods that are further explained in the relevant functionality and Batch Processing areas of this document.

4.2 Agent Commission Processing

4.2.1 Commission Calculations & Payment Release Patterns

Commission is typically paid to the Agent(s) responsible for selling life assurance contracts. The amount of commission that is due depends on the coverage, term and the specific arrangement between the agent and the company issuing the contract. LIFE/Asia V7.1 was enhanced to handle different channel or Source of Business with different commission rate through table set ups, and with no further program change or new component set up required. This enhancement involves adding up the Source of Business as part of key to retrieve the initial and renewal commission rates. Commission is normally divided into two parts, initial and renewal.

Initial commission is payable in respect of the first period of the coverage, this period being defined by the company. The commission calculation within the system is in three parts. Firstly, there is the calculation of the basic initial commission; the method to be used is specified in the coverage definition table. Secondly, this basic amount may be adjusted up or down according to the commission category held on the Agents record. Finally, the calculated amount of commission is released to the Agent.

Commission is released following receipt of the premium and it being applied to premium payment. The proportion that is released is governed by a Commission Release Pattern that may be defined at the Coverage level or

Agent. In addition, this pattern also defines the amount deemed to have been earned, which is not to be recovered, "Clawback", in the event that premiums cease.

In addition to the commission payable to the Agent(s) involved in the sale, there may be override commission payable to the person responsible for the selling Agent(s). This relationship is held on the Agents record with either a fixed or flexible override percentage of the calculated initial commission. This override commission is then released to the person receiving it according to the release pattern relating to that person. It is independent of the release pattern of the selling Agent(s). The agent receiving override commission may generate further override to their immediate supervisor and so on.

Unearned commission may be recovered if a policy lapses or is surrendered. If a premium is reversed after payment, any commission relating to that premium is also reversed. Accounting entries are generated on premium processing to cover all commissions earned and released.

The commission calculation and payment methods have been divided into separate functions. This enables additional commission methods to be added at a later date by writing new subroutines. This includes new methods of calculating initial commission that may use the existing payment calculation method and/or new methods of calculating commission payments for initial and renewable commission.

LIFE/Asia allows the commission structure of certain riders attached to a particular product type to follow the commission structure of the coverage to which they are attached. For products in which component riders are to follow the coverage's commission, and which have more than one coverage on a contract, the component rider's commission shall be based on the coverage to which it is attached e.g.

Coverage 01 00
Rider 01 01 Commission follows Coverage 01/00
Coverage 02 00
Rider 02 01 Commission follows Coverage 02/00

If initial commission is to occur then this method is defined in the Coverage table T5687. This entry is then used to reference table T5647 where the subroutine for calculating the commission will be found. For commission payments to be made, subroutines must exist on table T5644. The subroutine accessed will process the payment method and produce the commission payable and the commission earned. Either Agent or Coverage type can control commission payments. Commission payment entries for the component will always override that set up for the agent.

The initial commission calculation methods access tables T5565 and T5576. T5655 is for Term/Age banded commission and T5576 is for Term/Time multiplier based initial commission. An enhancement rule's table T5692 can be used to increases or decrease the original rate that is applied in order to calculate the commission payable and earned. The enhancement applied to the commission is dependent on the "class" of agent. If there is no value present for the enhanced rates, then the original rates are not adjusted. For

commission enhancement in a joint life case the age used will be the age of the first life.

The commission payment methods access T5694 and T5695. T5694 defines payment patterns based on the amount of the instalment premium actually paid. T5695 defines payment patterns to pay and earn the initial commission calculated earlier over a number of different commission periods.

The system release 9604 introduced to the base system the concept of flexible premiums for the Unit Linked contracts. Initial commission payments are calculated using a target premium basis, target frequency and actual amount paid. This means that from the outset the client selects a target premium and frequency and the system calculates commission based on these parameters. Where a premium is received which exceeds the annual target premium then over target commission is paid based on over target commission rates.

All of the commission routines have appropriate reversal subroutines.

4.2.2   Commission for Benefit Billed Component

Commission payment for the mortality charge collected for benefit billed component. Commission will be paid to those agents associated with the contract just as with any component receiving premium. Commission for benefit billed is included in a new subroutine Benefit Billing – with commission UBBLMT3.

4.2.3   Alternative Override Commission Structure

In Asia the override commission payment is normally by a structure based on the effective date and override percentages depending on the agent type. Originally, the base only supports a simple static hierarchy with a flat override percentage. The enhancement here provides an option to pay override commission based on a multi-tier agency structure. This structure can be maintained using the Agency Maintenance function (see also bullet point below). The override percentage to pay is stored in a table and is based on the agent types of the basic agent and the reporting to agent.

An OR rates table, TH622 is provided, which allow override percentages based on the component codes, agent types of the basic agent and the reporting to agent and can also be based on either premium, or commission amount.

Points to note before using this option:

- The override commission will only be computed at the transaction level and paid when the agent payment schedule (NEWAGTPY) is run.
- The agent details option in contract enquiry will not show the override structure of agents attached to that contract.
- The OR details on the agent maintenance screen has to be maintained by the users.
- The agency structure can be maintained using the Agency Maintenance function. However, if the Agency Movements facility is switched on, only the agency movement transactions like Promotion, Demotion, Transfer and

Terminate can be used to maintain the structure in order for the Agency Career History to be constructed accurately.

4.2.4   Agency Movements

An on-line transaction is provided to promote, demote or transfer an agent from one agency structure to that of another. Reversals of these transactions are also provided.

Structures built by the Agent Production Update functionality are required by the Agency Movements transactions.

Transfer will allow the "reporting to" information on agents currently reporting to an agent to be updated to a new agent.   No other processing will take place and it will not be possible to automatically reverse the transaction, i.e. reinstate the transferred agents to report back to the original leader, except via another transfer.

The promotion/demotion and transfer functionality will only cater for 4 levels.

The agency leader of the agent being Promoted or Demoted will be updated via these transactions, while the agency leader of any down liners should be considered on an individual basis as set out in the following tables:

Upon Promotion:

Change Agent Type from	Change Reporting to	Change Reporting to of downline agents?
AG to UM	Agency entered on the promotion screen SM507	No
UM to AM	Promotion	No

Upon Demotion:

Change Agent Type from	Update Reporting to	Change Reporting to of downline agents?
AM to UM	Agency entered on the demotion screen SM507	AG (or any lowest-tier agents) are not affected UM (or any intermediate-tier agents) reports to the agency leader entered in the demotion screen SM507
UM to AG	Agency entered on the demotion screen SM507 (which can be the same leader).	N/A

The user is required to maintain the ORC processing using the OR details.

4.2.5   Agent Production Enquiry

This new feature allows agents to enquire on their current production figures and also the production figures of their down liners.

This function pulls out the Personal, Direct and Group (where applicable) production figures for the accounting month and year entered by the user.

It will also accumulate the Calendar and Financial YTD Personal and Group (where applicable) production figures for this agent.

Financial YTD is the production made from accounting period 01 to the accounting period entered by the user of the same financial year.

Calendar YTD is the production made from January to the calendar month corresponding to the accounting month entered by the user. The mapping of the accounting period to the calendar period is based on the settings in T1698.

4.2.6 Agency Production Update

Capture Agency Production statistics to be used for Awards and Contests (e.g. Top Agency, Top Unit/Assistant Manager, Top Rookie Agent, etc.), Agency On-line Enquiry and Agency Income Summary report.

This is a Malaysian specific requirement that can be adapted by many life insurance companies.

Agent Effective Date and Product Type group the production information. By structuring it this way, it allows information to be reported by:

- Products – reports can be written to extract production figures for agents based on specific types of products
- Effective Date – reports can be written to extract production figures for an agent for a specific time frame when the agent was operating as either a Manager, Supervisor, Standard Agent, Career Agent, etc.

Some features are added to enable the batch override payment functionality when the agent online production functionality is used and allows override percentages for direct and indirect reporting in case the level structure is more than two.

4.2.7 Agent "Black List" Indicator

In many countries there are a lot of agents moving from one company to another, many of which are "black listed agents". "Black Listed Agents" are those agents that have been rejected by life insurance companies or have been terminated for misconduct, etc.

To assist recruitment and control the "black listed agent" information is shared among the Life Companies.

To allow the Life Company to control their agents more effectively LIFE/Asia introduced some features to the Agency Records.

- An additional control flag on the agency appointment/ maintenance screen is required and use it to prevent from issuing a contract (I-flag) or preventing the commission payment (C-flag) or both (X-flag) depending on the agency management decision.

- The agency sub-system would have a control feature for contract issuing and commission payment processes.

4.2.8   Agent License

Life Agent License is a number given to those who pass the life agent professional examination organised by the various country authorities for example Malaysia Department of Insurance (DOI) and is mandatory for all agents who sell Life Insurance. Life agents are required to renew their licenses when they expire.

The Department of Insurance (DOI) requires agent license number to be printed on the policy schedule and kept in the Agent file for reference.

LIFE/Asia maintains both the license number and expiry date field in its agent file

4.2.9   Agent & Premium Tolerance Amounts

Premium Tolerance Amounts will come as a result of a shortfall in the modal premium collected. The System has been modified to allow the Life Company to collect the shortfall from the agent by deducting against his/her commission proceeds.

The premium tolerance amount to be deducted from the agent will be reflected in the Agent Statement.

The agent statement calculates the net commission payment as follows:

> Net Commission Payment
>> = Net commission amount after withholding tax and other deduction
>> − total premium tolerance.

The system also provides the reversal transaction for the premium tolerance.

The Agent Statement will also have an additional column to show the premium tolerance amount and the net commission payment amount. The total commission amount that can be paid to an agent should then be the net commission payment amount after withholding tax and other deductions in the Agent Statement.

4.2.10   Withholding Agent Commission

This feature allows the Life Company to withhold a certain portion of the agent commission payment amount as collateral.

The collateral withholding is required as Indemnity caused by agent dishonesty. It is automatically deducted from the agent's commission and passed to the Investment Department.

An additional process was added in order to:

- Calculate the Collateral Withholding from the net commission after premium tolerance.
- Maintain the cumulative balance for the collateral withheld amount.
- Check the priority for deducting from the net commission amount.

When the agent statement is performed, the system will check if the outstanding balance for the collateral withholding exceeds the maximum limit or not.   If not, then calculate the withholding amount from multiple net commission payment amounts after premium tolerance. The total withholding collateral commission amount will be show in the agent statement and sum up to the outstanding balance. At the end of the period the collateral withheld will be passed to the investment department via a batch extract program.

Additional fields to capture and maintain the collateral withholding are added to the Tied Agent Details screen as the Collateral %, Maximum Limit and Outstanding B/L.

- Collateral % -   The percentage of net commission amount after premium tolerance is deducted as collateral.
- Maximum Limits -   The maximum accumulated amount allowed to be deducted from the net commission amount after premium tolerance.
- Outstanding B/L - The current accumulated outstanding balance for the collateral.

4.2.11   Agent Commission & Withholding Tax

When the agency statement batch process is performed, the system will look up the tax related calculating factors in the Tied Agent detail screen S5036 and deduct from the total commission payment.   The net commission after deduction will be used for calculating the commission withholding amounts. The priority of commission withholding tax should be the first item deducted from the commission payment amount.   At the end of the period, the total withholding tax report for the related departments and the transaction for withholding tax and reversing transaction for commission payable will be created.

Table T5622 defines the tax calculation factor, which is defined as a percentage.

4.2.12   Downloading Agent Commissions

This feature enables download of all commission payments with the monies date, i.e. receipt date or cheque date (whichever is later). This commission information can also be downloaded by sales unit.   The commission information is downloaded into a flat file that can then be transferred to a PC or other system for processing.

4.2.13   Bonus Workbench Interface

LIFE/Asia V7.0 introduced the interface with the Bonus Workbench system, to calculate the various secondary compensation bonus. Currently, there are

eight outbound extraction files and one inbound extraction file that interfaces between LIFE/Asia and Bonus Workbench.

Bonus Workbench requires the agent, agent hierarchy, policy, coverage, premium activity and commission activity data in order to calculate the various secondary compensation bonus. Since all of the above data has already been captured and maintained in LIFE/Asia system, an interface is required between LIFE/Asia system and Bonus Workbench system. This interface will pass the above data from LIFE/Asia to Bonus Workbench on a daily basis in the form of extract files.

Bonus Workbench has an import function that will read the extract files created by LIFE/Asia and automatically populate into the Bonus Workbench database. For the outbound interface, the Agent information, Agent hierarchy information, Premium activity information, Commission activity information, Agency information, Company Information, Policy information and Coverage information captured in LIFE/Asia will be extracted and then feed into Bonus Workbench. This is done by the batch job BONWBEXT (Bonus Workbench Interface Extraction) on a daily basis.

For the inbound interface, the extracted file from the Bonus Workbench that contains the calculated bonus amount for those corresponding agents will be uploaded into LIFE/Asia. The corresponding accounting postings are created to cater for those bonus allocations. This is done by the batch job BONPOST (Bonus Workbench Posting) daily.

4.2.14 Consolidated Cheques for Agents to an SMA

This enables the commission for agents belonging to the same Marketing Alliance to be lumped and then paid in single cheque. However, the override commission earned by the Marketing Alliance will be generated on separate cheques. The set up will be on per a per agent basis. Consolidated Cheques information in Agent Maintenance screen can be set up by default in Company Default table – TH602.

4.3   Contract Fees

A contract fee, in the base system, is a fixed amount charged against a life contract, which does not vary according to premium amount, but only according to premium frequency. It is possible however, for the fee to be waived on premiums in excess of a specified amount by creation of such a fee definition.

The fee is charged on the contract, not on its component coverage's. It is payable in addition to the total premiums for the components of the contract. The amount collected is defined by the Contract Fee Calculation determined for the contract.

If Contract Fees are to be calculated then an entry will be found on table T5688. This entry is then used to reference table T5674 where the subroutine for calculating the fee will be found. The fee subroutine accesses table T5657, which holds the fee, based on frequency. The table is keyed on contract type and currency.

4.4   Service Tax

Service tax in some countries like India is a tax levied on services rendered and the responsibility of tax payment is cast on the service provider. It is an indirect tax as it can be recovered from the service receiver by the service provider in course of its business transactions. In order to support this requirement, LIFE/Asia V7.4 has introduced a new functionality to calculate various taxes for the following existing charges in the system:

- Contract level charge(s)
  - ➢ Contract fee
  - ➢ Reinstatement fee
  - ➢ Surrender fee
- Component level charge(s)
  - ➢ Non investment premium
  - ➢ Mortality charge
  - ➢ Top up fee
  - ➢ Administration fee
  - ➢ Switching fee
  - ➢ Surrender penalty

The tax can be collected from the client or absorbed by the insurance company.

When the taxes are collected from the client

- Taxes on modal premium (or basic premium) and contract fee will be billed to the client as part of the total premium.
- Taxes on non investment premium for unit linked products are calculated on the portion of premium that is not invested into funds. The tax will then be deducted from the fund value.
- Taxes on unit linked charges (such as mortality charge, administrative fee, top-up fee, etc.) will be deducted from the fund value that same way as the current benefit billing deductions via coverage debt settlement.
- Taxes on Fund Switch fee are deducted from the redeemed amount prior to purchasing the switch-in funds.
- Taxes on the surrender fee and penalty are deducted from the surrender amount.
- Taxes on Reinstatement fee are collected together with the reinstatement fee in order to revive the policy.

When the taxes are absorbed by insurance company

- The calculation is same as the one collected from the client.
- However, the tax will be absorbed as company expenses. Therefore client is not required to pay extra or redeem units for any taxes due.

This new functionality provides the flexibility to vary the calculation of taxes depending on the regions where the contract is purchased. The system will use the contract register to identify the regions of the contract. A new table TR52C will be created to store the different tax codes while another table TR52D will be created to set up a tax code per contract register.

Rules that determine when and where taxes will be calculated in the system will be parameterized in a new Tax Rule table TR52E. It allows users to switch on or off the tax calculations for certain products and components. The Tax rate item in TR52E will be used to access a new table TR52F to get the tax rate.

A new subroutine SERVTAX has been created to calculate taxes and when necessarily posting the taxes. This subroutine will access table TR52F to get the rates that will be applied to the taxable basis and also determine whether the tax should be collected from client or absorbed by the company.

The system will display these taxes, when appropriate, in various enquiry and entry screens in the system. During new business proposal, tax on premium will be displayed to allow users to see the total premium amount due inclusive of tax. A new check box has been added in all component screens for both entry and enquiry to allow users to view the breakdown of tax applied on the premium.

The pre-issue validation screen has also been modified to calculate the tax on premium and contract fee and when it is to be paid by the client, it will be added to the total contract total premium required for the client to pay. The same has been done to the regular billing and paid to date advance functions.

Upon collection of premium, additional accounting entries will be created to post taxes calculated on premium and contract fees as well as non-investment premiums for unit linked products. Accounting entries will also be created in contract issue, paid to date advance, premium collection and revenue due accounting functions.

Lastly, all base letters that currently print the total premium amount have been modified to include the taxes.

4.5 Premium Calculation and Processing

4.5.1 Premium Calculation Methods

When a life assurance contract provides a defined benefit, sum assured or disability payment, the premium payable for that benefit is defined according to the rules set out by the company issuing the contract. Within the LIFE/Asia application the rule applicable to coverage constitute the premium calculation method and the method to be used is specified in the coverage definition table T5687. There are currently four methods within the base system and these will be detailed later.

The premium calculation for a single life assured depends on the table of rates calculated in according to sex, age, mortality, category, and coverage duration. A similar calculation is required for joint life contracts where the age is defined according to the age and sex of the joint lives. Another method is the sum assured being calculated from a given premium. The premium calculation relates to the coverage that provides the benefit and there may be several different calculations within one contract.

System Functions

Premium calculation for a life assured is performed on-line within the coverage/rider screens S5123/6 or S5220, depending on the type of coverage. The calculation uses various parameters passed in the linkage section. As mentioned earlier the premium method for a given component must be set up in table T5687. This premium method provides access to table T5675 that contains the subroutines that perform the calculations. These subroutines or calculation methods are as follows:

PRMPM01 - Single Life Term Based - Tables, T5658, T5659

PRMPM02 - Joint Life Term Based - Tables, T5585, T5658, T5659

PRMPM03 - Sum Assured, Calculated by Premium - Tables, T5646, T5533

PRMPM04 - Single Life Age Based - Tables, T5664, T5659

PRMPM09 - Hospital Plan Benefit, Age Based - Tables T5659, T5664

PRMPM14 - Sum Assured Band, Term Based - Tables T5659, TR696, TR697

PRMPM15 - Sum Assured Band, Age Based - Tables T5659, TR696, TR698

PRMPM16 - Single Life, Table Look-up - Tables T5658, T5659, TJ698, TJ699

PRMPM17 - Joint Life, Table Look-up - Tables T5585, T5658, T5659, TJ698, TJ699

PRMPM18 - Waiver of Premium - Tables T5664, T5659, TJ698, TJ699

PRMPM19 - IRDA Premium Calculation - Tables T5533, TR52R

ZRPRM03 - Sum Assured, Calculated by Premium (Unit Linked) - Tables T5646, T5533

TPRMPM1 - Accidental & Hospitalization - Tables T5659, TT502

TPRMPM2 - Hospitalization Weekly Indemnity - Table TT503

TPRMPM3 - Payer Benefit, Term Based - Tables T5659, TT504

TPRMPM4 - Payer Benefit, Age Based - Tables T5659, TT505

TPRMPM5 - Non-Annual Term Based, Single Life - Tables T5659, TT506

TPRMPM6 - Non-Annual Age Based, Single Life - Tables T5659, TT507

RPRMRDT - Mortgage Reducing Term Assurance (MRTA) - Tables
T5659, TH615, TH617

Calculating Premiums

The age at risk commencement date, obtained from the life details, and the age rates for the options/extra file, if they exist, are combined to form a rated age. This age is then used to read the basic annual premium table and a premium is obtained.

If a discount factor is to apply, table T5659 must be read. The key for this table is the concatenation of the discount method, held in premium rate table and the currency of the contract. The discount method is obtained by checking the sum assured against the sum assured ranges and when the applicable range is found, the discount amount associated with that range is subtracted from the basic premium. The discounted basic premium is then multiplied by the sum assured and divided by the risk unit held on the premium rate table.

Percentage loadings, from the options/extra record or LEXT record, are applied to the basic premium to yield a loaded basic premium.

The instalment premium is now calculated as the basic premium multiplied by the modal factor, held on premium rate table. This factor is based on premium payment frequency. The result is then rounded based on currency of the contract by obtaining the rounding factor from table T5659. If the premium unit from premium rate table is greater than zero, the instalment premium is the rounded instalment divided by the premium unit.

For joint lives' premium calculation additional processing is required. The life detail's record is accessed in order to obtain the joint life details. An equivalent age must be calculated. Table T5585 is accessed in order to obtain an adjustment amount. One, both or none of the lives may be adjusted, this depends on there being a value in the sex indicator within the table. If both the lives are female and the sex indicator is set to 'F' then both lives will be adjusted according to the value found in table T5585, that is, the adjustment age is added to the age of each life respectively. The difference between the higher and lower age is calculated and used to obtain the additional age from the table. The addition to age is added to either the highest age or the lowest age, according to the setting of the high/low age indicator.

Once this equivalent age is calculated then the premium is calculated as per the single life premium calculation described above.

4.5.2   Extra Premium Calculation Based on Mortality Rates

Provides the ability to calculate extra premiums based on mortality premium rates as a loading to a Substandard Contract.

4.5.3   Premium Discounts for Large Sum Assureds

For large sum assured, system provides the ability to calculate premium discounts for contracts with large sum assured amounts. It allows the system

to extract/look-up different premium rate tables for different sum assured bands.

4.5.4 Cash Dividend Option – Premium Settlement

This allows billing of net premium when the installment premium is due instead of only applying the dividend amount when the full premium is received.

4.5.5 Non Annual Premium Calculation

This feature will allow the Life Company to automatically calculate non-annual premium by the Life Company's non-annual premium rate more effectively. The life company's premium rate is pre-calculated and manually smoothed out diversely.

Prior to this enhancement LIFE/Asia used modal factors and multiply with the annual premium to calculate other non-annual premium. This method will provide a close result but will not match exactly to the required calculation. The system will calculate the non-annual premium by using a pre-calculated rate.

An additional premium calculation method is required to look up the premium table in Basic Annual Premium Parameters – Term Table (T5658) or in Age Based Premium Rates table (T5664) by using Payment mode, Mortality and Sex as a key and to ignore the other value than yearly ratio (Y-field in Modal Factors section).

When creating the new coverage code for manually non-annual premium ratio, the specific premium calculation methods should be identified in order that the system will look up the premium table.

The structure of premium calculation item code in Basic Annual Premium Parameters – Term Table (T5658) or in Age Based Premium Rates table (T5664) should be as follows:

Basic Annual Premium Parameters – Term Table (T5658)

- The first four digits represent coverage code.
- The next two digits represent payment mode as 01 = Annually, 02 = semi-annually, 04= Quarterly, 12= Monthly and etc.
- The next two digits represent premium payment term such as 15 = 15 years.

Age Based Premium Rates table (T5664)

- The first four digits represent coverage code.
- The next two digits represent payment mode as 01 = Annually, 02 = semi-annually, 04= Quarterly, 12= Monthly and etc.

4.5.6 Advanced Premium Deposit

Some insurance products allow premiums to be paid in advance and give interest on this advance payment.

To support this requirement, LIFE/Asia allows:

- Premiums to be accepted in advance of due date
- Interest on the advance payment to be credited for such premiums paid. The interest credited may then be used for future premium payments.

To achieve the above objectives, the following has to be done:

- Set up an account for advance premium deposits, say, Premiums paid in Advance (LN VP). The balance sitting in this account will be the principal used for interest calculations. This account balance will be shown in the contract enquiries under sub account balances.

- The condition of putting the extra money into Advance Premium Deposit is only for some products. There is a need for a table to control the valid product types where this Advance Premium Deposit is applied. A table with contract type as the item has been designed. This table will have an extra data screen to control the amount that should be in suspense before which a transfer to Advance Premium Deposit can be done.

- The Contract issue should check if the product is part of the table and if yes should take the extra amount in suspense and put it into advance premium account. This will be controlled from the issue transaction and the sub-account details will be picked up from T5645 - P5074 entry.

- The Paid to date advance and Renewals collection processes will look at the advance premium deposit to settle the premium.

- The interest billing and capitalisation will process the advance premium deposit according to the set-up in the interest rates table T6633.

To withdraw from premium deposit account, money needs to be journalled into suspense using the receipts – (payment type 4 for journals).

4.5.7   Premium Calculation Methods for Riders

The following additional Premium Calculation Methods has been introduced to the base system:

- Accidental Hospitalisation Rider is calculated by looking up the premium table (using the rider code and mode of payment as the keys). This table is banded by the coverage premium amount. It moves through the band using the incremental coverage amount and finally add the results together to get the premium.

- Hospitalisation Weekly Indemnity Rider is determined by looking up the premium table using the Sex, Sum Assured and mode of payment as the keys to point to the premium amount.

- Premium of Waiver of Premium is calculated using the main component premium and the policy fee. The summation is multiplied by a WP factor

to produce WP premium. For WP the factor can be looked up from a table using the insured Age as a key.

- Payer Benefit Riders are calculated by multiplying the total premium (all of main coverage and other rider in the same contract) with premium rates. For PB, the insured (juvenile) age and the owner (normally the parent) age are the keys to look up the rate.

- Hospital and Surgical is determined by looking up as follows:
  1. Premium table using Sex and Insurer Age
  2. Mortality Loading factors using Mortality Class
  3. Billing frequency loading factors using Frequency

  Assuming A= Sum Assured, B = Premium rate from premium table, C = Mortality loading factors, D = Frequency Loading factors, then the:

  Yearly premium amount = A*B*C
  Non annually premium amount = A*B*C*D

  - Calculation for O.P.D. Benefit, Major Medical, I.P.D. Benefit are determined by looking up premium table by using billing frequency and Mortality Class.

4.5.8 Premium Tables Upload

There are products whose premium rates are dependent on Cover/Term/Age/Mortality class/Sex. LIFE/Asia supports this by utilising the rating tables T5658 and T5664. Since the premium rates are already held on PC files in Lotus and Excel formats, it would be convenient to have an uploading program to transfer the rates from PC file to LIFE/Asia table file. The PC file in Excel format must be structured according to the file format to be accepted by the AS/400 to make the uploading process easier. The actual uploading of file is done via IBM's AS/400 Client Acess Express. A process on the AS/400 will be required to convert the data from the uploaded file to a SMART table file.

Tables

T1688 - Transaction Codes Table
An ITEM, BA80, has been added to the table, for use in the PC upload Batch Schedule.

T1671 - Control Totals Table
An ITEM, EBH551, has been added to the table, to hold various control totals used in the PC Upload Batch Schedule.

Batch Programs

BH551
Batch Program to run the Premium Upload Batch Schedule: PRMUPLD

Operations Procedure

(1) DFU one record into HRATPF so that the Timestamp field is in the correct format.

(2) Download the HRATPF file into an EXCEL database, and save the file description.

(3) Cut and Paste the downloaded record into the HRATPF spreadsheet, and ensure that each record has the timestamp field in the correct format.

(4) Upload the updated HRATPF EXCEL file as a database file (Using the file description created as part of (2) above) using the replace option into the relevant environment.

(5) Run the Batch Schedule UPLDPRM in the environment where the uploaded file is held.

4.5.9   T2240 Changes

Prior to LIFE/Asia Release V2.0 screens that are concerned with displaying the age of the life assured, contain the literal "ANB @ RCD". This is seen as being constrictive, as it is possible that the client might wish to have different age definitions for the calculation of premiums. Examples of these different age definitions might be Age next birthday at risk commencement date, Age last birthday at risk commencement date and Age nearest birthday at risk commencement date.

The following is an example of the calculation of the age under each basis:

Date of Birth: 27/01/62
Risk Commencement Date: 01/07/95

(a) Age next birthday at risk commencement date   34
(b) Age last birthday at risk commencement date   33
(c) Age nearest birthday at risk commencement date   33

4.5.10   Premium Discount Based on Frequency

LIFE/Asia Release V5.0 introduced a new discount method, which is after volume discount and before applying risk units, to apply a rebate on BAP for the frequency of payment.

Instalment Premium = SA * (BAP- (100-FDrate)/100) * MF
Where,
SA   = Sum Assured
BAP   = Basic Annual Premium
FDrate = Frequency Discount Rate, obtained from Rebate Based on Frequency table TJ698
MF   = Modal Factor, obtained from Modal Factor Based on MOP table TJ699

The new premium calculation routines:

PRMPM16   -   Term Based Premium Calculation method

PRMPM17   -   Joint Life Calculation method

PRMPM18   -   WOP Premium Calculation method

4.5.11 IRDA Unit Linked Product Premium Calculation

LIFE/Asia Release V7.4 introduced a new enhancement is to support the India IRDA guidelines for unit linked products. IRDA Guideline (Ref No.1) states that after 1st of July 2006 the Unit Linked policies should include a guaranteed minimum sum for premiums received.

The table below specifies the minimum sum insured in respect of death benefit under unit linked life insurance contracts. The minimum sum insured shall be at least equal to:

Type of products	Minimum Sum Insured
Single Premium products	125% of the SP
Regular Premium products	0.5 x T x AP or 5 x AP, whichever is higher

Where
> **T** is Policy term chosen by policyholder (T shall be taken as 70 minus age at entry in case of Whole Life products)
> **AP** is Annualised Premium selected by policyholder at policy inception
> **SP** is Single Premium chosen by policyholder policy inception

IRDA Guideline (Ref No.7.2) also requires Top up premiums done on regular premium paying policies be allowed only if the regular premiums are paid up to date.

Top up premiums should also be given a guarantee as stated in the IRDA guideline-7.3. The minimum guaranteed sum insured will be calculated the same as the table mentioned above, however guaranteed must only be given to the top up premiums exceeding 25% of the total amount of the basic regular premium paid up to date. No guaranteed sum insured will be given for top ups within 25% of the regular premiums paid up to date.

A new premium calculation method (PM19) has been created to calculate the guaranteed sum insured. This new method will incorporate IRDA formula to derive the sum insured of Unit Linked component. The formula is as follows:

$SA = Prem$ x Max (Min_Factor, Min (Max_Factor, $Factor$ x $Term$))

Where:
> $Prem$ = Annual Premium for regular premium policy or single premium amount for single premium policy
> $Term$ = It will be calculated as Min (70 - insured entry age, premium term)
> $Factor$ = Factor applied to the premium. This could be 1.25 for Single premium or 0.50 for regular premium
> Min_Factor/Max_Factor = Minimum and Maximum factor limits

A new UL Sum Assured Factor table TR52R has also been created to store the factors used in calculating the minimum sum insured. This table will be keyed by Component code + Frequency. It will be accessed by the premium

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calculation routine to derive the minimum guaranteed sum insured as per Indian Unit linked guidelines.

The top up transaction has also been modified to allow top up on regular premium paying policies only if the client has paid the premium up to date. System will display an error message if a top up is attempted on a regular premium policy where the billed to date is not equal to the paid to date.

With the option Single Premium Top-Up with Increase SA, the sum assured will be reviewed if the following rule is satisfied:

Top-Up Prem > *Regular Prem* x *Qualifying Factor − Single Prem*

Where
    Regular Prem = Total regular premium has been collected
    Qualifying Factor = Casual Premium SA qualifying factor defined on
                    TR52R
    Single Prem = Total single premium has been collected

Note that this rule applies only to regular premium paying policies. The sum assured for single premium policies will be always reviewed for every single premium injection.

The premium calculation routine for the new premium method PM19 is PRMPM19.

4.6   Underwriting

Underwriting Medical requirements exist on a contract type basis, and depending on the contract type, different requirements may apply. The medical requirements are based on the total sum assured of all the proposals and in-force policies attached to the life assured being underwritten, and will vary according to the age of the life assured.

At pre-issue validation, each life assured attached to the policy will be processed to determine the medical requirements. If one does not already exist, an outstanding follow-up will automatically be created for each medical requirement. This will ensure that all requirements are received or waived by the underwriter before the policy can be issued.

The medical requirements will be re-evaluated each time pre-issue validation is invoked, since a change in sum assured on any proposal or in-force policy attached to the same life assured will affect the underwriting requirements of the proposal being processed. At contract issue, pre-issue validation will always be required, even if an earlier pre-issue validation has set the policy to 'available for issue'.

The above functionality was introduced with LIFE/Asia V2.0 but LIFE/Asia V4.0 has enhanced this, as clients required the Underwriting Approval to be a separate transaction than a field capture at New Business. With this functionality, risks above pre-ascertained levels must be underwritten otherwise the contract cannot be issued.

Tables

TH522 - Medical Underwriting Requirements
This table is used to capture the medical underwriting requirements, which correspond to certain sum assured and age bands. The table is keyed on contract type. Follow-ups that are to be created for that method are held on T5677, which is keyed on transaction code + follow-up method.

TH525 - Underwriting Conditions Table
This table is keyed on coverage code, and has an indicator to identify which components are to be included in the sum assured total when determining the medical underwriting requirements for a life assured.

TH523 - Currency Rates for Automatic Follow-ups
This table holds the currency rates used to convert the sums assured into a common currency for comparing against the sum assured bands on TH522. This Table is keyed on a concatenation of Contract Type and Sum Assured Currency.

4.6.1 Body Mass Index (BMI) and Underwriting Questionnaire

The Life Assured's Body Mass Index (BMI) and underwriting questionnaires are used to help in the underwriting process. In order to achieve such objective, LIFE/Asia version 7.1 provided the following functions:

- Using underwriting tables and codes to define related underwriting rule.
- Based on the product underwriting rules, capture Life Assured's height and weight, underwriting questionnaires during new business proposal creation.
- For products where underwriting is required, component added to the proposal is also able to have it's sum assured checked against age bands, to determine what, if any, underwriting is required. *(N.B. Waiver of Premium and Hospital Benefit component has no such checking due to their specialty).*
- Automatic underwriting facilities associated with BMI, the answer for each underwriting questionnaire and each component's sum assured check against age bands are also introduced, such as where further information is required (follow-up records will be generated) or extra loading must be applied (Special Term will be added to all appropriate components etc).
- Underwriting can be confirmed for each life assured. Once the underwriting confirmation flag is set as 'Y', this life assured will by bypassed for any future rule assessment in pre-issue validation. In order for the proposal to be issued, underwriting needs to be confirmed for all lives assured.
- For authorized users, enquiry for details of the underwriting questions and answers provided can be accessed via the Contract Enquiry facility.

Underwriting rules are defined in tables with user defined rule codes. The rules are defined in terms of any follow-ups, special terms and/or letters that are to be created if the underwriting rule is applied. Underwriting rules can either be generic or specific. Only one generic rule will be applied for each life assured whereas any number of specific rules could be applied.

BMI parameters and associated rules are also defined in tables, with a user defined BMI method. The BMI calculations using either metric or imperial values for height and weight are supported, which can vary by product type.

4.6.2   Underwriting Authority Limit

If a client is assessed as a substandard risk then the contract may need to be rated. LIFE/Asia allows individual coverages to be underwritten. The following ratings can be applied:

- ages can be adjusted,
- percentage adjustments to premiums made, and
- the rate per mille that the system looks up can be changed.

Each of these ratings can be given a duration if required.

Underwriter Approval Level can be maintained in LIFE/Asia at User Security via the Additional Sanction Menu. Table TR594 (User Authority Limit) stores the following authority parameters:
- Plan Type – Single Premium, Regular Premium, Mortgage and etc.
- Standard TRSA Limit
- Substandard TRSA Limit

The limit amount is calculated based on the Total Relevant Sum Assured (TRSA), which is the sum assured of all In-Force policies, on the Life Assured, within X number of months from the Risk Commencement Date. This limit is also validated against the Life Assured being a Standard or Substandard life.

Underwriting Authority Limit checking is conducted at:
- U/W Approval
- Withdraw Proposal
- Decline Proposal
- Postpone Proposal
- Not Taken Up Proposal (including batch NTU)
- Reverse Decline/Withdraw/Postpone/NTU.

4.6.3   Underwriting Exclusion Clause at Component Level

New functionality was added with LIFE/Asia Release 4.2 to provide an Exclusion Clause at the coverage/component level that allows an underwriter to exclude specific risk for a particular risk class such as:
>   TEN1 (Traditional Endowment)
>   CCPV (Crisis Cover Provider)
>   Dread Disease excludes Heart Valve Surgery

The exclusion clause updated in the system is captured and printed on the policy document and conditional acceptance letter. The exclusion clause is also kept at the contract level so that Policy Services is able to administer the policy in the event of a re-underwriting (e.g. due to revivals, inclusion of rider benefits, etc) and during Claims processing.

4.6.4 Underwriting & New Business Reports

LIFE/Asia provides a number of reporting facilities. These reports are as follows:

Daily Outstanding Proposal Report. To aid the Life Administration Department, a daily report is required detailing submitted policies that remain Unissued due to outstanding information. Only those proposals which fall on either 21, 42, 63 or 84+ days, from the date the proposal was first received, are to be output. The report will include among other things, the current status of the proposal together with the number of days the proposal has been outstanding.

BH529 This Program reports on policies that remain Unissued due to outstanding information required. Only proposals which fall on the 21st, 42nd, 63rd or later than the 84th day from the date the proposal was first received will be output.

Weekly Sales Policy Status Report. This is a weekly report used by the individual sales channel to monitor completion and the status of outstanding policies awaiting completion. Sales people will use this listing to follow-up their clients on outstanding cases.

BH530 This Program reports on policies which have had one or more of the following transactions applied to them in the week prior to the running of the report - Issue, Cancel from Inception, Decline, Withdraw or Postpone.

Daily New Business Production Report. There is a requirement for reports to be produced for New Business transactions. These are to detail New Business transactions primarily on a daily basis, but as the report will be run daily, it will be possible to use it to accumulate information on a monthly, quarterly and annual basis. This report will contain such information as Sum Assured, Single and Regular Premium amounts as well as Product and Agency details.

BH531 ZSTRPF Extract Program. This program extracts data from various SMART files (PTRNPF, CHDRPF, AGNTPF, COVRPF etc.) and uses the extracted information to write to the ZSTRPF - New Business Reporting Master File. It is primarily this file, which is used in the other Reporting Programs.

Weekly New Business Production Report. There is a requirement for various reports to be produced for New Business transactions. This report will detail New Business transactions on a weekly basis, and will hold such information as Sum Assured, Single and Regular Premium amounts as well as Product and Agency details. This particular report will be run at the end of each week, and will produce updated figures for Month-to-date, quarter-to-date and year-to-date values.

BH533 This Program is designed to produce a report of New Business transactions on a weekly basis. The report will contain such information as

Sum Assured, Single and Regular Premium as well as product and Agency details.

BH532 This Program reads through the ZSTRPF Physical File and extracts sufficient data to create a report detailing the various types to New Business transaction that occurred on the relevant transaction day. This report should only be run after the NBEXTR extraction batch job.

Monthly New Business Comparison Report Over 12 Months Period. A monthly report is required to display new business figures for the past 12 months. Flexibility is required to allow the report to display information pertaining to specific channels, districts, divisions, branches or products and/or to display totals at these different levels.

BH534 This Program is designed to produce a report of New Business transactions on a monthly basis.

4.6.5 Underwriting Standard Letters

As there could be numerous requests for underwriting information to satisfy follow-ups, it is required that the printing of follow up letters be automated. This would avoid the manual tracking of letters and improve customer services. The type of follow-up, each of which relate to specific follow-up letter layout and wordings, identifies letters. Follow-up letters should be generated when they are added to the contract. These letters will be physically printed off-line. Reminders will be automatically generated three weeks after the first one is printed. Information should therefore be captured to determine when letters were sent and when the reminders are due. In the event that a previously printed follow up is claimed to be missing, a transaction to request the reprint of follow-up letters is required.

Tables

T5660 - Follow Up Status Codes.
The following items have been added to this table:
      L   - Print Standard Letter
      M   - Print Reminder Letter
      P   - Letter & Reminder printed

T5661 - Follow Up Codes.
For those Follow-Up Codes where Standard Letters are required, the following values should be assigned:
      Default Initial Status   'L'
      Printed Status   'M'
      Printed Status (Reminder)   'P'

In the above cases, the Letter Type field should window to Table T3609.

T3609 - Generate Standard Letters Table.
The extra data screen of this table has been amended. All of the follow up letters (HLAPP, HLAPS, HLMED, HRAPP, HRAPS, HRMED and XRATE) work by calling a subroutine whose name is found in the parentheses following the CALL SBR string. Each of the letters should have an entry on

this table, and the ITEM name should be the same as that specified in the "Letter Type" field in Table T5661.

For the other letters (HLDCL, HLPSP, HLTRM and HLWDL) each work in the same way to those above, and each should have an entry on T3609, but in these cases, the ITEM name should be the same as that specified on the extra data screen of Table T6634.

Batch Programs

BH521 - Generate Follow-Up Standard Letters
This Batch Program reads to FLUP file for a Follow Up Status of either "L" or "M", and for each one found, will write a LETC record via the LETRQST Subroutine.

B2650 & B2651 – XML Printing Generation Batch Program
This printing batch job will process any pending letter requests where the request date is on or before the batch effective date entered. A parameter prompt screen exists, which allows the user to refine the selection criteria further like to include or exclude certain letter types. This batch process will invoke the data extraction, formatting and document creation and will store the documents. However, it will not print the documents; this must be done using the Bulk Printing command (STRXMLPRT) or the online XML Printing submenu.

Letter Types:

HLAPP & HRAPP - Application and Application Reminder
Associating a follow up code of APP with a proposal produces this letter. The job FLUPLET should then be run followed by XMLPRT job, specifying a letter type of HLAPP. The follow up record for the reminder letter, HRAPP, will be generated a given number of days after the first follow up record was created. This number of days is specified in table T5661 (reminder days).

HLAPS & HRAPS - Attending Physician's Statement and Reminder.
Associating a follow up code of APS with a proposal produces this letter. The job FLUPLET should then be run followed by XMLPRT job, specifying a letter type of HLAPS. The follow up record for the reminder letter, HRAPS, will be generated a given number of days after the first follow up record was created. This number of days is specified in table T5661 (reminder days).

HLMED & HRMED - Medical Examination Letter and Reminder
Associating a follow up code of MED with a proposal produces this letter. The job FLUPLET should then be run followed by XMLPRT job, specifying a letter type of HLMED. The follow up record for the reminder letter, HRMED, will be generated a given number of days after the first follow up record was created. This number of days is specified in table T5661 (reminder days).

HLPSP - Proposal Postpone Letter.
This letter is produced by the creation of a LETC record upon the manual transaction of Proposal Postpone, and then running the XMLPRT batch job for letter type HLPSP. There is no reminder letter for this letter type.

HLTRM - Proposal Withdrawal Letter.
This letter is produced by the creation of a LETC record upon the manual transaction of Proposal withdrawal, and then running the XMLPRT batch job for letter type HLWDL. There is no reminder letter for this letter type

HLDCL – Proposal Decline Letter.
This letter is produced by the creation of a LETC record upon the manual transaction of Proposal Decline, and then running the XMLPRT batch job for letter type HLDCL. There is no reminder letter for this letter type.

The above letters can then be printed using the Bulk Printing command (STRXMLPRT) or the online XML Printing submenu.

4.6.6   Underwriting Follow-ups by Risk Class

LIFE/Asia release 4.2 provided new functionality to generate New Business Underwriting follow-ups, to cater for medical underwriting limits and trigger by risk class rather than product type.

Prior to this release at client underwriting, the total sum at risk was aggregate of all the sum assured(s) of all the coverage insured under the respective policies. The aggregate was not classified by the risk class.

With this enhancement allows the triggering of the underwriting limits and follow-ups by risk class.

4.6.7   Underwriting Follow-ups by Risk Class and Multi-currency

With LIFE/Asia release 4.2 a new enhancement was added that provides for underwriting follow-ups, to cater for multi-currency environment so that the product risks can be aggregated, and automatic follow-ups can be triggered off.

Prior to this release, the system aggregated the sum assured of the same policy type to trigger off the automatic follow-up requirements defined in the TH522. With this enhancement logic was added to aggregate by risk types defined against the product types to trigger automatic default follow-ups.

As LIFE/Asia is also multi-currency enable, there was a requirement to aggregate the individual risk by ledger currency to cater for a multi-currency environment. Policies may be issued with various contract currencies. For aggregation, the various contract currencies amounts need to be converted to a base (ledger) currency to facilitate underwriters in the underwriting process.

The system will display existing in-force policies contract details by risk class.

4.7 Waiver of Premium

4.7.1 Waiver of Premium Calculation

LIFE/Asia V1.0 enhanced the system by introducing an automatic Waiver of Premium Calculation Method. This functionality enables the system to automatically calculate the Waiver of Premium "sum assured" if the user has not specified an amount. Accumulating each instalment on coverage/rider records for a proposal or a contract will do this. Whether these sum assured can be calculated or not will depend on whether or not the coverage/rider is present on the table TR517.

This new table is keyed by coverage code and contains two flags and up to fifty coverage codes. The first of these flags indicate whether the premium can be waived for the particular coverage accessed and the second indicates whether the premium can be waived for the coverage's for all lives or just the life for which the waiver is applicable.

For each of the coverage codes that is found on this table the premium will be accumulated. These accumulated premiums will then be the sum assured for the Waiver of Premium rider. As Waiver of Premium is a common rider, a generic module is created. Apart from this generic module the other areas in which changes are required are common component add/modify, pre-issue validation and regular benefit payment processing.

4.7.2 Waiver of Premium Revised Sum Assured for Accelerated Crises Waiver

This enhancement was added in LIFE/Asia release 4.2. For Accelerated Crisis Waiver, the WOP Sum Insured (face value) should be the premium of the remaining face amount on claims admission. Some companies offer Accelerated Crisis Cover Waiver Benefit, where on the premium of the remaining sum assured (the sum assured of main component less sum assured of Accelerated Crisis Cover Benefit) is waived. On Crisis Cover Claim processing, the Accelerated Crisis Cover Sum Assured accelerates the same amount on the Basic Plan as claims payment. The Basic plan's Sum Assured is then reduced to the remaining Sum Assured after Crisis Cover Claim is admitted. As such, the premium to be waived should be calculated based on the remaining Sum Assured. As such when processing the accelerated crisis cover waiver of premium claim, the premium to be waived and journal for premium application will be based on the premium of the remaining sum assured of the basic plan.

4.8 Accident Rider Aggregate Limits

In some instances three accident riders can be underwritten as one aggregate risk, for e.g. Accident Death, Dismemberment Disability and Accident Indemnity and Accident Death Benefit.

When the aggregate sum assured of these riders exceed the retention limits the sum reassured of these riders are pro-rated and adjusted.

This feature, introduced by V4.0, will allow the Life Company to generate the aggregate limit report to use as the information for manual adjustment.

4.9 Regular Processing

The Regular Processing batch schedule processes form a fundamental part of the LIFE/Asia system and handles most scheduled events that are likely to take place with a contract. Much of the processing of life assurance contracts is controlled by the date, rather than being a transaction input at a terminal. Such processing as sending out premium due notices and overdue premium notices and so on come into this category.

4.9.1 Renewals Processing

The Renewals Processing batch schedule (RENEWALS) forms a fundamental part of the LIFE/Asia system and handles most scheduled events that are likely to take place with a contract. Much of the processing of life assurance contracts is controlled by the date, rather than being a transaction input at a terminal. Such processing as sending out premium notices and overdue premium notices and so on comes into this category.

The batch schedule covers those premium aspects and scheduled changes. For more detailed information on the batch schedule please refer to section 6.4 of this document.

4.9.2 Surrender & Claims Overview

The LIFE/Asia system provides the functionality to deal with Claims Processing and this section covers the calculation processes of Full Surrenders, both Traditional and Unit Linked, Surrender of Traditional Reversionary Bonuses, Part Surrender on Unit Linked Contracts, Maturities and Expiries, Death Claims and Regular Payments. Further explanation of the claims functionality is in the section 4.10, Surrenders and Claims.

4.9.3 Surrender Processing of Traditional Contracts

Processing is provided in the base system that enables benefits arising at the surrender of a contract or the surrender of the accrued Reversionary Bonuses to be paid to beneficiaries. Once all the benefits accrued under the policy have been paid the contract is complete and the contract header is updated to note the current status as Surrendered. Partial Surrenders, which is the partial surrender of the Sum Assured under Traditional Contracts, is not currently provided in the base system.

Differing contract types require different treatment on early termination. Some, such as, Endowments, Whole Life and Single Premium Decreasing Term Assurances attract surrender values, whereas Term Assurances, Disablement and PHI Riders usually lapse without any value. The system allows you to distinguish between these and provides calculation logic to yield surrender reserves equal to unmodified net premium Actuarial Reserve Values. This provides opportunity, by appropriate customisation, to apply an Office Expense factor to modify the reserve figure for the actual surrender value. For Single Premium Decreasing Temporary Assurances, an expense

loaded proportionate premium refund calculation is provided by the base system. Please note that, for increased flexibility, a sub routine is also supplied to calculate a similar Actuarial Reserve for Term Assurances. This routine is available for stand alone Reserve Calculations.

Reversionary Bonus surrenders applicable to In Force With Profit Permanent Assurances, but excluding Low Cost Endowments, are provided. These use single premium assurance encashment factors and if the Life Office needs to restrict the surrender of Reversionary Bonuses depending on the status of the contract then this can be simply achieved by the use of tables.

Please note that one other restriction applies to the surrender of Reversionary Bonuses and that is it is not permitted if there is any loan balance against the contract and if this does not comply with the Life Office's current contractual obligations then customisation will be required in this area.

For Traditional business the surrender value is based on the Actuarial Reserve of the policy being calculated as the present value of the Sum Assured less the current value of the net premiums, plus the current value of Reversionary Bonuses.

These reserves vary depending on some or all of the following:
• Contract type WOL or Endowment Assurance
• Life type - Single Life, Joint Life, Male or Female
• Premium Basis Single or Regular Premiums
• Premium Status
• Premium Paying Term
• Benefit Term
• Age of Life Assured
• Premiums Paid to Date
• Unexpired Contract Term
• Unexpired Premium Term

The Full Surrender transaction performs the following:
• Calculate and displays the Sum Assured Reserve and Reversionary Bonus reserve and the total amount payable.
• Allow for adjustments in the final payment both positive and negative.
• Makes' postings to the General Ledger for each constituent part of the amount payable, at the contract or component level as required.
• Allow for the payment of the final amount by cheque or direct credit.
• Optionally produce a letter setting out the details of the payment.
• Evidence the transaction in the contract records.

4.9.4   Actuarial Valuation Download

This program is provided to download specific data from LIFE/Asia for valuation purposes. The information will be sufficient for any valuation system used by the client. It is necessary to interface this data with the client's actuarial valuation system.

Batch job ACTVALU will select the contracts based on the status codes define for download transaction code – BR77, in the Component Stati table T5679

and the parameter entered. The parameter can be the contract issue date range, the contract number range or combination of both.

The job will produce the following extract files:

(A) Contract Extract File (any calculation figures are effective the date of the batch job was executed)
- Contract Number
- Contract type
- Risk commencement Date
- Owner Name
- Payer Name
- Original Issue Date
- Correct Issue Date (Latest issue date)
- Agent number
- Agent Type
- Billing Frequency
- Risk Status Code
- Premium Status Code
- Paid To date
- Billed to Date
- Total Coverage Installment Premium
- Total Contract Premium
- Cash Value
- Current Loans Outstanding
- Surrender Charge
- Surrender Value

(B) Life Assured Extract File
- Contract Number
- Life Details & Joint Life Details – Array with 5 occurrences
  Note: The first occurrence will be primary life, second will be second life and so on,
  - Life Name
  - Joint Life Name
  - Life Assured's Sex
  - Life Smoking or Non Smoking
  - Joint Life Assured's Sex
  - Joint Life Smoking or Non Smoking
  - Life Age at Contract Commencement Date
  - Life Assured's Attained Age
  - Joint Life Age at Contract Commencement Date
  - Joint Life's Attained Age
  - Life Issue Age
  - Joint Life Issue Age

(C) Component Extract File
- Contract Number
- Life Number (corresponds to the occurrence above in Life Extract)
- Coverage Number
- Rider Number

- Component Code
- Sum assured or Benefit Amount
- Risk term
- Premium term
- Commencement Date
- Extra Premium
- Total Instalment Premium
- Total Annual Extra Premium
- Total Annual Premium
- Substandard or Special Term - the following fields are in an array of 5 occurrences
  - Special Term Code
  - Loading %
  - Age loading
  - Rate Per mille
  - Duration of special term
- Fund details – the following fields are in an array of 5 occurrences
  - Fund code
  - Fund Value (as on the effective date of extract job)
- Annuity Information – the following fields are in an array of 5 occurrences
  - Payment Mode
  - Modal Annuity Payment
  - Nominated Annuitant Name
  - Current Age of Nominated Annuitant
  - Secondary Annuitant Name
  - Current Age of Secondary Annuitant
  - First Payment Date
  - Next Payment Date
  - Final Payment Date

4.10   Reserve Calculations

The formula, shown below, corresponds to unmodified net premium reserves. However, the structure of calculations is sufficiently modular to facilitate the introduction of modifications to the reserve values as individual Life Office's may require. This also applies to the factors that an office may choose to use to derive actual surrender values from these calculated reserves.

The calculations are provided for Term Assurance, Whole of Life and Endowments both with and without profit contracts are catered for. The structure of the system allows the Life Office to add routines for additional classes of business easily. The appropriate bonus reserve formulae are used equally for Full Surrender Calculations and for Reversionary Bonuses.

In order to provide increased flexibility to client sites, the calculations of actuarial factors used in the reserve formula have been written into a single sub routine, ACTCALC. The sub routine is passed various parameters relating to ages and terms and a particular function code. A number of function codes are provided in the base system. Others may be added by customisation.

The functions and the corresponding actuarial factors are returned are as follows:

Function Code	Factor Returned
WBIGA	A_x
WADUE	a_x
WNEPT	$P_x = A_x / a_x$
EBIGA	$A_{(x:n)}$
EADUE	$a_{(x:n)}$
ENEPT	$A_{(x:n)} / a_{(x:n)}$
TBIGA	$A^i_{(x:n)}$
TADUE	$a_{(x:n)}$
TNETP	$P^i_{(x:n)} = A^i_{(x:n)} / a^i_{(x:n)}$

The factors themselves are calculated using N_x commutation monetary functions as follows:

EADUE is calculated as $(N_x - N_{(x+n)}) / (N_x - N_{(x+1)});$

EBIGA is calculated as $1 - d \times EADUE$ where $d = 1/(1 + i)$

TBIGA is calculated as EBIGA minus the survival benefit:
$$(N_{(x+n)} - N_{(x+1)}) / (N_x - N_{(x+1)})$$

Values of N_x for a given rate of interest are calculated automatically by the LIFE system batch job T6641CRT. The item key is a concatenation of the five characters Mortality Table item key (T6686) and a three-character interest rate. This allows rates of interest up to 9.99 to be used. T6686 contains manually keyed values of lx for the user defined character items. Thus 6770 could represent the Institute of Actuaries A 67-70 Mortality Tables, Single Life ultimate mortality values.

The parameters passed to ACTCALC by the various reserve calculation programs are:

- Initial Age
- Final Age (1)
- Final Age (2)
- Function Code
- T6641 Item

The initial and final ages are set up calling programs to reflect whether ACTCALC is to calculate values at inception or paid to date. For example, in calculating a Net Premium age would be those at inception whereas for the

current value of the Sum Assured the ages would be at the paid to date, being ages next birthday at entry plus elapsed duration in force to the paid to date.

Note for joint life components, an equivalent Single Life age is calculated by means of entries on T5585 where the item is set up in T6642 that is keyed by the coverage code.

All the base functionality provided, and the underlying tables, assume yearly rather than continuous actuarial factors, with Sum Assured payable at the end of the year of death and makes no allowance for select or ultimate mortality experience.

Whole of Life Assurance Formula

The sub routine PRESERV recognises Whole of Life Assurances by the presence of a risk cessation age equal to 110.

It calculates the following value:

Value of Basic Benefit

$$SA \times (A_{(x+t)} - (NP * a_{(x+t)}))$$

where   SA is the sum assured for the component
NP is the Net Annual Premium for the component
x   is the age next birthday at component commencement date
t   is the elapsed duration

Endowment Assurance Formula

The subroutine PRESERV recognises Endowment Assurance by risk cessation age less than 110.

It calculates the following value:

Value of Basic Benefit

$$SA * (A_{(x+t:n-t)} - NP * a_{(x+t:r-t)})$$

where   SA is the Sum Assured for the component
NP is the Net Annual Premium for the component $P_{(x:n)}$
x   is the age next birthday at the component commencement date
t   is the elapsed duration
r   is the premium term
n   is the benefit term

Value of Bonuses

$$BA * A_{(x+t)}$$

where   BA is the accrued Reversionary Bonus for the component

As stated above bonuses can be valued at different basis from the basic benefit - see T6642. Linear interpolation is used to obtain values for non-integral elapsed duration's.

The ACTCALC sub routine is called to determine the actuarial factors with the function codes of EBIGA, EADUE and ENETP and again with EBIGA for the bonus encashment basis.

<u>Term Assurance Formula</u>

The formula for Term Assurance is as follows:

$$SA \ \times \ (A^{i}_{(x+t:n-t)} \ - \ NP * a_{(x+t:r-t)})$$

Where SA is the Sum Assured for the component
NP is the Net Annual Premium for the component
x is the age next birthday at the component commencement date
t is the elapsed duration
r is the premium term
n is the benefit term

Straight-line interpolation is used to obtain values for non-integral elapsed duration's.

The sub routine ACTCALC is called to determine the actuarial factors with function codes TBIGA, TADUE and TNETP.

<u>Single Premium Decreasing Temporary Assurance</u>

A number of Life Offices provides for a payment of a surrender value for this type of product. Generally, reserve based calculations are inappropriate and an expense loaded refund of the single premium is offered. Accordingly in such cases the base system contains the following calculations using the sub routine PRPSPRM.

$$SP * (\ (M2 - M1) \ / \ (M2 - MO) \ )^{2}$$

Where SP is the Single Premium
MO is the age next birthday at component issue
M1 is the age next birthday at the component anniversary, which is equal to or greater than the effective date of the surrender
M2 is the age next birthday at component expiry

4.11 Surrender of Unit Linked Contracts

For Unit Linked contracts the surrender sub system allows the facility to either take a full or partial surrender.

This action is achieved by entering the contract number into the relevant screen and after validation the coverage's and rider details are displayed for selection. Once selected the surrender information is provided with the options to enter the effective date, adjustment amount and reason if required. In

addition to this if the user enters a currency code the fund values are adjusted to reflect the entered currency otherwise the contract currency is used.

Once the contract has been processed through the AT the status of the contract on the contract header is updated to indicate that the contract has been surrendered and in addition to this the status of the coverage and riders are also updated. The surrender value is written to the contract header suspense, after the batch job NEWUNITD has been run, so that the cheque can be prepared for the beneficiary.

Agent's commission records are updated with the amount of the earned commission and if this is less than paid commission clawback will apply.

The Part Surrender transaction allows partial fund value to be withdrawn either at a policy or plan level and can be a fixed amount or a percentage of units held. Contract definition determines if Part Surrenders are valid and if so the rules for part surrender are table driven for example minimum withdrawal amounts, withdrawal fees, etc. As with full surrenders the value of the withdrawal is written to the contract header suspense for disbursement after the completion of the batch job NEWUNITD. Again as with full surrender's commission records are updated and a PTRN record is written for contract history.

4.12 Life Traditional Bonuses

The system caters for two types of bonus allocation of Reversionary Bonuses on with profit contracts; those allocated on the anniversary of the contract and bonus allocation at a company's fixed day of the year but not necessary each year. Normally a Life Office will follow one of these practices rather than a mixture of both but the system can handle both methods simultaneously as the methods are table driven and defined at component level.

The LIFE/Asia system supports "true" premiums rather than instalment premium method so that for Reversionary Bonuses it is assumed that all due premiums are paid within the acceptable time period set in table T6654. Because of this assumption, for components where bonuses are allocated on a Fixed Date basis, calculation for part year bonus eligibility is incorporated within the system. This will only apply for the first bonus allocation for any qualifying components.

Bonuses may be calculated based on Sum Assured alone or on the Sum Assured and Bonuses already allocated to each component. Different rates of Reversionary Bonuses may be defined for each bonus method code. Thus, by setting the rates to be applied to existing bonuses to zero, simple bonuses are calculated, if the rate is not zero then compounded bonuses apply.

Further flexibility is available in that different rates of bonus may be defined for each component status code. In this way a contract that is Paid Up may receive, say, a lower rate of bonus from another otherwise similar component that is still premium paying. To complete the built in options available to the Life Office the tables that hold the relevant bonus rates may hold up to ten

various rates depending on the length of time, in years, a component has been in force.

However, when Reversionary Bonus is declared for a component that has been made Paid Up and for which, therefore, a reduced Sum Assured now applies, the amount of Reversionary Bonus allocated at the next declaration date will be based on the Paid Up Sum Assured. In fact as a general rule the Bonus calculations are always based on the current component record. This means if the Life Office wishes to calculate and apply pro-rata bonuses on the original Sum Assured and now reduced Sum Assured then an adjustment could be made via the Bonus Journal functionality.

Other form of bonus calculation and allocation processing is also available for Maturities and Death Claims such as Interim, Terminal and Extra Bonus. The latter bonus method is similar to terminal bonus but with the added functionality of being able to define that only a proportion of the contract term qualifies for this type of bonus.

4.13 Maturity & Expiry Processing

Maturity processing enables benefits that fall due at the Maturity of a contract to be paid to the relevant beneficiaries. This may result from the Maturity of the whole contract or any constituent parts as and when they fall due. The value of the contract or the benefit due is calculated as part of the process together with any bonuses or adjustment payments to be made. Upon payment of the benefit due, part policy or whole contract, the components or contract is updated as Matured and all general processing will cease billing, etc.

Maturities and Expiries may be processed up to three months in advance of the contract risk cessation date so as to enable the administration area to complete, and receive from the client, all the necessary documentation so that the disbursement of the funds can be made on the due date. Contracts or components that have no monetary value arising at the completion of the contract term will go through the Maturity processing procedures but the contract or component is noted as Expired.

In order that clients may be notified of a pending Maturity or Expiry a batch job has been designed (PENDMATY) which allows a selection of the risk cessation date range to be processed as Pending Maturities. This batch job produces a report of the range of contracts requested and can be extended to produce the necessary letter of notification, assuming that the Life Office have designed the appropriate letter(s) and its key has been entered into the relevant table.

This report will show whether contracts will Expire or Mature and their estimated value broken down by component and by fund for Unit Linked products. This report could assist in planning workflow and later on identifying outstanding requirements.

In addition to the above there is the facility to reverse Maturity processing for both Unit Linked and Traditional contracts.

The above explains the system stages of informing the client of the contract or component Maturity and in this section we will deal with the process required to disburse the funds to the beneficiaries after the Life Office have receive all their requirements.

It is important to note that the system does not automatically Mature or Expire a contract or component upon attainment of the risk cessation date. It is a required on-line transaction and this task is currently held within the Surrender and Claims sub menu. During the entry stage of this on-line Maturity transaction the system will calculate the amount to be disbursed. This will include, for Traditional contracts, all bonuses due Terminal, Reversionary, Interim and Extra whichever is applicable (this is dependent on the contract definition) plus the Sum Assured less any Policy Loan or APL debts. Once the transaction has been committed and completed through the AT processing the Maturity value, gross or net, is placed into suspense for disbursement to the client completing all accounting entries as defined in table T5645. The contract and or component will then indicate a status of Matured.

For Unit Linked contracts the on-line Maturity screen will calculate an estimated value of the funds held based on the current unit price and once the transaction has completed through AT it will write the necessary UTRN's and await the running of the batch job NEWUNITD. Once the NEWUNITD has been completed the UTRN's will be satisfied and you are in the position to disburse the proceeds to the client. The on-line transaction and the completion of the batch job NEWUNITD with create all the accounting entries as defined in T5645. After the process has been completed the contract and/or the component will indicate a status of Matured.

To Expire components or contracts the same sub menu is accessed and instead of option A use option B. Once completed and committed through the AT will amend the status to Expired.

For both Traditional and Unit Linked Maturity transactions you have the ability to make adjustments to the value either a positive or negative amount. The system would normally expect a reason code to be captured in this event and this code must be held in table T5500.

All Maturity and Expiry transactions will produce letter records, LETC, MATCLAIM, TRDMATY and UNLMATY the latter two will produce a zero value as they are solely for Expiry of Traditional and Unit Linked Term type business respectively.

Maturity and Expiry reversal transactions are available through the Contract Servicing sub menu under Reversals (Windback). However, it is important to note that if the contract requiring re-instatement has components maturing over a period of time then each matured component will require individual reversal in the reverse order of Maturity.

4.14   Vesting

Vesting occurs on a deferred annuity contract at the date specified for the annuity to become payable. Early or late vesting may be available depending

on the rules defined for the contract. The vesting transaction causes regular payments to be created which will continue for the rest of the annuitant's life. A cash option may be available whereby some, or all, of the annuity amount can be commuted into a cash lump sum.

The Vesting transaction within LIFE/Asia forms part of the Surrender & Claims subsystem. The following Vesting functions are provided:

Pending Vesting

This function is performed by a batch schedule, PENDVEST. This produces a report of deferred annuity components due to vest and provides information to generate a standard letter, assuming the required entry is held in Automatic Letter table T6634, advising the contract owner the forthcoming event.

A date and contract range can be entered on the parameter prompt screen for the PENDVEST schedule so that Life Office's have the flexibility to control workflow. The schedule selects components with a risk cessation date that falls between the dates entered on the parameter prompt screen. Checking that the components exist on Annuity Details table T6625 identifies annuity components.

A Vesting Letter record is written for each contract that has one or more components due to vest between the dates specified. Note, that until the status of the component is changed, for example at Vesting Registration, Vesting Letters will continue to be written and the component will continue to appear on the Pending Vesting report.

The value of the components at vesting is calculated based on the sum assured, plus any bonuses if the component is with profits.

Vesting Registration

Vesting of a deferred annuity contract will usually occur when a component reaches its risk cessation date. This is an on-line function and if a contract number is entered the contract/component status is checked against T5679. At least one component within that contract must have a maturity method entered into table T5687, Coverage and Rider Details, and must be an annuity component set up in Annuity Details Table T6625.

The rules that apply to early or late vesting of annuity components are also held on T6625. The effective date of vesting cannot be earlier than the risk cessation date less the number of lead years entered in T6625 and cannot be later than the risk cessation date plus the number of years entered on T6625. It is possible to commute a proportion of the payable annuity to a lump sum payment, with a proportionately reduced annuity payable. The percentage of the total payable annuity that is allowed to be taken as a lump sum is validated against the values in T6625.

The annuity payable can be modified to an actuarial equivalent value payable within different parameters. For example, an annuity of $1000 per annum payable yearly in arrears for life may be modified at vesting to an annuity of $900 per annum payable monthly in advance for a guaranteed period of five

years and life thereafter. The annuity payable can be dissected to allow, for example, tax to be deducted from the gross amount, with a net payment to the annuitant and accounts accumulating the deductibles for payment to the taxation authorities.

If annuity details are altered a new annuity record is created. New Contract, Payer and Coverage records are created and the old records are set to a valid flag 2. The premium status on these new records is changed to Vesting Registered.   Temporary Regular Payment Records are set up for each payment's dissection with a single frequency payment record for any lump sum payment taken. On a with profit deferred annuity, the Reversionary bonus will be zeroised.

Statistical records are produced.

<u>Vesting Approval</u>

Vesting Approval is used after the Vesting Registration to amend the contract and component premium status to an annuity in payment status and to authorise the regular payments. Information from the Vesting Detail and the temporary Regular Payment records created during the registration process is displayed for enquiry only.

The Contract, Payer and coverage record status are changed to indicate that the contract is now an In Force Paying Annuity. Vesting detail records associated with the transaction number are deleted.

A Regular Payment record with the status of approved or pending approval is created for every temporary record created at the vesting registration. This status setting depends on whether the generic subroutine, which approves the Regular Payment, is entered in the Coverage/Rider Switching table, T5671, for a given product for this transaction.

Once the Regular Payment has been approved then the batch schedule relating to Regular Payments, REGPAY will generate the payment and cheque or Direct Credit records.

4.15   Death Claims

The base system provides for six types of Death Claim Calculation Methods for determining the actual death benefits payable. These methods can provide for payment of the Sum Assured (DC01), the current value of Unit Holdings, if any, (DC02) and the greater of the Sum Assured or the Unit Holdings (DC03). For Annuity Contracts, Payment of Claim on Annuity in Payment (DC04 & DC06) and Death Benefits for Deferred Annuity not Vested (DC05).

For Traditional contracts the system will also pay Reversionary Bonus accrued to the effective date of the claim and in addition to this the system, where defined, will calculate and pay Interim, Terminal and Extra Bonuses. Any outstanding contract loan or APL will be deducted from the claim value leaving a net amount to be disbursed to the beneficiaries.

<u>Registration</u>

For the registration of the death claim the transaction effective date must be entered into the screen and appropriate validation checks will be made. The effective date must be greater than the risk commencement date and the effective date must not be a future date. If a contract is not eligible for benefits on death then the system will reject the request. Where a contract has a mixture of components with and without a death benefit value then the transaction will be allowed but the ineligible components will be omitted from the calculations.

A death claim affects all the components for a contract that is each coverage and rider attached for a single life or joint life. In order to process a death claim on a joint life contract the life concerned must be selected and registered. A list of lives will be displayed for selection however, if the contract is a single life then this selection will be bypassed. When the transaction is committed and completes through the AT then the date of death will be registered in the client's record.

Contract details and coverage and rider information such as Sum Assured, Bonuses if applicable, or the value of the units held are displayed. These values may be an estimation or actual depending on whether final unit dealings have been calculated or not. The monetary amounts returned for each coverage is calculated in accordance to the calculation method held on the Coverage Rider detail's table T5687. This table and death claim method is used to access table T6598 that contains the actual calculation subroutines.

If a contract has any outstanding loans' theses together with outstanding interest to the claim effective date will be deducted from the claim value. Loan debts will always be repaid at the registration stage and if the Life Office wishes to charge interest up to the date of Claim Approval then this will currently have to be achieved through an on-line adjustment prior to the Claim Approval.

Finally the premium status and contract header record is updated to indicate Claim Registration and a PTRN record is written for transaction history.

<u>Adjustments</u>

The registered death claim can be adjusted and the screen used is the same as the registration. Amendment details are compared with the data originally stored and if there are any amendments this is also be stored.

<u>Approval</u>

A registered death claim is not realised for payment until it has been approved. Some time may elapse between registration and approval and therefore interest may be payable on the net claim amount. The system can calculate interest on a simple basis and the parameters are stored in table T6617. All that is required is to enter the number of day's credit is due and the system will calculate and display the amount increasing the value payable. In addition to these on-line amendments the claim header record is updated and the relevant postings are made to the defined sub accounts.

Once the claim has been approved then the claim proceeds can be disbursed via the Payment System.

Reversal

If it is necessary to reverse the registration then the appropriate transaction is located in the Contract Serving sub menu under Reversal (Windback). All contract information written at the time of registration is deleted and the records reversed. All unit transactions' records for the claim that have not been processed are deleted. For those records that have been processed through NEWUNITD the number of units and amounts are reversed. All the sub accounts that were updated for this contract are also reversed.

Please note a Death Claim reversal will only reverse the Registration and not the Death Claim Approval transaction.

4.15.1 Regular Payments

The Regular Payments system is an extension of the claims processing facilities provided by the LIFE/Asia and it is designed to cater for the following types of regular payments.

(1)   Regular Claims, that is a benefit that requires a regular payment, such as Permanent Health Insurance or Waiver of Premium.

(2)   Regular Payments, that is Annuities where benefit payments commence on a defined date.

(3)   Regular Withdrawals, that is a regular Part Surrender of an investment contract that will take place against a unit linked component.

In addition to the above, this claims processing facilities also supports pension payments and regular claim payments for Hospitalisation and Accident benefits which are paid on a reimbursement basis.

In cases where the amount is payable at a regular frequency and to ensure that the payments are not continued to ineligible claimants the system will place them into review at specified intervals or will set the last payment date for fixed term benefits. The Certificate of Existence letter verifies the continued eligibility of an annuitant for payment.

The system will allow the creation of payment details to be recorded against individual components of a contract. These will then be processed on a regular basis by a batch process that will invoke the appropriate processing to actually make the payments, surrender the units where relevant, update the accounts and create media requests as applicable. The system will make payments by cheque, direct credit or purely internally when they are being used to fund the source contract itself as, Waiver of Premium benefit, or to pay premiums on another contract.

The system will support multiple payment details for a given component. For benefit components against which a claim may be registered the system will

support multiple claims that may be consecutive or concurrent as long as the maximum values of all claims in force and in payment at any one time do not exceed the Benefit Value for that component. Time limits may be imposed upon claims so that they may be created to run for a given period of time or indefinitely. In the case of the limited period the system will automatically terminate claims when it reaches the specified date.

There is an Indexation facility built into the payment processing and again this has been implemented in a modular fashion so that new Indexation methods may be adopted with no coding changes to the existing software. For annuities there is a provision for dissections specifically for tax purposes. Similarly, when a deferred annuity vests, the Regular Payments subsystem is used to pay a lump sum when all or part of the annuity is commuted to a lump sum, as well as regular payments, net or gross of tax as required.

Payments may be made in any valid nominated currency defined in the system. In the case of a regular benefit claim the amount of the claim will always be held in the contract currency whereas the actual payment processing will make the conversion into the payment currency as each individual payment is processed. A running total will be held for information but only in the contract currency.

For Unit Linked Regular Withdrawals the client may nominate the amount, fixed or percentage of units and the currency. The system will surrender the appropriate number of units to meet the withdrawal. Therefore, the client will receive differing amounts due to the currency conversion fluctuations and where the client has selected a percentage of units to be withdrawn then again the value received with fluctuate due to the unit price fluctuations.

As far as possible the rules that the system employs to ensure that only valid data is recorded in the payment file are held on user defined tables thus enabling the end user to maintain a considerable level of control over the structure and running of the Regular Payments system.

5. Product Definition

5.1 Introduction

A product consists of a contract and one or more components within the contract structure. A component is a Coverage or Rider. Coverage is a benefit in its own right within the contract structure, for example, an Endowment or a Term Assurance. However, a Rider cannot stand-alone; it must be attached to Coverage, or alternatively given a Coverage status, for example a Waiver of Premium attached to Pension Coverage.

The contract header holds information common to all types of contracts, for example, the contract owner, the servicing agent and premium payment details. Assignees, Follow Up and accounting movements are at the contract level although the latter can be at the coverage level if so desired.

Each contract has at least one and up to ninety-nine single and joint lives attached. At the life assured level, information such as contract number, company and risk related attribute of the life assured is held. The contract number held on the LIFE file points to the client file that contains information such as name and address details. A client may have several roles defined, for example, life assured, payer, beneficiary, etc. and in addition to this the mandate and bank account details are held at the client level.

Components are classified as Coverage's and Riders and at Coverage and Rider level, information is held on special terms, reassurance, commission, bonuses, and investment and accounting movements.

Within the LIFE/Asia system all products fall into three categories:
- Unit Linked
- Traditional
- Regular Benefit (payments to clients by regular instalments)

LIFE/Asia version 7.3 was enhanced to cater for the maximum age and term of a component up to age 110. All premium rates and mortality charges tables similarly support the capturing of the rates up to this age.

5.2 Tables

The LIFE/Asia system makes extensive use of codes and information held on tables to define the rules and processes required for each type of product. A table may hold valid codes with additional information, or may have an extra data screen containing further information for each of the code entries.

Some extra data screen tables are dated tables, that is, a "from" and a "to" date can be entered and the information contained on that particular table is valid for that date range. Dated tables cater for alterations to contract rules that

apply to specific date range such as legally imposed changes or changes to premium or commission rates.

Some common functions require processing that is specific to a particular component type. In such circumstances, tables are used to point to processing subroutines, for example, surrender and claim processing. These subroutines in turn may also reference other tables during processing. The subroutines delivered with the base system are method based and can be customised and created according to the product's requirements, for example claim calculation methods, premium calculation methods or rounding routines, etc. Since programs access tables to obtain the required subroutines, there is no need for hard coding of these subroutines and subsequent compilation of programs. This approach provides flexibility, since table entries and subroutines can be tailored to individual requirements.

Each code item on a table has a constant format and this format is referred to throughout the system and all documentation contained in the set of LIFE/Asia manuals as the Key. In some tables, the item key may consist of asterisks where the key, or part of that key, applies to all cases.

Some table fields exist because an area of processing has been recognised, but little or no functionality has been added to the base system. This is due to the fact that there are so many differing insurance processes and practices that CSC provide the minimum and expect clients to customise these areas. In this regard the CSC system manual's terminology is that these fields are "Hooks" for customisation.

Certain table number ranges within the base system are reserved for specific areas of the system and these are as follows[1]:
- SMART   T0001 to T1799
- FSU/Asia   T2000 to T3799
- LIFE/Asia   T5000 to T5799 and T6000 to T6799

So that the above ranges can be preserved it is a CSC system standard that any tables developed on a client site use a numbering range outside the above. This will ensure that there will not be a duplication of table numbers when a new release of software is delivered from CSC.

The LIFE/Asia system provides full on-line HELP facility giving a description of each field on a table. In addition, in many cases, a window facility is available for fields that require code items that exist on other tables.

Product definition will vary between Life Office's so it is important that CSC clients grasp the concept of Product Definition and the table relationships as quickly as possible so as to assist the smooth process of the preparation stage of an implementation. Attendance of the Product Definition Training Course is strongly recommended to provide the user with the necessary background information and experience to define a product within the system.

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[1] refer to System Structure Diagramfor full range of numbers

5.3   Product Definition Guide

There is a dedicated manual for Product Definition and individuals should be familiar with this documentation prior to attempting to define products within LIFE/Asia.

5.4   Product Rules Cross Validation

LIFE/Asia version 7.2 was enhanced to support a comprehensive set of product validations which are parameterized through various tables and subroutines. Product validations are focused on the New Business (NB) and Policy Servicing (POS) modules. The following validations are currently supported:-

5.4.1   TR50X – Contract Rule Validation

Defines the validation subroutines that cross check for the Contract Type. Item key to the table is the Contract Type in table T5688 and allows up to 15 validation subroutines setting for each table item.

5.4.2   TR50Y – Contract vs. Component Rule Validation

Defines the validation subroutines that cross check for the Contract Type and its Components. Item key to the table is the Contract Type + Component Code where the Contract Type is in table T5688 and the Component Code in table T5687. This allows up to 15 validation subroutines setting for each table item.

5.4.3   TR50Z – Product Rules Validation (Component & Component)

Defines the validation subroutines that cross check the Rider Component against the Basic Component. Item key to the table is the Rider Component Code + Basic Component Code where both the Rider and Basic Component Codes are the Component Codes in table T5687. This allows up to 15 validation subroutines setting for each table item.

5.4.4   TR51A – Rider SA Cannot > Basic SA Validation

Defines the limits where the total of the riders' sum assured cannot exceed 'X' times of the basic sum assured and subjected to a maximum limit. The limits can vary by age band. Item key to the table is the Contract Type + Basic Component Code.

5.4.5   TR51B – Component SA must be < Other Component's SA

Defines the rules where a Component's sum assured cannot exceed another Component's sum assured and subjected to a maximum limit. Item key to the table is the Component Code + Component Code.

5.4.6 TR51C – Sum Assured Must Be In Multiples Of 'X' Amount

Defines the rules where a Component's sum assured must be in multiples of 'X' amount. Item key to the table is the Contract Type + Component Code. To allow Catch All (***) for the Contract Type.

5.4.7 TR51D – Product Valid Sales Channel

Defines the valid Source of Business for the product i.e. the channel through which the business can be solicited. Item key to the table is the Contract Type + Component Code. Allows up to 50 Agent Channel setting for each table item.

5.4.8 TR51E – SA of Rider & Basic <= % Income

Defines the rules where the total of the Basic sum assured and Riders' sum assured is dependent on the amount of the client's annual income. The limits can vary by age band. Item key to the table is the Contract Type + Basic Component Code. This validation is referring to the component sum assured and can be either basic or riders or both and not necessarily basic only.

5.4.9 TR51F – Aggregate SA Per Product

Defines the rules where the aggregate of the Basic and Rider sum assureds are subjected to a maximum limit. Item key to the table is the Contract Type.

5.4.10 TR51G – SA Limit Based on Age Band

Defines the maximum sum assured allowed by age band for the Basic Component. For example, where a different sum assured limit is applicable for a juvenile and an adult life. Item key to the table is the Contract Type + Basic Component Code.

5.4.11 TR51H – Component Interdependence

Defines the rules where certain Components are mandatory i.e. Component must coexist whilst certain Components cannot be attached. Item key to the table is the Contract Type + Component Code.

5.4.12 TR51I – Term Limit Interdependence

Defines the rules where a Component's risk/premium's term can't exceed another Component's risk/premium's term. Item key to the table is Component Code + Component Code.

5.5 Products Supported

The base system supports the Traditional and Unit Linked Products and subsequent now LIFE/Asia V2.0 has introduced Interest Bearing Generic type contracts.

An Interest Bearing contract is basically a savings plan to which insurance benefits can be attached. Premiums are paid to an investment pot to which

interest is added periodically. The costs of any insurance benefit deducted from the investment pot. There may be many lives associated with a contract; all with insurance benefits paid for by deduction from one investment pot. Additional lives may be added or removed throughout the term of the contract. An interest-bearing contract usually has flexible premiums and the basic product is often referred to as Universal Life.

LIFE/Asia release 4.4 introduced support for a new Hospitalisation Cash Plan. This product is an additional rider where the Assured can choose to have additional hospitalisation cover for himself or himself plus his spouse or himself plus his spouse and children (Family). The premium will be based on the main life assured. The maximum death benefit (ie. Sum Assured) is the benefit amount of the 'Daily Room & Board" multiplied by the Timing Factor as defined in the Hospital Benefit Plan Table, TR687.

In LIFE/Asia version 7.1 the Hospital and Surgical Claims was enhanced to check for the maximum benefits allowed on a per claim incurred basis. Functionality has also been added to check for Annual Limits, Lifetime Limits, Coinsurance and Deductibles at the benefit as well as plan level. Overwriting of the claim amount is only allowed at the benefit level subject to the overwritten amount being less than or equal to the maximum benefit amount as defined in the system. For Annual Limits checking, the component year will be based on the Hospitalisation component's risk commencement date and the claim incurred date.

LIFE/Asia also supports Accident benefits. Like the Hospitalisation Plan, this product is an additional rider where the Assured can choose to have additional accidental cover for himself. Accident claims are paid on the basis of reimbursement. In LIFE/Asia version 7.1 the Accident Claims was enhanced where a screen was provided to allow user to input the claim benefit details. Overwriting of the claim amount is only carried on each benefit level, subject to the overwriting amount being less than or equal to the maximum benefit amount defined in the system. However, overwriting of the amount is not allowed at the plan level.

LIFE/Asia release 4.4 also added functionality to allow the age at entry to be 0 years (using Age Nearest Birth basis).

5.6   Mortgage Reducing Term Assurance

The Mortgage Reducing Term Assurance or MRTA products in LIFE/Asia Version 4.0 have been designed as Single Premium products with the added facility to allow payment of the premium by instalments.

The premium for Mortgage Reducing Term Assurance or MRTA products is based on the:
- Age next birthday
- Term of policy
- Interim (construction period of buildings covered by loan)
- Frequency of repayment of loan interest
- Loan interest rate and whether self-financed or included in the loan.

The contract can be issued upon receipt of the first instalment. The remaining instalments are held in an Outstanding Instalment sub-account (say, LP OI in the example below) by managing receipting as follows:

Receipt Amount   300.00
Dissected into:
        LP S   00001380   2300
        LP OI 00001380   2000-
Instalment payments are limited to six instalments or less, with no interest element. Instalment amounts may be variable.

If instalment payments are overdue, the system will not automatically lapse the contract. A report is provided to track and manage the outstanding instalment premiums. If warranted, the user may then decide to surrender the policy. The base system does not provide surrender values on MRTA products.

Most of the reducing sums assured for MRTA contracts follows a formula but some lender figures cannot be reconstructed. Therefore, the Sum Assured amount for each anniversary is calculated and stored at New Business as a schedule. The setting in rest indicators table (TH615) determines whether premium and benefit schedule entry is manual for the rest indicator specified in the reducing term details. The Sum Assured amount for the component will be available via a window from Contract Enquiry. Where the benefit schedule is not manual, the system applies the following formula to derive the reducing sums assured benefit schedule:

In RLMRTRD the Sum Assured at each policy year n is:
$$SA_0 * ((T - n + c + 1) / T)$$
        where T is the Risk Term of the policy
               c is the number of coverage's on the policy
               SA_0 is the original Sum Assured

In RPRMRDT the Sum Assured at each policy year n is:
$$SA_0 * ((T - n + 1) / T)$$
        where T is the Risk Term of the policy
               SA_0 is the original Sum Assured

Rerating will pick up the sum assured from the schedule according to the anniversary year and change the component's sum assured. Rerating is invoked by the renewals batch job.

Claims and surrender processing will be as per the component set-up and will use the component's sum assured.

Component Add/ Modify processing is not allowed on MRTA type of products. To disable component Add/Modify function the T5671 items related to component Add/Modify should be omitted.

MRTA will be supported only for a term type of component. Using the above MRTA concept we can set-up-reducing sum assured type of components.

5.7 Interest Bearing Funds

The processing definition of Interest Bearing Generic is as follows:

- An Interest Bearing Generic contract is basically a savings plan to which Insurance Benefits can be attached.
- A pot of money is built up by the application of premiums, which may be Regular or Single.
- Interest Bearing Generic contracts normally operates with flexible Premiums, allowing the policyholder to pay what they want when they want.
- The pot of money has its value enhanced by the periodic application of interest.
- The cost of any insurance Benefit and policy administration charge may be deducted from the pot.
- Should the value of the pot become exhausted and after a grace period, the contract lapses.
- The investment can be divided and invested into interest bearing funds and unit linked funds.
- Investment vehicle (interest bearing funds and unit-linked funds) is defined at coverage level.
- Progress of the account needs to be reported periodically to the policyholder with appropriate statement production.

LIFE/Asia V5.0 introduced a new interest calculation method for interest bearing funds. The interest is calculated on a daily basis and the interest rate entered should be annual rates.

A new interest rate maintenance facility has also been included for this calculation. This new interest maintenance has a facility to capturing the new rate and the old rate. The new rate for the period is picked up if the calculation is done when the period is current otherwise the old rate is picked up.

This is the same vein as US mutual fund calculations but the money is kept in one bucket and there will be no differential treatment when the money was deposited.

New Business and Product Set Up
The interest-bearing fund will need to be captured and attached at coverage level. The definition of the interest bearing funds is the same as the unit linked funds except that they are not unitised. The fund split can be a combination of interest bearing funds and unit linked funds. Premium fee (a percentage of premiums) are levied in the same way as for unit linked funds.

Interest Rates Declaration
New on-line facility will be required to enter, modify, enquire and activate interest rates for interest bearing funds. These interest rates will be dated and there will be only one rate per fund per day. Each rate is expressed in annual rate and may be defined and stored with up to 5 decimal places.

Benefit Billing
Insurance Charge calculation is based on Sum Assured or Sum At Risk.

Debt Processing
Both unit-linked fund balances and interest bearing fund balances should be considered for deduction of insurance charge and administration fees. The debt should be proportionally deducted from all funds.

Component Change
Allow changes to either premium or sum assured.

Partial Surrender
Be able to withdraw a portion of the fund balances.

Premium Re-direction
Policyholder has the option to re-direct premium to a different set of investment funds. The changes are effective from the next premium collection date and would not affect the existing holdings.

Fund Switching
Allow switching of the following combinations:
- interest bearing funds to interest bearing funds
- interest bearing funds to unit linked funds
- interest bearing funds to interest bearing funds and unit linked funds
- interest bearing funds and unit linked funds to unit linked funds
- interest bearing funds and unit linked funds to interest bearing funds and unit linked funds
- interest bearing funds and unit linked funds to interest bearing funds
- unit linked funds to interest bearing funds
- unit linked funds to unit linked funds
- unit linked funds to interest bearing funds and unit linked funds

Switch can be by unit, amount or percentage.

Batch Programs

BH508 - Interest Bearing Transaction Splitter
This is a splitter program and it is responsible for extracting all unprocessed HITR's. The extracted records are held in the HITXPF members created in the prior program. It has three functions that will invoke separate SQL select statements. The functions are defined in the system param 01 within the schedule process, as follows: **DEAL:** This function will extract all undealt HITR's of any type. **DEBT:** This function will extract only unprocessed HITR's which have been created by the new Coverage Debt Settlement (B5104) program. **SWCH:** This function will pick up undealt HITR's which have been created as part of a fund switch. Typically this program will be called three times at various stages of the NEWUNITD schedule.

BH509 - Interest Bearing Fund Dealing
This program is responsible for reading and processing all the unprocessed HITR's from the extract files created by the splitter program BH508. The main processing functions are to perform accounting for the fund movements, update the HITS balance for the appropriate Fund/Coverage and update the feedback indicator on the HITR to indicate that it has been processed. Control totals are updated for various processing taken.

B5104 -Coverage Debt Recovery

This process program follows the Coverage Debt Splitter program B5103. The splitter program will have extracted from COVRPF all coverages with a non-zero coverage debt. Each coverage key will have been written to the COVU temporary file. This program will read the COVU file and process each coverage present. Previously, the debt recovers from only Unit Linked funds. This has now been modified to cater for recovery from Interest Bearing funds as well.

BR512 - Partial Withdrawals Batch Process

This program will adjust the sum assured of a component that has been through a partial surrender, based on the new value of units on the UTRS record. It must be amended to also include the fund values of any interest bearing funds attached to the component in the recalculation of the sum assured, by reading the HITS record.

BH511 - Interest Bearing Fund Interest Calculation Splitter

This is a Transaction Splitter Program and it is responsible for extracting all HITDPF records due for interest allocation. Before the Splitter process is invoked the, the program CRTTMPF. Should be run. The CRTTMPF (Create Temporary File) will create a duplicate of the HIDXPF physical file (created under SMART and defined as a Query file), which will have as many members as are defined in, that processes subsequent threads field. The temporary file will have the name XXXXDD9999 where XXXX is the first four characters of the file which was duplicated (in this case 'HIDX'), DD is the first two characters of the 4th system parameter (in this case 'IN') and 9999 is the schedule run number. Each member added to the temporary file would be called THREAD999 where 999 are the number of the thread. This program will read records from HITDPF and for each record it selects it will write a record to the temporary file member. Exactly which temporary file member is written is decided by a working storage count. The objective of the count is spread the transaction records evenly across the thread members.

BH512 - Interest Bearing Fund Interest Calculation Batch

This program will read HIDX records, HIDX's being HITD records on which interest is due, created by the Interest Bearing Fund Interest Calculation Splitter program, BH511. For each HIDX record read, the following processing will be performed: Read through all HITR's which may belong to the previous allocation period (due to reversals) and calculate the interest due; add the fund amounts and interest calculated to the existing fund balance. Calculate the interest on the existing fund balance. Read through all HITR records created and completed by unit deal since the last interest allocation date, and calculate the interest due on their fund amounts. Calculate the new fund balance by adding in the interest calculated above and the fund amounts of all the HITR's read.

Tables：

T5515 - Unit Linked Fund - Create

The main difference between the way Interest Bearing and Unit Linked accounts is defined in the fund definition. Existing Unit Lined Funds are defined using T5515. This table has been modified in order to incorporate the

definition of Interest Bearing Funds. The heading will change from 'Unit Linked Fund - Create' to 'Non-Traditional Fund Definition'. A new field, Fund Type, will be added to the XDS and need only be set for Interest Bearing Funds. Although no validation is required in the table program, it is expected that the new field will accept the following values:

'D' - Interest Bearing (deposit) Fund
'U' - Unit Linked Fund
' ' - Unit Linked Fund

Should the value be set to 'D', the only other relevant entry on the screen is the Fund currency. All remaining fields relate solely to Unit Linked funds. All tables and screens which refer specifically to Unit Linked details where the screen is now 'dual purpose' will be changed to replace 'Unit Linked' with 'Non-Traditional' where appropriate Tables that are currently identified to fall into this category are: T5536, T5521, T5537, T5520, T6647, T5545, T5540, T5551.

T5543 - Available Funds Table
This table holds a series of Available Funds Lists. Any newly created Interest Bearing funds will need to be added to one of these available lists, so that they can be selected at component set-up stage.

T1688 - Transaction Codes Table
An ITEM of BA73 has been set up to denote Interest Bearing Interest Calculation.

T6647 - Non-Traditional Contract Details Table
This table holds a series of rules that apply to non-traditional contracts. The key to the Table is Transaction Code and Contract type. An ITEM on this Table must be set up for a concatenation of BA73 (the transaction for Interest Bearing Calculation, and the relevant Contract Type)

T6661 - Reversals Parameters Table
Information in this table information is used by reversal transactions. An ITEM on this table needs to be set up to specify the name of the Subroutine used to reverse the interest calculation done as part of Interest Bearing Processing.

T5671 - Coverage/Rider switching Table
This table is used by reversals, among other parts of the system, to specify subroutines used by the particular combination of Transaction Code and Component type as specified in the Table ITEM. It is necessary to add the Subroutine ZGREVINC to the series of Reversal Subroutines already specified if there are any. This will allow the generic reversal of any interest calculations done.

As well as Transaction Code T642, similar Item's should be set up on this Table for the following transactions: BA73XXXX, B634XXXX, T510XXXX, T512XXXX, T514XXXX, T525XXXX, T539XXXX, T542XXXX, T555XXXX, T557XXXX, T575XXXX, T668XXXX and T676XXXX, where XXXX denotes the appropriate component code which will use Interest Bearing finds.

<u>T3695 - Sub Account Types Table</u>
This table holds all possible types of Sub Account Types used by the system. An ITEM of FI, denoting Interest Bearing Fund Interest has been added to this Table.

<u>TH507 - Int. Bearing Funds - Int. Rate</u>
A new dated table exists. It is expected that either the Annual Interest Rate or the Daily Interest Rate will be entered but not both.

<u>TH510 - Interest Bearing Interest Definition</u>
A new Table has been created to hold the interest calculation details for Interest Bearing funds. This table is referred to during creation/update of HITDPF file and at interest application.

5.8 Group Master Policy

This enhancement, introduced by LIFE/Asia V4.0, allows policies that are under group billing to be identified with the master policy of which they are attached to. It maintains the master policy number information together with the group details at the time of new business and contract servicing.

6.   New Business

6.1   Introduction

The purpose of new business processing is to set up a correct record of each application received, to monitor it through the required steps and complete the contract producing all the appropriate documentation.

The input required is the entry of the data for a new application and it normally specifies the product chosen/sold, the amount(s) of premium and sum assured. It defines all the people known to be connected with the contract such as the Life Assured, Payer, Contract Owner, Trustees, Assignees, etc. All this information is edited by the system ensuring that it complies with the contract definition rules set in the various tables and can calculate premiums for the given volume of life cover.

Commission is calculated and Statistics are produced to allow for production of reports of sales by agents, whether company agents or brokers.

When an application is entered into the system it is available for subsequent amendment and addition. Each time such an amendment is entered the edit checks are repeated. These amendments may be due to client request or may be imposed by the Company's Underwriting procedures such as mortality, occupation or pursuit loadings.

The Life Office may reassure part or all of the risk with another company and if this is the case then the details are retained so that future processing of premium payments and claims can be maintained.

New business also requires the entry of premium payment mode either cash, standing order or directs debits. The details of what is required vary between Life Office's and therefore, the system is sufficiently flexible so that the edit rules can be set up accordingly.

There is a facility to log progress on processing an application and to report outstanding requirements. These requirements and their receipt may be logged and reported according to the rules that the Life Office defines. If required, further processing can be inhibited if the outstanding requirements are mandatory.

There is also a facility introduced in LIFE/Asia version 7.1 to capture any comments which the user wishes to have tagged to the contract. This is a free format Policy Notes function. The notes are captured at the contract level and once created, no further editing, overriding or deleting of the notes is allowed. Furthermore, the policy notes can be classified into different categories and can be enquired from various modules such as from New Business, Surrender and Claims, Contract Servicing and Contract Enquiry.

There are two ways to complete the processing of an application, one by issuing the contract and bring the policy into force or by not proceeding with the application and any money received is refunded. An application not proceeded with is retained for statistical reporting and remains within the client details but no further processing occurs.

A policy can be cancelled from inception to void a contract that has been in set in force or if the client takes up his statutory right to cancel the policy during the allowed "Cooling Off" or "Free Look Period". All accounting entries and premiums are reversed automatically so that the premium(s) can be disbursed to the payer. In the situation where a clerical error has allowed a contract to be issued with incorrect details there is a facility to reverse the contract back to proposal and amend the error, subsequently re-issuing the correct contract details.

When the contract issue transaction is performed the record is again validated to ensure that it is complete and conforms to the product definition and if this is not so then the contract issue is inhibited. When the contract is issued on-line the system submits the job to the AT queue and once it has completed all the necessary processing then the contract is in force. The subsequent collection of premiums and commission payments will be subject to the rules and processing relevant to that type of contract.

The contract issue transaction should also initiate the printing of the schedules and accompanying documentation as defined by the Life Office.

Throughout the whole process of creating proposal and amendment there is full windowing facility to view and create clients and view tables for code checking. In addition to this full HELP information, either on individual fields or general areas is available.

6.2   New Contract Proposal

This subsystem provides the facilities to enter and maintain New Business Proposals. A life contract, and thus a new business proposal, is structured as follows:

6.2.1   Proposal Structure

A plan may consist of many separate and optional coverages and riders but only one plan header is written. Information maintained at this level includes:

- Owner, payer, addresses for communication, etc.
- Follow Ups of documentation required before the contract can be issued
- Commission split between agents
- Cash required prior to issue
- Future instalment billing control

Each contract may have one or many lives assured up to a maximum of ninety-nine. Each life may have a joint life associated to it.

Each life (with a joint life) assured might have one or many coverage's attached to it. For joint lives, the rider may attach to one or both lives. Some, none or all of these coverage's and riders may be mandatory.

For these multi-policy plans, variations may only exist at the component level, coverage and riders. Therefore, all components of the plan are billed and paid together at the header level.

Within the subsystem table T5688 is used to control contract header level information. This includes the validation of lives assured. Table T5673 is used to control the coverage and riders allowed on a contract and it is possible to denote on this table any mandatory components. The processing required for table T5671 control each component. This defines which generic components' programs are called to process the required coverage and riders.

Automatic number allocation is used to control the issuing of a new proposal number. As the LIFE/Asia system does not have a separate numbering system between the proposal and contract therefore, the number given is ultimately the contract number. Separate ranges of contract numbers must be set up for each branch within table T3642, if required.

Beneficiary and Trustee details may also be written and maintained at the contract header level. Beside the current beneficiary type whereby, the nominated beneficiaries are entitled to the death benefit (Death Beneficiary), Release v7.6; have added other types of beneficiary and functionalities. The new table TR52Y provides:
- Facility to capture other beneficiary types such as Living Beneficiary, Maturity Value Beneficiary, Indemnity/Index Increase Beneficiary and Annuity Death Beneficiary.
- Flexibility, for each beneficiary type, to have more than one beneficiary nominated.
- Facility to validate whether the relationships between the beneficiary nominated and the Life Assured and/or the Contract Owner, is defined as allowable for the particular beneficiary type.

Another new table TR52Z provides:
- Facility to define the beneficiary types allowable for a particular product.
- Validation to ensure that the total share percentage for each beneficiary type must be 100%.
- Indication as to whether the nominated beneficiary is revocable or irrevocable.
- Flexibility for a client to be nominated as a beneficiary of the different beneficiary type in a contract.

If no specific beneficiaries are created then the owner is assumed to be the beneficiary. These records are used in the claim systems in the event of a claim. The system will default the contract original commencement date to the Beneficiary Effective Date during registration of beneficiary at proposal stage.

Each contract must have a servicing agent or agency defined. This service agent may or not be the commission-receiving agent however; unless further agents are specified the system assumes that the servicing agent is also the

commission receiving agent or agency. It is possible to split the commission generated by the contract between two or more agents specifying the agreed commission split.

Each contract must have at least one life assured. The contract definition table T5688 controls the maximum number of lives, and whether a joint life is allowed. During proposal maintenance additional lives may be added to the proposal or incorrect lives may be deleted if required. Whenever a life is added, the contract structure table T5673 is used to prompt the user to select and complete the coverage and riders for that life.

Coverage and rider transactions are written at the proposal stage after the user has completed the proposal transaction. These coverage and rider transactions create temporary coverage records, COVT's. When the contract is issued these COVT's are changed to COVR's, coverage records. Table T5687 controls standard processing for all components.

6.2.2   Follow Up

At contract level, one or many Follow Up records may be written and maintained. Defaults can be automatically created for specific contract types. The setting up of default Follow Up codes are controlled by table T5677, which gives a list of the Follow Ups required keyed by transaction number and contract type code. For example T600 is the transaction code for proposal, END is the code for Endowment therefore the key is T600END. T5661 is used in conjunction with the previous table to set the follow up status by type of Follow Up. The item key on this table is a three-letter code such as AGE for the requirement of Age Admission, MED for Medical Evidence, etc. The extra data screen for those tables holds the default information such as initial status. In addition this extra data screen holds the rules relating to the allowed complete status, F for finalised, W for waived.

Additional information or details required for each follow code can be captured in the Follow-Up Extended Text screen SR50V and printed onto the Follow-Up Letter. Defaulted extended text for each follow-up code can be user defined in the Follow-Up Codes table T5661 and the user has the option to create, update or overwrite the entire text when creating the follow-up. The contract issue subsystem checks that all Follow Up records written are in a satisfactory state before allowing the contract to be put in force.

During proposal maintenance, coverages and riders may be added and or deleted subject to the rules contained in table T5673. Generic programs complete the addition of a component but the deletion of component transactions is performed by the new business subsystem. During the deletion of a component the system will call the required component proposal deletion subroutine, if any, as defined in table T5671.

Special terms may be added to any component. The maintenance of additional premiums and or discounts is provided by this subsystem. These special terms and extra premiums are based on the type of extra risk and there are tables, T5651 and T5657 that can hold default values keyed by component type and reason. For example, END1HP - Endowment Coverage and Hazardous Pursuits. The default values can be all or a combination of Age, Percentage

and a Rate per mil. These default values would be based on general rules but can be overwritten on individual components during new business proposal. In addition to these three methods of extra premiums you can indicate if you require the loading to cover just the main component, Reassurance or both and the duration of the loading. For Traditional Products LIFE/Asia allows the gross premium at component level to be separated into basis and loaded premium to enable the Life Office to have the choice whether or not commission is paid on the life extra or loaded portion of the premium. This functionality was introduced by LIFE/Asia V2.0 and is defined in the amended T5687.

6.2.3   Financial Movements

A proposal transaction may generate financial movements. Prior to the system allowing a contract to be put In Force the required premium amount must be available in contract suspense. This subsystem provides an on-line facility to apply cash held in the company suspense account to the contract header.

LIFE/Asia V5.0 provide a facility in apply cash function of proposal creation to search through the company suspense receipts based on the application form number. This application number should be entered in the transaction description during receipting.

The total amount for a given receipt is transferred to the contract suspense according to the accounting rules held in table T5645. However, it is possible to issue contracts without any money held in suspense and the rules for this situation are held in the billing table T6654.   In the situation where the contract has been issued prior to receipt of the premium the system will, in the next billing run, start the billing and collection process depending on the method of payment of the individual contract.

6.2.4   New Business On-line Batching

The entry and modification of proposals are batched using the standard on-line batching system. Batch control totals are updated and a policy transaction written each time a proposal is entered or modified. Soft locking controls the maintenance of a contract. This soft lock procedure means that only one workstation can create or modify a particular proposal at any one time, whereas any number of workstations can enquire on a proposal that is not being created or modified.

Tables assigned to Subsystem

Refer to the notes on Product or Contract Definition

Transaction Codes

M600	-	Life New Business Master Menu
S600	-	New Contract Proposal Submenu
T509	-	Proposal Enquiry
T600	-	New Business Proposal
T6A0		Underwriting Approval
T6A1		Proposal Follow Up Status

6.3   Change Proposal Contract Type

Currently the contract type cannot be changed after the proposal has been created. When the client wants to change his proposal to another contract type before contract issue, underwriter has to withdraw the original proposal and then create another proposal with the new contract number and re-enter all the contract information.

LIFE/Asia V7.4 has developed a new functionality to address these drawback. It allows underwriter to change the contract type of the proposal before contract issue with the original contract number and some contract basic information like contract owner, contract currency, life assured, etc.

- However, the following existing information on the proposal will be removed and must be re-entered: Billing frequency
- Method of payment
- First billing date
- U/W decision date
- Delivery Mode
- Non-forfeiture option
- Follow-ups and Exclusions clause
- Direct debit details
- Group details
- Reducing term
- Joint life assured and multiple life assureds
- Underwriting details and questions
- All component details and related loading

The rest of the screen flow is the same as Proposal creation, and users must enter all the new policy details based on the new contract type. Please note that this new function is using the same transaction code as Modify Proposal (T600) and it does not update any transaction history.

6.4   Fast Track Issue

Fast Track provides a method of inputting high volumes of New Business without going through the proposal data entry screens. With Fast Track, there is no proposal stage; the contract is input and then issued in one transaction. Therefore, it is not possible to save a Fast Track contract as a proposal and equally a contract that cannot be immediately issued should not be entered into the system using the Fast Track option. Fast Track is suitable for 'off the peg' or packaged contracts that have common specifications with a limited number of components. This functionality is able to support both traditional and non-traditional products.

It is important to note that any product you wish to allow through Fast Track must already be able to be issued through the normal new business process. Fast Track creates the same contract structure and life assured data as the normal Proposal and New Business Issue. It is not possible to change the

contract data within the Fast Track subsystem. If changes are required prior to issue, the option is available to switch to proposal maintenance to change any maintainable data fields.

The benefit of Fast Track is the reduced number of data entry screens to be completed by the input clerk. In Fast Track, one data entry screen is used. A large proportion of the data required completing the issue of a Fast Track contract is defaulted from pre-defined table entries.

Therefore, a Fast Track contract issued solely within this system consists of the following:
- One contract header. Information maintained at this level includes:
- Contract owner, addressee for communication, etc.
- Servicing Agent
- Payment details

- One life assured only. The life assured may have one or many components attached, as predetermined by the contract definition

    In addition, a Fast Track contract that has been amended using the Proposal subsystem may include:

- Beneficiaries, assignees, special terms and reassurance details as for a normal new business contract.

    Fast Track allows the input clerk to perform the following functions:

- Create a contract
- Perform pre-issue validation and providing there are no errors, issue the contract
- Maintain Direct Debit details, if required in order to issue the contract
- Apply cash to the contract
- Make adjustments to the contract.

Fast Track Tables (in addition to normal Product Definition)

T5705	-	Fast Track Contract Defaults
T5704	-	Fast Track Contract Structure
T5703	-	Fast Track Component Defaults

Transaction Codes

M600	-	New Business Master Menu
S600	-	Proposal Submenu
T642	-	Contract Issue

6.5   Contract Issue

This subsystem provides the facilities to convert a proposal to an In Force contract. Due to the amount of processing required once the input clerk confirms the input the transaction is completed asynchronously. Prior to allowing a contract to be put in force, the system will check that it is available

to issue. As mentioned earlier regular premium contracts can be issued either before or after the first premium is collected. The contract is made available for issue when it successfully passed the pre-issue validation.

The conversion of the proposal involves changing the risk and premium status as defined on T5679 on the contract header, life and component records. Temporary Component records, COVT's are deleted and COVR's are written. For each component written, optional generic processing may be required. T5671 defines the generic subroutines to be called.

If separate commission receiving agent(s) have not been set up then the system defaults the servicing agent to the commission paying agent by writing a single commission split record with 100% commission to the servicing agent. Initial commission is then calculated, assuming premium is paid on issue, for each commission agent on a component by component basis from the initial commission method held on table T5687. Initial commission will be released according to the payment method also defined on table T5687 or as held against the agent records. Renewal and Service commission is also paid if applicable. If an agent receiving commission reports to another agent, overriding commission is also generated at this stage.

If the contract is issued with a premium paid, the required premium is transferred from contract suspense and split between the premium and contract fee accounts. The contract fee is calculated from the method held in table T5688. The issue program, P5074, in accordance with the items held in table T5645 keyed by the program number generates the actual accounting entries. If no premium is paid then no accounting entries are made under the transaction contract issue. These will subsequently be made when the instalment has been collected and premium paid.

The issue transaction is generic and will look to T5671 to obtain any special processing required for a component. Transaction code, T642, and coverage code key this. For unit linked components, the table should be set with the subroutine UNLISS, Unit Linked Issue, which will create the relevant unit linked contract data. For Traditional term based policies, the extra data screen should include the subroutine TRADISS. The subroutine will create the appropriate traditional fields on the component records and in particular will create the correct values in these fields to permit application of Reversionary Bonuses through the structure. For annuity components, the ANNYISS subroutine is used via T5671. For immediate annuity components, two further subroutines, REGPAPP and REGPAYIS, are used to create the regular payment records.

Throughout the whole process of contract issue the system will automatically validate the input parameters, age of life assured, to ensure that the contract modal premium payable is not less than a pre-defined level or more than a per-defined level. Etc.

Within the Contract Issue Subsystem is the facility to flag a proposal as Declined, Postponed, Not Taken Up or Withdrawn. To do this the status is changed as defined in table T5679. Withdrawn, Not Taken Up or declined proposals can be reinstated to Proposal status if required.

M600	-	New Business Master Menu
S610	-	Contract Issue Submenu
T642	-	Contract Issue
T643	-	Withdraw Proposal
T644	-	Decline Proposal
TA63	-	Postpone Proposal
TR6V	-	Not Taken Up proposal
T645	-	Reverse Decline/Withdrawal

6.6 Cancel and Alter from Inception

This subsystem provides two separate but related facilities to reverse the effects of an In Force contract. The first is to cancel it from inception. If this option is taken, once processed, the situation is final. A contract cancelled by CFI, Cancelled from Inception, may not be revived. The second option is to perform an alteration from inception, AFI. In many respects the two choices are similar, in validation, record reversal and deletion, etc. However, the end results are quite different. A contract that is Altered from Inception is converted to a proposal record, even if it was issued via the Fast Track method. Once the record is again a proposal it may be amended as required using the Proposal Maintenance option. When the input clerk is satisfied that all the correct amendments have been completed then the proposal may be re-issued.

6.6.1 Cancel From Inception

The system operates in the same way as a Full Contract Reversal except that the issue transaction is selected, by the system, as the earliest transaction that must be reversed. Prior to allowing this action to be taken the system checks the CFI limit, held in months within table T5688.

The next stage is that all valid transaction history records are checked to ensure that they may be reversed or bypassed. That is, the pertinent entry in T6661 has a 'Y' or 'N' in the Processed by Full Contract Reversal flag. If this is not the case, the CFI is not permitted and an error message advises that other reversal transactions must be applied first. Due to the amount of processing required, once the clerk confirms the cancellation request, the transaction is completed asynchronously. Here, each transaction is processed or bypassed according to the setting of T6661 until the issue transaction record is reached. At this point T6799 is accessed and the CFI subroutine is called. This subroutine performs the actual issue reversal and this involves changing the Risk and Premium Status on the contract header, life and component records.

All the monetary, (that is Billing and Commission) and statistical entries are reversed. This is achieved by reading all the issue accounting movements, ACMV's and RTRN's, and posting equal and opposite amounts. The agent commission records are amended using the standard commission reversal subroutines obtained from T5644.

For each component attached to the contract, additional processing may be required. T5671 define what generic subroutines must be called to complete the cancellation. A transaction history record, PTRN, is written each time a contract is cancelled.

6.6.2   Alter from Inception

Much of the processing is identical to that for CFI. The real difference occurs with the reversal processing of the issue transaction. The same on-line validation is carried out for AFI as CFI and when it is confirmed by the clerk the transaction moves into the AT for processing.

Once again T6799 is accessed and the AFI Issue Reversal subroutine is accessed. This subroutine performs the actual Issue reversal and recreates proposal records. This involves logically deleting all Contract Header, Life Assured, Options and Extra's and Payer records, except each first one. Each first such record will be revalidated (in the case of Contract Headers this involves revalidating to a value of "3"). Reassurance coverage records are processed in this way also. Agent's Commission records are logically deleted. The effect of all these changes is to restore the records to Proposal status. Reverse Issue statistical records will be written.

All other processing, within the sub routine, is identical to that for Cancel from Inception.

Transaction Codes

M600	-	New Business Master Menu
S631	-	Cancel from Inception Submenu
T607	-	Alter from Inception
T646	-	Cancel from Inception

6.7   Freelook Cancellation

Currently LIFE/Asia provides the Cancel from Inception (CFI) facility to cancel any issued policies. It will basically reverse any transactions that have been done on the policy up to the policy issuance stage as if the policy has not been issued.
However the current functionality has some drawbacks:
- The cancellation can be done at any time since there is no validation of cooling off period for the cancellation.
- System always refunds all the premiums that have been paid
- There is no facility to deduct admin charges for the cancellation

In LIFE/Asia V7.4, a new Freelook Cancellation functionality has been developed to address some drawbacks of the current CFI facility. Basically, the new functionality provides the following features:
- Allow to configure the cooling off period based on one of the following:
  - (1)   Contract Risk Commencement date
  - (2)   Policy Issue date
  - (3)   The latest date of
    - Money receive date (before policy issue)

- U/W approval date
  (4)   Acknowledgement or Deemed Received date
  (5)   Acknowledgement or Deemed Rcvd or Issue date
- Allow to configure the calculation of refund amount based on one of the following:
  (1) Refund full premium
  (2) Refund units with options to be based on
     - Issue date
     - Cancellation date
     - Input date
- Allow to offset the admin charges that can be split between the client and the agent
- Allow to claw back the medical fee that can be split between the client and the agent
- Provide a facility to record the reason of cancellation such as admin error, free look period, dishonoured cheque and change of benefits etc.

A new Freelook Cancellation Rule table (TR52M) has been created to define all the Freelook Cancellation rules. The item keys to this table are transaction code plus contract type so that different contract type can have different rule. The transaction code can be used for future development such as applying the cancellation rule for proposal withdrawal, etc.

The existing Cancel/Alter From Inception submenu has been modified to cater for a new option D for Freelook Cancellation. For this new option, the system will validate the cooling off rules against the Freelook Cooling Off period defined in TH605.

A new transaction screen has been created for this Freelook Cancellation. The system will default the Refund Basis based on the Freelook Cancellation rules defined in TR52M. For Refund Unit case, the program will validate whether the policy has gone through Unit Dealing or not. If not yet then a warning message will be displayed and the refund basis will be automatically set to Refund Premium. For refund premium case, system will basically reverse all transactions up to policy issuance. Hence, all premiums paid will be posted back into the premium suspense account.

Another new transaction screen has also been created for the Freelook Refund Details. The system will display the admin charges and medical fee payments (if any). These expenses will be automatically split between agent and client by the system based on the setting in TR52M and can be overwritten by the users if required. Users can also make Other Adjustment to adjust the agent deduction amount or client refund amount if required. Agent deductions will be settled together during Agent Commission payment job (NEWAGTPY), while Client deductions for Refund Unit basis will be posted into Payment suspense account after the units have been dealt in Unit Dealing job (NEWUNITD).

6.8   Policy Acknowledgement

In some countries, insurance companies will attach policy acknowledgement slip together with the policy schedule package and the clients are required to

sign the acknowledgement slip and return it back to the insurance companies. Hence, LIFE/Asia V7.4 has introduced a Policy Acknowledgement process into LIFE/Asia.

The generation of policy acknowledgement slip usually depends on the delivery mode of the policy. For example, policy acknowledgement slips are not required if the delivery modes are by Agent or Registered Mail, while it is required for the normal Mail. Hence, a new Delivery mode field has been introduced to capture the delivery mode of the policy. The existing proposal header screens have been modified to include the new delivery mode field. System will default the delivery mode based on the contract type of the policy.

A new letter for the Policy Acknowledgement Slip has also been developed that will be generated together with the policy schedules during contract issue.

System allows the policy acknowledgement process to be configured based on the contract type. Some of the configurable rules are:
• Default delivery mode for the contract type
• Number of acknowledgement overdue days before sending a reminder letter with the corresponding letter type for the reminder letter
• Number of acknowledgement overdue days before the policy schedule is deemed received with the corresponding letter type for the deemed received letter
• Delivery modes to be excluded for acknowledgement process

A new subsystem has also been created to update the policy acknowledgement date upon receipt of the signed acknowledgement slip from the client. It also provides a facility to enquire on the policy dispatch details. The existing Contract Enquiry – Extra Details screen has also been modified to include a new option to enquire on the policy dispatch details.

Another two new letters have also been developed for the acknowledgement reminder letter and deemed received letter. The letter extract subroutine has also been enhanced to incorporate the new policy dispatch details used by those letters. A new daily batch job (POLACK) has been introduced to generate these two new letters when they are due based on the pre-defined rules.

New commission functionality has also been introduced to withhold the new business commission payment until policy acknowledgement slip has been received from the client. This option is configurable at company level.

6.9 Substandard Lives

Life Insurance Associations (LIA) of each respective country collates sub-standard risk details for their local life insurance industry. These details are passed on to the rest of the life insurance companies in the form of a flat file on a weekly or fortnightly basis.

These files can be retrieved from the Internet and uploaded to LIFE/Asia for use by the underwriters and to handle this we have developed two batch jobs, one to upload and another to download.

Details on sub-standard risks captured anew on the system are flagged for download to LIA, also in the form of a flat file.

Sub-standard risk is managed as follows in the system:

Contract Issue

Upon contract issue, loadings on a life where the reason code is denoted as sub-standard (set in table T5657) is deemed as a substandard risk and is written to the Substandard Risk File with Risk Type=2.

If the sub-standard life is pre-existing on the LIA file as a result of a previous contract purchased, then the system should inform LIA of the latest update e.g. special terms (medical codes) loaded, new contract nunber, etc.

Decline

Sub-standard cases declined are updated to the LIA file with Risk Type=1 (Decline).

Postponed/Withdrawn

Sub-standard cases postponed/withdrawn are updated to the LIA file with Risk Type=2.

Death Approval

When a death claim on a sub-standard life is approved, the LIA file is also updated.

Regular Claims

When Health Claims module is made available in the base system then upon registering a Health Claim on a sub-standard life, details like the Hospitalisation Period, Application (Hospitalisation) Date should also be passed on to the LIA and the Risk Type is set to 3 (i.e. hospitalisation).

AFI

If the Proposal/Policy No. is the same as the contract being Altered From Inception, then delete the record from the LIA file if the record has not been downloaded. If it has already been downloaded, then leave the record alone.

Add/Modify Component Approval

Loadings with reason code denoted as sub-standard would make this life known to the industry as a sub-standard risk.

If a Special Term or sub-standard risk loading is removed, the LIA file is updated accordingly. The Action Code to LIA should be '2' (i.e. 'Correction').

However, if all Special Terms are removed, then this life becomes a standard life. In this case, the Action Code is '3' (i.e. 'Deletion').

<u>Follow-ups</u>

Follow-ups are automatically triggered if a sub-standard risk is underwritten.

In addition to these batch jobs there is on-line functionality to allow, Create, Modify, Delete and Enquire on LIA Records.

<u>Transaction Codes</u>

SR60	Substandard, Hospitalisation & Death
T6A6	Create
T6A6	Modify
T6A6	Delete
T6A6	Enquire

6.10   Policy Schedule

A schedule document is required for each policy issued, which will be forwarded onto the client. In addition to the actual printing of the schedule, there is an option to print the necessary labels for the envelopes that deliver the schedules. Two different policy schedules have been created one for Interest Bearing policies, and one for non-interest bearing policies.

<u>Tables</u>

<u>T6634 - Automatic Letters Table</u>
The ITEM of XXXT642 should be set to contain the POLSCHD letter type where XXX is the product type.

<u>T3609 - Standard Letters Table.</u>
An extra ITEM, POLSCHD, representing the non-interest bearing policy should be set up.

6.11   Medical Provider & Medical Bill

6.11.1 Medical Provider Maintenance

This functionality introduced by LIFE/Asia V7.1 provides for the creation and maintenance of Medical Providers, who have in some way or another, conducted a medical examination or who has furnished a medical report on a client of the Life Office.

In order to create a new Medical Provider, a corporate client must be created, and information such as Name, Address, etc. is captured into client details. Doctors attached to the Medical Provider must likewise also be created as a personal client.

Medical Provider records will be maintained in the Medical Provider database, including detail information such as Provider status, Area code, Appoint Date,

Termination Date with reason, doctors attached, type of medical facilities that are provided and standard fees charged, etc.

Payment method for the Medical Provider is also captured, where for Direct Credit payment, the Medical Provider's bank details will also required.

6.11.2 Medical Bill Processing

This functionality also introduced in LIFE/Asia V7.1 is used to create, modify, approve or disapprove medical bill payments that had been incurred for medical examinations conducted or for medical reports that had been furnished to the Life Office. These medical bill payments have to be paid either to the Medical Provider or reimbursed to the Agent or Client.

Medical bill details can be captured either by the contract number or by the invoice number.

For approved medical bill payments, the batch job MEDIPAY will create the payments to the corresponding Provider, Agent and Client accordingly as below:
- Payment to Agent will be credited into the Agent's commission account
- Payment to Client will be credited into the Medical Payment account
- Auto cheque will be automatically generated to the Medical Provider, if the default payment type is Computer Cheque

Two reports will be also produced from the batch job:
(1) Medical Bill Payment Report
(2) Medical Payment Exception Listing

6.12   Automatic Increases

6.12.1 Introduction

The ability is given to amend premium and/or Sum Assured, for given components within a contract, on an automatic basis. These changes are at regular intervals expressed in years: commonly such escalations take place annually. To achieve these goals, the amounts of each automatic increase are recorded by component so that they may be capable of identification when the time comes to bill for the increased premium, and then actually implemented on the due date of the increase.

Two types of automatic increases are catered for within the system. These are Contractual and Optional. Contractual Increases are common in such circumstances as Low Start Endowment type products and these can be either Traditional or Unit Linked. The increase normally applies only to the premium payable.

Optional escalations may apply to almost any kind of product, Unit Linked or Traditional and further, may be Sum Assured or Premium based. Since, such increases are optional, the facility is provided to enable a contract owner to refuse an increase. The effects of such a refusal are at a Life Office's

discretion. It could mean the cancellation of future Increase Offers after a predetermined number of refusals.

These increases may or may not be subject to Commission, in a similar fashion, Statistical records may or may not be created.

In addition to refusing an Increase it is possible that the need will arise to reverse an Increase. This is achieved using the same on-line screens as for Refusal. Since it is a true reversal, it is more fully described in the Reversals Clerical Guide.

6.12.2 Automatic Increase Definition

When a component is defined to the system, LIFE tables are used to determine whether Automatic Increases apply and to set out the rules that govern how each relevant component is processed. These rules encompass:

- Whether such increases are permitted, optional or mandatory, during Proposal Processing.

- The frequency of such escalations and whether they cease at a maximum age, or if a minimum term, to premium cessation date.

- If the increases are simple or compound, and also whether they apply to Sum Assured, Premiums or both.

- The rules to apply with regard to Optional Increases in the event of a refusal.

- Whether commission is to apply to the increase.

- The decision as to whether Statistics are to be generated for each Increase.

- If there is a fixed number of Increases.

- The rules that govern the maximum and minimum percentage increases permitted at any one time.

6.12.3 New Business Processing

Contracts may be issued both Unit Linked and Traditional, tagged as requiring Automatic Increases. Where such increases have been defined as optional, Proposal Processing includes a question as to whether escalation is to apply.

In all cases where a contract is subject to Automatic Increases LIFE tables define the nature of the increase. If a case is subject to special terms it is excluded from the automatic increase process when the increase rules indicate that increases are to be effected by creating new components. However, if the existing component were to be amended, then any special terms would apply to the newly amended component.

6.12.4 Impending Automatic Increase

The batch program within the daily processing run RENEWALS detects all components where the next increase date is imminent.

The tasks performed are:

- To calculate the amounts of increases by reference to component records and table data.

- To create records to ensure that the next Billing takes into account the expected increase.

- To permit letters to be produced to notify the contract owner or payer that the increase is approaching.

Each group of increase rules is linked, via tables, to a specific subroutine. Three subroutines are supplies to handle the following:

- Low Start Contracts.

- Premium Increase and Sum Assured Calculation.

- Sum Assured Increase and Premium Calculation.

    Please note that the Effective Date of the Increase is used to access table T5648, Automatic Increase Rate, when determining the interest rate to be used in the calculations. Naturally, the Billing process itself checks for pending increases and incorporates the increased premiums into the records created. If such a component is the subject of special terms, imposed at issue, such components are normally excluded from Automatic Increases. The exception to this rule is when the selected method for effecting the increase is to amend the existing component as opposed to creating a fresh one. This is to permit the issue of rated Low Start Contracts.

6.12.5 Actual Automatic Increase

This too is effected by means of a batch job. It is incorporated into the daily RENEWALS processing. This automates the process of the actual increase by giving effect to the changes in contractual Regular Premiums and/or Sum Assured.

Depending upon different business criteria, the process may simply be to create new versions of the existing records, thus effecting the increase. However, in many situations, each increase is given effect to by the creation of additional records. For Traditional Products, with the possible exception of Low Start Contracts, this is to facilitate actuarial valuations. Another probable reason is to allow for more precise processing of commission rules on increasing policies.

Therefore, for reasons of commission calculations and release, and premium allocation patterns, there is a need to treat such increase as "top slices" subject

to separate controls. As has already been mentioned, this is controlled by entries in Product Definition tables, so that Life Offices can opt for no commission on increases if they so wish.

An important point to note is that for increasing components that are subject to Reassurance, the system makes no automatic changes to the amount reassured.

6.12.6 Automatic Increase Refusal

By its nature an optional increase must be capable of refusal by the owner/payer of a contract. Such refusal may occur before, on, or after the actual due date of the increase. The system provides transactions whereby the implications of such refusals may be handled. If the refusal occurs before the increase has been implemented, the system deletes the temporary pending increase records, ensuring that re-billing occurs by reversing that too if it has occurred. If the component is subject to a maximum number of refusals, the logic monitors this and if relevant switches off future increase processing.

When refusing an increase, the facility is given to stop all future increases even when the maximum number of permitted refusals has not been reached. If the actual increase has been processed, it is necessary to determine whether any partial premium refund applies. At all events the system reverses the effects of the refused increase by deletion and reinstatement of component records in the same fashion as normal reversal processing. As above, if the component is subject to a maximum number of refusals, the system checks this, and where appropriate, inhibits all future increase processing.

6.12.7 Effects of a Pending Increase

Some existing transactions, namely Component and Billing Changes, may be affected by the presence of a pending increase. In these cases, if the transaction is permitted to proceed, any pending increases are deleted. The effect of this is that the contract is reprocessed within the daily batch job, a fresh pending record is created. Such new transactions may differ from those originally created and therefore, will have implications on Billing of the next premium due.

6.12.8 Reversing an Automatic Increase

There is no separate transaction to perform the reversal of an automatic increase, within Full Contract Reversals. Indeed, the Automatic Increase transaction should be defined to the system as a "show stopper," that is a transaction that not only may not itself be reversed, but one that prevents the reversal of any prior transactions.

The method to be used when an automatic escalation must be reversed is to reverse the contract back to the first reversible transaction that was processed after the increase. Then reverse the increase itself using the "Refusal" transaction described above.

When this occurs, the reversal is not counted as a "Refusal" and thus eligibility for future discretionary increases is not affected. Another difference from the

Refusal is that whereas a Mandatory Increase may not be refused such an increase may be reversed.

6.12.9 Paid to Date Advance Considerations

Since the possibility exists that when a Paid to Date Advance transaction is performed, an attempt is made to advance over an Automatic Increase date, changes have been made to the processing. The Paid to Date Advance screen will now shows the next increase date and any attempt to advance beyond that date is prevented. If it is required to advance the Paid to Date past the next increase date then the contract should be advanced up to the next increase date and then:

- The next Increase may be achieved by running the batch job (POLRNWL that is a single contract RENEWALS).

- The next Automatic Increase may be refused if required, using the on line transaction and then continue with a further Paid to Date Advance.

6.12.10 Conversion of Existing Contracts

For Life Office's who wish to introduce Automatic Increases on contracts already written a batch program is available to perform the conversion. This job is run with an "Effective Date" and by reference to this date and Product Definition Life tables, all components are inspected, regardless of status and Valid Flag settings. All components that, as at the first Increase Date after the batch job effective date, qualify for an Automatic Increase, have that date set. So, when that date is reached, these components enter the normal Automatic Increase processing. Because all components are processed, it does not matter if, between the conversion and the next increase, some reversals are performed.

Tables used by the Subsystem

T5648	-	Automatic Increase Rates
T5654	-	Auto. Increase Contract Rules
T5655	-	Automatic Increase Control
T5671	-	Coverage/Rider Switching
T5687	-	Coverage and Rider Details
T6647	-	Unit Linked Contract Details
T6658	-	Ann. Auto. Increase Processing
T6661	-	Transaction Reversal Parameters

Transaction Codes

M602	-	Contract Servicing Master Menu
S501	-	Auto. Increase Refusal Submenu
T501	-	Auto. Increase Refusal
B523	-	Pending Automatic Increase
B524	-	Actual Automatic Increase

7.   Batch Processing

7.1   Introduction

As mentioned in the SMART section of this document there are three methods of processing within LIFE/Asia, On-Line Real Time, AT Processing and traditional Batch Processing. The latter is the subject of this part of the document. The first part of this note will explain the base system batch jobs with a note of relevant programs and tables called or referenced by the batch programs together with any comments on run dependencies. The second part will show a typical batch schedule for a Life Office.

Most batch jobs can be run as often as required however, some have an impact on the on-line system and should only be run outside the normal business day when the system is inactive. Most batch jobs need to complete satisfactory before they can be run again. In some cases this is not true and the rules for batch job schedule and processes can be defined by the Life Office in the Run Dedicated area of the individual batch job definition.

In order to enhance the efficiency of the batch schedules, selected processes were rewritten to allow for the enabling of multi-threading capability. These processes will be identified under their respective batch jobs. In general, for each of the processes to be transformed, three standard batch processes are created for a suite of multi-thread enabled function. The first process is the creation of a temporary file for storing the primary records selected for processing. The second process is a splitter program for selecting primary records based on a set of criteria. Finally, the third process is the core process for processing the selected primary records.

The following points have to be taken into consideration when multi-threading is switched on:-
* A multi-thread enabled process can be split into a maximum of 20 threads.
* The optimal multi-threading setup may vary with the size of the database and the hardware configurations.
* The 'No. Cycle per commit' is also a determining factor in affecting the batch performance. The value chosen is a trade-off between performance/throughput and the rollback time required in the event the batch job abnormally ends.

A job that updates files must complete properly, for example General Ledger Update, GLUPDATE. However, a report type Batch Job that does no updating can be submitted into the batch queue without any dependency on the success of the previously submitted job, for example, General Ledger Unlinked Report, GLUNLNK.

The batch jobs listed below may not be delivered in exactly the same naming convention as these batch job names can be amended should the Life Office or even the CSC Model Office feels that they should have a more appropriate name. In addition to this the current batch schedule definitions will have a

prefix of #x, x being the Company numbering practice; for example CSC has nominated Company 2 for the LIFE/Asia application. Therefore, the system batch jobs reference when will be #2AGENTCHG. What are important are the program processes and not the batch name.

7.2 Base System Batch Jobs (In Alphabetical Order)

ACSTAPST
Accounts Related Statistics Posting. This job accumulates and summarises the Government Statistics Posting records (GVST) into two accumulation files, GVAH and GVAC. GVAH is the accumulation file by contract type while GVAC is by component type.

Please note that GVST records are created by the Additional Government Statistics Extraction job (NEWSTEXT). Hence, NEWSTEXT job must be run prior to this job.

Program   B0237 B0321 BJ521

ACSTATRP
Accounts Related Statutory Reports. This job generates the following accounts related statutory reports:
(1) RJ522 - Premium Details
    This report lists all premiums due during the specified accounting year and month, segregating them into first year premium, renewal premium and single premium. It is reported at coverage level and an accumulated figure will be printed for each source of business.
(2) RJ523 - Commission Details
    This report lists all commissions paid during the specified accounting year and month, segregating them into first year commission, renewal commission and single premium commission. It is reported at coverage level and an accumulated figure will be printed for each source of business.
(3) RJ524 – Reassurance Details
    This report lists all premiums on reassurance ceded and commissions paid on reassurance premium ceded for the specified period.
(4) RJ525 – Benefit Payment Details
    This report lists all benefit payments during the specified accounting year and month.
(5) RJ526 - Bonus Payment Details
    This report lists all bonus payment details for the specified period. Allocation of bonus refers to reversionary bonus only.

Program   BJ522 BJ523 BJ524 BJ525 BJ526
Tables   T3615 T3589 T5685 T5684 T5687 T6625 TJ675

AGENTCHG

Bulk Agent Portfolio Transfer. The main processing of this batch job is to alter all Agent Commission records for an Agent to a new Agent for all contracts held by the original Agent. A parameter screen that requires the entry of Agent From and Agent To and a selection of the three types of commission held

within the system, Initial, Servicing and Renewal Commission drives the program.

This batch job should be run when the system is inactive. If the batch job is run during the working day you may encounter problems if a contract being transferred from one agent to another is being used.

A point to note is that the new agent will only receive the appropriate commission on receipt of premiums after the completion of this batch job. If there are any commission payment adjustments to be made to the new agent, or the old, then these should be completed by Direct Journals.

Program   B5001
Tables   T1692 T1693 T5679 T6688

AGENTPIS

Agent Premium Income Statement. The Agents' Premium Income Statement is a summary report on the production levels attained by each of the agencies on a month-by-month basis. It will provide a breakdown on the production levels achieved by each agent for a given agency. Agency movements within and without an agency structure like promotions; demotions, terminations and transfers are also reflected in this report.

Program   BM511
Tables   T1692 T1693 T3629 T5696

ANENDRLX

Anticipated Endowment Release batch job. LIFE/Asia V1.0 introduced the Traditional Anticipated Endowment product. This type of product is the same as an Endowment contract but allows contractual withdrawals at certain times, client's age or set duration, during the contract life.

The original ANENDRLS job has been replaced by this new ANENDRLX job that runs in multi thead.

This batch job produces payment records.

Program   BR538
                 Tables   T3629 T3695 T5645 T5688

ANNIVPRC

Anniversary Unit Statement. This report is basically a clone from B5105, the base system Anniversary Statement, that has been enhanced for the LIFE/Asia clients.

This statement is based on the Singapore requirements and is a Bank Statement style of unit statement. This means that each transaction that deals with units is recorded as a separate event unlike the base system statement where things such as coverage debts are "rolled up" into one charge. This statement itemises each part of the coverage debt and therefore if a contract

has four riders that are benefit billed then the statement will show four separate deductions.

Program   BR542 BR547
Tables   T3629 T3645 T3695 T5515 T5645 T5679 T5687 T5688
             T6578 T6647 T6649 T6659

ARCACMV

Archive ACMV's to Optical Disc. Some of CSC's more mature clients have found that to maximise performance and disc space they need to archive some of the larger files.

This batch job will move ACMV (Accounting) records from the ACMV file to file ACMVYYMM, where YY is the batch accounting year and MM is the batch accounting month as selected in the batch job parameter screen.

Once the archive files have been established and the ACMV records copied and deleted from the ACMV file, a reorganise physical file command is performed, RGZPFM, so as to take advantage of the system space created by this archive task.

Programs   B0250 B2000
             T1697 T3715

ARCUPDM & ARCUPDS

Archiving Update Process – Multithread and Single thread.

Programs   B3335 B3336 B3337

ATLIST

List AT Request Queue. This job generates the list of all AT requests in the system sorted by the status flag, that is either Awaiting, Bad (bomb) or Complete.

Programs   B0111

AUTOALOC

This batch job will automatically allocate numbers, contracts, receipts, agents, to the ANUM file according to the parameters set in table T3642. It is advisable to keep the number packets topped up so that numbers are not exhausted at any time during a working day. It is suggested that this batch job be completed out of business hours on a monthly basis as part of the Computer Operations housekeeping routines.

Program   B2283
Table   T3642

AUTOPMT

Auto Refund Batch For Terminated Policies. The batch job, introduced in LIFE/Asia V7.1, will be based on the submitted policy range to access ACBL file for non in-force policies (valid contract status held in table TR630) with balance amount in LP/S account and if the payment criteria is fulfilled, an auto payment will be raised.

Program   BR631
Tables   TR630

AUTONTU

Automatic NTU. The batch job will auto trigger the change in contract risk status from "PS" (Proposal) or "UW" (Underwrite) into "NT" (Not taken), when the full premium is not received and/or the pending follow ups (non-financial) are not received within the holding period. An exception NTU listing will be also printed, if any.

Program   BR50H BR50I
Tables   T3588 T3623 T5500 T5645 T5679 T5681 T5682 TH506

BONCMPY

This batch job processes the contracts that have a Reversionary Bonus due on a Company Anniversary date. The mainline program will call the Reversionary Bonus subroutine dependent on its component method, this is table driven. This subroutine will write the appropriate ACMV's and update the bonus figure held by the individual contract. The ACMV figures can be used to produce the notice to the client.

There is a parameter screen provided with this batch job so that the Life Office can select a contract number range to ease the processing load. Batch job should be run outside the normal working day.

Program   B5018
Tables   T5679 T5687 T6625 T6634 T6639 T6640

BONPOLY

This is the same type of batch job as above but based on individual contract anniversary.

Program   B5023
Tables   T5679 T5687 T6625 T6634 T6639 T6640

BONPOST

Bonus Workbench Bonus Posting. This batch job is created to upload daily the extracted file from the Bonus Workbench that contains the calculated bonus amount for those corresponding agents. The corresponding accounting postings to cater for those bonus allocations are also created by this batch job daily.

Program   BR655 BR656
Tables

BONWBEXT

Bonus Workbench Interface Extraction. This batch job will capture the Agent information, Agent hierarchy information, Premium activity information, Commission activity information, Agency information, Company Information, Policy information and Coverage information, which are used to derive the agency compensation bonus, from LIFE/Asia and then feed into Bonus Workbench on a daily basis.

Program   BR665 BR666 BR667 BR668 BR669 BR670 BR671
               BR672
Tables   TH605 TR654 TR657 TR658 TR659 TR660 TR661
               TR662 TR663 TR664

CASHLIST

Receipt Reporting. This job reports on the Cash Receipts processed through the system and if required will produce actual receipts for the clients of moneys entering the system. It also produces a Bank Deposit listing that has been designed to be run whenever it is required to bank money that has been received. This listing is intended to be used to balance the payments received against the cash and cheques. This job also produces a CashBook Receipt List that is a list of moneys received by either method, Banked Receipt or Receipt to be Banked.

This job may be run daily, twice a day, every second day, etc. You must ensure that when this batch job is run that contracts are not being issued or Single Premium Top Ups are not being applied as these transactions reference the receipt file and can cause "soft locks". It is suggested that this job is run during the lunch break or if not convenient then bring the system "down" until the job has completed successfully

Programs   B0236 B2064 B2065 B2486
Tables T3629 T3688 T3695

CHQLST

Automatic Cheques Update and ChequeBook Report. In the base system there is offered an automatic machine cheque production system. To be able to keep a track of the machine cheques used then there has to be a control and this batch job is that control. The batch job CHQPRN1 will extract all payments from the CHEQ file and the output from this job is needed as the parameters for the batch job CHQBOOK.

This job should only be run when the system is inactive.

Program   B2127
Tables   T1692 T1693

CHQMURCN

Daily Cheque Register Audit Log. LIFE/Asia V2.1 introduced Cheque Reconciliation Functionality and these new sub-systems provide both on-line and batch facilities to reconcile the 'Present' status of cheques that have been issued. This Report selects all the Payment Requisitions Records that have been cancelled or reconciled by the User manually on a particular business day.

Programs   BH541
Tables   T1692 T1693 T3629 T3688 TH543 TR396

CHQPRN01

Cheque Production. This is the first of the cheque production jobs and creates the print files ready for production of cheques. Manual intervention is then required to print the file on the special format cheque stationery. This job should only be run when the system is "down."

Program   B2126
Tables   T3616 TR900

CHQRCUPL

Update Bank Data To Cheque Register. This program uses the Bank Upload File as input. For each record, it will try to locate the corresponding record in the Payment Requisition File (CHEQPF) and reconcile with it. If the record is found in CHEQPF, the program will check the PRESFLAG as well as the Cheque Amount. If everything is ok, the PRESFLAG will be updated as "H" and the PRESDATE will be updated as the Cheque Present Date. A control report will be output to show all the successfully reconciled records plus any error that may occur during the process.

Programs   BR211
Tables   T1692 T1693 T3629 T3688

CHQUNPRS

Unpresented Cheque Report. This report is in two parts; the first part will come in three versions. Print cheques in date printed order, latest first. A total line and a page break after seven days, then another page break after the first month and monthly thereafter.

The first version will show only those unprocessed cheques with a "large" value. This "large" amount is selected through a parameter screen. Version two show only those unprocessed cheques, which were printed within or earlier than the entered accounting period. This will include cheques that are presented after the nominated accounting period. Version three will list all unpresented cheques irrespective of date or amount.

Part two is a summary report. This will print a one-page summary it has six lines and three columns. Lines are This Week, This Month, Last Month, 2

Months Ago, 3 to 12 Months Ago and Greater than 12 Months. The Columns are Small Amount, Large Amount and Total.

Programs   B2607

CLNTREG

Client Register Report. This batch job prints client details from the CLNT file. The program will select clients to be printed according to the parameters entered from program P2078. The selected clients will then be printed in the sequence of Company, Client Type, Client Number or Surname and Given name.

This job is reports only but with mature sites it may be wise to run this report overnight.

Program   B2077
Tables   T1692 T3643 T3644 T3645

COSTREP

Reassurance Costing Report. This job reports the risk level costing that has occurred within the specified period. The report will be grouped by reassurer, arrangement and currency. Totals will be printed for each currency type within each reassurer within each arrangement.

Program   B5457
Tables   T5449

CREDITS

Direct Credit Payments. This process is in two stages. One is the extraction of all the payments from the CHEQ, Cheque file with the relevant pay method. The second stage is to transfer this information to the tape for delivery to the factoring house and eventually crediting the client's bank accounts. The tape format is in the style required by the UK Banking authority BACS. This batch job should be run outside the normal working day.

Programs   B2499 B3286 B3288 B3289
Tables   T1692 T1693 T3629 T3684 T3699

DDAPLYnn

Direct Debits Apply. This batch schedule will apply money to contracts through the creation of pseudo receipts for contracts that have been extracted by the Direct Debit batch. By separating the tape extraction process (in Direct Debits) and the application of requested amounts (Direct Debits Apply), the tape extract date and the due date or expected receipt date from the clearing bank may be differentiated.

Programs   B3290 B3291 B3721 B3722
Tables   T1688 T1692 T1693 T3629 T3678 T3688 T3698 T3699

<u>DDnn</u>

Direct Debits. This batch job is very similar to BACSCR the difference being that the information transferred to the tape is amounts to be debit from the clients' accounts. The tape extracted by this batch schedule is passed to the Factoring House for processing. No account postings are made within the Direct Debits batch schedule. This is done is a separate batch job – DDAPLYnn.

The batch job should only be run when the system is "down".

Programs	B2498 B3288 B3289
Tables	T1688 T1692 T1693 T3629 T3678 T3684 T3688 T3697 T3698 T3699

<u>DISHGRUP</u>

Group Dishonours Batch Job. This batch job is for the processing of Group Payments collected by Direct Debit requiring to be recorded as dishonoured. Group Dishonours will only complete a representation and not a reversal. Dishonour processing has two stages. The first part is to register the dishonour, which is an on-line transaction; the second part is the actual processing required which takes place in this batch job.

As this is a processing type batch job it will need to be run overnight when the system is "down".

Program	B2814
Tables	T1692 T1693 T3678

<u>DISHnn</u>

Direct Debit Dishonours. This batch job is exactly the same as above only dealing with Direct Debit Dishonours. The rule relating to the dishonour is defined in tables, rebill, cancel mandate, etc.

Program	B6282
Tables	T1692 T1693 T3678 T6626 T6661

<u>DIVALOC</u>

Cash Dividend Allocation. LIFE/Asia V2.1 completed the Cash Dividend functionality introduced by release V2.0. This batch job is responsible for performing the processing for the dividend option chosen by the policyholder after each dividend allocation. The processing is driven by the dividend option held on the extract record from HDPXPF. Each HDPXPF represents one-dividend allocation from a participating coverage, including its associated paid up addition coverage. The actual processing is done in a subroutine held on TH500 and there is a different subroutine for each dividend option.

Programs	BH519 BH520 BH521 BH522 BH523 BH524 BH525 BH526
Tables	T1688 T5645 T5679 T5688 T6639 TH500 TH501

DRYRNCVT

Diary Portfolio Conversion for Multi Threading.

Programs   BR598 BR599
Tables   T1671 T1672

DRYGLUPDTE

In order to reduce the batch window, a new batch job, DRYGLUPDTE, Diary General Ledger Update, was introduced in LIFE/Asia version 7.3 as an alternate solution for client who wishes to replace GLUPDATE. This new job can be run concurrently with the on-line window and can be run multiple times in a day in different time slot, so that the data volume for each job is reduced

It can also be used by non-DIARY client (by removing the last process, which is to schedule the next Diary GLUPDATE).

Programs   DRY3611 DRY3612
Tables

DUTYRPT

Stamp Duty Report.

Programs   BT500
Tables   T1692 T1693 T3629 TR206

DYOUTRP

Daily Outstanding Proposal Report. To aid the Life Administration Department, a daily report is required detailing submitted policies that remain Unissued due to outstanding information. Only those proposals which fall on either 21, 42, 63 or 84+ days, from the date the proposal was first received, are to be output. The report will include among other things, the current status of the proposal together with the number of days the proposal has been outstanding.

Program   BH529
Tables   T1692 T1693 T5661 T5674 T5679 T5688 TH506

ERORREP

System/Database Error Report. This job generates the error log reporting from the specified period. There is also an option to select generate either online errors only, batch errors only or both online and batch errors.

Program   B0055

FLUPLET

This batch job generates Follow Up letters for cases where the FLUP file for a

Follow Up is set to status "L" or "M" and for each one found will write a LETC record via LETRQST Subroutine. LIFE/Asia V2.0 introduced this functionality.

Program   BH579
Tables   T1692 T1693 T3609 T3628 T3629 T5661

FNDVALRP

To assist fund valuation a range of reports have been designed listing all contracts in proposal stage with the premium amount held in suspense, the unit reserve date and fund to be invested. With this report Actuarial are aware of the money to be taken into account and "buy" units on account for those contracts prior to issue.

In addition to this proposal report the above will also be required to inform Actuarial of contracts that have been cancelled prior to contract issue, Declines and Withdrawals, with the same information, premium amount, fund, unit reserve date. With this list Actuarial can "sell" the units the purchased on account.

As the majority of the "buy" and "sell" transactions will take place over valuation dates the difference in dollar terms between the appropriate unit rates, fluctuations or profit or loss, will have to be recorded and journals completed to the fund accounts.

Generally there will need to a check on the suspense reports for "on's" and "off's" so that Actuarial are satisfied that the departments have used the same unit rate when purchasing units off the record and when the system purchases units at contract issue. Therefore, a Contract Issue report is required to check this fact and this should contain the contract premium, number of units purchased, rate date used and the unit fund.

Programs   BR506 BR507 BR508
Tables   T3623 T3629 T5515 T5645 T5679

GLALOCL

General Ledger Automatic Allocation Rules Report. There is an option within the General Ledger Submenu to allow for automatic methods so that it is possible to automatically transfer moneys between accounts. The report will list all Automatic Rules within the system. This report is a read only report and will not post any items to the General Ledger.

Program   B2122
Table   T3629

GLALOCR

General Ledger Automatic Allocation Report. This batch job extracts records from the "ALOC" file and uses them for the basis for automatic journal creation for the General Ledger. Each allocation record that is extracted contains the details of the allocation method, required figures and calculation

basis. This is then used to calculate an amount that will actually be posted to the appropriate General Ledger account.

This report again is a "read only" and as such it will not post any items to the relevant accounts. It is suggested that this batch job be run prior to the GLALOCU as part of the General Ledger controls.

Programs   B2122 B2123
Tables   T3626 T3629

GLALOCU

General Ledger Automatic Allocations. This is the batch job that actually posts the automatic allocations as explained above and can be run daily, weekly or monthly. It is important that this job is run when the business day is over so that the job can run without data being added as may happen during the working day.

It will actually post the extracted records to the appropriate account and provide a report for audit purposes.

Programs   B2122 B2123 B2124
Tables   T3626 T3629

GLAUD

General Ledger Audit Report. This report extracts data created from the GLUPDATE, General Ledger Update or Posting Batch Job. The purpose of this report is to allow the user access to this information in a number of ways by completion of a parameter screen. Therefore, a number of Audit Reports can be processed against the same data file but extracting different combinations of data and displaying it in several different ways.

This job can be run anytime but if it is important to have Audit style reports on the most up to date information then obviously these should be run the next business day after the General Ledger Update batch job GLUPDATE.

Programs   B3614 B3615
Tables   T1692 T1693

GLBALST

General Ledger Balance Statement. This job requires a parameter to be entered normally the Trail Balance or Profit & Loss Account. The report will list all entries for the entered account number and all those accounts linked below it in the Chart of Accounts. It will display this information showing current month to date and year to date actuals together with last year to date results.

As this job does not process any information it can be run at any time.

Program   B2150
Table   T3629

GLCLONCO

General Ledger Company Clone. This is the batch job to clone the General Ledger structure from one company to another within the system. This job can be run at any time if required.

Programs   B2428 B2429 B2430 B2431

GLCLONCU

General Ledger Account Clone for Currency. This job will clone a General Ledger structure from one currency to another. If required this job can be run at any time.

Programs   B2427 B2429 B2430 B2431

GLCLONST

General Ledger Structure Clone. This is the batch job to clone a new General Ledger structure from an existing one within the same company. If necessary this job can be run at any time.

Programs   B2426 B2429 B2430 B2431
Table   T1680

GLDWNLD

GL Balance Extract for Downloading. This job extracts monthly account balance of each GL account from GENV and GENL records and writes them into GLEXPF. The audit trail is then printed by reading GLEX as primary and they are summarised at Alternate Reference (ALTREF) of the GL account into SACCPF on condition that the accounts balance, that is debits equal to credits. SACCPF can then be downloaded into PC side.

Program   BR245 BR246

GLCMPST

General Ledger Comparison Statement enables you to obtain a hard copy of any account figures to compare to the corresponding budgets or last year's performance, etc. As this report is a read only and therefore, does not complete any processing it may be run at any time.

Program   B2148
Tables   T3626 T3629

GLCMYST

General Ledger Multi Currency Comparative Statement. This report will display the General Ledger Account, Account Description, Account Original Currency, Foreign Currency Amount held in this account, Current Exchange

rate, Local Currency Rate and Exchange difference. This batch job can be run at any time.

```
Program      B2415
Tables       T3628 T3629
```

GLEXPLR

General Ledger Explosion Report. This report requires that a valid General Ledger account is entered at the parameter screen and all accounts below that account in the Chart of Accounts are listed showing the relationship. This batch job can be run at anytime.

```
Programs     B2136
Table        T3629
```

GLEXPSL

The General Ledger Expense Sub Ledger Report is run on accounts specified in table T3669. The report lists all the activities in accounts specified and all accounts linked below the account within the chart of accounts. This report is designed to report on Expense type entries.

Again as this report does not complete any data processing and is just a report it may be run at anytime.

```
Program      B2108
Tables       T3629 T3669
```

GLIMPLR

General Ledger Implosion Report requests that a valid General Ledger account be entered into the parameter screen and all accounts above that account are listed showing the relationship. This job can be run at anytime.

```
Program      B2138
Table        T3629
```

GLINIT

General Ledger Initialise. This batch job initialises accounts according to their account types. This job is normally completed during the Development and Customisation process so that when the Model Office testing commences all accounts have been initialised and ready for receiving data. This job should be completed as part of the preparation of environments after a data "clear down" exercise.

```
Program      B2139
Table        T3629
```

GLMTHST

General Ledger Monthly Statement is similar to GLBALST with the

difference being the showing of the Year to Date figures against budgeted figures. This batch job is a read only and therefore, can be run as and when required either during on-line processing or in overnight run.

Program   B2148
Tables   T3628 T3629

GLROLL

General Ledger "Roll Over". This job "Rolls Over" the account that has an appropriate balance forward flag to show the brought forward balance as the new opening amount in the account and initialises those accounts with a Balance Brought Forward flag of Z. This job requires an Appropriation Account be entered in table T3698 item ****GL.

This job is run at the end of the financial year and can be run any number of times. However, it is strongly suggested that this job is not run until the on-line system is inactive.

Program   B2609
Table   T3629

GLUNLNK

General Ledger Unlinked Report. This job extracts all the accounts that exist in the General Ledger, whether created manually or by batch run, which are not linked within the Chart of Accounts. The criteria are that Posting Accounts that are not linked to Summary Accounts are listed, as are Summary Accounts that do not have posting accounts linked below them.

This job can be run at anytime.

Program   B2507
Table   T3629

GLUPDATE

General Ledger Update (Replacement for the batch job GLPOST). This job can be run daily, weekly or monthly and will extract batches to post to the General Ledger accounts in accordance with the item B3610 in table T1697. Once extracted these batches are "flagged" as having been processed so they are not selected again. The extract information is restructured into GTRN's and then the amounts are posted to the General Ledger.

In addition this job will create balancing transactions, should a one sided entry enter the system, create accounts should an account be used that is not set up in the Chart of Accounts. However, before the system can complete these actions certain information has to be entered into the appropriate tables and Chart of Accounts. Please refer to the section on General Ledger update procedures where these entries are explained in more detail.

Due to the sensitivity of this data this job should only be run when the on-line system is inactive.

Programs	B0237 B0321 B3610 B3611 B3612
Tables	T1692 T1693 T3605 T3629

GLUPDONE

General Ledger Update – Single Thread.

GLYTDST

This is the General Ledger Year to Date Report. It lists transactions in the specified account, and any subsidiary accounts, for the current month and year. This job can be run as and when required.

Program	B2150
Table	T3629

GRPSTMT

Group Statement of Account. This job produces a report on the schedule dates, according to each Group's billing frequency, to be sent to each Group Administrator. It has two main functions. One, to advise the Administrator of the amount of money expected by the Life Office and two, to provide a checklist of the individual amount expected from each contract within the Group. This report will take into account any unreconciled items, journals, outward payments and will state the total amount to pay. If the Group payment method is by Direct Debit then this is for information only.

This batch job should be run when the system is inactive.

Program	B2804
Tables	T1692 T1693 T3620 T3629 T3698

HELPALL

'HELP' Details Report. This job generates a report on the Help texts of all screens, fields and errors in the system.

Program	B0066

HELPSEL

Selected 'HELP' Details Report. This job generates a report on the Help texts for the specified screens. There are also options whether to print screen help, field help and error help.

Program	B0064

IFBCRPT

In-Force Business Comparison Report over 24 months. LIFE/Asia V2.1 introduced a range of production reports and it will report the Monthly

Regular Premium Business as well as Single Premium Business at individual product level and/or at sales channel level.

Programs   BH599
Tables   T1692 T1693 T3629 T5688 TH565

IFSEXTR

In-Force Status Extract Report. This is a monthly extract program for pertaining all in-force policies (both for single and regular premium policies) as at month-end. So this program is suggested to run on the last day of every month.

Programs   BH602
Tables   T1692 T1693 T3629 T5679 TH506

INCRCONV

Increase Conversion. The base system includes Automatic Increase functionality for Sum Assured or Premium or both. The Automatic Increase method is defined at the Coverage or Rider level in the Product Definition tables. The system handles an Automatic Increase by writing an Increase date within the Coverage. The batch job RENEWALS extracts the relevant coverages and flags them as being pending changes. The job INCRCONV actually completes the conversion and resets the new values, Sum Assured, Premium or both and was designed for CSC clients that have existing contracts and wished to add this automatic increase facility retrospectively.

Program   B5034
Tables   T5687 T6658

MEDIPAY

Medical Bill Payment Processing. This batch job is used to post the approved Medical Bills for Agent, Client and Provider, and also to auto generate the cheque for Medical Provider, if its default payment is computer cheque.

For successful payment postings, a Medical Bill Payment Report will be produced for Agent, Client and Provider. For terminated Provider or Client who are either inactive, or bankrupt, a Medical Payment Exception Listing will be produced.

Program   BR644 BR645 BR646 BR647 BR648 BR649 BR559
Tables   T3695 T3698 T5645 TR650

MTHNBRP

Monthly New Business Comparison Report Over 12 Months Period. A monthly report is required to display new business figures for the past 12 months. Flexibility is required to allow the report to display information pertaining to specific channels, districts, divisions, branches or products and/or to display totals at these different levels. BH534 This Program is designed to

produce a report of New Business transactions on a monthly basis. LIFE/Asia V2.0 introduced this batch job to the system.

Program   BH564
Tables   T1692 T1693 T3629 T5688 T5696 TH565 TH566

NBEXTR

Daily New Business Production Report. There is a requirement for reports to be produced for New Business transactions. These are to detail New Business transactions primarily on a daily basis, but as the report will be run daily, it will be possible to use it to accumulate information on a monthly, quarterly and annual basis. This report will contain such information as Sum Assured, Single and Regular Premium amounts as well as Product and Agency details.

BH531 ZSTRPF Extract Program. This Program extracts data from various SMART files (PTRNPF, CHDRPF, AGNTPF, COVRPF etc.) and uses the extracted information to write to the ZSTRPF - New Business Reporting Master File. It is primarily this file which is used in the other Reporting Programs

Programs   B0237 B0236 BH531
Tables   TH506 TH536

NBBUSSTS

Monthly Total New Business Status Report. This is the monthly report, detailing all New Business transactions for that month by Policy Status. The Outstanding case from the previous month are brought forward to the current month, to which are added all of the new cases submitted this month. The current month's transactions are split into three categories, Completed, Cancelled and Outstanding. These are subtracted from the months brought forward transactions to produce what will be the subsequent months brought forward transactions.

In all cases the Basic Sum Assured, the Annualised Premium and the Single Premium values are shown as well as a total of the cases for each category. This program reads the extract file HTMPPF produced by BH597 and sorts the records in the following order, Company, Channel and Product.

Programs   BH579 BH600
Tables   T1692 T1693 T3629 T5674 T5688 TH506 TH565 TH596

NBUSTUR

Monthly New Business Turnaround Report. This report is aimed to show turnaround times detail for New Business Transaction on a monthly basis. The outstanding cases from the previous month are brought forward to the current month; to which are added all of the new cases submitted this month. The current month's transactions are split into three categories, Completed, Cancelled, and Outstanding. These are subtracted from the months brought forward transactions to produce what will be the subsequent months brought forward transaction.

Programs   BH598 BH602
Tables   T1692 T1693 T5688 TH601

NEWAGTPY

New Agent Statement Payments. This batch job in LIFE/Asia version 7.3 replaces the old batch job AGENTPAY (Agent Pay & Statements) in order to reduce the batch window for the commission payment process. Furthermore, the multi-tier agency structure overriding commission calculation has been enhanced from a batch portfolio process into a transaction level basis and as such the entire overriding commission calculation batch process AGORSPAY has been removed.

To have better control on which commission type is entitled for commission override, tables are used to set up the overriding commission calculation for each commission type.

To reduce the involvement of the Account Movement file (ACMVPF), the Life Agents Payment temporary file (AGPY) is used to keep the unpaid commission information whenever there is commission or overriding commission posting into ACMV. Thus, there is no need to check and update paid ACMV records with Reconciled Date (FRCDATE) and Reconciled Amount (RCAMT). The AGPY record is deleted upon commission payout.

Additionally, to minimize the unnecessary checking already done during the statement processing, the Agent Commission Payment Balance file (AGPB) will be used to process only those Agents with commission at least equal to the minimum amount payment and since the deductible amount is already stored in AGPB file, there is no further need to check the deductible amount.

Programs   BR50S BR50T BR50U BR524 BR645 B5353 B5359
Tables   T1671 T1672 T3695 T5645

NEWAGTST

Agent Statements. This batch job in LIFE/Asia version 7.3 replaces the old batch job AGENTSMT to optimize the agent commission statement process as well as to eliminate duplicate checking in the Statement and Payment processes.

For the Commission Statement, the Commission Payment file (AGPY) will be used instead of the Life Agents file (AGLF) in order to reduce the I/O processes and remove the validation of inactive Agents (e.g. terminated agent, agent without commission, etc.) as it is already handled when Agent record is created/updated. The process of checking Agent record without currency can also be removed since the Currency Code is a compulsory field when creating/updating Agent record via Agent Appointment and Modify.

Additionally, the Agent Statement has been enhanced to include the additional remark at the end of the statement i.e. "No Payment will be made, Agent with insufficient commission!" for agents wherein the commission for the period is less than the minimum amount before a payment can be made. This will

reduce the processing time for the commission statement by approximately 40%.

The payment flag, total commission amount, tax amount, total deduct, Agent payment type, Currency code, etc. will be stored into a new Agent commission payment balance file (AGPB) which will be used by the Payment batch process.

Programs   BR50S
Tables

NEWBUSRP

Weekly New Business Production Report. There is a requirement for various reports to be produced for New Business transactions. This report will detail New Business transactions on a weekly basis, and will hold such information as Sum Assured, Single and Regular Premium amounts as well as Product and Agency details. This particular report will be run at the end of each week, and will produce updated figures for Month-to-date, quarter-to-date and year-to-date values.

BH533 This Program is designed to produce a report of New Business transactions on a weekly basis. The report will contain such information as Sum Assured, Single and Regular Premium as well as product and Agency details.

BH532 This Program reads through the ZSTRPF Physical File and extracts sufficient data to create a report detailing the various types to New Business transaction that occurred on the relevant transaction day. This report should only be run after the NBEXTR extraction batch job. LIFE/Asia V2.0 introduced this batch job to the system

Programs   BH562
Tables   T1692 T1693 T3629 T5688 TH565 TH566

NEWINTBL

New Interest Billing for Anticipated Endowments. The client upon attainment of an anticipated endowment instalment has the option of leaving the proceeds on account and interest is granted to this deposit. This batch job informs the client that interest is due and creates the actual payment and accounting entries.

Program   BR539
                Tables   T1692 T1693 T3629 T5645 T6633

NEWINTCP

New Interest Capitalisation for Anticipated Endowments. This batch job capitalises interest due.

Program   BR535
Tables   T1692 T1693 T3629 T5645 T6633

NEWSEXT

Additional Government Statistical Extract. The job reads and summarises accounting movement records (ACMV) at the policy and component level to accumulate the regular premium, single premium, first year commission, renewal commission, single premium commission, RI premium ceded, RI commission, terminal bonus, reversionary bonus, extra bonus, interim bonus, death claim benefit, maturity benefit, bonus surrender, claim recovery, etc. The details are then written into GVST records. GVST is a new statistical file which will be used later for updating to the new accumulation files, GVAH and GVAC. These two new files are mainly used for the accounting related statutory reports.

Program   B0237 B0321 BJ518
Tables   T5645 T5687 T5540 T6640

NEWSEXT

Unit Dealing (9606 & Singapore Withdrawal Calc). The job reads and summarises accounting movement records (ACMV) at the policy and component level to accumulate the regular premium, single premium, first year commission, renewal commission, single premium commission, RI premium ceded, RI commission, terminal bonus, reversionary bonus, extra bonus, interim bonus, death claim benefit, maturity benefit, bonus surrender, claim recovery, etc.

The details are then written into GVST records. GVST is a new statistical file which will be used later for updating to the new accumulation files, GVAH and GVAC. These two new files are mainly used for the accounting related statutory reports.

Program   B0237 B0321 BJ518
Tables   T5645 T5687 T5540 T6640

NEWUNITD

Unit Dealing. This job performs all processing required for unit linked and interest bearing policies. It basically performs the following:

- Calculate interest due on the Interest Bearing Funds
- Process all outstanding (un-dealt) Unit Linked transactions
- Generate Unit Linked Fund Movement report
    ➢ print total value of the funds extracted
    ➢ print outstanding transactions extracted grouped by fund / type
- Process outstanding (un-dealt) Unit Linked transactions created by of Fund Switch transactions
- Process all outstanding (un-dealt) Interest Bearing transactions
- Generate Interest Bearing Fund Movement report
    ➢ print total value of the funds extracted
    ➢ print outstanding transactions extracted grouped by fund
- Process outstanding (un-dealt) Interest Bearing transactions created by

Fund Switch transactions
- Coverage Debt recovery by either selling Unit Linked or Interest Bearing funds
- Process outstanding (un-dealt) Unit Linked transactions created by the previous Coverage Debt settlement process
- Process outstanding (un-dealt) Interest Bearing transactions created by the previous Coverage Debt settlement process
- Generate Unit Linked Fund Movement Listing to print all Unit Linked transactions that have just been processed
- Generate Interest Bearing Fund Movement Listing to print all Interest Bearing transactions that have just been processed
- Generate Unit Dealing Run – Error report
- Update Sum Assured of components having Partial Withdrawal transaction

The original UNITDEAL job has been replaced by this NEWUNITD job that runs in multi thread.

Programs	B5100 B5101 B5102 B5103 B5104 B5106 B5107 B5108 BR512 BR607 BR608 BH508 BH509 BH511 BH512 BH517 BH518
Tables	T1688 T1693 T3629 T5515 T5519 T5539 T5544 T5540 T5645 T5679 T5687 T5688 T6597 T6646 T6647 T6626 TR52R

NOTEPAD

Notepad Report. There is a facility within the system that allows the administration to add notes to individual contracts in addition too normal Follow Up procedures. This batch job is a report only basis and lists all Note Pad items where the reminder date is equal to or less than the batch job effective date.

Programs	B3710 B3711
Tables	T1658 T1692 T1693 T3590 T3592

OCCGUIDE

Monitor Agents to OCC Guidelines (Malaysia). This report monitors agent's benefits for compliance to Operational Cost Control guidelines set by the central bank of Malaysia, Bank Negara.

In particular, there are maximum Basic Commission and Overriding Commission levels provided as part of OCC guidelines. The guidelines provide rates for Basic and Overriding commission for 10 years of the policy varying by the initial term up to 20 years.

Compensations and benefits paid to agents are monitored in three broad categories:

(1) Commission
- Basic Commission
- Override Commission

- Production Bonus
- Persistency Bonus

(2) Agents Related Expenses

• 1st 5 mil FYP	• Retirement
• > 5 mil FYP	• Agency Allowance
• Renewal	• Recruiting
• Insurance	• Seminar & Convention
• Interest - Car	• Contest
• Interest - House	• Agent Training Allowance
• Clerical	• Agency Office
• Car Park	• Breakaway
• Medical	

(3) Management Expenses

- FYP 28%
- Single Premium 10%
- Renewal Premiums are banded i.e. 1st RM5mil is 19%, 2nd RM10mil is 14%, and so on.

Programs   BM501
Tables   T1692 T1693 T3627 T3629 TM600 TM601

OSBALINS
Listing O/S installment. This job prints total outstanding instalment of all in-force policies. This job also caters for Mortgage products where the instalment details are kept in the Instalment Schedule details (MINS).

Program   BR568
Tables   TH616 T5645

OWNCHG

Policy Owner Change For Juvenile. This batch job has been introduced in LIFE/Asia V7.1 to conduct auto Policy Owner change for Juvenile policy, when the child attains a certain age, usually an age when the child is self supporting. The Policy Owner is transferred to the child either on the exact attained age or the policy anniversary following the child's defined age. This attained age varies from country to country.

Program   BR628 BR629
Tables   TR627

PASTAPST

Policy Admin Related Statistics Posting. This job accumulates and summaries the Statistical Movement records (STTR) into a new accumulation file, GOVE. This file is used for producing the policy admin related statutory reports.

This is similar to the existing GOVR except with a different accumulation key. This is an addition to the existing GOVR. The online government statistics enquiry and journal functionality is not changed. There is no online enquiry or journal provided for the new statistical file.

Program   B0237 B0321 BJ533
Tables   T6625

PASTATRP

Policy Admin Related Statutory Reports. This job generates some policy related statutory reports based on the information from GOVE and GVAC. Even if no accounting reports are required, the new schedule ACSTAPST must be run prior to this job because some of the actuarial reports require accounting information.

(1) RJ522 - New Business Activities
    This report lists all New Business transacted during the year segregating them into regular premium contracts, single premium contracts (includes immediate and deferred annuities). It also takes into account proposals created during the specified account year regardless of the proposal status at the end of the accounting year.

(2) RJ528 - Premium Details
    This report lists all policy movements for the specified period.

(3) RJ529 - Persistency
    This report lists policies that lapsed and/or reinstated as at the specified accounting year and month.

(4) RJ530 - Overall Business Portfolio (Product level and Business level)
    This report lists all the accounts for overall business portfolio as at the specified accounting year and month.

(5) RJ531 - Total In-force Business
    This report lists all In-force business and identify those that have been reassurance ceded for the specified period. It is segregated into regular premium contracts, single premium contracts (includes immediate and deferred annuities and Others(fully paid and paid up contracts) at the end of accounting year.

(6) RJ532 - Claims (Linked/Health Insurance at product and business level)
    This report lists the following claim for the specific period:
    ➢ Claims benefits payable on Insurance Products segregating them into regular premium, single premium (includes immediate and deferred annuities), fully paid up and paid up contracts
    ➢ Claims benefits payable on Rider Benefits.
    ➢ Loaded premiums on claimed policies.
    ➢ Reassurance ceded on claimed policies.

Program   BJ527 BJ528 BJ529 BJ530 BJ531 BJ532
Tables   T3615 T3589 T5685 T5684 T5687 T6625 T6697 TJ675
PAYDUE

Anticipated Endowments Payments processing. The batch process reports on the payment records.

Program   BR536
Tables   T1692 T1693 T3629 T5688

PAYOS

Outstanding Payments Report. This report will list all the authorised and unauthorised outstanding payment requests. It will extract from the CHEQ file all payments with a status of RQ, Requisition and AU, Authorised. This is a read only report and therefore, can be run when the on-line system is active or inactive.

Program   B2203
Tables   T1692 T1693 T3629 T3672

PAYRPT

Processed Payments Report. This batch job extracts transaction records for all on-line payments and cheque batches and sorts this information into bankcode, requisition number and payment method.

Program   B0237 B0236 B2199
Tables   T1692 T1693 T3572 T3629 T3672

PDCHQPOS

Post Dated Cheque Posting. This batch job is created for automatic posting of the cheque details when the cheque date falls due, and corresponding receipts will be generated accordingly. This batch job will be run by user on an adhoc basis.

Program   BR22V
Tables   T3642 TR22X

PENDMATY

Pending Maturity Report. This report extracts all contracts that are due to Mature or Expire between selected input dates in advance of the run date. This ensures that the company has adequate time to contact the client and disburse the Maturity proceeds on time or the client has time to select any other contractual options. In addition to providing a list of contracts the process will produce client letters with the estimated Maturity Value excluding Terminal Bonuses, if applicable. This batch job would normally be run overnight but it is possible to run during the business day if required.

Program   B5024
Tables   T1692 T1693 T5679 T5687 T5688 T6598 T6625 T6634

PENDVEST

Pending Annuities Report. This is part of the annuity functionality and as it is a report only process it can be run at any time. The job will select any annuity component with a risk cessation date that falls between the dates entered on the parameter prompt screen, S5231.

One record will be written for each contract that has at least one component due to vest between the dates specified. This record will hold the information for all components, including the anticipated value of the component(s) at vesting.

Program   B5231
Tables   T1692 T1693 T5679 T5687 T6598 T6625 T6634

PLDTYRPT

Policy Loan Stamp Duty Report. Stamp duty is charged to the policy owner when applying for the policy loan. Therefore added functionality has been introduced to LIFE/Asia. This facility automatically calculates the Policy Loan Stamp Duty, and deducts from the loan amount and posts to the stamp duty payable.

This batch jobs reports on Policy Loan Stamp Duty after calculation from on line loan creation.

Programs   BT501
Tables   T1692 T1693 T3629 T5645

POLACK

Policy Acknowledgement Processing. This job extracts all policies with outstanding acknowledgement slip and generates either the acknowledgement reminder letter or deemed received letter based on the policy despatch rules defined in TR52Q. It excludes contracts having delivery modes that have been set under excluded delivery modes in TR52Q.

Programs   BR52P
Tables   T5679 TH605 TR52Q

POLRGT

Register of policies. This job list all policies having First Issue Date between the From and To Date specified in the parameter prompt screen. It prints some policy information like life assured name, age, sex, contract commencement date, maturity/expiry date, premium, sum insured, owner name, nominee names, etc.

Programs   BM500
Tables   T5679 T6654 T6597 T5687 T3627

PYPNDAUT

Payment Pending Authorisation/Authorised Requisition Report. This job allows the user to the print the following report:
1) Lists all payment requisitions awaiting approval or authorisation sorted by branch, bank code and payment number.
2) Lists all payment requisitions that have been authorised or processed sorted by branch, bank code and payment number.

Programs	BR412 BR413 BR414
Tables	T3688

RACOST

Reassurance Costing Processing. Each tranche of reassurance may be related to a distinct reassurance arrangement and this may be subject to different premium collection and rates, commission and taxation. This job creates the collections from reassurance coverage type records.

The output from this will be the appropriate accounting movement records (ACMV) that reflect the moneys due from each reassurance component. Reassurance premiums will be billed in advance and will cover the period from the current billed to date to a date one costing frequency in advance.

The premium will be re-calculated depending on the reassurance arrangement. There are two types of premiums, Original Terms and Regular. This is a processing batch job and should only be run overnight.

Process	B5457
Tables	T1688 T5448 T5449 T5450 T5647 T5679 T6598 TH621

RASAPAY (9606 Release)

Reassurer Statement and Payment. This is a two-stage process. The first stage extracts all outstanding reassurance transactions from the account movement file, ACMVPF, to a temporary file. It then checks to see if the total amount outstanding for a reassurer account is equal to or greater than the minimum statement amount on the RASA file. If the amount passes this initial minimum statement amount test each individual ACMV record will be printed as a statement and stored on a temporary physical file.

The second stage will extract the information from the temporary file and update the ACMV file by setting the reconciled date. For each individual reassurer, post a balancing ACMV record for the total amount and call PAYREQ to create payment records. This batch is of a processing nature and therefore, should be run overnight.

Programs	B5470 B5471
Tables	T1688 T1693 T3629 T5632 T5645 T6657

REACESS (9606 Release)

Reassurance Cessions Report. This batch job will report on all the cessions that are associated with a particular reassurer within the specified accounting year. The cessions will be grouped by reassurer, the currency and by transaction type. Total will be printed for each transaction type within each currency within each reassurer.

The required RACD and PTRN records are selected by using SQL. This is a report only batch job and can be at any time.

Program	B5469

Tables   T1688 T1693 T3629 T5449

REACLMS (9606 Release)

Reassurance Claims Paid Report. This process will read the RACD file and select all records that are valid flagged 4. SQL is used to retrieve all records that satisfy the selection criteria. A parameter screen is available for users to specify the date range. This again is a report only process and can be run at any time.

Program   B5473
Tables   T1688 T1692 T1693

REARDIST (9606 Release)

Reassurance Redistribution Report. This program uses SQL to extract life and joint life client numbers from the LIFE/Asia file that have terminated RACD records attached to them. Then, it will then read through the LIFERENQ records for each client number extracted to find any other cessions attached to the life. The details will only be printed if the reassured amount is greater than zero that indicates a current record.

A parameter screen is included to allow users to specify the transaction date range. Records within that date range will be selected for printing. This job can be run at any time.

Program   B5441

REASREV (9606 Release)

Reassurance Reviews Report.   Regular processing to determine if the reassurance levels need adjustment. In arrangements where only the sum at risk is assessed for reassurance, rather than the whole sum assured, the amount reassured must be adjusted at regular intervals to reduce sums reassured as reserves build up and thus offset the sum at risk.

This batch job has been designed to adjust the current reassurance position of the contract with reference to the current retention's for the life based on the treaty effective at new business for the contract. Thus if termination's or reductions in sum assured for the related benefits for the same life have occurred, then the reassurance for the contract being reviewed may take up any slack in retention that may exist.

The timing of reviews is determined by the reassurance method review frequency held in table T5448. This will be used to calculate the next review date for each cession at date of cession.

This batch job will select all cessions that are due for on a given date, where the next review date on the RACD file is less than or equal to the effective date of the batch job. Logically this process should be run before any costing to ensure the correct cessions are costed. However, if costing should be run first, a refund will be calculated for any terminated cessions. This job should only be run overnight when the on-line system is not being accessed

Program   B5464
Tables   T1692 T1693 T5446 T5448 T5454 T5679

REGPAY

Regular Payments. This job process Regular Payments that are due to make the next payment. It will be run periodically, perhaps daily although this is not strictly necessary. Where media runs are processed on a less than daily basis it may not be necessary to run REGPAY each day. A consideration is that the job should be run prior to any Premium Collection run so that any Waiver of Premium claims are able to post the moneys to the appropriate contract suspense accounts ready for the collection run to pay the premium.

The process will be driven by details held on the Regular Payments File. Checking its Payment Status against the Allowable Codes set in the appropriate table will screen each payment. The risk and premium status of the contract and associated components will also be checked. The batch job will also produce the payment requisitions duly authorised however; the batch job CHQPRN1 will actually produce the cheques.

This procedure will also control the payments that are due to fall into review and termination. When the review and termination date are equal to or less than the effective date of the run then the status of the Regular Payment record will be altered to reflect this. No payment will be made whilst the record is in review or terminated. A report will be produced of contracts in this category.

Batch job should only be run when the on-line system is inactive.

Programs   B5227 B6681 B6682 B6683
Tables   T1692 T1693 T5671 T5679 T6625 T6634 T6689 T6693

RENEWALS or POLRNWL

Contract Renewals or Regular Processing. This is the full contract Renewal run and can consist of twelve distinctive steps. Premium Re-rating, Flexible Premium Billing & Collection, Pending and Actual Automatic Increases, Billing, Due Date Accounting, Collection, Cancellation of Initial Units, Overdue Processing, Unit Linked Benefit Billing, Anniversary Processing, and Unit Statements. This job would normally be run daily but can be run at other intervals should the Life Office so wish.

This process is in a modular format so each step can be "broken out" into separate batch jobs if required. Obviously if a Life Office only requires the Tradition Processing then the Unit Linked items can be removed. In addition to this there is the ability by use of a parameter screen of selecting contracts for this batch run. This gives the Life Office the flexibility of updating an individual contract during the working day without effecting the rest of the database. It also assists the development cycle as programmers and users alike can take advantage of updating contracts in a testing environment.

The followings renewal processes have been multi-thread enabled:-
• Component re-rate

- Waiver of Premium (WOP) re-rate
- Anniversary
- Unit Statement trigger

The entire batch Renewal programs have also been converted into DIARY/400 subroutines, so renewal transaction can now be scheduled as a background process rather than in a batch run. For detail information, please refer to the separate document – DIARY /400 Batch Renewal Conversion Release Guide V4.0.

The individual programs within this batch job are explained in greater depth in the Regular Processing area of the document.

Programs	B5360 B5361 B6210 B5032 B5033 B5348 B5349 B5350 B5351 B5352 B5353 B5358 B5359 B6269 B5334 B5355 B5362 B5363 B6527 B6528 B5094 B5105 BH592 B5372 BH594
Tables	T1688 T1692 T1693 T3620 T3629 T3695 T5399 T5447 T5519 T5534 T5540 T5645 T5655 T5671 T5667 T5679 T5688 T5729 T6634 T6647 T6654 T6658 T6659 T6597 T6687 T5675 T5687 TR517

RETAPPnn

Return bank tape upload (Approve) for factoring house nn. This job processes direct debit bank return file containing only approved records. It also generates the following reports:
- Approved Debited Listing
- Discrepancy Listing

Programs	BR21W BR21X BR21Y
Tables	TR371 TR22A TR22B T3684

RETBNKnn

Return Bank Tape Update (Approve & Reject) for factoring house nn. This job processes direct debit bank return file containing both approved and rejected records. It automatically registers Dishonour transaction for the "Rejected" Direct Debit request. It also generates the following reports:
- Auto-Dishonour Listing
- Unsuccessful Auto-Dishonour Listing
- Auto-Dishonour Listing
- Unsuccessful Auto-Dishonour Listing

Programs	BR21W BR21X BR21Y BR21T BR21U BR21V
Tables	TR371 TR22A TR22B T3684

RETREJnn

Return bank tape upload (Reject) for factoring house nn. This job processes direct debit bank return file containing only rejected records. It automatically

registers Dishonour transaction for the "Rejected" Direct Debit request. It also generates the following reports:

- Auto-Dishonour Listing
- Unsuccessful Auto-Dishonour Listing

Programs   BR21W BR21T BR21U BR21V
Tables   TR371 TR22A TR22B T3684

STAAGPST

Agents Statistical Movements. This batch job is for posting Agent Statistical records in accordance with the parameters set in table T6627/8 and 9. This job can be run daily, weekly or as often as required. This job could be run during the working day but would suggest, for system efficiency, to be run overnight.

Programs   B0237 B0236 B6522 B6523
Tables   T1692 T1693 T3629

STAGVPST

Government Statistical Movements. This is for Government or Statutory Statistical postings in accordance with the relevant table listed above in STSAGPST. Same comments as above regarding when this job is run.

Programs   B0236 B0237 B6524 B6525
Tables   T1692 T1693 T3629

STATROLL

Statistical Year End Rollover. This job basically read through accumulated figures in all accumulation files (GOVE, GVAH and GVAC) to be rolled over to the following year with the brought forward figures. This job should only be run once at the end of the year and when all the statistics for the year have been verified to be correct.

SUBSDWLD

Download Substandard Risks from LIFE/Asia to LIA. Details on sub-standard lives in the industry are passed to the system and vice-versa using this interface.

The Life Insurance Associations (LIA) of each respective country collates sub-standard risk details for their local life insurance industry. These details are passed on to the rest of the life insurance companies in the form of a flat file on a weekly or fortnightly basis.

These files can be retrieved from the Internet and uploaded to LIFE/ASIA for use by the underwriters.

Details on sub-standard risks captured anew on the system are flagged for download to LIA, also in the form of a flat file.

Sub-standard risk is managed as follows in the system:

Contract Issue

Upon contract issue, loadings on a life where the reason code is denoted as sub-standard (set in table T5657) is deemed as a substandard risk and is written to the Substandard Risk File with Risk Type=2.

If the sub-standard life is pre-existing on the LIA file as a result of a previous contract purchased, then the system should inform LIA of the latest update e.g. special terms (medical codes) loaded, new contract no, etc.

Decline

Sub-standard cases declined are updated to the LIA file with Risk Type=1 (Decline).

Postponed/Withdrawn

Sub-standard cases postponed/withdrawn are updated to the LIA file with Risk Type=2.

Death Approval

When a death claim on a sub-standard life is approved, the LIA file is also updated.

Regular Claims

When Health Claims module is made available in the base system then upon registering a Health Claim on a sub-standard life, details like the Hospitalisation Period, Application (Hospitalisation) Date should also be passed on to the LIA and the Risk Type is set to 3 (i.e. hospitalisation).

AFI

If the Proposal/Policy No. is the same as the contract being Altered From Inception, then delete the record from the LIA file if the record has not been downloaded. If it has already been downloaded, then leave the record alone.

Add/Modify Component Approval

Loadings with reason code denoted as sub-standard would make this life known to the industry as a sub-standard risk.

If a Special Term or sub-standard risk loading is removed, the LIA file is updated accordingly. The Action Code to LIA should be '2' (i.e. 'Correction'). However, if all Special Terms are removed, then this life becomes a standard life. In this case, the Action Code is '3' (i.e. 'Deletion').

Follow-ups

Follow-ups are automatically triggered if a sub-standard risk is underwritten.

Upload

Upload sub-standard risks details captured by other insurance companies.

Download

Download sub-standard risk details captured anew into a flat file for circulation to other insurance companies.

SUBSUPLD

Upload Substandard Risks to LIFE/Asia.

SUSPREP

Suspense Reports. There are two options with LIFE/Asia for reporting on suspense items and it is up to the client which one he chooses, as the reporting is slightly different.

Programs	BR501 BR543
Tables	T1692 T1693 T5687 T5688
or	
Programs	BR543 BR544 BR545
	Tables T1692 T1693 T3623 T3590 T3629 T5645

TABLIST

Table List Report. This batch job will list, in hard copy form, all the tables within the system together with any HELP information and explanation of the table items. It is possible, by use of a parameter screen, to select All Tables or a specific table number. This job can be run at any time.

Program   B0071

TERMRPT

New Business Termination Report. This program selects policies, which have had terminating action performed against them within the selected accounting month/year, and summarises the Annual Premium, Single Premium and Sum Assured. The details are sorted and presented for the appropriate Company under the following criteria:

Company
Transaction Code (Termination Reason)
Branch
Contract Type.

Earlier processes make use of the SMART batching programs B0237 and B0236 to close and extract the relevant batches. (See T1697 - Item BH604 for Termination Transaction codes).

| Programs | B0236 B0237 BH604 |
| Tables | T1688 T1692 T1693 T3629 T5679 T506 |

TOPAGT

Top Agency Report. This function reports the top performing agent/agency for each agency category (e.g. Top General Manager, Top Unit Manager, Top Agent, etc.) and are based on the following key result areas:

Minimum Group FYP

Any leader agents meeting the minimum Group FYP criteria is selected. This field is also used as selection criteria against the minimum Personal FYP for non-leaders.

Minimum Direct Group FYP

This is the leader Group FYP less any sub-group FYP. Sub-group FYP comprises of assistant leader agents (also called Unit Managers) and the production produced thereof.

Minimum Cases

Any leader agent meeting the minimum Cases criteria (i.e. number of new policies sold during the reporting period) is selected. For non-leaders, this field is also used as selection criteria on minimum Personal Cases sold.

Programs   BM505
Tables   T1692 T1693 T3629 TM604

TRMBUS

New Business Termination Report. BH563 This Program is designed to produce a report of New Business transactions on a weekly basis. The report will contain such information as Sum Assured, Single and Regular Premium as well as product and Agency details.

Program   BH563
Tables   T1692 T1693 T3629 T5688 TH535 TH536

T6641CRT

Mortality Factors Creation. This batch job has been designed to assist the input of table T6641. It takes an item from table T6686 and will calculate the monetary function Nx for table T6641 and create an item. The item key is eight characters, the first five are the name of the item and the last three is the percentage rate for that item. For example 400 is 4%. This batch job would be run as and when required.

Program   B5017
Tables   T1692 T1693 T3629 T6641 T6686

UNAPPR

Unapproved Requisition Report. This job lists all unapproved requisitions

created from a specified date range.

Program   BR301 BR302
Tables   T3672

UNAUTRP

Requisition Approved, Not Authorised Report. This job lists all requisitions that have been approved but not authorised from a specified date range.

Program   BR301 BR302
Tables   T3672

UNAUTHR

Unauthorised/Unapproved Requisition Report. This job lists all unauthorised/ unapproved cheque requisitions for the specified bank accounts. It can be run at any time but it is recommended to be run a few days before month end so that the unauthorised requisitions can be dealt with is either authorisation or cancellation.

Program   B2510
Tables   T1692 T1693 T3629 T3672

UNITPRIC

Unit Fund Prices Report. This program is a price history of Unit Linked Funds. There are five versions of this report available, which one to print is dependent on the parameters entered in the parameter prompt screen P5430.

This is a report only batch job and therefore can be run at ant time.

Program   B6230
Tables   T1693 T5515

UNTRESRP

Unit Reserve Report. At certain times the Actuarial function of an organisation will require to calculate the net risk of Unit Linked Contracts so that he/she may reserve for this exposure.

This report extracts all Unit Linked Contracts calculates the net risk, sum assured less unit surrender value and reports this figure at clients attained age. This report can be run at any time when this system is in use or overnight.

Programs   BR502 BR503

UNITSTMX

Unit Statement Print. There is functionality within the system to request Unit Statements for clients via an on-line transaction. This batch job will print Unit Statements as and when required.

The original UNITSTMT job has been replaced with this new UNITSTMX job that runs in multi-thread.

Programs   B6505 B6506 BR541
Tables   T3629 T3681 T5515 T5688 T6578 T6649

UNITSTM2X

Unit Statement Reprint. As there are occasions where the client does not receive a requested Unit Statement this batch job facilitates reprinting.

The original UNITSTMT2 job has been replaced by this new UNITSTM2X job that runs in multi-thread.

Programs   B6505 B6506 B6508 BR541
Tables   T3629 T3681 T5515 T5688 T5678 T6649

UPLDDIV

Upload of Dividend Rates. This job will upload dividend rates from PC file into ITEMPF (TH527). The format of the PC file must be in the same format as DIVRPF. To create the PC file in the same format as DIVRPF, down load DIVRPF to PC in Excel format.

To add records to the PC file, first open the file in Excel, cut and paste data from other Excel worksheets into the DIVR format file. To convert the data to ITEMPF dividend rate upload the Excel file (as Database file with replace option) back to DIVRPF and then run the batch schedule.

UPLDPRM

Upload of Premium Rates. There are products whose premium rates are dependent on Cover/Term/Age/Mortality class/Sex. LIFE/Asia supports this by utilising the rating tables T5658 and T5664. Since the premium rates are already held on PC files in Lotus and Excel formats, it would be convenient to have an uploading program to transfer the rates from PC file to LIFE/Asia table file. The PC file in Excel format must be structured according to the file format to be accepted by the AS/400 to make the uploading process easier. The actual uploading of file is done via RUMBA. A process on the AS/400 will be required to convert the data from the uploaded file to SMART table file.

Operational Procedure

- DFU one record into HRATPF so that the Timestamp field is in the correct Download the HRATPF file into an EXCEL database, and save the file description.

- Cut and Paste the downloaded record into the HRATPF spreadsheet, and ensure that each record has the timestamp field in the correct format.

- Upload the updated HRATPF EXCEL file as a database file (Using the file description created as part of (2) above) using the replace option into the

relevant environment.

- Run the Batch Schedule UPLDPRM in the environment where the uploaded file is held.

WFANNIVY, etc

Windforward Batch Jobs. CSC Europe introduced the Windforward following Reversal Functionality in 1997. Windforward is the process by which transactions that have been reversed by Full Contract Reversal can be wound forward, in order to return the contract to its pre Full Contract Reversal state. Only automatic scheduled events are eligible for Windforward Processing i.e. batch processing and the following is a list of batch jobs available.

These batch jobs will have the same programs and tables attached to them, as would the originating batch process. For example Anniversary Processing program is B5094, WFANNIVY process is also B5094.

WFANNIVX Windforward Anniversary processing (new multi-thread Anniversary Processes)

WFBENBIL   Windforward Benefit Billing

WFBILLING Windforward Flexible Premium Billing

WFCANCIU   Windforward Cancellation of Initial Units

WFCOFEXI   Windforward Certificate of Existence

WFFODUE   Windforward of Flexible Premium Overdue

WFFPANNY   Windforward of Flexible Premium Anniversary Processing

WFFPCOLL   Windforward of Flexible Premium Collection

WFPAYMTS   Windforward of Regular Payments

WFREGPAY   Windforward Regular Payments (No Cert of Exist'ce)

WFRERATX   Windforward ofRerate (new multi-thread re-rate processes)

WREVACC   Windforward of Revenue Due Accounting

WFREVIEW   Windforward of Regular Benefits in Review

WFRPCOLL   Windforward of Premium Collection

WFRPODUE   Windforward of Overdue

WFTERMED   Windforward of Regular Benefits Terminations

WFUDDEAL   Windforward of Unit Deal

WFFUDDEBT Windforward of Unit Debt

WFUDFNDS Windforward of Fund Switch

WFUDREPT Windforward of Unit Deal Report

WFUDTIDY Unit Deal File Tidy Up

WFUNISTX Windforward of Unit Statements (new multi-thread Unit Statement Processes)

WKNBRP

Weekly New Business Production Report. There is a requirement for various reports to be produced for New Business transactions. This report will detail New Business transactions on a weekly basis, and will hold such information as Sum Assured, Single and Regular Premium amounts as well as Product and Agency details. This particular report will be run at the end of each week, and will produce updated figures for Month-to-date, quarter-to-date and year-to-date values.

BH563 This Program is designed to produce a report of New Business transactions on a weekly basis. The report will contain such information as Sum Assured, Single and Regular Premium as well as product and Agency details.

Program   BH563
Tables   T1692 T1693 T3629 T5688 TH565 TH566

WKSLSRP

Weekly Sales Policy Status Report. This is a weekly report used by the individual sales channel to monitor completions and the status of outstanding policies awaiting completion. Sales people will use this listing to follow-up their clients on outstanding cases.

BH530 This Program reports on policies which have had one or more of the following transactions applied to them in the week prior to the running of the report - Issue, Cancel from Inception, Decline, Withdraw or Postpone.

Program   BH560
Tables   T1692 T1693 T3623 T5661 T5674 T5679 T5688 T5696
            TH506 TH565

XMLPRT

This printing batch job will process any pending letter requests where the request date is on or before the batch effective date entered. A parameter prompt screen exists, which allows the user to refine the selection criteria further, e.g. to only produce letters of a particular type. This batch process will invoke the data extraction, formatting and document creation and will store the documents. It will not print the documents; this must be done using the bulk printing command or using the on-line print transaction.

Program	B2560L B2561L
Tables	TR383 T2634 T2635 T2636 T2642 T2652 T2659 T2667

7.3 Batch Schedule

The batch schedule below is a recommended approach for completing New Business and General Policy Service type transactions on a daily basis, Collection of Direct Debit payments daily, Unit Dealing and General Ledger postings from the system.

There are no specific End of Quarter reports within the LIFE/Asia system. However, there is no reason why many of the General Ledger reports cannot be run on a quarterly interval to produce a summary of the previous three-month's business.

During the Day : Close Cash Receipts Batches and run CASHLIST UNITEXT, if Unit Pricing completed on daily basis

Daily : (in this order after normal business hours)

AGENTCHG	Agent Change
NEWAGTST	Agent Statement
RACOST	Reassurance
REGPAY	Regular Payments
CHQPRN01	Auto. Cheque Production
DISHGRUP	Group Dishonours
GROUPSMT	Group Statements
POLRNWL	Regular Processing
POLACK	Policy Acknowledgement processing
NEWUNITD	Unit-Dealing
STAAGPST	Agents Statistics
STGVGPST	Government or Statistics
NEWINTBL	New Interest Billing
NEWINTCP	New Interest Capitalistion
GLUPDATE	General Ledger Update
GLBALST	GL Balance Statement
NOTEPAD	Notepad Report
XMLPRT	XML Printing Solution
CREDITS	Direct Credits
DDnn	Direct Debit Extract
DDAPLYnn	Direct Debit Apply
DISHnn	DD Dishonour Processing
RETAPPnn	Return bank tape upload (Approve) for factoring house nn
RETBNKnn	Return bank tape upload (Approve & Reject) for factoring house nn
RETREJnn	Return bank tape upload (Reject) for factoring house nn

Weekly		New Business Reports	
		UNAUTHR	Unauthorised Requisition Report
		UNAPPR	Unapproved Requisition Report
		UNAUTRP	Requisition Approved but Not Authorised Report
Month End	:	(Daily plus below)	
		NEWAGTPY	New Agent Statement Payments
		PENDMATY	Pending Maturity Report
		PAYOS	Outstanding Payments Report
		PAYRPT	Processed Payments. Report
		GLEXPSL	GL Expense Report
		GLMTHST	GL Monthly Statement
		GLYTDST	GL Year to Date Report
		GLCMPST	GL Comparison Statement
		POLRGT	Register of policies.
Year-End	:	BONCMPY	Company Anniversary Reversionary Bonuses
		GLROLL	GL "Rollover"
		STATROLL	Statistical Year End Rollover
Ad Hoc	:	General Ledger	
		GLAUD	Audit Report
		GLCURCON	Multi Cur. Conversion Report
		GLEXPLR	Chart of Accounts Explosion
		GLIMPLR	Chart of Accounts Implosion
		GLUNLNK	Unlinked Accounts Report
Ad Hoc	:	General	
		HELPALL	"Help" Details Report
		HELPSEL	Selected "Help" Details Report
		TABLIST	Table Listing Report
Housekeeping	:	F9AUTOALOC	System Numbering (FSU/Asia)
		AUTOALOC	System Numbering LIFE/ASIA
		ARCACMV	Archiving ACMV's to Optical Disc
		ATLIST	List of AT Queue
		ERORREP	System Data Base Error Report
		JOBPERF	Job Performance Listing

7.4   Renewals Processing

The Renewals Processing batch schedule (RENEWALS) forms a fundamental part of the LIFE/Asia system and handles most scheduled events that are likely to take place with a contract. Much of the processing of life assurance contracts is controlled by the date, rather than being a transaction input at a

terminal. Such processing as sending out premium notices and overdue premium notices and so on comes into this category.

The batch schedule covers those premium aspects and scheduled changes. It covers several different processes that can also be split and run independently. The steps are as follows:

7.4.1 Flexible Premiums Anniversary Processing - B5360 & B5361

UK Release 9604 introduced Flexible Premiums to LIFE/Asia for Unit Linked Products. The main feature of this new functionality is that any amount of premium can be paid at any time; a fixed premium on a fixed date is not required. Although fixed premiums are not required, it is a normal practice to define a Target Premium and a Target Frequency for the contract that will provide the basis for the calculation of commission, and where appropriate, the percentage of each premium received that is to be invested.

Flexible contracts are reviewed annually to compare the expected premium flow, Target Premium, with the premiums received. This step in the Renewals batch job completes this review. If the Target Premium has not been reached or not all the premiums have been billed then the indicator on the Flexible Premium Coverage record (FPCO) will remain as "Y" so that any premiums received in the next period can be applied to this period until the Target Premium has been reached. Once the Target Premium has been reached then the indicator on old record is set to "N" and the next year Target Premium record is created to record subsequent receipt of premiums.

The above processes will complete this review and must be run prior to the Billing process.

Tables used by Programs

T5679	-	Transaction Status
T5688	-	Contract Processing
T5729	-	Flexible Premium Variance
T6654	-	Billing Control

Transaction Code

B537	-	Flexible Premium Anniversary Processing

7.4.2 Rerate - Program BR612 & BR613

The main objective of this process is to recalculate any premiums that require re-rating prior to billing. A contract may require re-rating in the following cases:

- Expiry of an Option or Extra Loading
- Periodic Re-Rating of Renewable Term Contracts
- Component becoming Fully Paid

All contracts to be re-rated have a product type that governs the lead-time, days in advance of the due date, for re-rating to commence. Depending on this date, components are selected by query utility and re-rated if the premium is due for revision. This query will view both the contract header and component records in order to carry out the select/omit processing.

Generic premium calculation routines are called to recalculate the component premium and the difference is accumulated by contract until all components are processed in which time the contract header is updated. Where an Option, Premium Loading or Discount has expired, the premium calculation module for the component is simply called to recalculate the instalment due.

On cessation of a component premium the contract header and PAYR file records are rewritten with the relevant premium change, added or subtracted, from the overall contract amount. In addition, the system may alter the premium status of a component to 'fully paid' as defined in table T5679. In this way different actions may be taken on components with 'fully paid' premium status, than one that is still premium paying, such as Reversionary Bonuses.

The contract status will not be altered to 'fully paid' until all components have completed their premium paying terms. Similarly, these processes must be run prior to the Billing process.

The original B6210 program B6210 for Re-rate Module has been replaced by the following Multi Thread programs in the V6.5 release:

CRTTMPF	Create Temporary Re-rate file
BR612	Component Re-rate Splitter Program
BR613	Component Re-rate Updating

Tables used by Program

T5655	-	Automatic Increase Rerate Lead Time
T5671	-	Coverage Rider Switching
T5679	-	Status Transaction Requirements
T5687	-	Coverage and Rider Details
T6658	-	Anniversary Processing Rules

Transaction Code

B672	-	Component Rerating

7.4.3   Pending Automatic Increases - Program B5133 & B5134

This process extracts all contracts where the next increase date is imminent. The business tasks performed are to calculate the amount of the increase by reference to component records and table data to create records to ensure that the next billing takes account of the expected increase. In addition to this, it can generate letters to notify the contract owner or payer that an increase is approaching.

The original B5032 program for this Automatic Increase module has been replaced with the following Multi Thread processes in V6.0 release:

B5144	Clear Automatic Increase Report file
CRTTMPF	Create Temporary Pending Automatic Increase file
B5133	Pending Automatic Increase Splitter
B5134	Pending Automatic Increase Process
B5135	Pending Automatic Increase Report

Tables used by the Program

T5565	-	Automatic Increase Control
T5679	-	Transaction Status Requirements
T5687	-	Coverage and Rider Details
T5688	-	Contract Processing Rules
TR384	-	Automatic Letters
T6658	-	Anniversary Processing

Transaction Code

B523	-	Pending Automatic Increase

7.4.4   Actual Automatic Increase - Program B5136 & B5137

This program will process the Increase Pending record, created by the previous program, on the actual increase date. At this stage processing to update the contract records with the calculated new amounts will take place. This will involve writing new Contract Header, CHDR, Coverage or Rider, COVR, and Payer, PAYR, details and rewriting the old records with a valid flag of '2'.

The increased portion will write Increase records, INCI, that will hold the details of the increase amount and any commission that is payable.

The original B5033 program for Actual Automatic Increase module has been replace by the following Multi Thread programs in V6.0 release:

B5144	Clear Automatic Increase Report file
CRTTMPF	Create Temporary Actual Automatic Increase file
B5136	Actual Automatic Increase Splitter
B5137	Actual Automatic Increase Process
B5138	Facultative Reassurance Report

Tables used by Program

T5447	-	Reassurance Product Bypass
T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status Requirements
T5687	-	General Coverage/Rider Details
T5688	-	Contract Processing Rules
T6658	-	Anniversary Processing Rules

Transaction Code

       B524   -   Actual Automatic Increase

7.4.5 Waiver of Premium Rerate - Program BR614 & BR615

This is one of the processes in Renewals schedule for rerating Waiver of Premium (WOP) components of contracts. The contracts fall in the criteria to re-rate, that is when re-rate date is before the effective date of the run and maximum lead days in T5655. New coverage (COVR) records are written with the re-rated premium and new re-rate dates if applicable.

The reason that this program is introduced is because re-rating on individual component will affect the total sum insured for WOP, also the automatic increase processes will result in new instalment premiums for components, therefore this program is run after all relevant coverages have been re-rated, to write new COVR records for WOP components.

While reading through COVR records, skip processing on non WOP components. For WOP components, find the earliest re-rate dates from all the related components. Also, accumulate for the correct WOP Sum Insured before calling the premium calculation routine for new renewal premium.

The original BH592 program for Waiver of Premium Re-rate Module has been replaced by the following Multi Thread programs in the V6.5 release:

       CRTTMPF   Create Temporary Waiver of Premium Re-rate file
       BR614   Component Re-rate Splitter Program
       BR615   Component Re-rate Updating

Tables used by Program

Table		Description
T5655	-	Automatic Increase Rerate Lead Time
T5671	-	Coverage Rider Switching
T5674	-	Contract Management Fee
T5675	-	Premium Calculation Method
T5679	-	Status Transaction Requirements
T5687	-	Coverage and Rider Details
T5688	-	Contract Processing Rules
T6658	-	Anniversary Processing Rules
TR517	-	Waiver of Premium Component

Transaction Code

       BH65   -   Waiver of Premium – Rerate

7.4.6 Billing - Programs B5348 & B5439

This process bills all contracts that fall due at the effective date of the billing taking into account of the billing lead days defined in table T6654. A temporary file, PAYXPF, is created which adds the required numbers for the subsequent process B5348. B5348 uses SQL, Structured Query Language, to select the required PAYR records and write the records in turn to the members created above. The main processing is performed directly afterwards by

B5349. All contracts due, including past instalments, produce instalment records, LINS, which are used later for collection, B5353.

Each contract that is due is checked for outstanding suspense premium to assess how much will be available to settle the outstanding amount. If the available suspense is not enough to cover the outstanding instalment amount, an FSU/Asia subroutine, BILLREQ1, is called to create the Billing Extract record (BEXT).

Where Premium Relief at Source applies, this is calculated by means of its own subroutine, accessed from table T6687. The amount of tax relief is deducted from the amount billed.

Tables used by Programs

T3615	-	Source of Business Table
T3620	-	Billing Channels
T3629	-	Currency Details
T3684	-	Factoring Houses
T3695	-	Sub Account Types
T5645	-	Transaction Accounting Rules
T5679	-	Transaction Status Requirements
T6654	-	Billing Control Table
T6687	-	Premium Tax Relief Method

Transaction Code

| B521 | - | Billing |

7.4.7   Revenue Accounting - Programs B5350 & B5351

The system caters for two types of accounting methods, Cash and Revenue or Due Date Accounting. Cash Accounting requires that the premiums are only accounted for when the money is available. Revenue Accounting requires the premiums to be accounted for when they are due. The contra entry for the Revenue posting is made to the Premium Due Control Account. After posting, when the money is made available, then the contract's suspense sub account is debited and the moneys credited to the Control Account, during the Collection process.

The choice of Cash or Revenue Accounting can be made at the product level by notation in table T5688. This program performs Revenue Due Account Postings.

Table used by Programs

T3629	-	Currency Details
T5645	-	Transaction Accounting Rules
T5679	-	Transaction Status Requirements
T5688	-	Contract Processing Rules

Transaction Code

     B503   -   Revenue Accounting

7.4.8 Premium Collection - Programs B5352 & B5353

This module selects unpaid premiums from the outstanding instalments file and attempts to settle them from the contract suspense account. A temporary file, LINXPF, is created which adds the required number of members for the subsequent process, B5352. B5352 uses SQL to select the required LINS records and write the records in turn to the members created above. The main processing is performed by B5353.

When there are sufficient funds available in the contract's suspense account, the instalment, payer and contract header records are updated accordingly and the General Ledger accounting records are written.

Tables reviewed by Programs

T3695	-	Sub Account Types
T5644	-	Commission Release Methods
T5645	-	Transaction Accounting Rules
T5667	-	Premium Tolerance Limits
T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status Requirements
T5688	-	Contract Processing Rules
T6654	-	Billing Control Table
T6687	-	Premium Tax Relief Method

Transaction Code

     B522   -   Premium Collection

7.4.9 Premium Tolerance

With LIFE/Asia release 4.2 a 2nd Premium Shortfall Tolerance field was added to the system. Prior to this enhancement when a payment shortfall fell with in the first shortfall payment limit, the amount of the shortfall was charged to the company's expense account as an Administrative Charge. With this enhancement, if the shortfall is greater than the first shortfall tolerance limit, but less than or equal to this new second shortfall limit, the full amount of the shortfall will be deducted from the Agent Commission account. The new shortfall limit is specified in Table T5667 – Tolerance Limits.

7.4.10 Flexible Premium Collection - B5358 & B5359

Flexible Premium Collection processes premium received that is held in suspense and will apply any amount held assuming that the amount in suspense is within the flexible premium variance. The amount processed from suspense may be added to more than one target period, for example if the previous target period is active because the target premium for that period has not been received.

These batch programs will produce two reports as follows:

- The Over Maximum Premium Variance Report that will detail premium, which cannot be allocated because the suspense amount exceeds the maximum acceptable premium as, defined in table T5729.

- The Under Minimum Premium Variance Report, which will detail premiums that cannot be allocated because it is below the minimum premium as defined in table T5729.

Tables used by Programs

T3620	-	Billing Channels
T3695	-	Sub Account Types
T5644	-	Commission Payment
T5645	-	Transaction Accounting Rules
T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status
T5688	-	Contract Processing Rules
T6654	-	Billing Control

Transaction Code

B536	-	Flexible Premium Collection

7.4.11   Canc. of Unit Linked Initial Units - Program B5372

This is a contract anniversary process on Unit Linked Contracts that have Initial Units. The program selects all components that are due for initial unit cancellation based on the initial unit cancellation date of the coverage. It will calls generic routines as determined by table T5540 to process any components due. The initial unit cancellation date on the coverage will then be increased by one frequency based on the setting in table T5519.

Tables used by Program

T5519	-	Initial Unit Discount Factor
T5540	-	Contract Unit Linked Details
T5679	-	Transaction Status Requirements

Transaction Code

B678	-	Cancellation of Initial Units

The original program B6269 for Cancellation of Unit Linked Initial Units module has been replaced program B5372.

7.4.12   Overdue - Programs B5354 & B5355

This module extracts contracts in the system, with overdue premiums, selecting all Payers that have a paid to date less than the billed to date. A temporary file, PAYXPF, is created which adds the required number of members for the subsequent process, B5354. B5354 selects the required

PAYR records and writes the record in turn to the members created above. The main processing is completed by B5355.

Depending on the billing method of the contract, there may be a grace period that is table driven, T6654, and referred to in the processing to decide what form of overdue action is to be taken. All overdue processing is controlled initially but Billing Control table, T6654 and this will either enforce:

- Overdue Letters
- Overdue Processing at the component level
- Automatic Premium Loans, at the contract level

The Billing Control table T6654 controls the action to be taken by Method of Payment; Contract Type and these two data items form the key to the table. From the extra data panel can be found the appropriate overdue action to be taken for the contract. Different action can be taken depending upon how long the premium is overdue. If, say, one week, then an overdue letter can be sent therefore, the entry in the first overdue line, on table T6654, would be seven days followed by the name of the appropriate letter production subroutine. Up to four different periods of actions can be specified.

The field Contract Arrears Processing will determine whether the contract is permitted an Automatic Premium Loan or whether component level processing is to apply. If blank, then component level processing will be applied. If present, then true Non-Forfeiture processing in the form of APL will be applied.

Overdue Processing at Component Level

The system will look to table T5687 to determine the overdue processing to be applied to the component. If the component has a method in the Non-Forfeiture routine field, then the appropriate method is put into action. The system will look to table T6597, Non-Forfeiture Methods and execute the appropriate subroutine for the method detailed. This may be an instruction to lapse the component, or automatically to make it paid up, etc. Each component is processed in turn and different components under the same contract may have different action applied.

Overdue Processing at Contract Level

If the billing control table, T6654, has an entry in the field Contract Arrears Method, then this means the contract is eligible for a premium loan to pay outstanding premiums. The system will again reference T6597 to obtain the processing sub routine to implement the loan. The system will automatically calculate the total available surrender value, calculate the sum of existing loans both contract and APL including interest to date. These two figures will be compared and if the surrender value exceeds the loans by an amount equal to or greater than the outstanding premium(s), then the loan will be granted. In the event the loan debt plus interest is greater than the contract surrender value then the premium loan will not be advanced. The system will inform you of this situation within report R6244, Overdue Processing, so that the appropriate Non Forfeiture Surrender action can be taken.

The loan when granted will debit the loan principal account and credit contract suspense. The next RENEWALS run will debit suspense and credit the premium account and move premium paid to date to the billed to date.

LIFE/Asia Release 4.2 added new functionality for APL processing. This enhancement will trigger a change in the billing frequency of the contract to the next more frequent billing frequency if the total surrender value is insufficient to APL for the current modal premium. The payment frequency will be reduced until the revised APL installment can be advanced or monthly frequency is reached, and advance that revised premium installment.

If the revised monthly installment cannot be advanced, then system will produce an exception listing for user to do further processing (i.e. lapse the contract or refund the balance surrender value through surrender transaction).

This change assumes that all riders attached to this policy/contract will have their premium advanced under APL if premiums are not paid, as non-forfeiture options are held at contract header level and not at component level.

The Release LIFE/Asia V2.1 introduced two new non forfeiture-processing methods; Extended Term Insurance (ETI) and Reduced Paid-Up (RPU) are provided to the Client to choose from in addition to Automatic Premium Loan (APL). If the cash value is insufficient to cover an Automatic Policy Loan (APL), there should be an option to use the cash value to purchase ETI or RPU instead.

The User can choose to create the Non-Forfeiture Option (NFO) during New Business data capture. After the contract is issued, the User can also change the NFO via one of the options in the Minor Alteration Submenu.

There will always only be one NF option invoked after the grace period. This is either client defined or by company default. Therefore there is no hierarchy of non-forfeiture options.

ETI

For a contract with an ETI NFO, the ETI NFO will be exercised when premium has not been received for a defined period of time. Any outstanding loans or loan interest will be settled using the cash value (including accumulated dividend and paid-up additions) before the ETI cover is purchased, and the remaining cash value will be used to purchase the ETI cover. The extended term will be calculated based on the remaining cash value and death benefit as at the date of termination (as outlined below), and the existing coverage will be extended by the calculated amount of time. The coverage will have a new status of ETI, which will make it ineligible for any further regular processing. The ETI coverage is assumed to be non-participated, i.e. no dividend allocation is required.

RPU

For a contract with an RPU NFO, the RPU NFO will be exercised when premium has not been received for a defined period of time. Any outstanding loans or loan interest will be settled using the cash value (including

accumulated dividend and paid-up additions) before the RPU cover is purchased, and the remaining cash value will be used to purchase the RPU cover. The Sum Assured will be calculated based on the remaining cash value and the remaining term as at the date of termination (as outlined below), and the existing coverage sum assured will be reduced to zero. The coverage will have a new status of RPU, which will make it ineligible for any further regular processing, except for dividend allocation (optionally). A new paid up addition record (HPUA) will be written for the reduced paid-up coverage.

The LIFE/Asia V5.0 introduced a new non forfeiture-processing method; Automatic Cash Surrender.

Automatic Cash Surrender (ACS)

For a contract with an ACS NFO, the ACS NFO will be exercised when premium has not been received for a defined period of time. Any outstanding loans or loan interest will be settled using the cash value (including accumulated dividend and paid-up additions) before the remaining cash value surrendered.

In the system, the automatic cash surrender non-forfeiture option can be set up by two methods:
- First method is specified when the contract is defined.
- Second is specified at the product definition depending on the billing channel; e.g., Cash, direct debit and contract type.

Tables used in Programs

T5645	-	Transaction Accounting Rules
T5679	-	Transaction Status Requirements
T5687	-	Coverage/Rider Details
T6597	-	Non-Forfeiture Methods
T6647	-	Unit Linked Transaction Rules
T6654	-	Billing Control Table

Transaction Code

B673	-	Overdue Processing

7.4.13 APL Billing Frequency Change - Program BR588

This process will perform the Billing Frequency change for policies having Non-Forfeiture method of APL with Billing Change. It will basically read the Billing Frequency Change Details file (BFRQ) and process sequentially for all records found in this file. For each record read, do a Billing Frequency Change and invalidate the BFRQ record by setting the Validflag to '2'.

The BFRQ records are created during the Overdue processing, when the Surrender Value of these policies is not enough to cover the instalment premium and the Billing Frequency is not Monthly.

Tables used in Programs

T5541	-	Frequency Conversion Factors
T5567	-	Contract Fee Parameters
T5664	-	Preimum Rates (Age Based)
T5671	-	Coverage/Rider Generic Processing
T5679	-	Transaction Status Requirements
T5687	-	Coverage/Rider Details
TR517	-	Waiver of Premium Component

Transaction Code

BR74	-	APL Billing Change

7.4.14 Automatic Non-Forfeiture Surrender - Program BR525

This process will perform the Non-Forfeiture Surrender for policies having Non-Forfeiture method of NF Surrender. It will basically read the Contract Non Forfeiture Surrender file (CNFS) and process sequentially for all records found in this file.

The CNFS records are created during the Overdue processing, when the Surrender Value of those policies is not enough to cover the instalment premium.

Tables used in Programs

T5679	-	Transaction Status Requirements
T5687	-	Coverage/Rider Details
T6598	-	Calculation Methods (Various)
TR691	-	Surrender Tax

Transaction Code

BR78	-	Automatic Non Forfeiture Surrender

7.4.15 Overdue Flexible Premiums - B5362 & B5363

When premiums are received for a Flexible Premium contract, the system assumes that the amount received pays the contract up to date. Overdue batch processing for regular premiums uses the difference between the Billed to and Paid to Dates to identify overdue contracts. This processing is not applicable to Flexible Premium contracts since the receipt of any premium pays the contract to date.

Therefore, Flexible Premium contracts are excluded from the overdue batch processing via T6654, Billing Control Table. The overdue premium lag time should be set to the maximum number of days e.g. 999, within T6654 in order to prevent overdue letter production and automatic non forfeiture processing.

The above batch programs create a report on components that have not received the minimum premium required so that manual action can be taken such as manual lapsing of the component.

Tables Reviewed by the Programs

       T3629   -   Currency Codes
       T5679   -   Transaction Status

Transaction Code

       B536   -   Flexible Premium Overdue Processing

7.4.16 Benefit Billing - Program B6527 & B6528

Benefit Billing is a Unit Linked term where the units purchased on the main coverage are used to pay for the life cover of that component and any other components attached to that main coverage. The system calculates either the net amount at risk or the gross amount at risk, dependent on the product definition settings, and holds that amount as a debt against the units held. This debt awaits the next unit purchase and sale batch job, NEWUNITD. During the NEWUNITD process the system will attempt to clear the debt by surrender of units. In the event that the coverage does not have sufficient unit value to clear the debt in full then the remaining debt continues to be held as outstanding until future unit purchases are sufficient to clear this debt.

Benefit billing is normally completed on a monthly basis irrespective of the frequency of premium payments.

Tables used by the Program

       T5534   -   Benefit Billed Method
       T5679   -   Transaction Status Requirement
       T5687   -   Coverage/Rider Details

Transaction Code

       B674   -   Benefit Billing

7.4.17 Deferred Agent Postings - Program B6688 & B6689

This program updates the sub account balances (ACBL) for agents if this processing has been deferred from the Collections process.

When Collections process runs in multi-thread, it is possible for the processing to abort if one of the threads tries to access an agent account balance (ACBL) record which is already held for update by another thread. To avoid this situation, the ACBL updates have been deferred and the Deferred Agent Details records (ACAG) are created to store the update details.

This program will basically read through all ACAG records sequentially to update the corresponding Agent sub account balances.

Transaction Code

       B522   -   Benefit Billing

7.4.18 Anniversary Processing - Program BR618 & BR619

This module selects all components that are due for anniversary processing. This could be for Unit Linked and/or Traditional contracts and could include such things as Statement of Account, Premium Certificates, etc.

The extract is similar to benefit billing in that the components have a schedule date for this action. Again generic routines carry out any processing dependent on the method held in T5687. The Anniversary/Automatic Increase Processing table, T6658, contains the generic subroutine and after processing the schedule date on the component is incremented by one year.

Tables used by Program

T5519	-	Initial Unit Discount Factor
T5540	-	Contract Unit Linked Details
T5679	-	Transaction Status Requirement
T5687	-	Coverage/Rider Details
T6658	-	Anniversary Processing Rules

Transaction Code

B675	-	Anniversary Processing

The original B5094 program for Anniversary Processing module has been replaced by the following Multi Thread programs in the V6.5 release:

CRTTMPF	Create Temporary Anniversary Processing file
BR618	Anniversary Processing Splitter Program
BR619	Anniversary Processing

7.4.19 Unit Statements - Program BR616 & BR617

This process is for Unit Linked contracts to provide the client with a unit statement either at the anniversary of the contract or at premium payment dates, depending on the definition held in table T6659.

All contracts due for such processing are then processed by calling the generic subroutine as determined by the method held in T6647.

Tables used by Program

T5679	-	Transaction Status Requirements
T6647	-	Unit Trans. Processing Rules
T6659	-	Unit Statement Details

Transaction Code

B676	-	Unit Statements

The original B5105 program for Anniversary Processing module has been replaced by the following Multi Thread programs in the V6.5 release:

CRTTMPF	Create Temporary Unit Statement file

| BR616 | Unit Statement Splitter Program |
| BR617 | Unit Statement Processing |

7.4.20 Premium Notice Creation - Program BH594

This process generates premium notice letter requests (LETC) for those contracts with cash paying method for premium collection and the associated next instalments are due immediately.

Please note that there is no premium notice for Flexible Premium contracts.

Tables used by Program

| T5729 | - | Flexible Premium Variance |
| TR384 | - | Automatic Letters table |

Transaction Code

| BH74 | - | Premium Notices |

7.4.21 Deferred Agent Production Update - Program BR623 & BR624

This program updates the Agency Production record (MAPR) balances for agents if this processing has been deferred from Revenue Due Accounting and Collections processes.

When Revenue Due Accounting or Collections runs in multi-thread, it is possible for the processing to abort if one of the threads tries to access an agent production record (MAPR) which is already held for update by another thread. To avoid this situation, the MAPR updates have been deferred and the Deferred Agent Production Details records (AGPR) are created to store the update details.

This program will basically read through all AGPR records sequentially to update the corresponding Agent productions (MAPR).

8. Online Processing

8.1 Contract Enquiry

8.1.1 Introduction

Contract Enquiry is an on-line facility that displays all relevant data about an issued contract and its components. It comprises a basic contract header information screen and subsequent screens giving more detailed information.

The system first displays the contract header and from here the user may select various aspects of the contract for more detailed enquiry. The contract header will contain the following:

- Contract Number
- Contract Type
- Contract Currency
- Contract Status
- Contract Premium Status
- Life Assured
- Joint Life
- Contract Owner
- Joint Owner
- Payer
- Servicing Agent
- Branch
- Assignee Flag, Assignee Information is given in more detail under Extra Details screen
- Marketing Route
- Payment Method
- Payment Frequency
- Risk Commencement Date
- Last Instalment Date
- Next Billing Date
- Contract Premium
- Paid to Date
- Billed to Date
- 1st Policy Issue Date
- Policy Issue Date
- Proposal Date
- Proposal Received Date
- Underwriting Decision Date

At the bottom of the Contract Header screen, number S6363; there are various selections that will take the user into a different screen for a more detailed enquiry. The user selects the option by typing X into the appropriate area.

The options available are as follows:

8.1.2   Claims Enquiry, Screen S6685

This area is to enquire on Regular Benefit type claims such as Waiver of Premium, Permanent Health Payments and Regular Withdrawals from Unit Linked Contracts.

This initial screen will detail the Coverage's and Riders under the plan. You select the appropriate Coverage and Rider that will take you into another screen that will hold the information relating to Regular Benefit Payments, Date of Payment, Amount, Next payment due, etc.

8.1.3   Plan Components, Screen S6239

The initial screen will display the Life Assured and Coverage and Rider details. For the life assured details enter 1 into the area displayed and this will take you into the Life Assured details captured at the new business proposal. If it is a joint life case then scrolling between each life detail is available.

For the Coverage and Riders there are three options, 1, Component Details, 2, Fund Holding of Unit Linked Contracts and 3, Reassurance.

Select 1 and the system takes into screen S6259 which at the top of the screen displays the Contract Header information, Contract Number, Currency, etc. In addition to this it displays the following:

- Life Number, Coverage Number, Rider Number and Lien Code
- Age Next Birthday, ANB, at Risk Commencement Date, RCD
- Statutory Fund, Section and Subsection (Statistical Codes)
- Benefit Amount
- Single Premium (If applicable)
- Premium and Premium Cessation Date
- Coverage RCD and Risk Cessation Date
- Anniversary Processing Date
- Re-rate Date and Re-rate From Date
- Mortality Class and Extra Premium Details (If applicable)

Select 3 and the system will display a pop up window of screen S6263. It displays the details as follows:

- Reassurance Account Number
- Reassurance Payment Frequency
- Reassurance Type
- Total Sum Assured for Component
- Reassured Amount
- Premium Payable
- Currency and Billed to Date

8.1.4   Client Roles, Screen S6240

This screen will display all the clients attached to this contract with the role notated, for example, Life Assured, Beneficiary, Trustee, etc. If you enter 1 into the selection field then the system will display the Client Details screen, S2465, which hold all the relevant client information.

8.1.5   Sub Account Balances, Screen S6235

The screen displays all the account balances in accordance with the selections required and requested in T5645, item P6235. If you select one of these balances then the system will move into screen S6236 and display a breakdown of the overall balance of the requested sub account type. The information shown on this screen is as follows:

- Effective Date
- Transaction Number
- General Ledger Code
- Document Prefix
- Document Number
- Original Amount
- Accounting Amount (these last two items could differ in a multi-currency environment)

LIFE/Asia version 7.2 has enhanced this enquiry function to further display the document related to this financial transaction such as payment, receipt or journal by selecting the transaction with the document attached.

8.1.6   Transaction History, Screen S6233

This screen displays all the Policy History information (PTRN) in descending transaction number order. This screen will display Transaction number, Date, creation user for each Transaction, PTRN Code and Description. The cursor will only allow entry to a history item that has some financial information. If you select one of these transaction history items then screen S6234 will be displayed with the account posting Entity information, e.g. for Agent commission posting, Agent number would be displayed for that transaction. This screen has also been enhanced to allow enquiry on the proposal transaction history and posting at the proposal stage from the Contract Header screen S5004.

LIFE/Asia version 7.2 has enhanced this enquiry function to further display the Fund Transactions Details screen, SR50U, if the selected transaction has related fund movements.

8.1.7   Agent Details, Screen S6237

This screen shows the Servicing Agent and any Agents that receive commission in relation to this contract. There are two selections available 1, Initial Commission Status and 2, Agent Details.

Select 1 and the screen S6238 will be show the following:
- Effective Date

- Annualised Premium
- Commission Paid
- Commission Earned

Select 2 and the System will take you to the Agent Record screen S5035.

8.1.8   Extra Details, Screen S6354

This screen will show the Contract Header details plus Direct Debit mandate details and Dispatch Address.   There are four further options within this screen, Trustee, Contract Beneficiaries, Contract Assignees and Group Details.

Select Trustee and you will move into screen SR626 that displays all trustees appointed and recorded in the contract either via Proposal or Contract Trustee transaction maintained in the Minor Alterations submenu. The trustee's name, client number, trustee type and the trust effective dates are displayed.

Select Contract Beneficiaries and you will move into screen S6247 that displays all beneficiaries named and recorded in the contract either via Proposal or Beneficiary Change transaction maintained in the Minor Alteration submenu. If you select one of the beneficiaries then you can view the client details of the beneficiary, screen S2465.

Select Contract Assignee will create a pop up window of screen S6228. The information contained is the name and address of the assignee together with the Assignee type and From and To Date. If there is more than one assignee scrolling facilities are available.

Select Group Details and screen S5110 will be displayed. The information held is the Group Number and Member reference Number.

8.1.9   Follow Ups, SR589

This screen shows the follow up description and details for each follow up item. Follow ups can be created during new proposal creation, at policy servicing transactions as well as during claims processing.

Select 1 against the follow up item and the Standard Exclusion Clauses screen SH583 will display the exclusion clauses which were previously created. User can browse the exclusion records by pressing the ROLLUP and ROLLDOWN keys.

8.1.10   Policy Notes, Screen SR50E

This screen shows any comments or notes that have been appended to the contract. Besides displaying the free format notes, the date timestamp and user who created the notes are also shown.

8.1.11   Reducing Term, SR563

This screen is used to display the reducing term details for a Mortgage Reducing Term Assurance product. These details are necessary for calculating the reducing benefit schedule as well as the required premium.

8.1.12   Output, S2661

This screen is to display all the contract related correspondences. The details of all the letter request records related to the contract are displayed such as the letter type, the addressee of the letter, letter status as well as the last status change date.

8.1.13   Component History, SR50N

This screen is to display the transaction history of changes on the component and despatch address at the policy level.

9. Contract Servicing

9.1 Introduction

Once a contract has been issued there are many events that a Life Office has to record against the contract during the life span of that particular policy such as beneficiary amendments, change of billing status, change of premium frequency, etc.

The following notes are a brief description of the servicing on-line functionality of the LIFE/Asia base system. All the following transaction can be located in the Contract Servicing Master Menu. For information relating to Lapse and Paid Up Processing due to non-payment of premiums please refer to the Regular Processing section.

9.2 Minor Alterations

The Minor Alterations Subsystem consists of transactions that are used to update the records of in force contracts. Minor Alterations affect only items that refer to the whole contract and are referred to as minor as they do not have any immediate financial implications.

These transactions fall into two distinct groups, the first update information about clients who have a role in the contract, except for the life or lives assured. The roles covered are those of Contract Owner, Dispatch Address, etc., whereas the second group of transactions temporary or permanently suppress such things as initial commission, overdue notices, etc.

These alterations have no accounting or statistical implications for the contract and the roles may be amended or added in the following areas:
- Beneficiary, Release v7.6 will reject any attempt to change or delete a beneficiary if the revocable flag of the beneficiary has been set to 'N' (irrevocable).
- Trustee, Release v7.6 will provide a warning message when user tries to do any changes to the contract beneficiary.
- Assignee, the assignment 'To Date' will be defaulted to the main benefit risk cessation date
- Dispatch or mailing address
- Contract Serving Agent, the agent receiving commission may not be altered in this subsystem (this functionality is in the Agent Subsystem) and the servicing agent may not be deleted.
- Contract Owner amendment but not deletion

The following transactions may be suppressed and re-instated as required:
- Overdue processing
- Billing
- Notices
- Renewal Commission

- Initial Commission
- Non-forfeiture Option

LIFE/Asia v2.1 introduced two new non-forfeiture options, Extended Term Insurance (ETI) and Reduce Paid-Up (RPU), are provided to the Client to choose from on top of Automatic Premium Loan (APL). If the cash value is insufficient to cover an Automatic Policy Loan (APL), there should be an option to use the cash value to purchase ETI or RPU instead.

The User can choose to create the Non-Forfeiture Option (NFO) during New Business data capture. After the contract is issued, the User can also change the NFO via one of the options in the Minor Alteration Submenu.

There will always only be one NF option invoked after the grace period. This is either client defined or by company default. Therefore there is no hierarchy of non-forfeiture options.

ETI

For a contract with an ETI NFO, the ETI NFO will be exercised when premium has not been received for a defined period of time. Any outstanding loans or loan interest will be settled using the cash value (including accumulated dividend and paid-up additions) before the ETI cover is purchased, and the remaining cash value will be used to purchase the ETI cover. The extended term will be calculated based on the remaining cash value and death benefit as at the date of termination (as outlined below), and the existing coverage will be extended by the calculated amount of time. The coverage will have a new status of ETI, which will make it ineligible for any further regular processing. The ETI coverage is assumed to be non-participated, i.e. no dividend allocation is required.

RPU

For a contract with an RPU NFO, the RPU NFO will be exercised when premium has not been received for a defined period of time. Any outstanding loans or loan interest will be settled using the cash value (including accumulated dividend and paid-up additions) before the RPU cover is purchased, and the remaining cash value will be used to purchase the RPU cover. The Sum Assured will be calculated based on the remaining cash value and the remaining term as at the date of termination (as outlined below), and the existing coverage sum assured will be reduced to zero. The coverage will have a new status of RPU, which will make it ineligible for any further regular processing, except for dividend allocation (optionally). A new paid up addition record (HPUA) will be written for the reduced paid-up coverage.

- Suppress Interest Bearing Fund Interest
- Change of Dividend Option

As is the normal LIFE/Asia standard each transaction above will produce a history record (PTRN) and the contract header; CHDR is updated in each event except for beneficiary amendments.

M602	-	Contract Servicing Master Menu
S604	-	Minor Alterations Submenu
T618	-	Suppress Overdue
T622	-	Change Contract Owner
T623	-	Suppress Billing
T624	-	Suppress Notices
T625	-	Change Servicing Agent
T626	-	Suppress Renewal
T627	-	Suppress Commission
T628	-	Amend Dispatch Address
T631	-	Assignee, Add, Modify, Change
T632	-	Beneficiary Add, Modify, Change
TA80		Non forfeiture change

9.3 Component Add/Modify Proposal

Due to work security practices, the component add/modify functions have been separated for proposal and approval. Prior to LIFE/Asia Version 4.0, the base system manages such changes in only one step i.e. if a component is added or modified, the system immediately effects the change. The enhancement here stores the component add/mod request as a proposal. The component changes can then be approved later. In order for the base system to handle the pre – version4.0 and the post version4.0 this function is under a new option in the contract-servicing submenu. The client can decide the option that will be used and through' table set-up in T1691 – disable the unused one.

The contract status reflects that the contract is under component add/mod request. By doing so, processes like billing, re-rating etc. can be controlled to pick up or skip such contracts for processing through the usual table settings of T5679.

The Component Add/Modify approval function checks that the underwriting date is keyed in based on the TH506 setting.

9.4 Component Changes

The Component Change option allows modification of generic coverage and rider components. Changes may also be made to related records such as, Special Terms and the ability to split commission to ten valid agents. Access to these components is through the plan selection screen. From this point the user can select the component concerned and either add a new component or amend existing component.

As amendments or additions to components re-create the new business process, it normally generates commission and adds an increase to the contract header premium. Therefore, all changes are initially written to the coverage/ rider temporary file, COVT, for later extraction by the relevant AT module. Whilst awaiting extraction the record is "soft locked" or protected so that no other type of processing can take place on that particular contract. After

processing through the AT the record is released from "soft lock" and the temporary files are deleted.

Component Add

These can be Coverage's, Riders or both depending on how the product has been defined within the system. The components defined within a product are the only one allowed to be selected. The addition of a component has the effect of either increasing the billable premium or in the case of a Unit Linked contract where the coverage or rider is benefit billed (premium paid by surrender of units) keeping the same premium. Therefore, in the majority of cases the billing extract records, commission records and relevant allocation entries (Unit Linked) will be written out along with a number of other records to record the transaction fully within the system.

LIFE/Asia version 7.2 has enhanced this existing function where the policy holder is now able to purchase another new rider of the same type that had earlier lapsed.

Component Modify

The purpose of Component Modify is to allow changes to an existing component. It allows alteration of the expiry date of the component; the premium, sum assured and the mortality class if applicable. It also allows alteration of existing special terms in components; it also allows additions of special terms to existing components.

If the premium is being increased then the new element commission can be either paid to the original agent(s) or if applicable it can be split to up to ten other valid agents.

As mentioned previously both Modify and Add will be validated against the product definition tables and will not allow processing if there are any validation problems. A point to note on component changes that the effective date of the change will always be the next premium due date.

Add Supplementary Life

The supplementary Life add function allows users to add another life to an in force contract. This is a function that is provided as part of the component changes functions. Once another life has been added, the component add function may be used to add coverages to that new life.

Life Assured Changes

In LIFE/Asia, changes to the client detail, such as gender, date of birth and occupation can only be done at the Modify Client at Client Maintenance Submenu. However, these changes are not reflected on the premium for the client's existing policies, if the client is the Life Assured.

LIFE/Asia version 7.2 was enhanced to provide a new option to user, where besides updating the client detail record with changes on the Life Assured's gender, date of birth, occupation or smoker status, is able to reflect these

changes to the premium for the client's existing policies, i.e. to re-calculate the premium. The system will list all the IF/PP (Inforce/Premium Paying) contracts of the client and the user is able to select some or all of them to reflect the required changes.

Tables used by Subsystem

Product definition tables for validation

Transaction Codes

M602	-	Contract Servicing Master Menu
S636	-	Component Alteration Submenu
T556	-	Component Modify
T557	-	Component Add
TA61	-	Add Supplementary Life
SR6X	-	Life Assured Changes Submenu
TR6Y	-	Life Assured Changes

9.5 Component Add Anytime for Disability Components

In Asia, there is a practice to allow addition of components to the contract at an effective date lesser than the paid to date of the contract. Currently, the base system does not allow this facility as it check for the bill to date to be same as paid to date and the addition is effective only from the paid to date. This enhancement is to facilitate the system to add a component effective from a date in the last payment period i.e. the effective date should be between the current paid to date and last paid to date.

Please Note- This component add anytime will only support disability type of Components (this was the criteria in the client site from where we retrofitted this functionality)

The premium for the component added anytime would be prorated in the following basis:

Prorated premium Calculation formula
The calculation is prorated to the number of days. The formula used is:

Prorate Factor =
$$\frac{(\text{Number of days between effective date and the current paid to date})}{(\text{Number of days between last paid to date and the current paid to date})}$$

Prorate Premium = Prorate Factor * Instalment Premium

The collection validation check should look into T5645 entry to check the subaccount code/type whether the money has been paid (the sub-account codes/types to be considered should be for suspense).

The rule is to look into suspense for the available amount.

If say, the money in suspense not enough and there is money in the advance premium deposit – then to transfer money from advance premium account to suspense do a Receipt with payment type – 4 (journal).

Prorated premium Posting

Once there is enough money in suspense, the collection for the prorated premium is done in the same basis of collection of premium in renewals.

Has the appropriate entries in T5645 like Renewals premium collection and uses the same basis for account posting. Please note this is a one off posting for collection of prorated premium of the contract and has no effect on the contract's Billed-to-date & Paid-to-date.

Reversal of the component added on an effective date will reverse the accounting entries.

9.6   Component Journals

The Component Journals area consists of two types of journals, one for Unit Linked business and the other for traditional style of contracts. In Release v7.5, another type of journal for Interest Bearing Funded is added.

For Unit Linked components it permits journals of units to and from any investment fund already used by the relevant component. Whereas for Traditional contracts it permits journals to and from Reversionary Bonus sub account on the with profit components. It also allows adjustment to the Bonus date to allow Life Office's to control or override the date of the next bonus allocation to the component if necessary. Interest Bearing Fund Interest Journal (Interest Journal) allows Life Office to change the fund amount for a Fund and Fund Type. Interest Journal keeps the changes in the temporary IJNLPF file and can be enquired with the Journal Enquiry (Interest Bearing) option.

The business reasons for this functionality generally relate to the exceptional rather than day-to-day adjustments. In the case of a Unit Linked component the client may point out to the Life Office that a single premium entered the system and purchased units at a certain rate that was above the rate when the client issued his cheque. Therefore, because of administration delays the client has been penalised. It is of course possible to reverse this transaction and correct the unit allocation position. However, to do this you may have to reverse, say, two years worth of regular premiums and it is more cost effective just to increase the clients' units via this option to satisfy the policyholder.

In the situation of the with profits contract you may wish to make an adjustment to the clients Reversionary Bonus as the sum assured was reduced just prior to the Bonus allocation so the whole year's bonus was based on the reduced sum assured.

In either event there are standard checks within the system and the transactions will produce a transaction history record and a complete audit trail.

Tables used by Subsystem

T5679	-	Status Transaction Requirements

Transaction Codes

M602	-	Contract Servicing Master Menu
S635	-	Component Journals Submenu
T527	-	Trad. Contract Bonus Journals
T553	-	Unit Linked Unit Journals
T654	-	Interest Bearing Journal Enquiry
T655	-	Interest Bearing Journal

9.7 Unit Linked & Interest Bearing Funds Premium Redirection

Unit Link and Interest Bearing contracts have a special way of accumulating the investment in a life assurance contract and as such require additional information to be captured at the proposal stage. Unit Linked processing is added to the appropriate generic component, usually a Term Product, to enable this additional information to be captured and processed. The rules for this are defined in a separate set of tables.

The distinctive feature of Unit Linking is that premiums are mainly used to purchase units in one or more notional funds administered by the Life Company. The rules defined in the tables which control what proportion of the premium is invested and in what type of unit, Capital/Initial or Accumulation.

The purpose of Premium Redirection subsystem is to allow re-allocation of future premiums to another fund on Unit Linked components. When a Unit Linked component is initially defined during proposal the distribution of premiums is set and determines the investment made by the Life Office on the client's behalf. At any stage during the lifetime of the contract the company may wish to give the client the opportunity to re-direct his premiums to other funds. This area caters for this eventuality.

The fund redirection may be effected over either, the whole plan or selected policies within the plan. If individual policies are chosen then several may be selected for processing at once and will be dealt consecutively by this function.

For each policy, the clerk must select the components for which redirection is to take place. After which the new funds may be entered. Any input will be subject to the normal rules that apply during proposal or unit linked component changes or addition. That is, the clerk must select valid, current funds and if there is an available fund list allocated to the component then the selected fund must be from that list.

As with all amendments within the system the premium redirection change will take effect from the next premium due.

The subsystem uses the same table range as Product Definition

Transaction Codes

M602	-	Contract Servicing Master Menu
S629	-	Premium Redirection Submenu
T551	-	Premium Redirection Modify
T552	-	Premium Redirection Enquire

9.8 Fund Switching

Unit Fund Switching allows for the transfer of money's from one set of funds to another on a Unit Linked contract. This transaction takes place at the component level and in the event of a contract with multiple Unit Linked components it is not possible to switch units from one component to another, only fund within components. It is recognised that a large majority of clients when switching funds also require a premium redirection. So as to cater for this eventuality it is possible to indicate from this subsystem that the clerk wishes to go into the Premium Redirection transaction after completing the switching details.

The process is straightforward in that the clerk selects the policy within the plan, if plan processing is a feature, and then the component within the policy from which the fund switches are to be made. After selection of the component the Source Funds screen displays all the current fund holdings for the component along with their estimated values. The most recent unit price is used to calculate these values using either the Bid or Offer price. This is determined by the entry in table T5544 that is accessed using the switch rule and contract currency held on the Unit Linked Contract detail's table, T6647. The amount to be switched out of a fund is entered either as a percentage of the fund holding, or as a value expressed in the fund currency.

After entering these details the next screen is displayed which is the Target Funds that holds the previous screen details and allows the clerk to specify the funds into which the moneys are to be switched. The money may be distributed into the target funds only by percentage as the real value of the switch may change by the time the transaction is processed by the batch job NEWUNITD. (The majority of Unit Linked transactions are dealt with on a deferred basis that is at the next unit price otherwise there could be selection against the Life Office and the fund if transactions were allowed using known unit prices.)

Unit switch header and detail, USWH and USWD, records are created. Unit transaction selling records for the selected source funds are created either with a negative contract amount or a percentage, depending on the selection, in the surrender value field. These records are used for further processing in order to establish the actual values of all the source funds and switch values for the switch transaction.

Charges may be associated with the switch. Table T5544 holds the details of the number of free switches allowed per period, measured in policy years, and the number of unused free switches that may be carried forward to the following period. Using this information, the system determines whether or not this is a free switch. If a switch charge applies, either a flat fee or a percentage of the total value of the selling transaction, subject to minimum and maximum parameters, is used. This information is also obtained from T5544. If a charge applies, it is spread across the calculated values used to buy into the target fund and the ACMV record is written for posting the charge to the General Ledger.

Finally, the buying unit transactions are created. A UTRN record is written for each target fund and type with the calculated value in the contract amount. If there is a mixture of capital/initial and accumulation units in the source fund then two UTRN records are written for each target fund. The total raised from the sale of initial units is allocated to initial units across the target funds, and the total raised from accumulation units is allocated to accumulation units across the target funds. A policy transaction, PTRN, is also written.

The UTRN records are used in the Unit Dealing batch run, NEWUNITD, which will complete the transaction.

Prior to LIFE/Asia V4.0 it was not possible to switch between funds in terms of whole units, from one fund to another. This request can now be accommodated.

Tables used by Subsystem

The subsystem uses the Product Definition Tables

Transaction Codes

M602	-	Contract Servicing Master Menu
S629	-	Unit Switch Submenu
T551	-	Premium Redirection
T676	-	Unit Switch
T677	-	Component Enquiry

9.9   Paid to Date Advance

This is normally a Unit Linked transaction as Unit Linked policies are very date sensitive in relation to unit purchases however there is no reason why it cannot be used for traditional contracts. The business reason that this transaction could be used is that the unit price has fallen and the client takes the risk that this situation will continue in the short term. So he pays the Life Office, say twelve monthly instalments to take advantage of the lower offer price.

In this case the administration area dealing with this request would enter the contract number and the system will inform them how much money is in suspense and the user is expected to enter the date to which premiums are to be paid. The system validates this date against the money held in suspense

and will inform the user if there is not sufficient to pay premiums to the selected date.

The user will also enter the effective date however, if it is not completed the system will default the transaction to the business date of the machine. Once completed any commission due in that Paid to Date Advance period will be generated together with all the other accounting movements, Premiums, Policy fees, etc. The overnight batch job NEWUNITD will purchase units at the applicable rates as defined in the appropriate tables.

9.10   Single Premium Top Up

This again is a Unit Linked transaction where the client injects cash into his unit-linked component again possibly to take advantage of current low unit offer prices. The transaction is straightforward in that the user will select the relevant component(s) and the following screen will inform the individual of the amount in suspense and the user is expected to complete the process selecting the funds the client wishes to invest in.

This Single Premium Top Up will generate commission in accordance with the product definition and the batch job NEWUNITD will allocate the actual units.

Due to Singapore statutory requirements Single Premium injections in that country have to purchase extra life cover based on 125% of the single premium unless the client is a sub standard life then this minimum percentage can be reduced to 110%. Therefore to cater for this new arrangement LIFE/Asia V1.0 introduced a separate option within this sub menu to cater for Single Premium Top Up's in Singapore.

Tables used by Subsystem

Specific tables are not assigned to this transaction

Transaction Codes

M602	-	Contract Servicing Master Menu
S679	-	Single Premium Top Up Submenu
T679	-	Single Premium Top Up
TA69	-	Singapore Single Premium Top Up

9.11   Paid Up Processing

The Paid up Processing subsystem provides the facility to make Paid Up, contracts, and policies within contracts or individual components of the contract. This applies to both Unit Linked and traditional business and can be achieved by on-line transaction or automatically by non-forfeiture processing. (Non-forfeiture processing is explained earlier in the Regular Processing section.)

If all of the coverage's and riders are Paid-Up then the contract premium will be reduced to nil and the premium status of the contract header will be set to

In Force, Paid Up. However, if only one component or rider among a number requires the Paid Up action then only that component or rider status will be notated Paid Up, the overall contract premium status would remain unchanged.

When a Traditional contract is made Paid-Up its sum assured is reduced according to an Actuarial formula. These may be based on net premium reserves or on a proportion of the original term that has elapsed. The reduced sum assured still could have a surrender value attached to it albeit now on a reduced basis. In addition to the surrender value the contract may, depending on the Office, still have reversionary bonuses accrue but normally this again would be on a reduced basis.

Whereas for Unit Linked business when the contract is made Paid Up the processing will calculate the value of units accumulated to date, deduct any fees charged for the transaction, and retain the remaining units under the contract as a reduced benefit until one of the following events occurs:

- The contract Maturity date and therefore units are cashed

- Client death and then the value of units is paid as a death benefit

- The value of units expires prior to the previous events. This later occurrence could be brought about by units being surrendered over a period of time to pay, via benefit billing, policy fees, mortality charges if the life cover is still in force or to pay for the benefits of a rider.

The on-line process is quite simple and can be achieved via the appropriate transaction and all that is required is completion of the contract number. The second screen requires you to select the relevant components or riders. Once the screen(s) have been completed the calculation procedures will display the existing sum assured, the new sum assured, value of funds, transaction fee if applicable and the Paid up Method.

There are three Paid Up Methods within the base system and these are follows:

PUPM001

This method is for Unit Linked contracts and the first calculation performed determines the fee to be charged by referencing table T6651. If the values within this table are zeros then the sub routine moves into the second calculation reducing the sum assured as below.

Paid Up Sum Assured = Sum Assured * Term in Force/Original Premium Term

PUPM002

This method calculates a paid-up Sum Assured equal to the ratio of the number of months' premiums paid and the number of months' premium payable applied to the present Sum Assured.

PUPM003

This method is for Traditional Contracts. It is the method to be used when the calculation of the Paid Up Sum Assured is to be based upon actuarial reserve of the contract.

Paid Up Sum Assured = Sum Assured $* (1 - NEPT_{(t)} / NETP_{(t-x)})$
    Where   NETP is the net premium obtained by calling ACTCALC
             t is the original term
             x is the term in force

PUPM004

This method is also for Traditional Contracts. Its calculation is based solely on the number of premiums that have been paid divided by the number that would have been payable throughout the whole term. This fraction is then applied to the original Sum Assured to give the reduced value.

Paid Up Sum Assured = Sum Assured $* T / N$

The subroutine that completes the relevant postings to the General Ledger is PUPTRAD.

Tables used by Subsystem

T5679	-	Transaction Status Requirements
T5687	-	Coverage/Rider Table
T6598	-	Calculation Methods Table
T6651	-	Paid up Processing Rules & Fee

Transaction Codes

M602	-	Contract Servicing Master Menu
S575	-	Paid Up Processing Sub Menu
T575	-	Paid Up Processing

LIFE/Asia Release 4.2 added transaction TH6C to provide the ability to quote the paid-up value for a contract.

9.12   Contract and Component Lapse

During the early stages of a Unit Linked contract, often in the first and second years, the amount of premium allocated to purchase units in investment funds is minimal. Consequently, it is unlikely that a significant surrender or paid up value will have accumulated within this period. In the case of Traditional contracts, the situation is similar but for different reasons. Clearly units do not feature for this type of arrangement, but simply because recovery of the set up costs, commissions, etc., accounts for a significant proportion of the early premiums and for these reasons minimum Paid Up Sum Assured are specified.

Whenever an attempt is made to make a contract or component Paid Up, and the value or calculated Paid Up Sum Assured, is less than this specified minimum, the form of termination is referred to as Lapse.

The LIFE/Asia system provides two approaches to lapsing contracts and components. The first is via automatic non-forfeiture processing where the contract has fallen into arrears. This procedure will be explained in more detail in the Regular Processing section. The other method is an on-line transaction to lapse a component or contract.

The facilities for selecting the contract, the whole plan, or some of the policies within a plan or some or all of the components, are based on the same principles as the on-line Paid Up processing transaction mentioned above. The functions of the transaction will be to perform commission clawback when this is relevant and where processing occurs on a Unit Linked contract negative UTRN records will be written to zeroes on all unit holdings on the coverage selected. All components, up to and including the whole contract, have their risk and premium status set to reflect the lapse processing.

Once the processing has been completed a PTRN record will be written for the contract history. Various amendments will be made to the contract header and coverage record, CHDR and COVR, creating new valid flag 1 records and amending records prior to the transaction to 2. In addition to this the system will check the status of commission and if there any amounts of commission advanced that has not be earned then commission clawback will occur, together with the AGCM adjustments.

Tables used by Subsystem

T5679	-	Status Requirement Table
T5687	-	Coverage/Rider Details

Transaction Codes

M602	-	Contract Servicing Master Menu
S514	-	Manual Lapse Submenu
T514	-	Manual Lapse

9.13   Lapse Reinstatement

Although currently the LIFE/Asia system supports the reinstatement of a lapsed policy, some clients require this to be enhanced to incorporate a fee based on the outstanding premium amount at the time of the reinstatement. The fee is calculated as an annual interest rate, which is applied to the premium at regular frequencies, normally monthly.

Reinstatement should not be permitted if there are insufficient funds in the billing currency Suspense Account to cover both the outstanding premium and fee, although the outstanding amount can be amended at the discretion of the user. However once the condition fulfilled, it will generate the Lapse Reinstatement Letter to the contract holders for acknowledgement.

The ability to perform an enquiry on a Lapsed Contract, with a projected reinstatement date should also be available.

It should be noted that the reinstatement fee will be levied against the contract at the time of the reinstatement action, but the outstanding premiums will not be collected until the next execution of the billing cycle.

LIFE/Asia V2.1 introduced this enhancement

Tables used by Subsystem

T3588	-	Contract Premium Status
T3623	-	Contract Risk Status
T3695		Sub Account Types
T5645		Transaction Accounting Rules
T5667		Tolerance Limits
T5679		Status Required by Transaction
T5688		Contract Processing Rules
T6634		Automatic Letters
TH614		Lapse Reinstatement Interest Rules

Transaction Codes

M602	-	Contract Servicing Master Menu
SR70	-	Lapse Reinstatement
TR71		Lapse Reinstatement
TR72		Lapse Reinstatement Enquiry

LIFE/Asia release 4.2 also added an additional field in the Lapse reinstatement transaction to provide an adjustment field so that partial interest or any additional fees (medical examination fees, etc) can be deducted or added to the reinstatement requirements when processing.

9.14 Re-instatement for Re-Dating

The main business objective of this function is to allow contracts that had lapsed for a considerable period of time to be reinstated.

This is done in the following steps:

(1) Reinstate the lapsed contract for re-dating.
This has the effect of putting the contract back into force (no accounting movements involved).

(2) Reverse contract for re-dating.
The contract is rolled back to the status just prior to Contract Issue in preparation for the next step. All associated accounting entries are reversed accordingly.

(3) AFI for re-dating.
The contract is AFI'd to proposal status.

Once the contract is in proposal status, the risk commencement date can be re-dated to commence at a pre-agreed date. Any outstanding premiums relative to this date will need to be collected from the policyholder for the contract to be re-issued.

9.15   Premium Holiday

Premium Holiday has become a common Non-Forfeiture Option (NFO) for Unit Linked Regular Premium products. When a contract has accumulated sufficient fund value after the preliminary period, it allows a policyholder to temporarily stop premium payment until:-

- the funds are exhausted and the contract then auto lapses; or
- policyholder requests to resume premium contribution.

LIFE/Asia supports both Automatic Premium Holiday as well as On Line Registration of Premium Holiday. Automatic Premium Holiday is triggered by the overdue process which is invoked when regular premium has not been received upon expiry of the grace period of the contract. With sufficient cash value (refer to table, TR51P, Premium Holiday Rule), the contract and coverage will have their statuses set to Premium Holiday, which will make it ineligible for some transactions such as billing and premium collection processing.

On Line Registration of Premium Holiday, on the other hand, is initiated by the policyholder and is subjected to the 'Minimum Months In force' rule defined in the Premium Holiday Rules table, TR51P. The contract must satisfy the minimum number of in force months or the fund value must be able to support 'X' number of months of mortality charges before the request can be processed.

When a contract falls into Premium Holiday and if there is any premium paying rider attached, then the rider will be auto lapsed according to its NFO method, while for benefit billing riders, most of them will remain in-force as long as there is available fund balance.

Client may request to resume premium contribution by either paying all premiums in arrears or without paying any premium arrears. Riders lapsed in Premium Holiday can be reinstated subject to the rules defined by the user in table TR51P, Premium Holiday Rules as follows:-
- For Premium Paying riders:
  - whether to allow or disallow reinstatement
  - if reinstatement is allowed, then the date of reinstatement must be in line with the contract's paid-to-date
- For Benefit Billing riders:
  - upon reinstatement, the Benefit Billing Date will be set as the Reinstatement Date irregardless of whether arrears of premium are paid

Premium Holiday Reinstatement can be registered via the Pending PH Reinstatement where both auto and manual follow ups can be requested from the client as part of the reinstatement process. User is also given the options to select the components to be reinstated, whether to back pay arrears of

premium or to do a manual adjustment to the total reinstatement amount. Premium Holiday Reinstatement is only confirmed when there is no outstanding follow-ups and with sufficient reinstatement amount.

A Premium Holiday Reinstatement Quotation is also available where the system allows the reinstatement date to be set as a future date, as long as it in line with the contract's paid to date.

Premium Holiday enquiry function provides a complete view of the premium holiday history for a contract, if any.

Tables used by Subsystem

T5688	-	Contract Definition
T6597	-	Non-Forfeiture Methods
TH584	-	Non-Forfeiture Method by Contract/Component
TH586	-	Client Defined Non-Forfeiture Option
TR51P	-	Premium Holiday Rules

Transaction Codes

SR7A	-	Premium Holiday (PH) Reinstatement Submenu
TR7B	-	Pending/Modify PH Reinstatement
TR7C	-	Pending PH Reinstatement Inquiry
TR7D	-	PH Reinstatement Issue
TR7E	-	Delete Pending PH Reinstatement
TR7F	-	PH Reinstatement Quotation

9.16 Reversals (Windback)

The Reversal subsystem provides facilities to reverse many transactions that have occurred under a contract, or in some situations, transactions processed against individual policies within a contract or plan. The options currently held in this subsystem are as follows:

Billing Reversal

Billing Reversal provides the facility to "Windback" the billed to date of the contract. The date can be wound back either to the premium paid to date or to a date of a premium yet unpaid. There are no accounting implications with this transaction, since only dates are reset so that one or more premium may be billed again. Billing can be suppressed up to an entered date, while any necessary amendments are carried out on the contract. Once past this date billing will restart including any premiums missed while the billing was suspended.

Full Contract Reversal

Full Contract Reversal allows a contract to be wound back to a selected transaction. Some of these transactions will be reversed others will be bypassed and these transactions can be defined within the reversal table T6661. The presence of some transactions may prevent any attempt to reverse an earlier transaction.

As with Billing Reversal there is a facility to suspend billing while necessary amendments are performed on the contract. Prior to performing a full contract reversal the paid to date and the billed to date must be equal. Note that the Full Contract Reversal operates by calling sub routines that apply to specific transactions. At present the sub routines required for the following transactions are operational.

- Benefit Billing (Accounting)
- Benefit Billing (Unit Dealing)
- Billing
- Collection
- Unit Dealing
- Partial Surrender
- Fund Switch
- Billing Changes
- Reversionary Bonus Surrender
- Policy Loan
- Revenue Due Accounting
- Single Premium Top Up
- Component Add
- Component Modify
- Cede Reassurance
- Regular Payments in Review
- Regular Payments Automatic Termination's
- Regular Claim Payments
- Lapse/Paid Up
- Maturity
- Expiry
- Full Surrender
- Non Forfeiture Surrender
- Death Claim Registration
- Vesting Reversal

Those for which no subroutines exist are:

- Unit Journal
- Agent Commission Change
- Rerate and
- Anniversary Processing

Tables used by Subsystem

T5644	-	Commission Release Methods
T5645	-	Transaction Accounting Rules
T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status Requirements
T6647	-	Unit Linked Contract Details
T6661	-	Transaction Reversal Parameters

Transaction Codes

M602	-	Contract Servicing Master Menu
S633	-	Reversal Submenu
T503	-	Rev. of First Death Registration
T506	-	Vesting Reversal
T513	-	Full Surrender Reversal
T526	-	Non-Forf. Surrender Reversal
T537	-	Paid Up Reversal
T538	-	Lapse Reversal
T540	-	Expiry Reversal
T543	-	Maturity Reversal
T656	-	Full Contract Reversal
T659	-	Billing Reversal
T670	-	Death Claim Reversal

9.17   Billing Changes

The Life Billing subsystem provides the Life Office with the functionality required changing the billing details of an In Force, Premium Paying contract.

From the main Billing Change screen the Frequency, Billing Method and Billing Date may be altered. If it is necessary to change the contract Payer, Direct Debit Mandate details or Group Payment details then the appropriate screens from which these details may be altered are accessed by the window facility indicated at the foot of the main transaction screen.

The transaction is initiated from its own sub menu by entering the desired contract number and table T5679 is checked to see if the contract has a valid status before the transaction is allowed to proceed.

When changing one of the details in the main screen the usual edit rules that are relevant to New Business and Component Change still apply. For example the Billing Date may only be changed to a day allowed according to the rules set in table T5689, etc. If the Billing Method is changed to Direct Debit then the transaction automatically places an X against the Direct Debit window and forces the user to set up the mandate details as in New Business. The usual window facilities for the selection and creation of mandates also apply to this transaction. With a change of Payer on a contract paid by Direct Debit a cross check will be made against the mandate details.

When the Payment Frequency is altered then an AT module is called and the system automatically visits all the components for the contract and those with a status of premium paying will have the premium adjusted by the factor in table T6630. A key composed of the Frequency Conversion code and the current premium frequency will read this. This Frequency Conversion code is held at the component level in table T5687 and the screen of table T6630 then provides a list of conversion factors to be applied to the existing premium. A generic subroutine will also be called for Unit Linked components as INCI records are affected.

All component records, COVR's are updated in this way will have the existing record(s) changed to valid flag 2 and the new valid flag 1 records written with the new TRANNO from the contract header. A new contract header, CHDR, will also be created with the new TRANNO. As with all other transactions a PTRN record will be written to mark the event.

LIFE/Asia V4.0 introduced a validation check to ensure that the new billing frequency is a multiple to the anniversary month/year.

For example, to change a monthly paying premium contract with inception date 1/1/96 and paid to date 1/2/96 to a quarterly paying premium, the quarterly due dates are going to be 1/2/96, 1/5/96, 1/8/96, 1/11/96, 1/2/97. This will not tie up with the anniversary date of 1/1/97. This validation check ensures that this situation does not occur.

The validation check is introduced in both the Billing Change and Frequency Change Quotation functions. If changing from a lower frequency to a higher frequency, the new billing frequency should be a multiple from the paid to date to the anniversary month/year. A new screen is designed with a facility to calculate the new instalment premium based on the new billing frequency.

LIFE/Asia V7.1 further enhanced both the Billing Change and Frequency Change Quotation functions to include a validation on the revised instalment premium to ensure that it is not less than the required minimum instalment premium limits. The Billing Changes screen SR674 displays the instalment premium for all components and for all frequencies ie. Yearly, Half-Yearly, Quarterly and Monthly frequency and if any of above frequency is not allowed, zero amount will be displayed for that frequency. The Gross Premium, Contract Fee and Total Premium amount will be calculated and displayed for all the above frequencies

For the Frequency Change Quotation, a Print indicator is added to indicate whether Billing Change Quotation letter is required. Letter will be generated when indicator is set to 'Y' and letter type found on table TR384.

Tables used in Subsystem

T5541	-	Frequency Alteration Basis
T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status Requirements
T5687	-	Coverage/Rider Details
T5689	-	Method Payment/Frequency

Transaction Codes

M602	-	Contract Servicing Master Menu
S522	-	Billing Change Submenu
T105	-	Billing Change Mandate Create
T522	-	Billing Changes

9.18 Contract Windforward

Windforward following Reversal is the process by which transactions that have been reversed by a Full Contract Reversal can be wound forward, one transaction at a time, in order to return the contract to its pre Full Contract Reversal state.

Only automatic scheduled events are eligible for Windforward processing, i.e. batch transactions. Windforward of non-scheduled event i.e. on-line transactions must be undertaken manually by the user.

Individual Transactions are selected and registered for Windforward on-line. Each registered Windforward transaction must be confirmed in order to process the Windforward. As a result of this confirmation, one or more batch schedules will be submitted automatically for each confirmed Windforward transaction. This batch schedule(s) will contain the processes, which normally perform the transaction as part of overnight processing.

It is important to note that Windforward is a powerful transaction and authorisation to this transaction should be restricted. Any user authorised to Windforward must have a comprehensive understanding of the implications of Windforward for a particular contract and must have detailed knowledge of the Batch Processing System.

Tables used in Subsystem

T5679	-	Transaction Status Requirements
T6757	-	Windforward Transaction Schedule
T6760	-	Windforward Batch Parameters

Transaction Codes

M602	-	Contract Servicing Master Menu
S655	-	Windforward
T674	-	Windforward Register
T675	-	Windforward Confirm

9.19 Policy Loans

Traditional Life Assurance Contracts, those that are Permanent Assurance, have long been useful as a means of providing collateral security for loans for a wide range of uses. This is most frequently seen in the mortgage market, but is certainly not confined to this. These loans may be granted simply because the life policy has equity in the form of the surrender value. This applies to Endowments and Whole Life contracts. It is true that Unit Linked contracts also have a surrender value, these have not often been used as security for contract loans due to the vulnerability to fluctuation in surrender value. The system as delivered does not preclude this but it is assumed that most Life Office's would only use this subsystem for Traditional Contracts.

The system provides for the administration of two types of loans, APL as explained in Regular Processing area of this document and Contract Loans.

For both types of loan the system will automatically calculate and bill for interest at variable intervals as specified within the appropriate tables. If the billed interest remains unpaid for a given period, on both types of loan, it can be capitalised and added to the loan principal and therefore, future interest will be charged on the original principal sum(s) plus unpaid interest. The system will regularly check to see whether existing loans plus interest exceeds the available contract surrender value. The check is done at each capitalisation date, whenever a request is made for a new loan, both APL and Contract Loan, and each time a claim value is requested.

Whenever a claim is made in the form of a Surrender, Death or Maturity then the existing loan plus any outstanding interest up to the date of the transaction will be deducted from the claim value leaving a net amount to be disbursed to the beneficiaries.

To register a Contract Loan is a straightforward on-line transaction via the Policy Loan sub menu that is currently held in the Contract Servicing menu. The available surrender value is calculated on all available components and applied to this is the maximum loan percentage available. After deducting any previous loans plus interest gives you the new maximum value that can be disbursed.

If the Loan amount keyed into the system exceeds system calculated value it will not allow you to proceed with the transaction. However, if the amount requested is equal to or below the system calculated figure then the loan principal would be debited with the figure entered with a corresponding credit to suspense so that a cheque can be prepared for the client. The system will write a policy transaction, PTRN, to record the transaction.

As mentioned earlier interest is billed automatically on the anniversary date of the loan, or the contract anniversary, or any fixed date at any frequency. The system permits interest to be varied by loan method and this can therefore, be different for each type of component or contract type. All these items are table driven and can be defined by the Life Office.

Interest is always calculated in arrears and can be at a fixed rate or variable. If a fixed rate is defined then you have further flexibility to state the term of this fixed rate by a given number of months from the loan registration.

Loan interest is calculated and the relevant accounting postings are performed in the batch job LOANINT together with the necessary BEXT (Billing Extract) records so that the life office can bill their clients.

Capitalisation works in exactly the same way as interest calculations but the batch job that completes all the relevant accounting postings is LOANCAP.

Repayment of loans is made automatically within claims processing or by Cash Receipt procedures. Within Cash Receipts the rules should be defined in such a way that you are able to indicate what part of the loan you wish to repay, Loan Principal, Loan Interest, etc. In addition to the above there is also functionality within the Reversal (Windback) sub menu to reverse a registered loan.

LIFE/Asia V2.1 introduced the Loan Debt Enquiry feature as an option within the Contract Servicing menu. This functionality gives a summary total of all loans and interest outstanding displayed together with individual loan details showing the current balance and interest outstanding.

As loans can be granted in a variety of currencies, summary totals will initially be displayed in contract currency, but the loan enquiry screen can allow the summary totals displayed in any currency selected.

9.20 Policy Loan Stamp Duty

In some circumstances stamp duty is charged to the policy owner when applying for the policy loan.

This enhancement was introduced by LIFE/Asia V4.0 and can now automatically calculate the Policy Loan Stamp Duty, and deducts from the loan amount and posts to the stamp duty payable.

To achieve this we have amended the policy loan registration screen to add policy loan stamp duty and net policy loan amount fields to store the policy loan duty stamp amount and net policy loan amount.

Tables used by Subsystem

T3695	-	Sub Account Types
T3697	-	Receipt Processing Subroutines
T3698	-	Dissection Codes
T5645	-	Transaction Accounting Rules
T5679	-	Transaction Status Rules
T6632	-	Loan Method Codes
T6633	-	Loan Interest Rules
T6654	-	Billing Control Table
T6661	-	Transaction Reversal Parameters

Transaction Codes

M602	-	Contract Servicing Master Menu
S618	-	Policy Loans Submenu
B510	-	Loan Interest Billing
B511	-	Loan Interest Capitalisation
T606	-	Loan Registration
TA79		Loan Enquiry

9.21 Automatic Increases

The ability is given to amend premium and/or Sum Assured, for given components within a contract, on an automatic basis. These changes are at regular intervals expressed in years: commonly such escalations take place annually. To achieve these goals, the amounts of each automatic increase are recorded by component so that they may be capable of identification when the time comes to bill for the increased premium, and then actually implemented

on the due date the increase. (The processing of Automatic Increases is within the Regular Processing batch job RENEWALS.)

Two types of automatic increases are catered for. These are Contractual and Optional. Contractual Increases are common in such circumstances as Low Start Endowment type products and these can be either Traditional or Unit Linked. The increase normally applies only to the premium payable.

Optional escalations may apply to almost any kind of product, Unit Linked or Traditional and further, may be Sum Assured or Premium based. Since, such increases are optional, the facility is provided to enable a contract owner to refuse an increase. The effects of such a refusal are at a Life Office's discretion. It could mean the cancellation of future Increase Offers after a predetermined number of refusals.

These increases may or may not be subject to Commission, in a similar fashion, Statistical records may or may not be created.

9.22   Refusing an Automatic Increase

By its nature an optional increase must be capable of refusal by the owner/payer of a contract. Such refusal may occur before, on, or after the actual due date of the increase. The system provides transactions whereby the implications of such refusals may be handled. If the refusal occurs before the increase has been implemented, the system deletes the temporary pending increase records, ensuring that re-billing occurs by reversing that too if it has occurred. If the component is subject to a maximum number of refusals, the logic monitors this and if relevant switches off future increase processing.

When refusing an increase, the facility is given to stop all future increases even if the maximum number of permitted refusals has not been reached. If the actual increase has been processed, it is necessary to determine whether any partial premium refund applies. At all events the system reverses the effects of the refused increase by deletion and reinstatement of component records in the same manner as normal reversal processing. As above, if the component is subject to a maximum number of refusals, the system checks this, and where appropriate, inhibits all future increase processing.

In addition to refusing an Increase it is possible that the need will arise to reverse an Increase. This is achieved using the same on-line screens as for Refusal. Since it is a true reversal, it is more fully described in the Reversals area of this document.

9.23   Effects of a Pending Increase

Some existing transactions, namely Component and Billing Changes, may be affected by the presence of a pending increase. In these cases, if the transaction is permitted to proceed, any pending increases are deleted. The effect of this is that the contract is reprocessed within the daily batch job and a fresh pending record is created. Such new transactions may differ from those originally created and therefore, will have implications on Billing of the next premium due.

Tables used

T5648	-	Automatic Increase Rates
T5654	-	Auto. Increase Contract Rules
T5655	-	Automatic Increase Control
T5671	-	Coverage/Rider Switching
T5687	-	Coverage and Rider Details
T6647	-	Unit Linked Contract Details
T6658	-	Ann. Auto. Increase Processing
T6661	-	Transaction Reversal Parameters

Transaction Codes

M602	-	Contract Servicing Master Menu
S501	-	Auto. Increase Refusal Submenu
T501	-	Auto. Increase Refusal

9.24 Surrenders & Claims

9.24.1 Introduction

The LIFE/Asia system provides the functionality to deal with Claims Processing and this section covers Full Surrenders, both Traditional and Unit Linked, Surrender of Traditional Reversionary Bonuses, Part Surrender on Unit Linked Contracts, Maturities and Expiries, Death Claims, Vesting of Deferred Annuities and Regular Payments.

9.24.2 Surrender Processing

The Full Surrender subsystem provides for the full surrender of a contract at plan or policy level. After selection of a policy, coverage and rider information is displayed such as the value of investment funds, for Unit Linked components or actual surrender values, in the case of Traditional components. The clerk may enter information relevant to the surrender, the surrender date, and a negative or positive adjustment to surrender amount and the reason code for the adjustment. If the clerk enters a currency code the values are adjusted to reflect that currency. The surrender amount returned for each coverage depends on the calculation method held on T5687. This method is then used to access table T6598.

For Unit Linked contracts, initial and accumulation units are accumulated for each fund on each component. Therefore, the surrender returned is the number of deemed units multiplied by the bid price less any surrender fee. (Please note that the value stated is, in the majority of cases just an estimate based on the current bid prices. The actual value will not be known until the next unit price has been calculated as the majority of Life Office's would base their contracts on the deferred pricing approach.)

A surrender fee is applied dependent on a minimum and maximum surrender fee held on table T5542, Unit Withdrawal Rules. The surrender fee can be a flat fee or percentage of the surrender.

An enhancement was added with LIFE/Asia release 4.3 that supports calculation and imposition of tax when a policyholder surrenders a policy within 3 years of policy commencement.

LIFE/Asia V5.0 introduced a new feature for the non-traditional full surrender charge to be based on table set up. The surrender charge factor is obtained from table T6656 using item key is a concatenation of surrender calculation method and component premium status. The surrender charge method is defined in the Unit Linked Edit Rules table-T6656. With this change, the system will able to cater for different computation methods like:

(1) Surrender Charge = Estimated Surrender Value * Surrender Charge factor.
(2) Surrender Charge = Total Premium Paid (till surrender effective date) * Surrender Charge factor.

For Traditional Components, which are defined on table T6640, the calculation subroutines may calculate actual values directly, or where the value is Net Premium Reserve based, table T6642 is used to define the reserve calculation factors to be utilised. The returned amounts are always in the contract currency.

For Unit Linked contracts, the returned amounts may be held in different currencies, depending on the Fund currencies. These are then converted to the claim currency or, if no claim currency are present, to the contract currency.

Surrender claim header and detailed records are created and are used for posting to the General Ledger. They are also used, for Unit Linked surrenders, by further surrender subroutines, for the creation of unit-linked transactions and sub account postings. Unit transactions are passed to the Unit Dealing subsystem where unit linked sub accounts are updated. Sub accounts for posting are obtained from table T5645 and are updated with the necessary amounts.

If the complete contract is surrendered, the status on the contract header will be updated and a new version of the contract header is created. The status of the coverage and rider affected by the surrender is also updated. For full surrenders an optional letter may be provided. In practice the system always attempts to produce a letter. To avoid this, the entry in table T6634, for the product code should be left blank. The same is true for the surrender of Reversionary Bonuses and for Non-Forfeiture Surrenders. Letters for Surrender and Reversionary Bonus Surrender quotations are optional at the processing stage. A Y/N question is provided on the screens.

Agent's commission records are updated with the amount of earned commission or the amount of commission to be clawed back. Policy transaction records, PTRN's are written to keep track of events and the batch header is updated.

Traditional contracts may be permitted to bear policy loans. Interest is calculated periodically and this may be paid or capitalised. Certain contract types may also have APL, Automatic Premium Loan as a Non Forfeiture process. Whenever a contract is surrendered with either of these types of loans outstanding special processing applies. The surrender amount is first

applied to repay the loans in full with interest charged up to the effective date of surrender. In these circumstances, two subroutines are used. TOTLOAN is called during the on-line processing to give the current value of all loans on the contract. The same subroutine will be also used when called with a function of 'Post' to bring interest up to date of the claim. A second sub routine, LOANPYMT, is used here and throughout the system, whenever a loan is fully or partially repaid.

Once the transaction has been completed all the accounting is finalised, loan debts repaid and the amount to disburse to the beneficiary(s) is placed in contract suspense awaiting clerical cheque requisition procedures.

There is the facility to reverse full Surrenders and this is held in the Contract Servicing subsystem under Reversals (Windback).

Tables used by Subsystem

T3000	-	Currency Conversion
T3629	-	Currency Code Details
T3695	-	Sub Account Types
T5500	-	Adjustment Reason Codes
T5585	-	Joint Life Parameters
T5606	-	Disablement Based Edit Rules
T5608	-	Term Based Edit Rules
T5551	-	Unit Linked Edit Rules
T5645	-	Transaction Accounting Rules
T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status Rules
T5687	-	Coverage/Rider Details
T5688	-	Contract Structure
T6598	-	Calculation Methods
T6634	-	Automatic Letters
T6640	-	Traditional Business details
T6641	-	Mortality Factors of Nx
T6642	-	Reserve Calculation Basis
T6647	-	Unit Linked Details
T6655	-	Surrender Value Penalty
T6656	-	Surrender Value Penalty Discount
T6686	-	Mortality Factors Value of 1x

Transaction Codes

M608	-	Surrender & Claim Master Menu
S611	-	Surrender Master Menu
T512	-	Full Surrender
T524	-	Full Surrender Enquiry

9.24.3 Part Surrenders Unit Linked, Interest Bearing Contracts

For Unit Linked and Interest Bearing contracts the subsystem allows the partial surrender at a plan or policy level. Component definition determines if part surrenders are valid, and if so, tables drive the rules governing these. Therefore, minimum amounts, withdrawals' fees, etc. may be specified.

Partial withdrawals can be a percentage of the fund held or a monetary value. Please note that the actual units cancelled will depend on the next pricing date and fund holdings will only be adjusted after the completion of the batch job NEWUNITD. Once this job has been completed then the amount to be disbursed to the client is placed in the relevant suspense.

LIFE/Asia V5.0 was modified to enable the system to compute for surrender charges similar to those supported in non-traditional full surrender.

In Singapore any Single Premium Top Up requires to purchase life cover based on 125% of the premium paid therefore whenever a partial surrender is paid the Singapore clients require a reduction in the sum assured equal to the payment * 125: %. To cater for this requirement a new batch process has been added to NEWUNITD to make the calculation and reduce the Sum Assured. This new batch process is #BR512.

Tables used by Subsystem

T3000	-	Currency Conversion
T5542	-	Unit Withdrawal Amount
T5551	-	Unit Linked Edit Rules
T6647	-	Unit Linked Rules
T6656	-	Surrender Value Penalty
T6598	-	Surrender Calculation

Transaction Code

M608	-	Surrender & Claims Master Menu
S622	-	Part Surrender Submenu
T510	-	Part Surrender

9.24.4 Traditional Part Surrender

When the policyholder chooses to decrease the basic plan's Sum Assured of a participating traditional policy, it is treated as surrender on a portion of the policy, hence part surrender. A participating traditional policy can attract company surplus in the form of Cash Dividend or Reversionary Bonus. The basic plan's Sum Assured would also have a Cash Value and the level of amount depends on the in-force duration of the policy. Therefore if the basic plan's Sum Assured decreases, surrender processing should be carried out for the decreased portion in addition to changing the Sum Assured. This is to refund the Cash Value of the decreased portion of the Sum Assured into the policy surrender suspense. Payment requisition is then initiated and drawn against this suspense. General Ledger entries will need to be generated automatically. When the Sum Assured changes, the instalment premium should be re-calculated automatically based on the original issue age and commission adjusted accordingly.

SH519 / PH519 - Traditional Part Surrender.

After a component is selected from P6351, this program will call the surrender calculation routines from T6598 and display the surrender value details for the component and any bonuses attached to the component. It will calculate a

new premium based on the decreased sum assured by calling the appropriate premium calculation routine on T5675. A COVT record will be created with the new sum assured and premium details to be processed later by P5132AT, the component change AT module (which will adjust commission and reassurance and write a new COVR record based on the COVT details).

PH520 - Traditional Part Surrender End Processing.

This program will perform all the traditional part surrender processing by calling the processing routines from T6598, which will in turn write the necessary accounting entries. There is no screen attached to this program. (Note: this program is a cross between P5084AT, Full Surrender AT, and P5022AT, Bonus Surrender AT).

Tables

T1688 - Transaction Codes

      TA70 - Traditional Part Surrender

T1690 - Sub Menu Switching

      ITEM P6306 - Part Surrenders Sub Menu

T5671 - Generic Component Processing

      New items are required on T5671 for all components that will be eligible for traditional part surrender. Items are transaction code (TA70) concatenated with component code. The items should contain PH519 as the first program, as shown below, where XXXX denotes the relevant Component Code. The program called is PH519.

T5679 - Status Req. by Transaction

      TA70 - Traditional Part Surrender

9.24.5 Reversionary Bonus Surrender

The surrender of Reversionary bonuses attaching to a with profit Traditional component, may be surrendered in full, or in part. To complete this process the clerk enters the amount of reversionary bonus to surrender and the system calculates the actual bonus surrender amount. Once this transaction has been completed the amount is posted to the contract header, for disbursement to the client, and the reversionary bonus account balance is reduced accordingly. Optionally a bonus letter can be produced.

If a contract has an outstanding loan debt bonus withdrawal will not be allowed.

Transaction Codes

M608	-	Surrender & Claims Master Menu
S611	-	Surrender Submenu

| T523 | - | Bonus Surrender Enquiry |
| T541 | - | Bonus Surrender |

9.24.6 Non-Forfeiture Surrender

If a contract surrender value is found to be insufficient to cover all loans and interest due it should be surrendered under the Non-Forfeiture Surrender transaction. This transaction has a similar function to full surrender, except that there is no option to surrender part of a plan. The whole contract will be surrendered under this option.

Contracts in this state are normally reported by the overdue processing batch job, which is part of RENEWALS, and it gives the Life Office an option to review the situation prior to taking the decision to cancel the contract. In the event that a contract is cancelled by this procedure there is a facility to re-instate or reverse this transaction in the Contract Servicing subsystem under Reversals (Windback).

Transaction Codes

M608	-	Surrender & Claims Master Menu
S611	-	Surrender Submenu
T525	-	Non-Forfeiture Surrender

9.24.7 Maturity & Expiry Processing

Maturity processing enables benefits that fall due at the Maturity of a contract to be paid to the relevant beneficiaries. This may result from the Maturity of the whole contract or any constituent parts as and when they fall due for both Unit linked and Traditional Contracts. The value of the contract is calculated as part of the process together with any bonuses or adjustment payments to be made. Upon payment of the benefit due, part policy or whole contract, the components or contract is updated as Matured and all general processing will cease billing, etc.

Maturities and Expiries may be processed up to three months in advance of the contract risk cessation date. This is to enable the administration area to complete, and receive from the client, all the necessary documentation so that the disbursement of the funds can be made on the due date. Contracts or components that have no monetary value arising at the completion of the contract term will go through the Maturity processing procedures but the contract or component is notated as Expired.

In order that clients may be notified of a pending Maturity or Expiry a batch job has been designed (PENDMATY) which allows a selection of the risk cessation date range to be processed as Pending Maturities. This batch job produces a report of the range of contracts requested and can be extended to produce the necessary letter of notification. (This assumes that the Life Office has designed the appropriate letter(s) and its key has been entered into the relevant table.)

This report will show whether contracts will Expire or Mature and their estimated value broken down by component and by fund for Unit Linked

products. This report could assist in planning workflow and later on identifying outstanding requirements.

It is important to note that the contracts will not Mature or Expire automatically within the LIFE/Asia system. The individual contracts have to be entered into the system. If a contract that has a mixture of components with benefits payable at maturity and components and riders that do not have any benefits at risk cessation date then those with benefits will be matured and those without will be cancelled as expired. This happens whether or not the expiring benefit has reached the risk cessation date, but the transaction must be within three months of expiry.

Upon completion of the maturity transaction all contract types will have a maturity letter produced detailing the amount payable. The system will realise all benefits, sum assured, relevant bonuses arising and will deduct or add any adjustments, as defined by the clerk at the maturity transaction, and will, for traditional contracts, deduct any outstanding loans and interest from the maturity sum. The balance available will be transferred to contract suspense, ready for disbursement to the beneficiary.

For unit linked contracts, the on-line maturity request will create the relevant records in order that all units are realised in the next run of NEWUNITD.

In addition to the above there is the facility to reverse Maturity processing for both Unit Linked and Traditional contracts.

Tables used by Subsystem

T3609	-	General Standard Letters
T5645	-	Transaction Accounting Rules
T5679	-	Transaction Status Requirement
T6635	-	Additional Bonus Rates
T6636	-	Terminal Bonus Rates
T6637	-	Interim Bonus Rates
T6639	-	Traditional Bonus Calc. Routines

Transaction Codes

M608	-	Surrender & Claims Master Menu
S542	-	Maturities & Expiries Submenu
T542	-	Maturity Processing
T539	-	Expiry Processing
B507	-	Pre Maturity/Expiry Report

9.24.8 Vesting

Vesting occurs on a deferred annuity contract at the date specified for the annuity to become payable. Early or late vesting may be available depending on the rules defined for the contract. The vesting transaction causes regular payments to be created which will continue for the rest of the annuitant's life. A cash option may be available whereby some, or all, of the annuity amount can be commuted into a cash lump sum.

The Vesting transaction within LIFE/Asia forms part of the Surrender & Claims subsystem. The following Vesting functions are provided:

Pending Vesting

This function is performed by a batch schedule, PENDVEST, which produces a report of deferred annuity components due to vest. This report provides information to generate a standard letter, assuming the required entry is held in Automatic Letter table, T6634, advising the contract owner the forthcoming event.

A date and contract range can be entered on the parameter prompt screen for the PENDVEST schedule so that Life Office's have the flexibility to control workflow. The schedule selects components with a risk cessation date that falls between the dates entered on the parameter prompt screen. Checking that the components exist on Annuity Details table T6625 identifies annuity components.

A Vesting Letter record is written for each contract that has one or more components due to vest between the dates specified. Note, that until the status of the component is changed, for example at Vesting Registration, Vesting Letters will continue to be written and the component will continue to appear on the Pending Vesting report.

The value of the components at vesting is calculated based on the sum assured, plus any bonuses if the component is with profits.

Vesting Registration

Vesting of a deferred annuity contract will usually occur when a component reaches its risk cessation date. This is an on-line function and if a contract number is entered the contract/component status is checked against T5679. At least one component within that contract must have a maturity method entered into table T5687, Coverage and Rider Details, and must be an annuity component set up in Annuity Details Table T6625.

The rules that apply early or late vesting of annuity components are also held on T6625. The effective date of vesting cannot be earlier than the risk cessation date less the number of lead years entered in T6625 and cannot be later than the risk cessation date plus the number of years entered on T6625. It is possible to commute a proportion of the payable annuity to a lump sum payment, with a proportionately reduced annuity payable. The percentage of the total payable annuity that is allowed to be taken as a lump sum is validated against the values in T6625.

The annuity payable can be modified to an actuarial equivalent value payable within different parameters. For example, an annuity of $1000 per annum payable yearly in arrears for life may be modified at vesting to an annuity of $900 per annum payable monthly in advance for a guaranteed period of five years and life thereafter. The annuity payable can be dissected to allow, for example, tax to be deducted from the gross amount, with a net payment to the annuitant and accounts accumulating the deductibles for payment to the taxation authorities.

If annuity details are altered a new annuity record is created. New Contract, Payer and Coverage records are created and the old records are set to a valid flag 2. The premium status on these new records is changed to Vesting Registered. The premium status on the coverage is changed to Annuity Paying. Temporary Regular payment Records are set up for each payment's dissection with a single frequency payment record for any lump sum payment taken. On a with profit deferred annuity, the reversionary bonus will be zeroised.

Statistical records are produced.

Vesting Approval

Vesting Approval is used after the Vesting Registration to amend the contract and component premium status to an annuity in payment status and to authorise the regular payments. Information from the Vesting Detail and the temporary Regular Payment records created during the registration process is displayed for enquiry only.

The Contract, Payer and coverage record status are changed to indicate that the contract is now an In Force Paying Annuity.

A Regular Payment record with the status of approved or pending approval is created for every temporary record created at the vesting registration. This status setting depends on whether the generic subroutine, which approves the Regular Payment, is entered in the Coverage/Rider Switching table T5671, for a given product for this transaction.

Once the Regular Payment has been approved then the batch schedule relating to Regular Payments, REGPAY will generate the payment and cheque or Direct Credit records.

Tables used in Subsystem

T3609	-	Generate Standard Letters
T5645	-	Transaction Accounting Rules
T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status Requirements
T6598	-	Calculation Methods
T6623	-	Vesting Commutation
T6625	-	General Annuity Details
T6634	-	Automatic Letters
T6639	-	Traditional Bonus Calculations
T6690	-	Default Regular Payment Types
T6691	-	Regular Payment Types
T6692	-	Regular Claim Reason Codes
T6693	-	Allowable Action for Status
T6694	-	Regular Payment Methods
T6696	-	Reg. Payment Validation Rules

M608	-	Surrender & Claims Master Menu
S643	-	Vesting Submenu
B526	-	Pending Vesting Batch Job
T504	-	Vesting Registration
T505	-	Vesting Approval
T506	-	Vesting Reversal

9.24.9 Death Claims

The following transactions are available within this subsystem are, Registration, Adjustment, Approval, Register First Death and Enquiry. In conjunction with the action code relevant to each of these transactions, entry of the contract number applicable will be required. The status codes of the contract will be validated prior to the transaction screen being provided.

When notice is received of the death of a client, the Registration transaction will enable the contract where the client has a suitable role to be updated. Where the client is a life assured, once the death has been registered, and the contract is a Traditional Product, the potential death claim amount will be determined. For Unit Linked products the potential liability will be known after the surrender of the units following the batch schedule NEWUNITD. Once the amount has been determined accounting entries are generated to the pending death claim account.

The calculations of the pending death claim amount will be subject to the type of Death Calculation Method applicable to each coverage and rider present on the contract.

The following Death Claim Calculations are supplied with the base system:

- The total of the Sum Assured and all allowable bonuses, Reversionary, Interim, Terminal and Additional as specified

- The cash value of Unit Holdings

- The greater of the Sum Assured and any Unit Holdings

- The total of the Sum Assured and any Unit Holdings

- The amount payable on a benefit paying Annuity

- The amount payable on a Deferred Annuity which has not vested

- A death value of zero

When processing a death claim for traditional cases, logic exists which repays any Policy Loan and/or Automatic Premium Loan with interest calculated to the date of death. Therefore, only the net proceeds are presented as payable. In addition to calculating the potential death claim, the registration transaction

will also update the client's contract and the client's record with the date of death.

For contracts with more than one life, either joint life or multiple life contracts, it is possible to register the death of one life. This transaction will update the date of death on the clients' records. If the contract on which the death of a life is being registered is an annuity, the payment amounts may be reduced in accordance with the component rules.

One the death has been registered the details can be adjusted. The forms of adjustment permitted can relate to creating financial adjustments to reduce or increase the pending death claim amount as required. Additionally, the transaction can be used for updating the claim details as further details or items are received, such as the cause of death or an item that was recorded as an outstanding follow up.

Once satisfied that the claim can be paid, the approval transaction will calculate the net claim proceeds, taking any financial adjustments into account. During the approval transaction the facilities of amending the currency of payment, applying interest to the net claim and charging any Office Expenses are also available. Where any of these fields is used, the total claim proceeds will be duly amended.

Where significant errors have occurred which cannot be resolved by the adjustment transaction, the reversal transaction will remove the registration of the claim and restore the contract to the status applicable before the death claim was registered. Additionally this transaction will remove the date of death from the clients file and reverse all accounting transactions that occurred as a result of the death registration and any adjustments. However, a point to note is that once the contract is Death Claim Approved there is no transaction, currently, that re-instates the contract.

The death claim subsystem also provides an Enquiry facility on contracts that have been registered with a death claim. The enquiry screen will display all the details entered and calculated to date regarding the death claim and can also display any Follow Up details if required.

Tables used by Subsystem

T5679	-	Transaction Status Requirements
T5687	-	Coverage/Rider Details
T5982	-	Cause of Death
T6598	-	Calculation Methods
T6693	-	Allowable Action for Status

Transaction Codes

M608	-	Surrender & Claims Master Menu
S623	-	Surrender Submenu
T502	-	Register Death of Life Assured
T668	-	Register Death Claim
T669	-	Approve Death Claim
T671	-	Adjust Death Claim

T672   -   Enquire on Death Claim

9.24.10 Anticipated Endowments - Alterations

LIFE/Asia V1.0 introduced the Traditional Product Anticipated Endowments that are basically an Endowment that allows benefits payments throughout the term of the contract. The product definition process allows certain options for the client to select at the inception of the contract such as the benefit is paid in cash, held on account, etc.

As it is recognised that the clients requirements may alter from incepting the contract and subsequent benefit payment dates there is now an option to amend the payment option.

9.24.11 Regular Payments

The Regular Payments system is an extension of the claims processing facilities provided by the LIFE/Asia and it is designed to cover three basic types of regular payment. The first of these is a regular Part Surrender of a Unit Linked contract where the client wished to withdraw either a percentage of units or a fixed amount at regular intervals such as monthly, quarterly and annually as an income from his initial investment. By using this method it saves the Life Office having to remember to and complete these withdrawals at the agreed frequencies. The second use is in respect of a benefit that requires a regular payment such as a Permanent Health or Waiver of Premium claims and the third is payment of Annuities. In addition to the above, this claims processing facilities also supports pension payments and regular claim payments for Hospitalisation and Accident benefits which are paid on a reimbursement basis.

In all the regular payment cases, the amount is payable at a regular frequency and to ensure that these payments are not continued to ineligible claimants the system will place them into review at specified intervals or will set a last payment date for a fixed benefit term.

The system will allow the creation of payment details to be recorded against individual components of a contract. These will then be processed on a regular basis by a batch process that will invoke the appropriate processing to actually make the payments, surrender the units where relevant, update the accounts and create media requests where applicable. The system will make payments by cheque, direct credit or purely internal when they are being used to fund the source contract itself as Waiver of Premium benefit or to pay premiums on another contract.

The system has been designed to be flexible so that it will be able to cope with all types of regular payments due to the modularity of its construction. This will include such payments as Annuities but these will no doubt have to be modified with extra processing to deal with local tax regulations and the individual Life Office requirements. However, these can be met quite effectively without altering the existing structure of the system.

The system will support multiple payment details for a given component. For benefit components against which a claim may be registered the system will

support multiple claims that may be consecutive or concurrent. However, the system checks that the maximum values of all claims in force and in payment at any one time do not exceed the Benefit Value for that component. Time limits may be imposed upon claims so that they may be created to run for a given period of time or indefinitely. In the case of the limited period the system will automatically terminate claims when it reaches the specified date.

There is an Indexation facility built into the payment processing and again this has been implemented in a modular manner so that new Indexation methods may be adopted with no coding changes to the existing software.

Payments may be made in any valid nominated currency defined in the system. In the case of a regular benefit claim the amount of the claim will always be held in the contract currency whereas the actual payment processing will make the conversion into the payment currency as each individual payment is processed. A running total will be held for information but only in the contract currency.

For Unit Linked regular withdrawals the client may nominate the amount, fixed or percentage of units and the currency and the system will surrender the appropriate number of units to meet the withdrawal. Therefore, the client will receive differing amounts due to the currency conversion fluctuations and where the client has selected a percentage of units to be withdrawn then again the value received will fluctuate due to the unit price fluctuations.

As far as possible the rules that the system employs to ensure that only valid data is recorded in the payment file are held on user defined tables. This enables the end user to maintain a considerable level of control over the structure and running of the Regular Payments system.

Tables used by Subsystem

T5671	-	Coverage/Rider Switching
T5679	-	Transaction Status Rules
T6663	-	Regular Payment Status
T6689	-	Regular Payment Exceptions
T6691	-	Regular Payment Types
T6692	-	Regular Claim Reason Codes
T6694	-	Regular Payment Methods
T6695	-	Regular Claim Indexation Rules
T6696	-	Reg. Payment Validation Rules
TR584	-	Accident Benefits
TR585	-	Accident Benefit Plan
TR687	-	Hospital Benefits
TR50A	-	Benefit Codes
TR50B	-	Benefit Plan
TR50H	-	Diagnosis Code

Transaction Codes

M608	-	Surrender & Claims Master Menu
S640	-	Regular Payments Submenu
B515	-	Regular Payments Run

B516	-	Regular Payments Processing
B517	-	Regular Payments in Review
B518	-	Reg. Payments Auto Termination
T515	-	Regular Payment Register
T516	-	Regular Payment Adjustment
T517	-	Regular Payment Approval
T518	-	Regular Payment Cancellation
T519	-	Regular Payment Termination
T520	-	Regular Payment Enquiry

9.25 Cash Dividends

LIFE/Asia V2.0 introduced Cash Dividends option to Product Definition. This requirement is to support the processing needs of participating plan with cash dividend. Cash dividend is only available with the basic plan and a number of supplementary benefit riders can be attached to the basic plan. At New Business, the Policyholder can elect to take any of the following dividend options: accumulate dividend to attract interest; transfer the cash dividend to settle future premium; withdraw the cash dividend after each allocation, or utilise the cash dividend to purchase paid-up addition. A user defined default option is available if the policyholder indicates no preference. For the third option, payment method, currency and payee details are required.

The dividend is always allocated yearly in arrears at policy anniversary. The dividend is normally derived from a formula of various variable factors. In this case, however, the dividend amounts are held on tables. This means that the dividends are pre-calculated outside the system. The dividend table is keyed as follows:

The policyholder is allowed to change the dividend option at mid term (as long as the policy is in-force). The change will be effective on the next dividend allocation date (i.e. anniversary date). In the case of changing from accumulating dividend & interest to any other options, the existing dividend and interest balance will remain unaffected i.e. continue to attract interest.

LIFE Asia V2.0 is only concerned with the initial capture of the relevant Cash dividend details at New Business, the modification of existing Cash Dividend details and the addition of new Cash Dividend components at mid term, and enquiries on existing components with Cash Dividend options.

LIFE/Asia V2.1 completed the dividend functionality with the following:

Change of Dividend Option
>   To allow change of the dividend option via Minor Alterations

Dividend Allocation
>   To enable dividends to be allocated on contract anniversary date

Dividend Option Processing
>   To enable the processing of the following dividend options:

-   Interest calculation & allocation

- Settle future premiums
- Cash Withdrawal
- Paid Up Addition

Manual Withdrawal Facility
To cater for the subsequent withdrawal requirement for all dividend options there should be a manual withdrawal function to allow the policyholder to withdraw any amount up to his allocated dividends plus interest.

Full Surrender, Death & Maturity
Includes the functionality of calculating dividends in the event of a full surrender, death or maturity claim.

Tables

TH500 - Cash Dividend Options Table
This Table is keyed by Dividend Option. It drives the processing required to process the dividend after declaration. A value of "N" is assumed if nothing is entered for the "Payee details required" value. If a "Y" is entered here, details of the payee on the Coverage Screen are mandatory.

TH501 - Cash Dividend Methods Table
This is a description only table, which contains all possible Cash Dividend Methods on the system. There is no extra data screen.

TH502 - Bonus/Dividend Allocation Basis Table.
This Table is used to define the meaning of the allocation basis, e.g. Reversionary Bonus to be allocated at Company Anniversary, Contract anniversary etc.

TH505 - Term Based (Dividend) Edit Rules Table.
This Table is used to allow users to specify the valid ranges of values for the life assured in terms of age ranges and term ranges. This table is cross-referenced when the proposal screens are used to create a traditional Cash Dividend Coverage. The Cash Dividend option entered must exist on Table TH500, and the Coverage Screen during proposal creation picks up the default option. Before a traditional Cash Dividend coverage can be attached to a particular Life Assured the Coverage must exist on this Table, otherwise an error will be generated if you try to allocate this Coverage to a Life. The Table is keyed on a concatenation of Component Code and Currency.

T6640 - General Traditional Business Details.
This Extra Data Screen of this Table has been altered to include options for Cash Dividend Processing. A typical set up for Cash Dividend processing is shown below. The Cash Dividend Method field windows to Table TH501, and although there is no validation, it is expected that either the Reversionary Bonus Method or the Cash Dividend method should be entered, but not both. The Cash Dividend Withdrawal Method windows to Table T6598. Although there is validation, it is expected that either the Surrender Bonus Method or the

Cash Dividend Withdrawal Method should be entered but not both.

T1675 - Secondary Program Switching Table.
The following ITEMS should be set up on this Table as follows:

T600H504 - Cash Dividend Proposals.
T509H504 - Cash Dividend Proposal Enquiry.
T555H515 - Cash Dividend Component Modify.
T556H515 - Cash Dividend Component Enquiry.
T557H515 - Cash Dividend Component Add.

T5671 - Coverage/Rider Switching Table
The following ITEMS should be set up on this Table as follows, where XXXX denotes the relevant Component Code:

T600XXXX - Proposal Input XXXX – Program PH504
T509XXXX - Proposal Modify for XXXX. – Program PH504
T555XXXX - Component Modify for XXXX – Program PH515
T556XXXX – Comp. Change Enquiry for XXXX – Program PH515
T557XXXX - Component Add for XXXX – Program PH515
T609XXXX - Contract Enquiry for XXXX – Program PH514

9.26   Unit Pricing

9.26.1 Introduction

Unit Linked contracts differ from Traditional contracts in that the portion of the premium pertaining to the life and/or disability cover is separate and distinct and the balance remaining is used to purchase units in one or many funds.

A Unit Fund is a separately identified pool of assets, a share of which is allocated to policy owners who own units in the Unit Fund. Several Unit Funds are usually available to the policy owner such as Equity, Fixed Interest, Property and normally a composite of funds that comprise a mixture of investments fixed by the Life Office. These funds are normally referred to as Managed Funds.

A major feature of this type of contract is that the policy owner has a greater control over the overall investments as he/she can switch units from one fund to another from time to time.

9.26.2 Unit Pricing and Unit Price Entry

The Life Office to operate this type of business require a way of fixing the unit price, which is normally completed outside the LIFE/Asia system, so that they are able to transact the purchase and selling of units on a daily or weekly basis. How the units are priced very much depends on the level of buying and selling transactions and before the price is calculated the Fund Manager requires to know the transactions outstanding for both selling and buying units in the various funds available. The system will provide this information by means of a report generated from the batch job UNITEXT.

However, the above system batch job does not take into account any proposals that are within the system as UNITEXT only deals with unprocessed UTRN's and these are only produced for in force contracts. To improve this reporting stage prior to Unit Price calculation LIFE/Asia V1.0 introduced a new batch job FNDVALRP, Fund Valuation Report.

This batch job gives three distinct reports as follows:

Proposal Report.

This report lists all contracts in the proposal stage with the premium held in suspense, the unit reserve date and the fund to be invested. With this report the Fund Manager is aware of the money banked that should be taken into account and "buy" units for these contracts out of the system.

New Business Cancellations

Equally the Fund Manager requires to know the new business cancellations, postponements, withdrawals and declines so that the Fund Manager may "sell" the units he purchased when the proposal was first reported on.

New Business Report

When the contracts are issued there will be a need to check that the same unit rate was used when the units where initially bought of the system and the rate used at contract issue. If the rates are the same then no action needs to be taken. If the rates differ then a journal may be required to account for the profit or loss caused by the differing rates.

Once the fund manager has received all the relevant information the valuation exercise can be completed. There then is a need to input into the system the Bare Unit Price that is used in the calculation of the virtual Bid/Offer Price. The Unit Linked Pricing subsystem provides the facilities for entering and maintaining prices for the virtual funds held within the system. (Virtual Funds must be set up in table T5515.) The first stage is to enter the Bare Price, this price may be modified if required, and the system will calculate the Bid and Offer prices from this in accordance with the rules defined in the various units pricing tables. Prices may be input for single fund or a selection of various funds as required. The scroll feature of available funds may be left to default to the start of the full list of funds, or a fund or partial fund identifier may be input to prompt the system to begin its display from there.

All price inputs are batched by the use of a job number entered from the sub menu. This job number must be unique within any given date so both the date and the number identify entries. The prices under any job number may then be reviewed and amended directly if necessary before calculation takes place.

For any Bare Prices entered under a specific date and job number the user can select to calculate and enter the corresponding Bid and Offer prices. Alternatively the Bid Price can be entered directly and the system uses this as the Bare Price to calculate the Offer Price. In each transaction the system will refer to tables T5515 and T5509 for rounding and calculation rules.

The calculated Bid and Offer prices may be modified directly through the sub menu option. Once again the entry date and number must identify the particular list of prices.

Prices do not become effective for use by the system until using the activation option within the submenu has activated them. An enquiry facility is provided on the existing activated prices as a history of price input from a given date to and optionally from a given date.

Table used in Subsystem

T5509	-	Virtual Fund Bid Offer Spread
T5515	-	Virtual Funds
T5543	-	Available Virtual Funds

Subsystem Transactions

M606	-	Unit Prices Master Menu
S613	-	Unit Price Submenu
T511	-	Unit Price Activate
T660	-	Unit Bare Price Create
T661	-	Unit Bare Price Modify
T662	-	Unit Bid Offer Create
T663	-	Unit Bid Offer Modify

9.26.3 Unit Pricing Report

The Unit Pricing Reporting function allows the user to obtain a hardcopy of fund prices. This may be a history of fund prices from a specified date, or a list of all fund prices entered within a specific date or job number batch.

The parameters, which influence the content of the report, are the effective date that must always be entered. The fund which may be entered if the report is to be restricted to only one fund and the job number, which should only be entered if the report is to list all the prices, input during the specified date/job number combination. If the job number has not been entered, the report defaults to print a history of price input since the specified effective date. It may be changed to print the prices as at the effective date and this will cause the program to search backwards from the effective date and for each fund, pick up the most recently dated price. As default, the bare price will appear on the report, but it may be excluded.

The program that extracts this information is B6230 and the batch job requires parameter screen P5430 to make the necessary selections.

9.26.4 Unit Statements

As with all other types of business Life Office's require to inform their clients the current state of the contract normally on an annual basis. However, due to the nature of the unit linked business it is possible, especially during fund value fluctuations, those clients' request ad hoc statements of current value and premium position.

This subsystem provides the facility, in addition to the normal annual statement produced at the anniversary of the contract, to request Unit Statements on-line. The user can request to print or re-print statements previously forwarded to the client, review outstanding statement requests not yet processed and make portfolio summary enquiry.

The Unit Statement batch job produces the statements dependent on a schedule date held at the contract level. This date is used to select all due contracts. Note that the parameter date used within the selection is incremented by three days to allow any imminent unit transactions to be processed through unit dealing. The Unit Linked detail's table, T6647, holds unit statement method that is the key to the unit statement's table, T6659.

This table holds various processing parameters such as whether the statement is to be produced on an anniversary or after premium receipt. Table T6659 also holds an outstanding unit indicator that stops the production of statements if any units are outstanding awaiting a unit price. To process the statement, a generic subroutine as held on the table is called. After completion the schedule date is incremented by the factor, number of months, which is also held on table T6659.

Tables used by Subsystem

T6647	-	Unit Linked Contract Details
T6659	-	Unit Statements

Transaction Codes

M605	-	Unit Price Master Menu
S637	-	Unit Price Submenu
T566	-	Unit Statement Reprint Request
T570	-	Unit Statement Print Request
T571	-	Outstanding Statement Requests

10. Reassurance

10.1 Introduction

The Life Reassurance functions within the LIFE/Asia system will provide the facility of reassuring sums assured for individual components within contracts. It will handle the definition of reassurance details against coverage's and riders, cede periodically and create accounting movements necessary in order to process payments to the Reassurer.

Reassurance will be created by the system at component level. It will be based on the sum assured of each component on a plan basis. In other words the reassurance specified for a given component will apply to every policy within the plan for the specified component. When adding reassurance to a contract it will be added to a specific component and it will apply to the total sum assured for that component on all the policies within the plan.

The Reassurer is held in the system as a Corporate Client who has been registered as a Reassurance Account in the Reassurance Accounts subsystem. An account number will identify the Reassurer and this will be used when defining reassurance against a component.

10.2 Reassurance Definitions

Reassurance is the process by which a risk underwritten by one assurer is shared with one or more other assurers who are each in turn paid for their share of the risk. The reassurance contracts are between one assurer and the other and do not involve the assured party. (Where the assured party is involved, the process is Co-assurance.)

Reassurance is often arranged as a standing agreement between a life assurance company and another assurance company (the reassurer) who specialises in accepting reassurance business. This agreement is known as a Treaty and the following details normally outline the arrangement:

- the life assurance company retain a certain portion of each risk underwritten
- the remainder of the risk is accepted by the reassurance company, under the terms the original insurer has underwritten the business.

Where business underwritten by the life assurer falls outside the parameters of the treaty (perhaps because the sum assured is larger than the reassurer is willing to accept automatically), specific terms need to be arranged between the life assurer and the reassurer. This type of reassurance is known as facultative reassurance.

In the event of a claim, the reassurer may be liable for part of the claim amount, or where premiums have been paid in advance; moneys may need to be recovered. This is known as reassurance recovery.

10.2.1 Reassurer Definition

This section describes the building blocks required to set up the Reassurance arrangements, treaties and Accounts, in order to allow reassurance processing to occur. It includes both on-line transactions and SMART tables (only the most pertinent are mentioned). Further details regarding all the necessary SMART tables can be found in the Reassurance Table Guide.

10.2.2 Reassurer Details

Reassurer details are created, amended and enquired upon using the Reassurers Maintenance Submenu, which is accessed from the Reassurance Accounts Master Menu. This processing is an existing function, which has been enhanced as part of this development.

The input screen has been amended to allow the capture, amendment and display of some additional information relating to the Reassurer. All of the data relating to a reassurer is stored within the Reassurance Account File (RASAPF).

In order for the Reassurer Account to be used to reassure contracts the Reassurer should be entered against a Reassurance Arrangement on table T5449.

In Create mode all fields are available for input, except the Termination Date field. In Modify mode all fields are available for input except the Commencement Date field. In Enquiry mode, all fields are protected, although Client Details and Bank Account details can be selected for Enquiry.

10.2.3 Retention

A contract is reassured when the amount of the sum assured is in excess of a limit for which the Life Company is prepared to be on risk. The amount of risk the company is prepared to accept is called Retention. The excess of the sum assured above the retention limit is then ceded to reassurers, who in turn have their own retention's.

Retention limits are applied to individual risk classes, i.e. Permanent Health and Critical Illness. Risk Classes can be further broken down into risks per line of business, e.g. Disability for Unit Linked business and Disability for Traditional Business. Different risk classes can be classified under one risk type. As a component can belong to different risk classes, each component has one risk type.

Whilst a retention limit is set it may be that the amount of sum assured in excess of this limit is not worth reassuring and therefore a Discretionary Retention limit must be set. If the amount in excess of the retention limit is within the amount set for the discretionary limit the excess is covered by the Life Company. Should the Life Company change its retention limits, these new limits will only apply to New Business.

10.2.4 Multi Risk Classes

A component can be classified into more than one risk class. To allow a component to have two mortality risk classes say death and disability, multiple risk classes for each component are classified into one risk type.

- At Table T5448, each component is attached to one risk type. This windows out to Table TH618 which is the grouping of different risk classes for each risk type.

- Each risk class can have its own arrangement hierarchy. Therefore each arrangement hierarchy at T5448 becomes an arrangement type which windows out to TH619.   This shows the actual arrangement hierarchy for each risk class.

- In T5449 for each treaty or facultative arrangement, the premium basis could have different calculation methods for different risk class (termed as premium class). TH621 is used to define the premium class and is used in T5450.

10.2.5 Automatic Reassurance

Reassurance is set automatically at New Business, depending on the Company retention limit. If reassurance is not to occur for a certain product, details must be inserted upon a Reassurance Product Bypass table T5447.

10.2.6 Treaty

A Treaty is a defined agreement between the Life Company and the Reassurance Company. Both companies agree to share the risk for a Life Assured and a particular classes of business within given limits. The reassurer also has retention limits on the amount of risk it is willing to accept. The method applied to proportioning the sum assured between the Life Company and the Reassurance Company will vary from Treaty to Treaty.

Within this development two Treaty types are covered, Surplus and Quota Share:

10.2.7 Surplus

A Surplus Treaty dictates that the Life Company will cede all risks above the company's retention limits, for a particular class of business (e.g. Death or Disability). In return the Reassurance Company will accept the excess risk up to its own retention limit. There may be more than one reassurer within a Treaty, creating a tiered effect. Each of the limits within the tier must be exhausted before the next one is taken up.

10.2.8 Quota Share

Within this type of arrangement the life and Reassurance Company agree to accept a percentage of the risk. Whilst the retention amount is a set percentage there is also a maximum amount of risk that is acceptable by each

party. Once all the limits have been exceeded a facultative agreement is required.

As treaties may be defined separately for individual risk classes e.g., Disability and Death, due to different costing periods it must be possible to create more than one treaty for the same risk class. For example, you may have two PHI treaties created where the first has a costing period of annually in advance and the second monthly.

If a contract has been rated the treaty must be able to recognise this; there may also be a limit to the amount of rating acceptable to the reassurer. If the risk is rated beyond this limit the risk may not be accepted and facultative cover may be required. In some circumstances risks with ratings may be excluded from a treaty.

If ratings have been applied to the sum assured, this should also be taken into consideration against the sum reassured as well. Age additions and percentage loadings can be applied to the sum reassured as it is for the sum assured. However flat extras must be proportioned for the actual reassurer's share of the risk.

10.2.9 Facultative Reassurance

When a risk exceeds all retention limits for a treaty another reassurer may be sought to accept part or all of the remaining risk. Again the conditions and costing arrangements will be agreed between the insurer and reassurer. This arrangement is known as Facultative Reassurance.

A Treaty can have more than one reassurer associated with it. When defining a treaty arrangement it should be possible to attach a default facultative treaty. The absence of either a treaty or facultative arrangement should indicate that any excess risk for a product will require facultative arrangement on a case by case basis. Therefore there must be flexibility to create ad hoc agreements specify the exact sums to be reassured, with whom and under what agreement.

The same processing required for Treaty arrangements is utilised for a facultative arrangement.

10.3   Costing

The Life Company pays premiums to the reassurer for each sum assured ceded to them, this is known as Costing. The treaty must specify the method used to cost premiums (Original Terms or Risk Premium) and the frequency of such costing. The following frequencies are the most commonly used:

- Annually in advance
- Same Billing Frequency as the risk

There are two types of costing methods used for calculating the premiums payable for ceded sums assured.

They are:

Original Terms - The premium for the reassured amount is a proportion of the premium for the whole sum assured, based on the rates of the Life Company.

Risk Premium - The premium for the reassured amount is determined using a set of rates from the reassurance company.

Under Original Terms, costing is based on either the sum reassured or the sum reassured at risk. If costing is not based on the sum at risk, the premium for the sum assured and subsequently the sum reassured will be known immediately. However for costing based on sum assured at risk, more detailed calculations are required, taking into account unit values held on the Unit Linked Contract or reserves that have accumulated for the Traditional Contract.

Therefore when costing is calculated on a sum at risk basis the premium may differ, on each costing, due to the possible change in the fund value or reserves accrued.

10.3.1 Costing processing

Each 'tranche' or cession of reassurance is costed separately, i.e. for a Contract that has two components, each of which are reassured, premiums will be costed separately. Costing could take place at different frequencies, using different basis (sum reassured or sum reassured at risk), different Premium and tax methods.

Costing Frequency, costing basis and tax basis is defined on table T5448 that is keyed on a Contract/Component combination.

The Premium Basis is held against each Reassurance Account for each Reassurance Arrangement, as defined on table T5449.

Costing is processed automatically by a Batch schedule (RACOST). Reassurance premiums are costed in advance and costing will cover the period between the current Costed To date and one costing frequency as specified on Table T5448. The Costing batch processing will not 'catch up' on any outstanding premiums.

The Costing Batch schedule will select all Cessions due for processing based on the Costed To date on the Reassurance Cessions Detail File (RACD) being less than or equal to the Batch schedule Effective Date.

For each cession the premium will be calculated.

The Premium Basis for each Reassurance Account is ascertained from table T5449. This Premium Basis method is then used to obtain further costing processing held on the Reassurance Premium Basis table T5450.

10.3.2 Risk Premium Costing

Risk Premium Costing uses rates supplied by the Reassurer and processing is similar to standard coverage premium calculations.

T5450 provides the Reassurance Premium Calculation subroutines per premium class. Premium class is a term used for the same treaty but different risk class.   There are three Reassurance Premium Calculation subroutines:

RPRMM01.   Premiums are calculated on a Single Life Basis, using the Premium Rates (Term Based) Table, T5658.

RPRMM02.   Similar to the first subroutine but calculated on a Joint Life Basis.

RPRMM04.   The Premium Rates used in this calculation are held on the Premium Rates (Age Based) Table, T5664.

Reassurance Premiums are costed on either a Sum Reassured or Sum Reassured at Risk basis. The basis used is held on table T5448. If the Sum Reassured at Risk basis is used, a Reserve calculation method is also entered, with subroutines held on T6598 under this method.

If the Sum Reassured at Risk basis is defined for a Cession, before any premium calculations are processed, the Sum Reassured at Risk is calculated. Premium rates are then applied to this figure instead of the Sum Reassured.

The Premium Rates fields held on T5450 provide the code with which to look up Tables T5658 or T5664 to acquire the Premium Rates for the Reassurance Premium.

The code in the Select field will be used to look up Premium Rates during the Initial Discount/Commission period (also held on T5450). For the remainder of the Cession duration, the code in the Ultimate field will be used to look up rates.

After the Reassurance Premiums has been calculated using either T5658 or T5664 the Rate Factor held on T5450 will be applied to the premium to make the final Reassurance Premium.

10.3.3 Original Terms Costing

Original Terms Costing calculates a proportion of the coverage premium to charge as the Reassurance premium. Calculations for Original Terms costing will be processed if on Table T5450 fields 'Select' and 'Ultimate' are blank.

As in Risk Premium costing, the Sum Reassured or Sum Reassured at Risk is calculated. The instalment premium for the coverage per cessation is then ascertained but is converted to the premium appropriate to the Costing Frequency.

The Rate Factor entered on table T5450 is then applied to this converted premium to arrive at the Original Terms premium.

<u>Special Terms</u>

For either Reassurance Premium Basis Special Terms should be checked to see if any ratings apply to the Reassurance premium as well as the coverage premium.

10.3.4 Commission

Commission is payable to the life company, by the reassurer. For Original Terms costing commission is usually calculated and then deducted from the Reassurance premium due to the reassurer. For Risk Premium Costing, the reassurance premium rates provided by the Reassurer usually take into account commission and are therefore slightly discounted. In this instance commission would not be shown to be deducted from the premium.

10.3.5 Joint Lives

In the case of Joint Lives, the amount retained by the Life Company should be the lesser of the remaining retention for either life. Assuming the retention limit is exhausted for one life the entire sum assured should be reassured. The amount retained covers both lives and therefore, any future retention calculations on either life will take into account this amount.

10.3.6 Tax and Stamp Duty

Tax can be calculated and deducted from Reassurance Premiums. If there is no Taxation Basis entered on T5448, Reassurance Method table, no taxation calculations are required and Commission is calculated. If there is a code entered in the Tax Basis field on T5448, this code is used to ascertain the Taxation subroutines held on T6598, Calculation Methods table.

Two Tax Calculations have been developed Government Sales Tax and Stamp Duty.

The Government Sales Tax calculation uses the Government Sales Tax Rate table, T5443, using an item of Currency Code plus coverage code (or **** as a catch all for coverage code). This table then determines the tax rate percentage for a specified Annual Premium Band. The tax is then deducted from the gross Reassurance Premium.

Stamp Duty calculation uses the Stamp Duty Calculation table, T6650, using an item of Contract currency. This table then determines the Stamp Duty factor used to apply to the range of Sum Assured. The Stamp duty is then deducted from the gross Reassurance Premium.

10.3.7 Commission

Before any premium is posted to the Reassurance companies, commission is deducted to provide the net Reassurance premium. The Commission Calculation Basis code is entered on the Reassurance Premium Basis Table T5450 and this code is then used to ascertain the subroutine to use in the calculation, held on T5647.

The Commission Calculation Rates code is entered on the Reassurance Premium Basis table T5450 and this code is then used to ascertain the Commission rates on T5565. Commission is calculated against the gross Reassurance Premium.

For premiums paid on a Risk Premium Basis, the commission is usually already accounted for in the premium rates provided by the Reassurer. If this is the case, the Commission Basis and Rates field on should remain blank and no commission will be processed.

After deducting any Tax, Stamp Duty or Commission, the net Reassurance Premium is given.

10.3.8 Alterations

The treaty arrangement must take into consideration contractual and non-contractual alterations to the sum assured and subsequent retention limits. Where contractual increases in sums assured occur i.e., Automatic Increases; the retention limits must also be increased proportionately.

If the current sum assured is not reassured then the increase will not be i.e. amount will remain with the life company and similarly if all or part of the sum assured is reassured the increase will be reassured in the same proportions as the original. Decreases may cause the retained amount to decrease in proportion to the overall decrease.

Non-Contractual changes are treated like new business.

10.3.9 Recovery

As mentioned earlier, the function of reassurance is for reassurers to help insurers cover amounts arising from claims. Recovery is therefore an important consideration of any Reassurance processing being developed.

The maximum cover will be agreed between the assurer and the reassurer. Any claim amount, which exceeds the reassurers' maximum limit, will fall back into the hands of the Life Company.

Upon any type of claim/termination the reassurer should be notified. Claim recovery will not be known until the end of the cover period when a report detailing the costing premium, premiums actually paid by the policyholder and the amount of claim paid will be produced.

Upon a Death Claim the amount to be reclaimed should be the sum reassured on the date of the claim. If the risk is calculated on a sum at risk basis, the fund value reduces the claim amount proportionately.

Upon Surrenders and Maturities it may be necessary to recover some of the claim value from the reassurers in proportion to the amount reassured.

For Regular Benefits it maybe necessary to debit the reassurer for their proportion of the claim on the frequency that the regular benefit amount is paid.

Should a policyholder hold several contracts, upon the termination of a contract there may be a knock on effect with the reassurance risks maintained on existing contracts. Therefore, manual recalculation of reassurance risk maybe required. Notification is required, identifying in force contracts, with reassurance, for lives that have had contract terminations during the reporting period.

Costing of Reassurance is normally paid in advance. Therefore, if cover is no longer required for a period, which has already been paid for, the over paid reassurance premiums are reclaimed, by the life company from the Reassurance Company. Arrangements can be made by the life company to pay a set fee to the Reassurance Company to cover the administration costs of the refund.

A different refund basis can be specified for each reassurance arrangement. As well as the refund of premiums to the Life Company, the Life Company should refund commission to the reassurer upon terminations.

The costing of premiums payable in advance, to the reassurer, must still be maintained regardless of whether or not the policyholder has actually paid the premium. The payment of Reassurance premiums will only cease upon the contract status being shown as terminated. Should any interest be due on a claim then a proportioned amount can be claimed from the reassurer.

If a terminated contract is reinstated, the reassurance is not automatically reinstated, but recalculated and ceded as if it was a new contract being issued.

10.3.10 Cash Calls

It was mentioned above that Reassurers would be notified of Claims processing either during the registration or upon the actual completion of the claim. In some circumstance i.e. large claims, the insurer may require immediate recovery of the reassured amount from the reassurer. Therefore the ability to record a Cash Call event is required.

This process will debit the reassurers account and the necessary statement will be forwarded to the reassurer requesting payment. Upon receipt of the money the reassurers account will be credited. The status of a Cash Call should be noted on the regular statements.

10.3.11 Reversals

In the same way that normal contract reversals are processed, i.e. equal but opposite processing, so should reassurance transactions be reversed. Therefore, adequate history of all reassurance processing is required. However if the forward transaction that is being reversed terminated the contract and therefore the reassurance, the reversal which in fact 'revives' the contract should process the Reassurance from first principles, i.e. reassessing the sum assured or sum assured at risk and creating new Cessions.

10.3.12 Review Processing

Regular review processing must exist to determine if the reassurance levels need adjusting.

10.3.13 Reports

Due to the amount of processing now involved with reassurance, it is important to produce reports on a regular basis for both the insurer and the reassurer. These reports can assist in the reconciliation of accounts, auditing, payment of premiums and commission due, and the recovery of claim payments.

10.3.14 Reassurance Product Bypass Table

Reassurance is now created automatically at New Business, depending on the Arrangement Type and the Company retention limits. If reassurance is not to occur for a certain product, the Product type must be created as an item on the Reassurance Product Bypass table, T5447. This table does not have an extra data screen.

10.3.15 Reassurance Retention's

Retention's are stored on a new SMART table, T5446, Reassurance Risk Class Retention's.

This table is keyed on the user defined Reassurance Risk Class (up to 4 characters), which in turn should be entered on T5448 and T5449 to link Contract/coverage combinations and Reassurance Arrangements to specific Risk Classes and retention's. A risk class can be defined per line of business. Table T5446 is a dated table allowing different values to apply for different date ranges.

10.3.16 Reassurance Arrangement

The Reassurance Arrangement defines the Treaty and Facultative agreements between the Life Company and the Reassurer(s). The arrangement details are stored on a new SMART table, T5449, Reassurance Arrangement Table. This is a dated table, with the key being a four-character user defined code. (This code is subsequently entered on Table T5448 to define a specific arrangement against a Contract/Coverage combination.).

10.3.17 Reassurance Method

The reassurance method is a means of linking together the various reassurance arrangements, which form the hierarchy of rules for reassurance for the product and coverage combination. It also links the administration rules for the arrangements together. This information is held on the Reassurance Method Table, T5448. The item code for this table is a concatenation of the Product code (3 characters) and the coverage code (4 characters). It is a dated table.

10.3.18 Sub Standard Life Retention's

There is an option in Client Details Screen, which allows creation of Client specific Retention's limits. This would typically be used if a Client has had sub standard underwriting and the Life company is therefore unwilling to accept the standard retention's against him and would be likely to set retention's lower.

There is a checkbox at the foot of the Client screen; 'S/S Retention's' and entering an 'x' will display the initial sub standard retention's window. There follows the option of creating sub standard retention details or modifying, deleting or enquiring on any existing Sub standard retention details. Additional retention details may be added, although these must be for a different risk class. The Sub Standard Retention Details screen is similar to T5446, Reassurance Retention Limits table.

The client specific retention details are stored on the RACRPF Physical file.

10.3.19 Sub Standard Rating Limits

Whether or not a Reassurance Arrangement includes sub-standard lives depends on the Sub Standard lives allowed indicator on Table T5449, Reassurance Arrangements. If reassurance is accepted on sub-standard lives, i.e. those with an extra rating or loading, this might only include certain rating or loading limits. These limits are held on the Sub-Standard Life Limits table T5451. This table is accessed using the Sub-Standard Limits code entered on T5449.

10.4   New Business

Reassurance is automatically created during New Business and is dependent on the risk and retention limits.

During pre-issue validation a number of different calculations and processes are performed to assess the risk and need for reassurance based on the Reassurance definition tables.

Essentially, during pre-issue validation, the risk (for the component and the Life Assured) is calculated and checked to see if it is above the retention limits for the Life Company and therefore whether the remainder of the risk needs to be reassured. If the risk is in excess of the Life Company retention limit, Treaty Reassurance Cession Details records are then created on the RACDPF

file, with cession amounts based on the SMART table definitions for sequential Reassurance Arrangements.

After the company retention has been calculated together with any Treaty Reassurers cessions, if there is still excess risk a Facultative record is set up for either an arrangement held on the Reassurance Arrangement table or if there are no Facultative reassurers defined, a 'dummy' record with blank Reassurance Account number. If facultative reassurance has been created the contract cannot be issued until the Facultative Reassurance record has been visited and either viewed to confirm or Reassurance details added if it was initially just a default record.

On issue the Reassurance Cession records are activated.

The processing is described below in more detail.

10.4.1 Treaty Reassurance

Firstly, the Contract type is checked against the Reassurance Product Bypass table, T5447. If the Contract type exists as an item on the table, no Reassurance Processing is necessary.

If Reassurance is necessary, for each component the following steps are processed. Each component is dealt with, in sequence of priority as held on the Reassurance Method table (T5448), e.g. Contract/component combination LCELCE1 has a priority of 1, whereas LCEDTRL has a priority of 2, therefore Reassurance processing on an LCE contract will process the LCE1 component before the DTRL component.

10.4.2 Calculation of Sum to be Reassured

The Reassurance Arrangement code(s) for the contract/coverage combination is obtained from the Reassurance Method table (T5448) and the details and definition for this Arrangement code are then obtained from the Reassurance Arrangement table (T5449). Table T5449 will specify, if the Treaty is Quota Share or Surplus, whether the Arrangement includes sub standard lives and which Reassurer Accounts are to be used in which sequence, together with the percentage share and retention limits for these accounts.

The Sum Assured or Sum Assured at risk is ascertained for that component. Whether Cession calculations use the Sum Assured or the Sum Assured at Risk is defined on the Reassurance Arrangement Table (T5449). Although at New Business the Sum Assured at Risk is likely to be the same as the Sum assured because no units or bonuses have been allocated to reduce the risk.

For cessions based on the sum assured at risk, the reserves held on the contract is calculated and therefore the amount that is currently at risk is ascertained. The Reassurance Arrangement Table (T5449) defines a Reserve Calculation method and this method, held on T6598 (General Calculation subroutines table), defines the subroutines to be used. The Sum at Risk is then calculated by the subroutine and returned to the Cession Calculation processing.

As well as the amount of risk on the component, it is necessary to assess the risk that the Life Assured already has with the Life Company, for that Risk Type and whether any previous risks were reassured. Both in force contracts and proposals are checked, together with risk reassured within the contract currently being processed, on a component with a higher priority.

If the Contract is on a Joint Life basis, it is necessary to assess the risk held by both Lives for the Risk Type.

Once the amount at risk has been obtained, it is necessary to ascertain the Life Company retention of that risk and subsequently the additional cessions required to reassure the remainder.

Processing is slightly different depending on whether the Reassurance arrangements are Quota Share or Surplus.

Quota Share Treaty

If the Reassurance arrangement for a contract/coverage combination is Quota Share, a certain proportion of the risk is retained, regardless of whether the risk is below the Life Company retention limit. The remaining proportion is reassured.

The sum assured or sum assured at risk is calculated, together with the total risk amount for that Life (See above).

The Quota Share percentage, specified on T5449 for each Reassurance Arrangement code, (where arrangement is Quota Share based), is used to calculate the risk retained by the Life Company.

If the percentage share of the risk is in excess of the Company retention held on the Reassurance Retention Limits table (T5446) for the Risk Type, the table defined retention limit is used (e.g. 75% of the risk may be retained by the company up to £120,000 which is the table defined Retention limit for the Risk Type).

Any sub standard retention limits that exist for the Life Assured (held against the Client record) must be checked initially and these retention limits, if any will be used in preference to the table defined retention limits.

After assessing the amount of risk retained by the Life Company, the next stage is to ascertain what amounts are to be reassured by which Reassurance arrangements and Reassurers.

Again the Reassurance Method table (T5448) and Reassurance Arrangement table (T5449) are used to obtain the necessary information.

The Reassurance Arrangement table (T5449) defines the Reassurer Accounts that are included in the Reassurance Arrangement, together with the percentage of the risk that each Reassurer is willing to accept up to the retention limit specified. Each Reassurer takes a proportion of the risk, unlike Surplus arrangements where an additional Reassurer will only take the risk after the first Treaties retention limit is exceeded.

If all Reassurer Accounts have been used and there is still part of the risk left unprotected, Facultative Reassurance is automatically created.

<u>Surplus Treaty</u>

Processing is similar to a Quota Share Treaty in the creation of Reassurance Cession records but the retention and cession amounts are calculated differently. If the Reassurance arrangement is a surplus treaty only risk that is above the Life Company retention limit for the Risk type, held on T5446, is reassured.

The sum assured or sum assured at risk is calculated, together with the total risk amount for that Life.

Any sub standard retention limits that exist for the Life Assured (held against the Client record) must be checked initially and these retention limits, if any will be used in preference to the table defined retention limits. If there are no sub-standard retention limits, the Life Company retains the risk up to the Company retention limit for that risk (T5446).

If the Sum Assured is equal or lower than the retention limit plus any discretionary retention limit, no reassurance is required.

However if the Sum Assured is above these limits, anything above the Company retention limit is reassured (the discretionary retention limit is not included).

Again, the Reassurance Arrangement is used to ascertain the relevant sequential Reassurer Accounts and the applicable Retention Limits. Once these limits are exhausted for each Reassurer, the next sequential Reassurer is used. A Reassurance Cession Detail record is created for each Reassurer Account, per arrangement, per component.

10.4.3 Reassurance Cession Detail File (RACDPF)

A Reassurance Cession Detail record (RACD) is set up for each Reassurer, per arrangement per component.

The Reassurance Cession Details file contains information such as:
- Commencement Date of the Cession
- The Reassurance Arrangement code
- The Reassurer Account Number
- Client Number of Life Assured.
- Whether the arrangement is on a Surplus or Quota Share basis
- Whether it is Treaty or Facultative
- The Date the cession has been costed to
- The Reassurance amount for that cession and the percentage of the sum assured.

This is the most significant file in Reassurance processing and is used for enquiries, costing, reviews, terminations, reversals and other functions.

10.4.4 Special Terms/Sub Standard Lives

If there are special terms on the contract, the Sub Standard lives field is checked on table T5449 to see if the Reassurance Arrangement includes sub standard lives. If it does then the sub standard lives limits are checked against table T5451. If the special terms are within these limits then the Treaty Arrangement continues with the cession. If the arrangement does not accept sub standard lives, or the special terms are in excess of the table defined limits, Facultative Reassurance record is created and a message is displayed in pre-issue validation to revisit Facultative record.

On creating Special Terms, there is now the option to specify for each loading, whether the loading is for the component (Reassurance Indicator 1), reassurance (Reassurance Indicator 2) or the both (3). If the loading is for just the component i.e. Indicator 1, the Reassurance cession calculation processing does not consider the Component as sub standard and skips the processing.

Facultative Reassurance

When all Treaties are exhausted but there is still some risk exposed, Facultative Reassurance is required. It is also required if the Treaty Reassurance arrangements will not accept Sub Standard Lives or the Sub Standard Limits are exceeded.

If a Facultative arrangement is held on the Reassurance Method Table T5448, a Facultative Cession record is automatically created with the Arrangement details, including the Reassurance Account number. If however no Facultative arrangement has been defined on the table, a 'dummy' Cession record is created with the Reassurer account left blank for manual input. In either case during Pre-issue validation, a message is displayed 'Revisit Facultative Reassurer' and the Proposal cannot be issued until this has occurred.

It is only in this scenario that the Reassurance Check Box on the benefit screen is displayed and an 'x' must be entered to display the Facultative Reassurance Arrangement.

The Facultative Cession Maintenance screen will be displayed initially, with the facultative cession record automatically created displayed. This will either be the default arrangement as specified on T5448 or a dummy record with the Arrangement code and Reassurer blank.

In either scenario the record should be selected, using 1 for Modify. The Facultative Cession Details window will be displayed with the cession details. The only fields that allow input are 'Reassurer Number', 'Arrangement Code' and 'Sum Reassured'. If the default facultative arrangement from T5448 has been created it is just necessary to view the facultative arrangement as confirmation (although it can be updated if necessary).

If a dummy record has been set up it is mandatory to enter a Reassurer Arrangement Code and Reassurer Number. These two fields must agree with the Arrangement definition on T5449, with regards to the Risk Class and Reassurers attached to the Arrangement.

Once entered and validated, the facultative details are created as an RACD record, in the same way as Treaty Reassurance details. If the Arrangement details are modified, the field 'Manual Override', should be set to 'Y' to indicate an alteration has occurred.

10.4.5 Deleting Components/Proposal Withdrawal

All RACD records will be deleted if the Component or Proposal is deleted or withdrawn.

If a component is deleted, when re-entering pre-issue validation, the amount at risk together with any cessions should be recalculated based on the new proposal details.

10.4.6 Contract Issue

On issuing a contract all Reassurance Cession records on RACDPF will be activated and will change from valid flag 3 to valid flag 1.

A record on the Life Retention and Reassurance History file (LRRHPF) record will be created. This file records details of the total risk for a Risk Class per Life, the amounts retained by the Life company and cession amounts for both Treaty and Facultative Reassurance. The file contains the following information:
- Client Number of Life Assured
- Risk Class
- Treaty amount reassured
- Facultative amount reassured
- Amount retained by Life Company

The Life Company uses this file to ascertain the current retention for the Life Assured for a particular Risk Class. It can be enquired upon on line from the Reassurance Experience submenu. See the On-line Enquiries section for further details.

The Reassurance Experience History file (LIRRPF) record is also created. This file also records details of the amount reassured per Life Assured per Risk Class but also includes a breakdown by Reassurer and Reassurance Arrangement. The following information is held:
- Client Number of Life Assured
- Risk Class
- Reassurance Account Number
- Reassurance Arrangement Code
- Amount Reassured

This file is used in on-line enquiries from the Reassurance Experience Enquiry submenu. See On-line Enquiries for further details.

10.5 Cession Management

10.5.1 Cession Management

The Cession Maintenance submenu is accessed via the Reassurance Master Menu.

This transaction allows maintenance of all in force/active Cessions on a Contract, both Treaty and Facultative. It is possible to create new Cessions, Modify and Enquire on existing Cessions and delete Cessions.

Due to the high risk involved in being able to freely update these automatically created records, User sanctioning to this transaction should be strictly limited.

To access this transaction both the Contract Number and Effective Date must be entered. The date entered must be less than the Paid to date but greater than the Risk Commencement Date. The Effective Date will become the commencement date of any RACD records created within this transaction. There is only one Action because all other choices are within the transaction.

On entering details on the submenu and pressing enter, the first screen displayed is the Work with Reassurance Cessions screen. This screen displays the Life and Component(s) held on the Contract, together with all active Cessions that exist on the contract, together with Costed to Date of each, the Arrangement Code and the Sum Reassured.

There are four Actions within this Work With screen, Create (1), Modify (2), Enquire (3) and Delete (4). The Life details are only there for information purposes and the field is therefore protected.

The Reassurance Cession Details file (RACDPF) is updated and the validflag will reflect the different Actions taken.

Additional Files Updated

In addition to the Reassurance Cessation Details file, the other reinsurance files are updated:

- Reassurance Experience History file (LIRRPF). A new record is created for any new arrangements or Reassurers on the component.

- Life Retention and Reassurance History file (LRRHPF). The previous record is flagged 2 and a new record is created with updated Sums Reassured, Facultative or Treaty and new sums retained.

10.5.2 Contract Auto Cession

From the Reassurance Master menu, there is a submenu option 'Contract Auto Cession'. This transaction allows the addition, modification and deletion of *inactive* Facultative Reassurance cessions, which also enables the switching of Reassurance arrangements.

Treaty Reassurance cannot be maintained as part of this transaction. See Cession Maintenance.

Contract Auto Cession Submenu.
The Contract number and Effective Date are required. The Effective date will become the Commencement Date of Reassurance Cession records (RACD). The Effective date must be less than the Paid to date but greater than the Risk Commencement Date.

There must be at least one inactive facultative cession already on the Contract to continue with the transaction. If there are no inactive Facultative cessions, the screen will display a message 'No Facultative Review required. Press Enter to continue', pressing enter will then return you to the submenu.

If there are existing inactive facultative cessions on the Contract, the first screen displayed is the Facultative Cession Component selection. Once the relevant component is selected, the next screen is the Facultative Cession Maintenance screen. This screen displays the existing inactive facultative cessions, with Commencement Date, Reassurer, Reassurance Arrangement and Sum Reassured. There is also an Override flag, which is displayed if the Cession has already been altered in some way. From this screen you can select the appropriate cession for Modification or Deletion or press function key F10 to add an additional cession.

10.5.3 Modify Cession

If a cession is selected with the Modify action, the Facultative Cession Details screen will be displayed. (as in New Business, see above). The screen displays the Cession details:
- Reassurer Number
- Arrangement code
- Commencement Date
- Costed To Date
- Component Sum Assured
- Sum Reassured

Only the Reassurer Number, Arrangement Code and Sum Reassured can be altered.

The following screen validation exists:

- The Reassurer Number must be included on T5449 for that Reassurance Arrangement Code.

- Both the Reassurer Number and the Arrangement Code must be valid.

- The Reassurer must be of the correct Status to accept Cessions.

- The Reassurance Arrangement must be Facultative

- The Reassurance Arrangement code must exist on Table T5448, for the Contract/component combination.

- The Reassurance Arrangement code must be valid for the Contract/Component Risk Class.

- The Sum Reassured must be entered and must not be greater than the Component Sum Assured.

The Arrangement code field windows to table T5449. The Reassurer Number field windows to the Client Scroll, filtered by Clients with the role of Reassurer.

10.5.4 Delete Cession

If a Cession is selected with the Delete action, the Facultative Cession Details screen will be displayed but all fields will be protected. There is a confirmation message at the foot of the window 'Press ENTER to confirm Delete'.

If the record is to be deleted, press Enter and the Facultative Cession Maintenance screen is displayed, with the previously selected Cession deleted. If you do not wish to Delete, Function Key F12 will cancel the Delete transaction and return you the Facultative Cession Maintenance screen whereas F3 will cancel the transaction completely and return to the Submenu.

10.5.5 Add Cession

From the Facultative Cession Maintenance screen, function key F10 will create an additional Facultative Cession. The Facultative Cession details screen will be displayed, as in the previous actions, and input is mandatory in the Reassurer Number field, the Arrangement Code field and the Sum Reassured.

Screen Validation and windowing is the same as in Modify.

A record on the RACDPF file is created. The Add Cession transaction will automatically activate this RACD record.

Contract Enquiries is an additional submenu option. The Effective Date must not be entered if the Contract Enquiries Action, Action B, is selected.

10.5.6 Files Updated

Reassurance Costing Details File (RECOPF)

This is a new file used to maintain Costing Details. A record is created for each Cession per Component that is costed in the Batch Schedule run.

Reassurance Cession Details File (RACDPF)

A new RACD record is created for each Cession that was processed in the Costing run. The previous RACD record is flagged as 2 and the new record has the Costing Transaction number and a new Costed To date (last date plus 1 frequency).

Policy Transaction Records File (PTRNPF)

A PTRN record is created for each Costing Run per Contract.

Contract Header Details File (CHDRPF)

A new CHDR record is created with an incremented Transaction number to match the Costing transaction.

Accounting Movements File (ACMVPF)

Accounting movements are created for the gross reassurance premium, commission, tax or stamp duty deducted and the net Reassurance Premium payable, for each Cession per component on a contract. The ACMV's created by the Reassurance Costing batch schedule, have the Reassurance Account number as the Subsidiary Ledger Entity Key. Table T5645, item RECOPOST, details the accounting movements that are required.

10.5.7 Reassurance Premium Refund

Costing of Reassurance normally covers an advanced period. If the cover should then not be required for the period which as been paid for, for example where a reduction of sum assured has occurred or a Risk had been terminated, a refund of premiums may be in order to the Life Company. Each arrangement will have its own refund basis, which has been agreed between the Life Company and reassurers involved.

On the Reassurance Arrangements Table, T5449, there is a Premium Refund Basis field. The value entered here must be an item on table T5445, Reassurance Premium Refund Basis. Table T5445 has four-character user defined codes as items. The extra data screen allows the Refund processing to be defined:

Whenever a transaction is processed where a contract with Reassurance has the Risk reduced, including down to zero if a Termination has occurred, Refund Processing should occur. If there is no Premium Refund Basis on Table T5449 then no premium refunds are due. If there is a Premium Refund Basis specified table T5445 is checked for details and the following processing occurs.

The Reassurance Costing file is checked to ascertain the Reassurance premiums that were paid in advance. The new sum reassured for the Cession is also ascertained (either reduced or zero) to determine the amount of premium to be refunded, if the sum reassured has been reduced, the refund of premium may be proportionate. Commission that the Reassurer paid to the Life Company also needs to be refunded back to the Reassurer. The refund due will therefore be net of Commission and refund fee.

Files Updated

Accounting Movement File (ACMV's)

Account Movements are created for the gross premium to be refunded any commission or refund fees and the net refund due. The accounting movements are created according to Table T5645 for the item of 'RFNDPST'.

Reassurance Costing File

A new record is created on the RECOPF file for the premium that is to be refunded. This will be a negative amount.

10.5.8 Tables used by the Subsystem

T3609	-	Reassurance Facultative Schedule
T3616	-	Sub Ledger Codes
T3642	-	Auto Allocation
T3698	-	Dissection Codes
T5443	-	Government Sales Tax Rates
T5445	-	Premium Refund Basis
T5446	-	Reassurance Risk Class Retensions
T5447	-	Reassurance Product Bypass
T5448	-	Reassurance Method
T5449	-	Reassurance Arrangement
T5450	-	Reassurance Premium Basis
T5451	-	Sub Standard Limits
T5452	-	Reassurance Claims Basis
T5453	-	Treaty Type Table
T5454	-	Reassurance Arrangement Type Table
T5455	-	Reassurance Account Status
T5458	-	Allowable T. codes for Prop. Processing
T5472	-	Claim Calculation Routines
T5645	-	Financial Accounting Rules
T6661	-	Reversals
TH618	-	Risk Type Split into Risk Class
TH619	-	RI Risk Class – Arrangement Reln
TH620	-	Reassurance Premium Class
TH621	-	Premium Class of a Risk Class

Transaction Codes

M635	-	Reassurance Master Menu
S639	-	Reassurance Accounts
S650	-	Costing Enquiry
S651	-	Reassurance Experience
S652	-	Reassurance Cession Maintenance
S653	-	Contract Auto Cession
S654	-	Cash Call Maintenance
T529	-	Reassurance Costing Enquiry
T530	-	Reassurance Experience Enquiry
T531	-	Cession Maintenance
T532	-	Auto Cession Component Select

T558	-	Reassurance Account Create
T559	-	Reassurance Account Modify
T560	-	Reassurance Account Enquiry
T710	-	Reassurance Cash Calls
T711	-	Cash Call Reversal
B540	-	Reassurance Costing Batch Job
B541	-	Reassurance Review Batch Job
B542	-	Facultative Reassurance Schedule
B543	-	Reassurance Cessions Report
B544	-	Reassurance Costing Report
B545	-	Reassurance Redistribution
B546	-	Reassurance Statements and Payment
B547	-	Claims Paid Report

11. Statistics

11.1 Introduction

The facility is provided in the LIFE/Asia system to accumulate Agent and Government Statistics for transactions in order to reflect additions and changes to data. Government statistics are intended to reflect product information; Agent statistics reflect contract information. Accumulation is by accounting month and year.

Statistical movements are produced to reflect the change to a contract or contract component resulting from a system transaction. Movements can be produced to show the contract and/or component position after the change, (current) or prior to the change (previous). The statistics can be ordered according to criteria defined in tables so that, whenever a transaction is performed, a particular set of statistics will be created.

The statistics are extracted by batch schedule and then stored and flagged as having been reported upon so that they are not extracted again. Once statistics have been posted by the batch schedule, then can be enquired upon on-line.

Statistics can also be adjusted on line by using the journalising facility. This facility may be used to update the system with statistical information from another source or to correct mistakes. The journal data is retained for audit purposes and may be enquired upon.

11.2 Transaction that Effect Statistics

Statistical Accounts are produced by the following transactions. The account records are updated when the transaction is processed.

- Agent Change
- Renewals Re-rating
- Overdue Processing, Non Forfeiture and Lapse
- Component Anniversary Processing
- Contract Issue
- Contract Cancellation, CFI, New Business withdrawals, etc.
- Full and Part Surrender
- Single Premium Top Up
- Manual and Automatic Paid Up
- Component Add and Component Changes
- Billing Change
- Automatic Increases
- Lapse
- Death Maturity and Expiry

Any of the above transactions, if reversed, will also generate statistics.

11.3   Types of Statistics

As mentioned earlier there are two types of statistics accumulated Agent and Government. The statistical accumulation is tailored by the Life Office's requirements by the use of statistical categories. A category is used to group statistics together this category can be any two-digit code. The table definition of the category within T6629 also determines the selection of statistics: Agent or Government.

Within a category, it is also possible to further refine the contract related statistical accumulation by defining the following bands for both Agent and Government statistics:
- The age of the Life Assured
- The sum assured
- The risk term of the contract
- The annualised premium

A category can be updated by several transactions. Each category is set up in the Statistical Categories Table, T6629; a transaction can update many categories. Each combination of transaction and category must be set up on the Statistical Category by Transaction table, T6628.

The use of bands to determine the selection of statistics is set up in T6629. Each band specified on that table must be defined on the Statistics Accumulation by Band table, T6627, where the band is broken down into band ranges; for example the age may be broken into several age ranges.

11.4   Statistical Movement Generation & Postings

Statistical movements are created by the subroutine LIFSTTR that is called by the transactions that update statistical information. LIFSTTR writes to the STTRPF flat file. The values that appear in this file are determined by the entries on the following tables:

- T6628 Statistical Category by Transaction
- T6629 Statistical Categories
- T6627 Statistical Accumulation by Bands

The statistical information held on the STTR file is extracted by SMART batch extract processes and posted to the statistical accounts. There are two batch schedules as follows:

- STSAGPST. Agent Statistical Movement Posting. This batch job reads the STTR file and writes or updates the AGST, Agent Statistics, and file with the Agent statistical accumulations.

- STSGOPST. Government Statistical Movement Posting. This batch job reads the STTR file and writes or updates the GOVR, Government Statistics, and file with the Government statistical accumulations.

In both processes, if a match on the key information is found, then the accumulation file is updated, otherwise a new record is written. The AGST

and GOVR records are used by the on-line statistical account maintenance facility.

11.5   AGST & GOVR Data

As mentioned above the statistical movement posting batch schedules together with data updates from the statistical journalising facility updates these files. A statistical account consists of two parts: the key and the accumulations. The key information consists of the contract parameters and the system parameter. The accumulation information consists of contract details.

The AGST, Agent Statistical account information is as follows:

AGST Key Information
- Agent Number
- Agent Area Code
- Agent Commission Category - O = Override - B = Basic
- Servicing Branch
- Statistical Category
- Contract Type
- Contract Currency
- Age Band
- Sum Assured Band
- Premium Band
- Risk Term Band
- Accounting Year

AGST Accumulation Information
- Contract count   Total number of contracts for agent
- Coverage count   Total number of components
- Annual Premium   Total annual premium from which commission is calculated
- Single Premium   Total annual premium for single premium coverage's
- Commission   Total initial commission payable to agent

The GOVR, Government Statistical Account information is as follows:

GOVR Key Information
- Statistical Category
- Accounting Year
- Statutory Fund
- Statutory Section
- Statutory Subsection
- Register
- Servicing Branch
- Commencement Year
- Coverage Premium Status Code
- Contract Currency
- Age Band
- Sum Assured Band

- Premium Band
- Risk Term Band

GOVR Accumulation Information
- Contract Count. Total number of contracts
- Annual Premium. Total annual premium
- Single Premium. Total annual premium for single premium coverage's
- Sum Assured. Total benefit sum assured

Tables used by Subsystem

T1697	-	Batch Extract Rules
T5679	-	Transaction Status Requirements
T6627	-	Statistical Accumulation Band
T6628	-	Stats. Category by Transaction
T6629	-	Statistical Categories

Transaction Codes

M611	-	Statistics Master Menu
S641	-	Agent Statistics Submenu
S642	-	Government Statistics Submenu
T572	-	Govern. Stats. Journal Enquiry
T573	-	Govern. Stats. Account Enquiry
T576	-	Agent Stats. Account Enquiry
T577	-	Agent Stats. Journal Enquiry
T578	-	Agent Stats. Journal Create
T579	-	Government Stats. Journal Create

11.6   Statutory Reports

Based on the current understanding of the Statutory Requirement in India, is deduced that the information and data needed to be furnished to the Authority basically falls into the following classification:

1. Accounting Related Information
2. Valuation Related Information
3. Policy Administration Related Information
4. Investment Related Information

LIFE/Asia Statutory Reports concentrates on issues relating to Accounting and Policy Administration related information only.

11.6.1 Accounting Related Information

A new schedule, NEWSTEXT is created to read the accounting movement file, ACMV, for the specified accounting year and month. The transactions to be extracted are specified in table T1697, Batch Extract Table. All required sub account code and types are to be included in the new item, BJ518 in table Transaction Accounting Rule, T5645. A new statistical file GVST, is produced to store all the accounting information.

With the information in GVST, a new posting schedule ACSTAPST is created to produce two new accumulation files, GVAH and GVAC. GVAH is accumulated at contract type and GVAC is accumulated is coverage type. When the contract level accounting is used, the coverage level accumulation is based on the basic plan. All figures are in accounting (ledger) currency.

Included in this enhancement is the separate posting for Single Premium Commission and for Initial Commission as well as RI ceded premium and for RI Claims. New sub account codes are introduced for this purpose. This change is required for the Commission and Reassurance statutory reports.

Currently, at renewal collection, the effective date in the accounting movement file, ACMV, is updated with the instalment from date. This allows us to differentiate between first year premium and renewal premium. For this purpose, Paid to Date Advance module is changed to update the effective date with the instalment from date as well.

Finally, the 5 financial statements required based on the information from GVAH and GVAC are produced by the new schedule ACSTATRP.

(1) RJ522 – Report on Premium
  - This report lists all premiums due for the specified accounting year and month, segregating them into first year premium, renewal premium and single premium. When the contract/coverage earns dividends, bonuses and the like, the contract/coverage type is classified as "with participating in profits". Otherwise, it is classified as "without participating in profits"
  - The outstanding premium is from LINS and is derived during report generation, which means it is based on the latest outstanding premium as at time of reporting.
  - The advance premium is premium deposit and any premium received in advance.

(2) RJ523 – Report on Commission
  - This report lists all Commission paid for the specified accounting year and month, segregating them into first year commission, renewal commission and commission paid on single premium plan. Commission paid to contract/coverage earning dividends, bonuses and the like, the contract/coverage type is classified as "with participating in profits". Otherwise, it is classified as "without participating in profits"

(3) RJ524 – Report on Reassurance
  - This report provides the total reassurance premiums ceded and the total commissions paid on reassurance premium ceded for the specified accounting year and month.
  - The information on reassurance premium accepted and on commission paid on reassurance accepted is currently not available. A value of zero is printed.

(4) RJ525 – Report on Claims
  - This report shows the total benefit payment for the specified accounting year and month.

- The insurance claims for death claim refers to the approved death claim amount.
- The amount recovered from reassurance is the amount posted during death claim registration.
- The outstanding claims for death claims exclude RI claims recovery. It is the outstanding amount minus any approved amount.
- No outstanding claims amount is reported for maturity, Annuities/Pension and Regular Payment.

(5) RJ526 – Report on Bonuses
- This report provides the total bonus payment for the specified accounting year and month.
- Allocation of bonus refers to Reversionary bonus.

11.6.2 Policy Administration Related Information

New fields are included in current statistical file, STTR, to capture additional required information. The subroutine LIFSTTR is changed to include the processing for the new fields and new transactions. Transactions affecting the statistics are identified and included in table T6628 with new statistical categories.

Additional processing is included to the subroutine LIFSTTR to handle reversal. Currently, for reversal, the original STTR records are reversed with the same statistical categories. However, we need to capture the statistical movement for reversal transactions that we need a statistical category for reversal transaction itself. For this purpose, new items keyed by transaction code and '**' are set up in table T6628 with its required statistical category. If this item is found, it creates a set of STTR record.

A new Statistical Reversal by Transaction table TJ688 is also introduced. This is keyed by transaction code. This table is to capture the corresponding reversal transaction code(s) of a transaction. For example, Contract Issue, T642, the corresponding reversal transaction is Alter from Inception, T607. The purpose of this table is to know if there is a need to reverse any transaction.

Instead of changing the existing government statistical accumulation file GOVR and the online related programs, a new schedule PASTAPST is created to read STTR and post to a new accumulation file, GOVE. This is similar to the existing GOVR except different accumulation keys. All figures are in contract currency. These are converted to accounting currency at reporting time. All figures are furnished in thousands.

A new schedule PASTATRP is created to produce the required actuarial reports based on the information from GOVE and GVAC. Even if no accounting reports are required, the new schedule ACSTAPST must be run before the batch schedule PASTATRP. This is because some of the actuarial reports require accounting information.

(1) RJ527 – New Business Activities
- This report list all new business transacted as at the specified accounting year and month. Segregating them into regular premium

contract and single premium contract.
- The annualised premium for reinsurance ceded is the ratio of sum assured or annuity and sum reassured multiply by the annualised premium or single premium. Only contracts with sum reassured will have the ceded premium computed. This applies to all other reports with reinsurance.

(2) RJ528 – Policy Movements
- This report lists all policy movement as at the specified accounting year and month.
- Each line of details is equivalent to a statistical category.

(3) RJ529 – Persistency
- This report lists policies that lapsed and/or reinstated as at the specified accounting year and month.

(4) RJ530 – Overall Business Portfolio (Product level and Business level)
- This report accounts for overall business portfolio as at the specified accounting year and month.

(5) RJ531 – Total In-force Business
- This report accounts for all the in-force business transacted as at the specified accounting year and month. Segregating them into regular premium contract, single premium contract fully paid contracts and paid up contracts.

(6) RJ532 – Claims (Linked/Health Insurance at Product level and Business level)
- This report accounts for all claims benefits payable as at the specified accounting year and month.
- For traditional product with "Participating" will be reported under without guarantees whereas "Non-participating" product will be reported under with guarantees. For non-traditional product will be reported under without guarantees.

Finally, the accumulated figures in all the accumulation files are to be rolled over to the following year. A new schedule STATROLL is created for this purpose. This should only be run once at the end of the year and when all the statistics for the year are verified to be correct.