

# MetLife México

## PROVIDA

### Understanding Document

Version 2.3

**Document Details:**

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## PROVIDA

### 1. Introduction

Provida is a policy administration system in MetLife Mexico, S.A. (MLM) that offers individual life insurance policies. The products offered by Provida belong to the 'Universal Life' insurance type and some of their most important characteristics are:

- The policies can be term or whole life, depending on the policy's plan.
- The policies receive leveled premium payments.
- The premiums payments create a reserve fund, which will increase with the remainder calculation. This cash value is accumulated during the policy's lifetime and can be withdrawn partially or totally by the insured.
- The policies can have two premium types: 'Net premium' and 'exceeding premium'.
- The policy can have two funds: the 'Reserve fund' (from the 'net premium') and the 'Investment fund' (from the 'exceeding premium').
- The insurance does not depend on the payment application (i.e. the premiums received from the policy holder). The risk of a policy continues to be covered despite delays in the premium payments, as long as the policy's reserve fund is not depleted because the reserve is used to cover the Cost of Insurance (COI).
- The insured person owns the individual insurance policy and is known as the Policy Holder.
- The premium payments of majority of the policies in Provida are done by payroll deduction through Retainers; the remaining policies receive direct premium payments from the Policy Holders or through bank collection (i.e. credit card, debit card, direct account debit).
- The Policy Holder has the option to put his policy that has lapsed back into force in certain cases.
- The Policy Holder can surrender his policy or reduce the sum assured, if he is not able to continue paying premiums.

MLM has an operational area with several departments that are involved in performing the processes of Provida:

- Transaction and Issue department
- Services department
- Collections department
- Claims department

Furthermore, the sales department obtains reports from the policy administration system to follow up on applications and the commissions that are generated from the new businesses.

MLM is supported by a sales force, which has the following structure:

- **Promotorias:** It's a promoting agency that captures new businesses for MLM and offers services to clients with existing policies. At the system level, it is identified by a code (Promotoria id) and it can have branch offices located in several zones across the country, which also have their specific code. Every Promotoria has a Promoter that represents it.
- **Promoter:** A Promoter may be of type 'moral' (a company) or 'física' (a person). A promoter of type 'física' works with agents, but a 'moral' has one or no agents. Each promoter is also identified with a code in the system and every policy must have a promoter, which earns a specified commission for the new policies or new coverages that are added to existing policies, according to MLM's business rules. A promoter of type 'moral' has no agents for MLM, but the promoter manages a group of agents that has no direct relationship with MLM. Some promoters call these agents like 'apoderados'. The promoter and the agents ('apoderados') agree on the definition of the commission percentage for new businesses (new policies, increments or inclusions).
- **Agent:** Is the individual who acquires new a business (new policies, increments or inclusions) for the insurance company and follows up with clients that have existing policies. The agents also earn a specified commission for the new policies and coverages that they collect.

The Provida application has three main modules that handle the policies throughout their life cycle:

- Issuance
- Services
- Portfolio Management

## 2. Provida Life Cycle

The policy life cycle in Provida starts with the applications that are filed by the potential Policy Holders. These applications are validated according to the business rules of MLM and go through the process of underwriting. As a result, some policies are declared to require medical or occupational extra premiums depending on the health condition and the risk involved in the Policy Holder's occupation/job.

Once these applications have been accepted, the 'Issuance' module generates the corresponding policies. The date of 'Begin of Validity' is when each of benefits of the policy will become valid and the insured is covered for the corresponding risks.

In the period between 'Policy Accepted Date' and 'Issue Date', the insured is covered by the VCPM coverage.

The activities that occur after the policy is issued belong to the 'Portfolio Administration' module, where the appropriate follow up of each policy is done, regarding its validity, calculation of reserve, remainder and corresponding commissions.

The insured may choose to pay the yearly policy premium in monthly, quarterly, half-yearly or yearly terms. In this case, the payments should not be less than a month in frequency and they expire at the beginning of each period. The payments should be done in the offices of MLM or through deduction from the insured's salary.

Most of the policies receive payments through deduction from payroll (DXN) and the majority of the retainers pay salaries to their employees every fortnight. In these cases, the deduction of the first fortnight corresponds to 50% of the monthly payment/premium and the deduction of the second fortnight corresponds to the other 50% of the monthly payment/premium.

The calculation of remainder and the commissions depend on the application of payments (AP system).

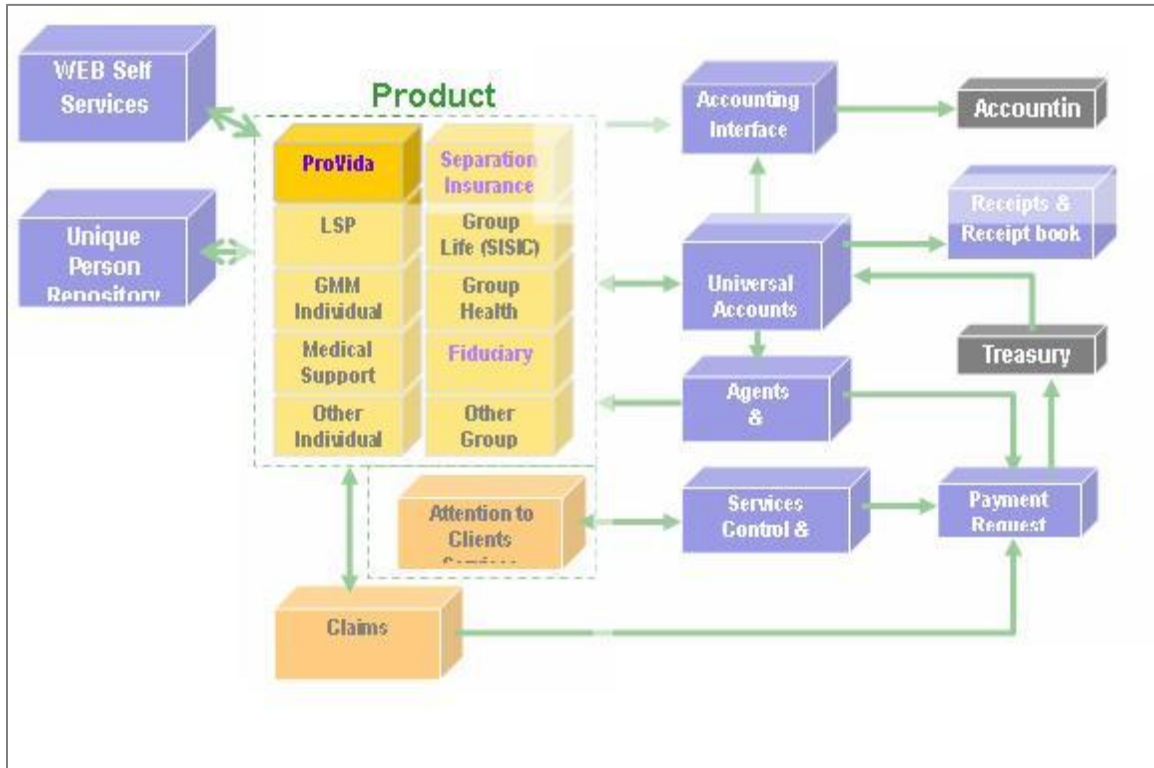
The policy is subject to several endorsements or services, which are registered through the 'Services' module.

A policy's life cycle ends when there's a death claim and MLM pays the benefit (assured sum) upon the death of the insured. However, the policy may also be terminated under other circumstances, such as when the policy is matured, or when the conditions of the contract become void, or there is a lack of payment and the reserve of the policy is depleted, or if the policy holder surrenders his policy.

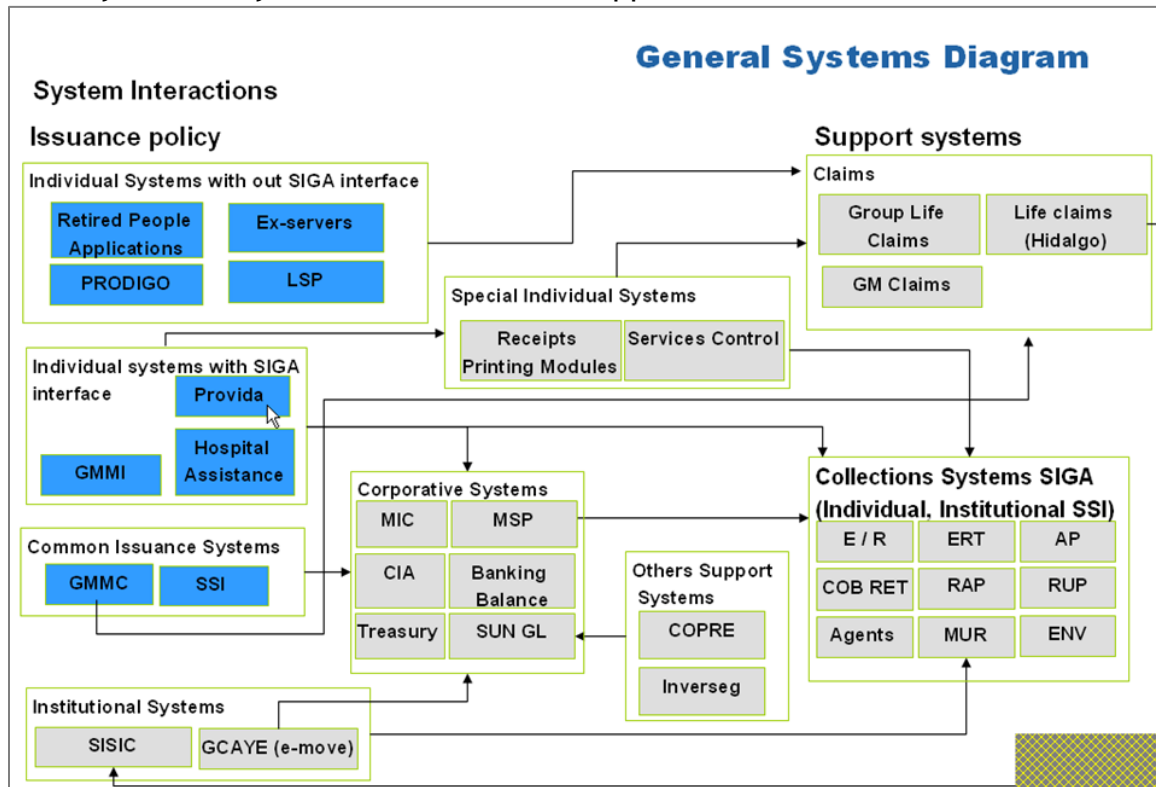


## Provida

Below is the Product-based diagram for MetLife Mexico, featuring the different products and their link to their corresponding systems:

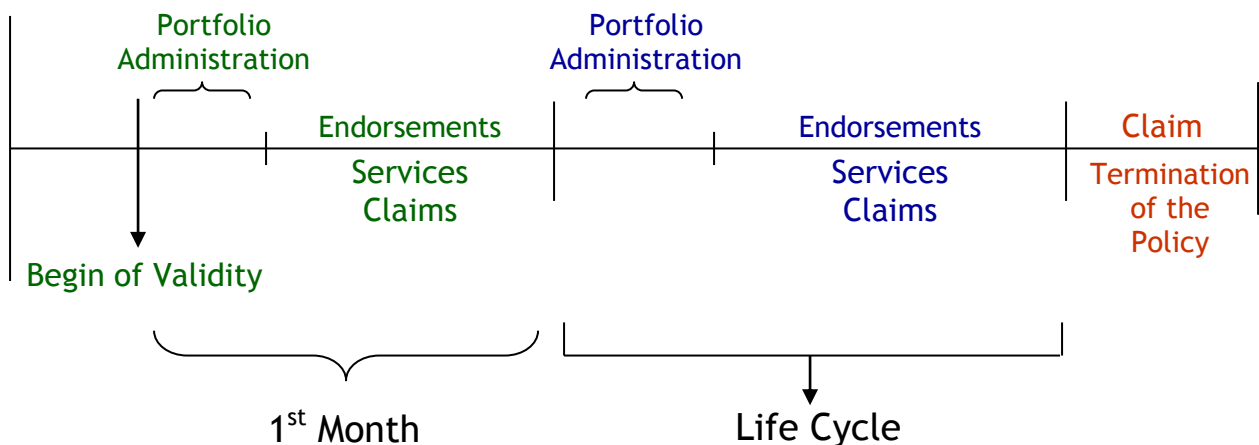


Below is a General Systems Diagram, representing all the systems directly/indirectly connected to Provida application:



### 3. Details of the Provida Life Cycle

#### Begin of the Issue Process



The policies in Provida go through several processes along their life cycle:

**Fig. Life cycle of a policy**

- **Application Process:** the requests of potential Policy Holders are captured and validated.
- **Issuance Process:** the policies are issued and the Policy Holder is covered for the risks mentioned in his contract.
- **Portfolio Administration:** includes the processes related to keeping the policies in force and the calculation of their reserve and the related commissions.
- **Services:** this process deals with the changes that policies may undergo through their life cycle. These changes range from modification of basic information to variation of conditions, such as the frequency of premium payments, change in the retainer, the premium amounts, the face amount, and the term of the insurance and additional coverages. The changes done in the Provida system are also reported to an external module called “Control of Services”, which keeps track of the changes made to the policies issued by MLM.
- **Claims:** this process is done either when the Policy Holder dies or a claim is made against a risk that is covered by the policy. A death claim of the Policy Holder will terminate the policy. The actual claim is handled by a separate MLM system called “Claims”, which has no interface with Provida.

### 3.1. Application Process

All the new businesses come to MLM through Promotorias and their promoters or agents. The applications can be processed through a CP net portal or through the Provida D2K system installed in the MLM office, which accepts the applications by batches.

The CP applications are captured through a data entry screen (DES) and they are processed on-line and in real time. The CP system has the characteristic of using an automatic underwriting process for its applications (AURA), unlike in the Provida D2K system where the underwriting is done manually.

It is important to note that MLM requires the physical copy of the application form filled and signed by the applicant (paper based application) in all the cases whether the application is received from Promotorias with/without remote capturing or the application is captured from DES in case of the CP.

### 3.2. Issuance Process

The issuance of a policy is the result of either processing an application through CP or by batch.

The main functions of this process are:

- Checking the validity of the details of the application.
- Calculating the premiums according to the application details, coverage and the business rules.

There are different types of validations in the issuance process:

- Data validations (e.g. does the agent exist? is the RFC in correct format?)
- Business rules validations (e.g. what's the insured amount limit? What is the age limit for a person to be accepted in a coverage?; what are excluding coverages?)
- Validations pertaining to collections (e.g. is the 'Key of Collections' defined correctly: Retainer, Unit of Payment and Concept? Is the Concept unique per Retainer or the policy holder? Is the form of payment valid?, is the 'Identificador Nominal' required?)
- Validation of 'accumulated sums'. This validation is not required in the CP system because it is already included in the automatic underwriting process. This validation is required to determinate if the insured requires additional information (such as medical exams) to issue the policy.

An application that successfully passes all the validations becomes a policy. The applications with incorrect or insufficient data are returned to the Promotorias so that they can be processed again after they have been corrected.

The issuance process ends with the policy getting enforced starting from the 'Issue Date'. The 'Date of Validity' is the when the first premium payment is expected.

For policies that receive premium payments through payroll deduction, the determination of the 'Issue Date' is based on the Retainer's calendars.

### 3.3. Portfolio Administration

The important processes carried out in the Portfolio Administration are the ones required for the entire life of the policy:

1. Policy cancellation due to Negative Reserve/Lack of Payment
2. Begin of validity of Services (Inicio de Vigencia)
3. Commissions (Generated in (2) Inicio de Vigencia Process)
4. Coverage cancellation due to reached Age/Term
5. Reserve calculation
6. Remainder calculation

All of these processes are done once at the beginning of the month, except the remainder calculation and commissions, which is done fortnightly after the application of premium payments in the Collections system.

#### 3.3.1. Policy Cancellation

This is a mass process that checks for the policies that have comply with the conditions that terminate the contract. There are two circumstances under which a policy gets cancelled:

- When it has not received a payment after 180 days from issue date.
- When it has a delay in the premium payments and its reserve has been depleted for 90 days and therefore, not enough to cover the contracted risks.

#### 3.3.2. Begin of Validity

This process refers to the operation of endorsements or services that are applied to the policies. When a service with modification in premium or face amount is registered to a policy, it does not become in force immediately. For policies that receive premium payments through payroll deduction, the determination of the date when a service starts to be valid is based on the Retainer's calendars.

Since the registration of services in the system can be done any time, there is a mechanism that manages the pending services in a so-called 'mirror' until they are activated in the policy.

### 3.3.3. Commissions

Every new business that is captured generates a percentage of commission for the agent and/or the promoter who is involved in the transaction. Besides the issuance of a new policy, the increment of face amount or the inclusion of a new coverage in an already existing policy is also considered a new business, and therefore, it generates commissions.

A previous commission schema determines the payment of 68% of commission for the first year, and 10% of commission of the second and third year. However, a new commission schema has been developed to allow the configuration of more flexible payments (with different percentages and durations of years and different commissions plan, like 'punished policies').

### 3.3.4. Coverage Cancellation

This is a mass process and is executed at the beginning of every month. It validates that the age of the insured person for each of the coverage is within the defined range limit.

In case an insured exceeds the defined age for coverage (called the 'cancellation age'), it will be cancelled from the policy while the rest of the contract continues to be in force.

### 3.3.5. Reserve Calculation

Each policy has a risk reserve (also called mathematical reserve). Additionally, a policy may also have an investment reserve, which acts as an investment fund for the Policy Holder. The total reserve is the sum of both risk and investment reserves.

Part of this process includes the calculation of COI (Cost of Insurance, or Cost of Mortality), which is the amount of money that is used to cover the risk of a policy.

This process is done once a month regardless of the frequency of premium payments of the policies.

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### 3.3.6. Remainder Calculation (Sobrante)

This process capitalizes the reserve.

The remainder is calculated after each payment application. Therefore, it's one of the two amounts (along with the Commissions) that can be calculated fortnightly, unlike the COI's, which are calculated only once a month since the risk can only be charged once for the entire month in advance.

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### 3.4. Services

Broadly, services can be classified into two main categories:

- **Con Affection (CA) - Services that affect Premium**
- **Sin Affection (SA) - Services that do not affect Premium**

There are different types of endorsements that are done to a policy through its lifecycle:

- Services that don't affect premiums (SA)
- Services that affect premiums (CA)
- Services with payments (SA)
- Services with claims (SA / CA)

These categories determine if the changes in the policy involve only a modification of the information or the change in the contract leads to a change in the premiums. Other services entail a payment to the Policy Holder, for example, when he has done extra payments to his policy. The services with claims update the Provida system by canceling coverage after it has been claimed.



## 4. Interfaces

Provida has interfaces with other modules in SIGA:

- **RUP - Universal Repository of Persons.**

This module is a unique registry of people. It stores the basic information of all the people related to MLM, such as potential clients, Policy Holders and employees. This module maintains records such as name, DOB, address and other details specific to the insured.

When a person applies for a policy, Provida interacts with RUP to check if the information of the person is available. If RUP does not have the information of that person, the information is added. Otherwise the information is updated with the new one.

- **MUR (Universal Module of Receipts) and 'Envíos' modules**

This module is mainly in charge of issuing receipts, for Provida and other policy administration systems in MLM.

Provida interacts with MUR in order to generate the receipts for each policy. Provida sends the information related to premiums, form of payment, agents, commissions, mode of payment to MUR.

Provida policies have three modes of payments:

1. Direct: the Policy Holder directly pays the premiums to MLM.
2. Payroll Deduction: the premiums of the Policy Holder are discounted from the salary. A retainer is a company that discounts the premiums from the salary of the Policy Holder and most of the retainers do it fortnightly.
3. Bank Collection: Here, the Policy Holder has an option of paying using Credit cards, Debit cards, Account debit or AMEX (American Express).

Envíos is the module in charge of communicating with the retainer. The retainer gets updated with the information of which discounts should be done to the each employee who owns a policy. Provida doesn't have a direct interface with Envíos, but the information goes to each Retenedor through the interface that MUR has with Envíos.

After the operation of every service that affects premiums or a service with claims, Provida sends an endorsement to MUR.

A 'Code of collections' consists of Retainer ID, Unit of Payment and the Concept of Retainer. It refers to the employer details of the Policy Holder. The concept of the retainer appears on the pay slip of each Policy Holder. It is used to identify different types of policies, such as Individual life insurance, Group life insurance policies.

Every retainer has a defined calendar. The services that affect premium start the validity according to a date determined by the retainer calendar. MUR generates the receipts according to the information provided by Provida. Then MUR sends the information to the retainers through Envíos, in order to discount the corresponding amount of premium from the Policy Holder's salary.

- **Treasury (MSP / TES) and Accounting (MIC)**

Provida executes a closing process daily. This process interacts with Treasury and/or Accounting. Treasury keeps the track of the payment related services such as surrender, partial withdrawal etc. Interface named MSP is used to send information from PROVIDA to Treasury. Another interface named MIC is used between PROVIDA and Accounting. Accounting maintains the all transactions happen through closing process, depending if the type of service was operated in a Direct or Indirect manner, as it is explained in the section "8. Closing Process"

- **Agentes**

This module has information about sales agents. It takes data from PROVIDA.

- **Control of Services**

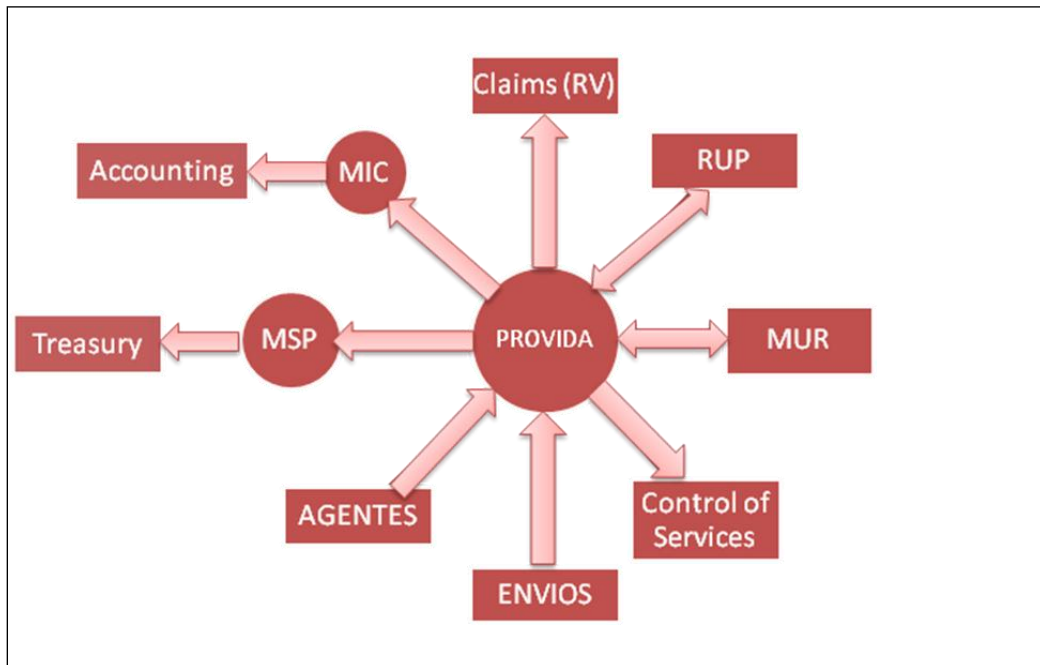
Records for ALL the changes/services applied on a policy are maintained in the module.

- **Claims (Siniestros RV)**

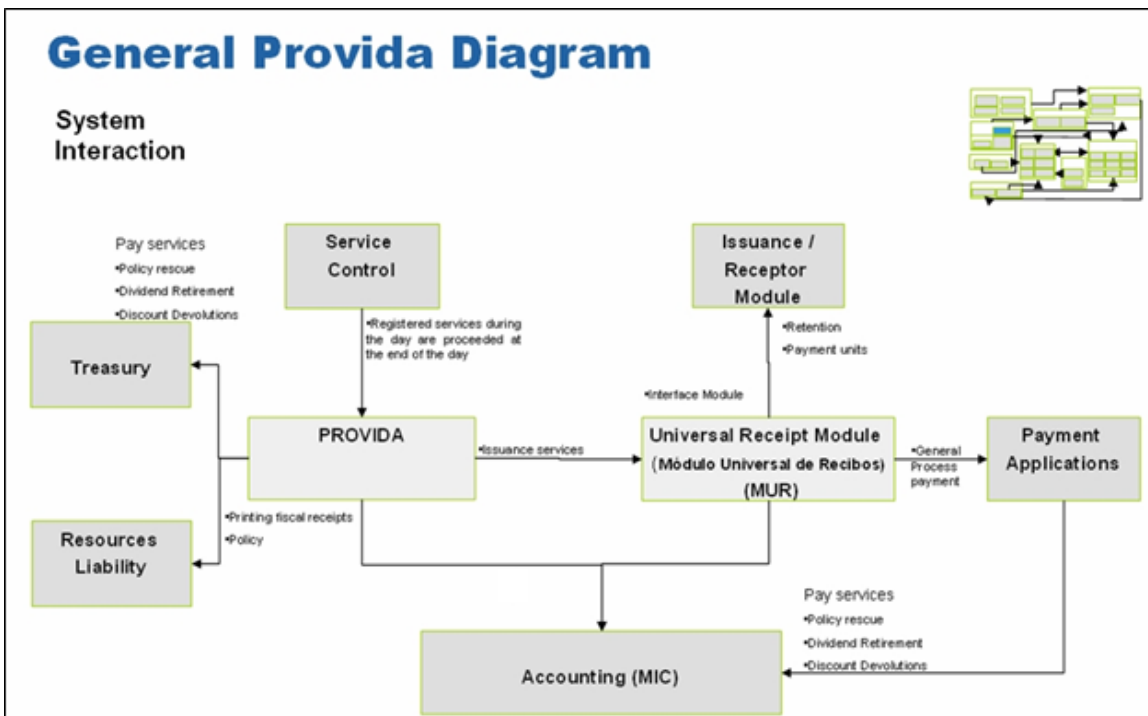
This module keeps records for all the claim services applied in PROVIDA.

- **Application of Payments (AP):**

It is the module that keeps track of all the payments. It is used in PROVIDA for calculation of remainders.



The above diagram displays the Inflow and Outflow of information from/to PROVIDA application.



Above LAB diagram displays the different interfaces with which the system interacts and the services provided by each system.

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## Issuance Process

Provida policies are issued through:

CP - Through the Data Entry System (DES) in the Internet portal

This is an online process done using an Internet portal. The information of the applicant is filled using a Data Entry Screen (DES). The underwriting is done automatically using the 'Analyzed Underwriting Risk Application' (AURA). Note: The AURA process may take days during which the data remains in DES.

The applications in CP are sent to the Provida database structure so that they can be validated with the same rules as the applications that go through the Batch process. All the validations are done except for the validation of 'Accumulated Sums' which is part of the automatic underwriting process. Once the applications are validated, the information returns to CP in order to continue with the process of issuance.

All the applications in CP happen through the TMA (Transaction Manager Adaptors).

**Note: All the new businesses have their 'Issue Date' ('Begin of Validity') starting the first day of the month.**

**The flow of issuance process is described as below:**

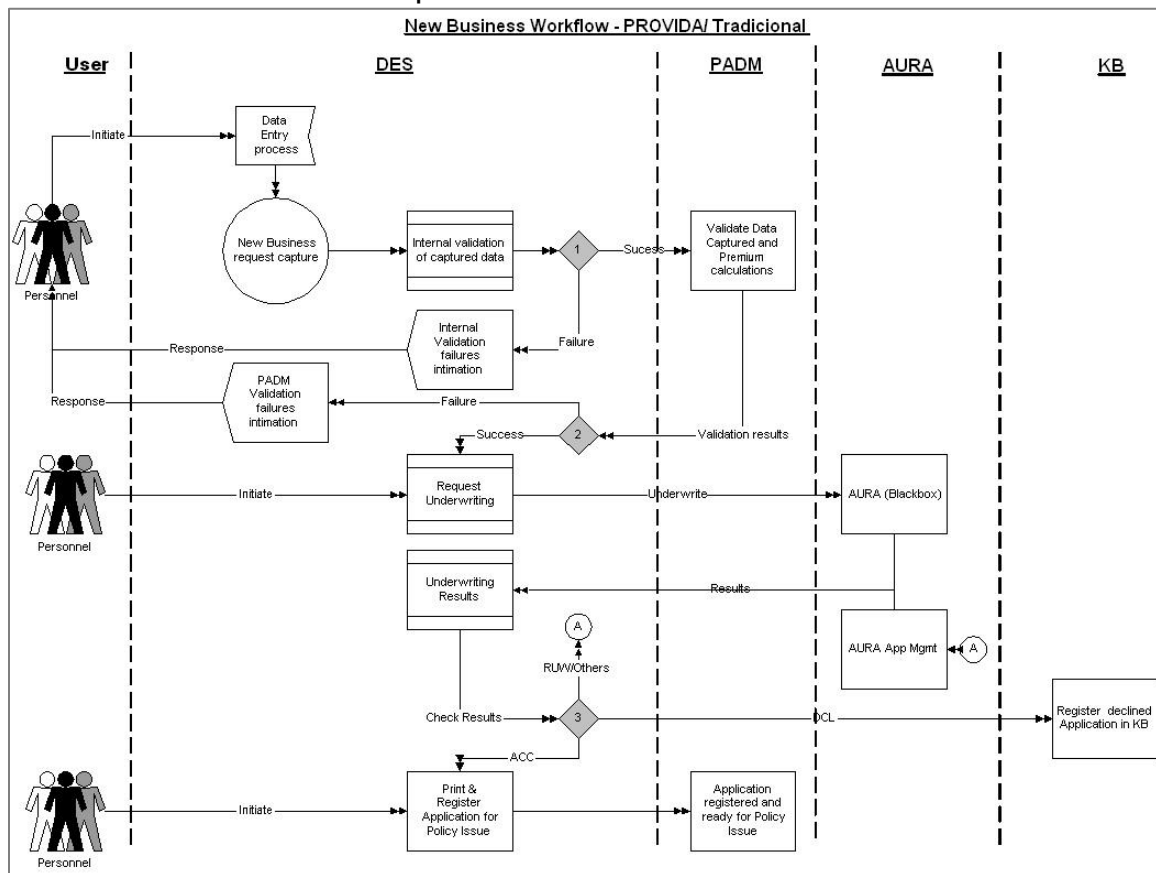
1. This is a general process because it deals directly with portals and not with mediators (i.e. promoters, agents).
2. The (potential) client approaches a promoter, who has access to the portal and has the entire infrastructure required to complete the application process. This is the origin of the flow, which takes place through the pages of DES (Data Entry System), a CP module.
3. The required information is captured online and in real-time.
4. DES captures an application and sends it to the "Validation of policies" process, where it is validated and calculated (i.e. the amounts of the premiums of the policy). If there's something wrong in the validation, the application is not calculated, it goes back to DES so that the errors can be corrected.

5. When a validation event reaches PROVIDA, PROVIDA does the same thing as it would do with a policy issuance, but at the end it does not assign a real policy number and it does not carry out all the interfaces. However, all the data is loaded into the PROVIDA tables so that all the validations can be carried out. At the end, the application is erased from PROVIDA and only the resulting information is sent to the portal.
6. Once an application for a policy has been validated and calculated in PROVIDA and the information has returned to the portal (to DES), the system “almost” knows everything. It still needs to send it to AURA (the risk selection process, which is done in a much more automatic way than in a “batch process”). DES captures here the “Health questionnaire” to send it to AURA, which in turn decides (with help of its parameters) whether to dictate “extra-premium” for a policy or to send the application for a manual risk selection where a person is the one in charge to dictate “extra-premium” for a policy.
7. After AURA has dictated an “extra-premium” for a policy, it sends the info back to DES and DES sends the info again to PROVIDA, where it will be again validated, but this time for confirmation. In this case, the premium might be different.
8. The “Modification of Applications” is done for the ones that didn’t go directly to “Automatic Issuance”. This process sends them back to DES with an error status and the error message. When these applications are sent back to DES, they are erased from PROVIDA, because they don’t have a policy number yet. Applications can be here only until the end of the month, when they are erased. This is an internal DES rule: there is no grace period. Unlike in the batch process, here all the applications are being saved, even the ones with errors, that’s why they are erased at the end of the month.
9. Once the validation process is passed, it goes to “automatic issuance” and it’s until this point where it is assigned a real policy number, before that it only had a sequence number. After this, it interfaces with “Control of Services”, “MUR” and “Portfolio Administration”.
10. The CP Issuance process always results in a policy issuance. There are no rejections, since all the errors can be corrected when the client is present.
11. Additionally to the policy issuance, a printout of the application is generated, which must be signed by the client so that it can be sent to MLM. When this paper reaches MLM it goes through a ‘document control’, which is a status in

the PROVIDA system– indicating that the physical application for that policy has arrived).

12. According to the calendars MLM has with the retainers, there's a “closing process”, which is performed fortnightly and all it does is generate information to the retainers, or the companies associated to the clients. This closing process includes all the policies generated through CP and through the batch process. The daily “closing process” (generated at the end of the day), produces all the information of the day for each promoter and for each zone (there are big promoters that have several zones).
13. Both PROVIDA and DES generate reports for the promoters: PROVIDA generates flat files for the printing in the promoters in the policy issuance process and DES generates reports that include statistics (generated in Acrobat).

The flow of the issuance process is as follows -



#### 4.1. Coverages

Internal code of coverage	Description	Requires face amount	Can be covered by VBIT	Additional Beneficiaries
VBAS	Basic Coverage	Yes	Yes	Yes
VTIB	Loss of body parts due to accident	Yes	No	-
VCII	Disability coverage	Yes	No	-
VCCO	Complimentary Coverage	Yes	Yes	Yes
VCCF	Spouse Coverage (male)	Yes	Yes	Yes
VCCM	Spouse coverage (Female)	Yes	Yes	Yes
VGFC	Funeral expenses of the spouse	Yes	Yes	Yes
VBIT	Exemption of payments due to disability	-	Yes	-
VEXC	Exceeding premium	-	(*)	-
VGFT	Funeral expenses for titular	Yes	Yes	-
VGFH	Funeral expenses for children	Yes	Yes	-
VDEV	Payment due to early death (before 5 years from the date of policy issuance)	-	Yes	-
VCPM	Temporary Coverage	-	-	-
VBET	Advance payment for terminal illness	No	Yes	-
VCAT	Cancer Coverage for titular	Yes	Yes	-
VCA1	Complementary Cancer Coverage 1	Yes	Yes	Yes
VCA2	Complementary Cancer Coverage 2	Yes	Yes	Yes
VCA3	Complementary Cancer Coverage 3	Yes	Yes	Yes
VPTT	Personal Accident Coverage for Titular	Yes	No	-
VP01	Personal Accident Coverage for others 1	Yes	Yes	Yes

VP02	Personal Accident Coverage for others 2	Yes	Yes	Yes
VP03	Personal Accident Coverage for others 3	Yes	Yes	Yes
VP04	Personal Accident Coverage for others 4	Yes	Yes	Yes
VGf1	Funeral expenses for others 1	Yes	Yes	Yes
VGf2	Funeral expenses for others 2	Yes	Yes	Yes
VGf3	Funeral expenses for others 3	Yes	Yes	Yes
VEGT	Serious Illness for Titular	Yes	No	-
VEG1	Serious Illness for Others 1	Yes	Yes	Yes
VEG2	Serious Illness for Others 2	Yes	Yes	Yes
VEG3	Serious Illness for Others 3	Yes	Yes	Yes
VCRT	Surgery Coverage for Titular	Yes	No	-
VCR1	Surgery Coverage for Others 1	Yes	Yes	Yes
VCR2	Surgery Coverage for Others 2	Yes	Yes	Yes
VCR3	Surgery Coverage for Others 3	Yes	Yes	Yes

(\*)

Yes: for PP99, PV99 or PT20 plans.

No: for ML99 and Maestro 20 plans.



### Description of Coverages:

**VBAS - Death of Policy Holder:** This is the basic coverage, which is mandatory for every policy. It covers the risk of death of the Policy Holder. The information of the beneficiaries is required, as they would receive the compensation in the event of the claim of this coverage, in which case the policy is terminated.

**VTIB - Triple indemnity:** This coverage compensates for the loss of body parts due to an accident and/or accidental death. This coverage is claimed when a person has lost body parts and has not been declared medically disabled (the person is still able to work) or when the person dies in an accident that meets the conditions described in the technical notes. The benefits given for this coverage in case of total loss of body parts or accidental death are double the amount of the insured sum of this coverage. In the case of partial loss of body parts the benefits paid are half the amount of the insured sum of this coverage.

**VCII - Total and Permanent Disability:** It covers the risk of a person becoming disabled due to an accident. A person is medically declared disabled when not able to work. On the claim of this coverage the Policy Holder continues to pay the premiums of the policy.

**VCCO - Complementary Coverage:** Covers the risk of another person (spouse, child or some other). The benefits of this coverage are given to the specified beneficiaries.

**VCCM/VCCF - Spouse Coverage (Male/Female Policy Holder):** Covers the risk of the spouse. The benefits of this coverage are given to the Policy Holder.

**VBIT - Waiver of premium payments due to disability:** Covers the risk of the disability of the insured, where on a claim the insured does not have to pay the premiums for the rest of the policy life from the date when he is medically declared disable. The policy remains in force and hence the risk of the Policy Holder is covered for the entire life of the policy.

**VEXC - Exceeding Premium:** This benefit is not risk coverage. This is an investment fund for the insured. The Policy Holder chooses the amount that he wishes to pay every time a premium payment is expected. This extra amount helps in saving and capitalizes the reserve.

**VGFB - Funeral Expenses for Children:** Covers the funeral expenses for children. More than one child within the specified age limit can be covered. The premium amount for this coverage depends on the number of children. The coverage does not get cancelled if there's at least one child that remains covered.

**VGFC - Funeral Expenses for Spouse:** Covers the funeral expenses for the spouse of the Policy holder. The benefits of this coverage are given to the Policy Holder. The Sum Assured of this coverage should be  $\leq 35\%$  of the VBAS Sum Assured, with a maximum value of \$180,000.

**VGFT - Funeral Expenses for Titular:** Covers the funeral expenses for the Main Insured. The Sum Assured of this coverage should be  $\leq 35\%$  of the VBAS Sum Assured, with a maximum value of \$180,000.

**VDEV - Payment return due to early death:** For policies with ML99 plan, it covers the risk of death of the Policy Holder during the first five years of the issuance of the policy. This coverage is cancelled automatically after five years. For policies with Master 20 plan, this coverage covers the risk of death of the Policy Holder after the first five years of the issuance of the policy. This coverage begins to be in force until the 1<sup>st</sup> month of the 6<sup>th</sup> year. In the case of a claim, all the paid premiums are returned to the beneficiaries.

**VCPM - Temporary coverage due to natural death:** This is a temporary coverage automatically provided with the application of the policy. It covers the risk of the death of the Policy Holder from the time the application is submitted until the policy is issued. The coverage is valid for up to a maximum of 60 days for the 'PP99', 'PV99' and 'PT20' plans, and up to a maximum of 90 days for the 'Plan Maestro' and 'ML99' plans. This coverage only covers the natural death of a person and it is automatically cancelled after the issuance of the policy.

**VBET - Advanced payment due to terminal illness:** This coverage provides a benefit to the insured in the case he is diagnosed with a terminal illness, i.e. the person is not expected to live for more than one year. In such a scenario, the insured is allowed to take 30% of the basic face amount. The basic face amount of the policy is decreased by 30%. For PP99 or PT20 plans, on claim of this coverage the age of the insured is increased by 20 years and the calculation of the COIs is done according to the increased age. For the policies with plans ML99 and Master Plan, the calculation of the COI is done with their own specified tariffs. The premium continues to be charged during the life of the policy.

**VCAT - Cancer Coverage for titular:** Covers the risk of cover the financial risk of developing the first time of malignant Cancer with metastasis or Malignant Cancer in situ to the main insured. The benefits of this coverage are given to the beneficiaries of the basic coverage. Only for policies with whole life plan (PP99, PV99 and ML99) will be able to incorporate this coverage. If the plan of the policy were 'PP99' or 'PV99', then the coverage would be incorporated in the policy considering the plan as 'ML99' after VOBA date. The minimum insured sum for this coverage will be as per the value configured in the PLANCOB table and maximum will be equal to that of VBAS coverage in the plan ML99. Assured sum of this coverage cannot exceed that of VBAS assured sum for the same policy.

**VCA1/VCA2/VCA3 - Complementary Cancer Coverage:** Covers the risk of cover the financial risk of developing the first event of malignant cancer with metastasis or malignant cancer in situ. This benefit will enable the Policy Holder to take Cancer coverage for his/her relatives like spouse, children and/or other people. The benefits of this coverage are given to the beneficiaries that would be mentioned while taking the benefit. Only for policies with whole life plan (PP99, PV99 and ML99) will be able to incorporate this coverage. If the plan of the policy were 'PP99' or 'PV99', then the coverage would be incorporated in the policy considering the plan as 'ML99' after VOBA date. The minimum insured sum for this coverage will be as per the value configured in the PLANCOB table and maximum will be equal to that of VBAS coverage in the plan ML99. Assured sum of this coverage cannot exceed that of VBAS assured sum for the same policy.

Note:

1. The coverages VCCO and VGFC are also known as BAC in business terms (It is like a benefit in the policy).
2. The coverages VCCM/F and VGFC together are referenced as VDAC coverage in Provida (technically) in the table TVALOGAR.

**VGE - Garantía Escolar:** New coverage VGE (Garantía Escolar), for whole life plans Met99 (ML99) & PP99, PV99 with VOBA effect is introduced in February 2010. It will enable the Policy Holder to take educational coverage for beneficiaries to cover the risk due death of titular. Policy holder can take VGE coverage along with the basic coverage in the issuance of a new policy (plan ML99). It could also be included in the existing policy that is in force (for plan ML99 or PP99 & PV99 with VOBA effect).

Beneficiaries for the VGE coverage will be depending on the type of liquidation. Following are the two options are available with the VGE coverage,

Type of Liquidation	Beneficiary
1	PAGO UNICO (Max 10 Beneficiaries)
2	FIDEICOMISO (Trust)

Beneficiaries details for the VGE coverage is present in the MPOLICED table against the MPOLICED.NMLINEA = 4 (Newly added for VGE coverage).

Educational coverage VGE can be taken only for term of 20 years. The coverage will get automatically cancelled once the term of coverage is complete (i.e. Due to massive cancellation process).

**VPTT - Personal Accident coverage (Titular)** - This coverage compensates the insured in an event resulting from a sudden, external, unforeseeable and violent cause, producing bodily injury to the insured and requires medical attention.

The injuries resulting from an accident that will be covered by the Personal Accident (PA) Benefit are as follows:

**Fractures:** Partial or complete interruption of bone structure continuity.

**Burns:** Injury to skin and/or appendages due to external factors, leading to their total or partial destruction. External factors include the following: physical (heat), chemical substances, radiation or electricity.

**Wounds:** Injury resulting from external factors and generating loss of continuity greater than 5 cm in skin, muscle, subcutaneous tissue, tendons or nerves.

**Poisoning:** Reaction of the organism to the entrance of or contact with any toxic substance resulting in an attack to the overall state.

**Sprains:** Strain or elongation of a ligament, tendon, muscle or capsule surrounding a joint.

This benefit will be for a time period of 20 years or to the attained age of 60. After the occurrence of any of the two events, the coverage will be excluded from the policy.

- This benefit will provide the client with support (compensation) for up to a maximum of two events per year, with a cumulative maximum compensation amount of up to \$10,000 pesos per year.
- There will not be any beneficiaries for the insured for this coverage.
- Apart from the Main Insured, a total of 4 additional insured's can be added under this coverage. The coverages will be VPTT (Titular), VP01, VP02, VP03 and VP04. All these coverages will be treated as independent coverages. In a consolidated manner, it will be known as VPXX coverage.
- The insured, covered under VPXX coverage, will be any person, related to the policy holder. Policy holder will not be covered under VPXX coverage. Policy holder will be covered under VPTT coverage.
- The coverage can be added through the new business services (Issuance and Inclusion) with plan ML99. It can also be added in the policies, with the plan PV99 and PP99 (with VOBA effect), and this validation will be done by the CP team. The coverages will not be included in the policies with the plan other than ML99, PP99 and PV99.
- The benefit period for the accidental coverage will be for a time period of 20 years or to the attained age of 60 of the insured.
- The accidental coverage can be divided into two types: "Basic coverage level" and "Extended coverage level". These two types are mutually exclusive and only one can be chosen at the time of issuance.

### Compensation Amounts

Package	Basic Coverage Level	Extended Coverage Level
Sum Assured	\$1,000	\$1,203

### VPXX - Personal Accident coverage (Others)

There are four coverages that entail the same functionality as VPTT, i.e. for other family members.

1. **VP01** - Personal Accident coverage for others 1
2. **VP02** - Personal Accident coverage for others 2
3. **VP03** - Personal Accident coverage for others 3
4. **VP04** - Personal Accident coverage for others 4

The Cost of insurance for the Personal Accident coverages does not depend on the age of the insured.

### VGFX (Supplementary Funeral Expenses) - VGF1/VGF2/VGF3

- The new Complimentary Funeral Expenses coverage will provide the insured with benefit for the funeral expenses for death of supplementary insured.
- Maximum of 3 supplementary insured can be added under this coverage. The coverage's will be VGF1, VGF2 and VGF3. All these coverage's will be treated as independent coverage.
- The insured covered under this coverage could be any person related to the policy holder (Except spouse and children).
- The coverage can be added through the new business services (issuance and inclusion) with plan ML99. It can also be increased/included in the policies, with the plan PV99 and PP99 (inclusion service will have plan ML99), and this validation will be done by the Provida.
- The age limits for the Supplementary Funeral Expenses coverage is from supplementary insured's age of 15 up to the age 80. The benefit period begins from the supplementary insured's minimum age of 15, until the insurance period has concluded.
- The coverage can be excluded on the user's request or on the insured's death or at the end of policy effectiveness.

The system validates that the new insured with any of the supplementary funeral insurance coverages (VGFX) is not the same as the insured persons in the other funeral coverages VGFC, VGFT, VGFH and VGFT and does not have any other supplementary funeral VGFX coverages.

**VEGT - Enfermedades Graves (Serious Illness) (Titular)** - This coverage will provide the insured with financial assistance to cover the costs incurred to diagnose critical conditions which are defined by MetLife. The life of EG coverage is of 5 years.

- The maximum beneficiaries can be 10 (same as that of VBAS).
- VEGT will not participate in VBIT.
- The policy holder can include the coverage between the age limit of 18 to 55 years.
- The insured can include/increment the SA of this coverage in the range of \$30,000-\$100,000 MXN.

### **VEGX - Enfermedades Graves (Serious Illness) (Titular)**

There are four coverages that entail the same functionality as VEGX, i.e. for other family members.

1. **VEG1** - Serious Illness coverage for others 1
2. **VEG2** - Serious Illness coverage for others 2
3. **VEG3** - Serious Illness coverage for others 3

- The complementary coverages (VEG1/2/3) will participate in VBIT.
- There can be a maximum of 5 beneficiaries for this coverage.

**VCRT - Cirugías (Surgery Coverage) (Titular)** - This coverage will provide the insured with financial assistance to cover the cost incurred to undergo surgery as per defined by METLIFE. The life of CR coverage is of 5 years.

- The maximum beneficiary can be 10 (same as that of VBAS).
- VCRT will not participate in VBIT.
- The insured can include the coverage between the age limit of 18 to 60 years.
- The insured can include/increment the SA of this coverage in the range of 15,000-60,000 pesos.

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### VCRX - Cirugías (Surgery Coverage) (Titular)

There are four coverages that entail the same functionality as VCRX, i.e. for other family members.

4. **VCR1** - Surgery Coverage for others 1
5. **VCR2** - Surgery Coverage for others 2
6. **VCR3** - Surgery Coverage for others 3

- The complementary coverages (VCR1/2/3) will participate in VBIT.
- There can be a maximum of 5 beneficiaries for this coverage.



## 4.2. Calculation of Premium

The premium of the policy depends on several factors, such as health history, age and gender.

Health history:

There are questionnaires designed to describe the health of the person. Depending on the questionnaires the premium of the person is decided. For example, if the person is a smoker ('fuma') then he has to pay more premium than a person that does not smoke.

Age:

The age factor is very important in the calculation of premium. There are several concepts of age, which are defined as follows:

Real age: It is used during the issuance process. The real age of a Policy Holder is the reached age at the present date. The completed number of years at the time of issuance of the policy is called issue age. The policy age is the number of years that the policy has been in force.

The current age of the policy holder is calculated as:

$$\text{Current age} = \text{Issue age} + \text{Policy age}$$

Reduced age: It is used in the calculation of premiums. This age depends on the gender and smoking habits of a person. In the case of gender being female, the real age is reduced by some years depending on the plan. (The supporting table PLANCOB stores the necessary parameters.) In the case of non-smoker age is also reduced from the real age.

When calculating the reduced age, there is never an addition of years to the actual age. Therefore reduced age is never greater than the real age.

$$\begin{aligned} \text{Reduced age} = & \text{current age of Policy Holder} - \\ & \text{Number of years to be reduced for not smoking} - \\ & \text{Number of years to be reduced according to the gender} + \\ & \text{GARAN.} \end{aligned}$$

Actuarial age: It is not used in Provida. It is the rounding of Policy Holder's age to the nearest decimal.

If the age is between  $x$  and  $x.5$ , the age remains  $x$ .

if the age is between  $x.51$  and  $x+1$ , the age is  $x+1$ .

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### Gender:

Depending on the gender of a person the calculations of premiums are affected. As discussed in reduced age the age calculations differ for the male and female.

### GARAN:

The attribute GARAN in the PLANCOB table determines the number of years that have to be increased or decrease in a person's age. If the person has signed for the benefit VCCX (Coverage for spouse) then the age is increased in the case of male spouse and decreased in the case of female spouse, only for PP99, PV99 or PT20 plans.

The calculation of a premium for coverage 'x' is done using the formula:

$$\text{Premium}_x = (\text{Fa}_x * \text{F}_{xy}) / 1000 * \text{PF}$$

Where:

Fa = face amount for the coverage 'x'.

F<sub>xy</sub> = factor for the coverage 'x' and age 'y'

PF = payment frequency

Payment Form (Unidad de Pago)	Period (Monthly)	Payment Frequency
Monthly	1	12
Quarter	3	4
Half yearly	6	2
Annually	12	1

Since the VBIT coverage does not have a face amount value it is calculated using the formula:

$$\text{Premium (VBIT)} = (\text{Fa(VBIT)} * \text{F}_{xy})/100$$

Where:

Fa(VBIT) = sum of premiums of all coverages with BIT =yes. i.e. Sum of all the coverage which are included in the VBIT coverage .

F<sub>xy</sub>= factor for the coverage 'x' and age 'y'

There are two types of extra premiums:

- 1) Medical:  
This premium is calculated using 'tablas' (factors)
- 2) Occupational:  
This premium is calculated using 'pesos' (rate) or 'tablas'.

The total premium is calculated using the formula:

$$\text{Total Premium (TP)} = ((Fa * F_{xy}) / (1000 * PF)) + \text{Medical Extra premiums (ME)} \\ + \text{Occupational Extra Premiums (OC)}.$$

$$ME = ((Fa * F_{xy}) / (1000 * PF)) * \text{factor}$$

$$OC = (Fa * \text{pesos}) / 1000$$

## 5. Portfolio Administration

The processes involved in the Portfolio Administration are executed in the following order:

1. Coverage Cancellation
2. Policy Cancellation
3. Begin of Validity
4. Reserve calculation
5. Remainder calculation
6. Commission calculation

All of the processes are executed monthly except for the calculation of the remainder and commission, which is done every time there is a payment application.

### 5.1. Coverage Cancellation

Coverage gets cancelled in two cases:

1. When the person who is covered by the benefit reaches the 'age of cancellation' (EDADCAN), which is a parameter defined in the supporting table PLANCOB. In this case, it is an automatic cancellation and it's done through the service code 2214, motive 260.
2. When the Policy Holder requests to cancel the coverage. In this case, the coverage gets cancelled through the service code 2214, motive 631.

After the cancellation of coverage, the premium amount for that coverage goes to exceeding premium (VEXC), which means that the premium amount of the policy is not affected.

The coverage gets cancelled with respect to the cancellation age, except the coverage for funeral expenses of children (VGFH). In the case of VGFH, only the child who reaches the age limit gets excluded from the coverage and the number of children is reduced by one. The coverage now will cover the rest of the children. The coverage gets cancelled after all the children reach the cancellation age or after a claim.

The policy will still be in force after the cancellation of any coverage except VBAS. VBAS coverage is mandatory and it can't be cancelled as it terminates the policy.

## 5.2. Policy Cancellation

A policy can have one of the following statuses:

“V”- In force

“I”- Disability: also In force, but with the benefit of waiver of premiums due to the VBIT coverage. In this case, MLM simulates the premiums payments

“M”- Cancelled

A policy that is in force can be cancelled in two cases:

1. By request of the insured
2. MLM cancels the policy according to conditions regarding the status of the policy, the amount of the reserve or lack of premium payments.
  - Cancellation due to lack of payment (Service 2108, motive 250):  
MLM receives payment in two ways:
    - Direct - In this case, Policy Holder pays the premium directly, i.e. not through retainer.
    - Payroll deduction - In this case, the retainer discounts the premium from the Policy Holder’s salary. Most of the retainers discount it fortnightly.
  - If MLM does not receive the payment from the Policy Holder for 3 months in case of ‘direct payment’ or for 6 months in case of ‘payroll deduction’ then MLM cancels the policy.

MUR provides the above information regarding status, issue date, premium payment, etc. to Provida. The date to compute the months without premium is the issue date or the ‘reinstatement of discount’ date.

- Cancellation due to exhaustion of reserve (Service 2204, motive 260):
  - If MLM does not receive the payments from the Policy Holder for 3 months in case of ‘direct’ or for 6 months in case of ‘payroll deduction’.
  - If the policy has at least one payment, it means it has generated a reserve.
  - If the reserve is negative then MLM cancels the policy.

The date to compute months without premium is the last payment date or the date of the 'reinstatement of discounts' if applied.

In this case, MLM does not pay to the insured, as the reserve is negative except the exceeding premium.

As an effect of cancellation, the status of the policy will be changed to 'M' in TVALOGAR, MPOLIZAS and MSERVICIOS, among the other tables.

This endorsement is sent to MUR. As a result, MUR deletes all the receipts after the cancellation date.

**Summary table of conditions for policy cancellation**

Service/Cancellation	2108	2204
Condition		
Status of policy	In force	In force
Months without payment	D- 3 PD - 6	D- 3 PD - 3
Sign of reserve	NA	Negative
Need payment	No	Yes (at least one)
MUR provide information	Yes	Yes
Provida provide information	Yes	Yes
Date to compute months without payments	Date of reinstatement of discounts or issuance date	Date when the reserve changes from positive to negative and Date of reinstatement of discounts (if applied) or last payment date

Where: D -> Direct Payment; PD -> Payroll Deduction

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### Service 2108 operated through CP:

#### Motives of the service

- This service can be operated with only 2 motives
  - 353 - Request of the Insured
  - 243 - Internal reason

#### Validations

- The policy should not have any premium payments
- Only the Promotoria that has issued the policy can cancel the policy.
- A MetLife user can cancel a policy issued by any Promotoria.
- Users of the Collections area (SEUS.USUARIOS.cveserv = 2) cannot operate the service with motive 353.
- Users of the Technical area (SEUS.USUARIOS.cveserv = 3) cannot operate the service with motive 243.

#### Movements

- The service generates a deletion movement in MUR. I.e. inserts a record in MUR\_HISPRIMA to inform the retenedor to discontinue deduction of premiums.

### 5.3. Begin of Validity

This process is applicable for the services that affect premiums. Whenever a service that affects premium is applied, its validity starts from a date, which is calculated from retainer's calendar. The policy remains in current state up to the 'begin of validity' date. After that date, the applied services will be effective and the face amount and premium will change accordingly.

This process uses the concept of 'mirror'. The field 'NMSUPLEM' in MPOLIGAR, TVALOGAR, MPOLIZAS tables is used for the implementation of the mirror. This field can have two values:

- NMSUPLEM = 0, indicates the current state of the coverage or policy.
- NMSUPLEM = other than zero, indicates that the service is pending and will be effective from the date of validity.

Whenever the service that affects premium is applied, the record for that policy gets duplicated in the tables mentioned above with 'NMSUPLEM' with a value different than zero. The mirror will be erased after the date of validity and 'NMSUPLEM' is updated to zero.

One can apply other services in the period between the current date and the date of validity. Many services can be pending at the same time depending on the date of validity.

If more than one service is applied on the same day, the date of validity of those services will be in the sequence that is maintained in 'MSERVICIOS.NUMSERVICIO'.

A case study example:

Statserv	Service	NUMSERVICIO	Coverage	Face Amount	Premium	Date of validity
9	0	98885545	VBAS	100,000	100	
			VBIT	100	7	
4	2208	98885546	VBAS	180,000	200	01/08/04
			VBIT	200	17	
4	2214	98885547	VBAS	180,000	200	01/08/04
			VBIT	200	17	
			VCII	180,000	50	



**Note:** All the services that affect premiums have their 'Begin of Validity' date as the first day of the following month.

Statserv: Status of Service

- 9- Confirmed
- 4- Pending
- 2- Pending
- 1- Pending

Service: 0- issuance

- 2208 - Increase in face amount - motive 631
- 2214 - Inclusion of coverage - motive 633

Some of the business rules used here are:

- The face amount of VBIT is the sum of premiums of all coverage included in the VBIT benefit. VBIT doesn't cover VCII, VTIB.
- The face amount of VCII is equal to face amount of VBAS.
- The premium of VCII is less than the premium of VBAS.

The above example shows the current situation of a policy where its status is 9. Then the service 2208 is applied and that increases the face amount by 80,000. This means that the premium for that coverage will also increase and ultimately the face amount for VBIT changes.

Later, the service 2214 is applied to add the coverage VCII to the policy. To apply each service the base information is being considered. The base information is taken where the face amount is increased even though it has not started its validity yet. This is because the validity of the service will start in the order as they are applied. The last service of the policy is the current information i.e. the base information.

In the case where the date of validity of service surrender (2204) is prior to the date of validity of increase in face amount (2208), the policy gets cancelled and the status of the service (2208) remains pending (status 4).

Service	Statserv	Date of validity
0	9	
2208	4	1/10/2004
2204	9	31/09/2004

The process updates the service completion date (MSERVICIOS.fefinserv) of the last applied CA service (service that affects premium) with the start

date (MSERVICIOS.FEINISERV) of the current CA service that is being put in force.

The phases for this process are:

- Acknowledgement of the base information
- Operation of the service
- Obtaining the Final result = Base information + Service operation result

The possible statuses of the services are:

- 1: Direct operation before closing
- 2: Direct operation after closing
- 3: Indirect operation before closing
- 4: Indirect operation after closing
- 9: In force

This process interfaces with 'MUR' and 'ENVÍOS'. Accordingly, the receipts in MUR change and the commissions are updated and the Retenedor is informed accordingly.

### 5.4. Reserve Calculation

The reserve is the amount of savings that belongs to the insured. The reserve is the heart of a policy, as the health/life of the policy depends on the reserve. The cost of insurance (COIs) or mortality cost (amount of money to cover the risk of the insured) is recovered from the reserve of the policy.

The reserve usually is negative during the initial two years of the life of the policy, but it slowly starts to grow after that. The reserve is calculated at the beginning of every month for all the non cancelled policies. It is paid to the Policy Holder if the person cancels the policy and he requests for the reserve. This amount is also paid to the beneficiaries in case of a claim of the policy.

The risk reserve of the policy is negative during the first two years as during the initial years of the policy high commissions are paid, which results in a small remainder being credited in the reserve. And after the COI's are deducted from the risk reserve, the amount remaining would be either negligible or would go negative.

There are two types of reserve:

- Risk (mathematical) reserve
- Investment fund, that originates from the "Exceeding premium" (VEXC) coverage. This coverage does not pay a 'risk' premium, therefore its

cost of mortality and administrative expenses are zero. As there are no deductions from investment fund, it is always a positive amount.

The reserve consists of:

- **COI (Costs of Mortality or Cost of Insurance):** This amount is specific to Universal Life products and is calculated monthly for each coverage, regardless of the frequency of premium payments. It is the 'risk' part of the reserve and it depends on the face amount, not on the premium amounts. Since it measures the risk, a factor used in its calculation is the age of the insured, gender, smoking habit and medical/occupational factors.
- **Remainder:** This amount is related to the collection process and is payment application. Any payment made by insured is added into reserve after deducting commissions and other administrative expenses. This amount makes reserve positive as COIs are always negative.

If a policy discontinues receiving premium payments and the reserve is positive, the necessary amount to cover the risk is taken from the reserve and the policy would continue to be in force and the risk is covered.

A premium covers following expenses:

**COI (or Qx)**

**Administrative expenses:** It's always a fixed amount. The Insurance Company charges for administrative expenses such as paperwork, investments, taxes, etc.

**Acquisition expenses :** (i.e. commissions, etc.)

**Extra premiums** (additional risks)

The reserve is calculated as:

**Reserve** = Remainder(Sobranante) - COI - Partial Surrender (Partial Withdrawal amount ).

For a given month x,

**Reserve<sub>x</sub>** = reserve<sub>x-1</sub> + (reserve<sub>x-1</sub> \* interest) - COI + remainder - partial surrender.

$$V_{m,t} = V_{m-1,t} * (1 + (int\ r)) + SOB_x - COI_{m,t} - Rp_{m,t} * (1 + \frac{(int\ r)}{2})$$

Basic Remainder = Basic Premium - administrative expenses for Basic coverage - acquisition expenses for Basic coverage - Bonus

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Exceeding Remainder = Exceeding Premium - Acquisition Expenses for Exceeding Coverage

Where,  
Interest:

There are two types of interest: financial interest (which is fixed to a .09 and a 0.1 is assigned for company profit) and warranty interest; they depend on the sign of the reserve.

```
IF reserve < 0 THEN
  interest := warranty interest;
ELSE
  IF financial interest >= warranty interest THEN
    interest := financial interest;
  ELSE
    interest := warranty interest;
  END IF;
END IF;
```

If the reserve is negative and the interest is high, the insurance company is at loss.

If the reserve is negative and the interest is low, the insured is at loss.

If the reserve is positive, both the insurance company and the insured have a win-win situation.

As the reserve belongs to the Policy Holder, the same can be withdrawn from the reserve if it is positive.

In case of a total surrender of a policy, the amount paid is:

Reserve + transit premiums + any other amount in favour of the Policy Holder, if any.

A partial surrender is allowed once a year and the amount must be within 15% and 75% of the reserve.

In case of a claim of the basic coverage (VBAS), the amount paid is the face amount + reserve.

The administrative expenses can be up to a maximum of 17% over the premium.

The commission and bonus can be up to a maximum of 75% over the premium as per the prevailing rates of commission in the previous commission schema.

At the beginning of the life of the policy, the COI, administrative charges and the acquisition charges are higher and hence the reserve would be negative

During the second year the remainder is greater than the COI, the administrative charges and the acquisition charges and hence the reserve starts to grow. The reserve grows positive during the second and subsequent years.

The COI will be the same during one year period; it changes with the age of the insured or if the conditions of the policy change.

No two COIs are allowed for the same coverage during a month, because it's not allowed to charge the same risk twice.

Unlike the COIs, there can be more than one remainder (one for each payment made).

In the case of a new policy, the reserve is negative:  $\text{Reserve}_x = \text{Reserve}_{x-1} + (\text{reserve}_{x-1} * \text{interest}) - \text{COI}$ ;  
Where  $\text{reserve}_{x-1} = 0$ .

An example of a policy in its first year may be:

Premium = 100

COI = 25

Administrative expenses = 15

Acquisition expenses = 70 (high amount at first)

Remainder = Premium - Administrative expenses - Acquisition expenses

Remainder =  $100 - 15 - 70 = 15$

Reserve = Reserve of previous month + Interest on Previous month Reserve + Remainder - COI

Reserve =  $0 + (0 * 0.9 / 100) + 15 - 25 = [-10]$

## 5.5. Remainder Calculation

The remainder amount of a policy starts to exist after the first payment application and is updated according to the frequency of the payments. Its calculation is done as part of the reserve calculation process, after the value of the commissions has been calculated.

It does not apply for 'disability policies', because in those cases the payments are 'done' by the insurance company.

It is calculated as:

**Remainder** = applied premium payment - (Applied premium payment \* administrative expenses %) - Acquisition expenses - Bonus

The remainder makes the reserve positive. The remainder is negative only when there's a "Cancellation of payments" (for example, when 'Discount from Payroll' sends a cancellation payroll type.)

There are two types of remainder:

- Risk remainder
- Investment remainder, which has no administrative expenses.

The remainder calculation is done fortnightly as in Mexico the salary is given after 15 days and for the mode of payment as payroll deductions payments will be received after every 15 days. The remainder process is different than the reserve process.

In case of the Exceeding Premium (VEXC), even if the coverage is cancelled, the investment fund continues to be the same because the money belongs to the insured.

In Provida's DB structure, a payment that generated a remainder can be traced using AP\_CTLPAGO.numpago and TRESMATE.nmsituac.

## 5.6. Commissions

The commissions are defined for each product, based on the percentage of the premium. The product sends the commission for each policy to collections, but the commissions are calculated per coverage.

In Provida, currently there's a three-year scheme that pays commissions as follows:

The commission is paid first three years (first year the commission is very high compared to second and third year) and the bonus is paid only for the first year.

Commission is paid to the agent for issuance, services that affect premium, services with claim and begin of validity. There are four types of commissions:

1. New commissions
2. Cancel scheme
3. Cancel coverage
4. Adjust commissions

1. New commission:

The commission is paid to the agent based on the premium paid.

The commission is paid to the agent in case of new businesses i.e. policy issuance (Service 0), increase in face amount (Service 2208-631) and inclusion of coverages (Service 2214-633).

2. Scheme of commission:

MLM has a scheme of commission in which a particular commission for a particular endorsement is defined.

In case the increment service gets cancelled (service 2208-632) then the corresponding generated commission for that service gets cancelled.

3. Coverage cancellation

Whenever coverage is cancelled by the request of insured (the service 2214-631) or automatically (the service 2214-260) the corresponding commission also gets cancelled.

4. Adjust commission

The commission gets adjusted whenever the policy condition changes such as change in premium amount like change in the payment mode (service 2210), change in plan (service 2211) and verdict reconsideration (service 2213) or decrement of Sum Assured etc.

## 6. Services

Services are applied on a policy in order to make changes to it. Depending on the impact of the changes to the policy they are classified in four types:

- Services that don't affect premiums
- Services with payment
- Services that affect premiums
- Services with claim

For any of the services to be applied the policy should be in force, except when applying the service 'Suspension of Discount' (2222) when the policy has a status of cancelled.

All services can be applied by MLM through the Provida D2K system. Currently, only some services can be applied by a Promotoria through CP. After the operation of the service, the date of validity that is determined from the retainer's calendar is assigned. At the system level the field 'MSERVICIOS.STATSERV' maintains the status of the services. When the service becomes effective, the status of it is updated to '9'.

### 6.1. Services that don't affect premiums

These services change the information in the policy that does not affect the premiums, for example: a change of name or change of address. A change in the general information of the Policy Holder is specific to the product, but some types of changes require interface with MUR.

The following lists the services that don't need interface with MUR because the information does not affect collections. This also implies that no information is sent to the retainer (Envíos).

#### **Service 2000:** Cancellation of service

This service cancels the pending service mentioned by the insured. There are certain validations that will verify whether the service could be cancelled. If the all the validations were successful cleared then the requested service would be cancelled.



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### **Service 2100** - General data change for complimentary coverages

If the data captured in the system for the insured, under complementary coverages is incorrect, then user can apply this service to change the general data. The data such as Name, Date of Birth, RFC, CURP, Gender, Beneficiaries and Parentesco (for VCCO) can be modified in this service. The date of birth can be modified such that there is no affect in the actual age of the person covered under the benefit (except for VGFH). Hence, this service does not affect premium.

### **Service 2102** - Changes the name of the insured.

### **Service 2103** - Change of Address

This service changes the insured's residence address. This service can be applied as a secondary service along with any other service.

### **Service 2104** - Change of RFC

This service is used to change the RFC of the main insured and corresponding endorsement is sent to MUR as the change in the RFC is related to the code of collections.

### **Service 2113** - Change of CURP

This service is used to change the CURP of the main insured and corresponding endorsement is sent to MUR.

### **Service 2105** - Changes the information of the beneficiaries.

This service is used to make any changes in the current beneficiaries of the policy. They can be added, deleted or updated.

### **Service 2108** - Cancellation of policy without payment

MLM cancels the policy if there is a lack of premium payments. In case of direct payment if MLM has not been receiving payments for 3 months or in case of payroll deduction for 6 months then MLM cancels the policy. The date to compute the months without premium is the 'reinstatement of discounts (Service 2221)' date or the issue date.

### **Service 2109** - Duplicates the policy

This will print the policy as it was at the time of issuance and not as per the current status of policy.

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### **Service 2110** - Duplicates the endorsement

This will print all the endorsements of the policy that affect premiums.

The following lists the services that need interface with MUR because the information affects Collections. This also implies that the information can be to send to the Retenedor (Envíos).

### **Service 2205** - Reinstatement of policy

This service is used to reinstate a policy that has been cancelled before. The service is also called as Rehabilitation. If the policy is cancelled as per insured's request or by a automatic cancellation, this service can be applied on the policy to make it active again. Reserve and COIs will be recalculated for a policy for the period for which a policy is cancelled.

For example: The policy is cancelled in February and reinstated in June then the calculation of COI and reserve is calculated for each month starting from March. Therefore, the risk for all the months between the cancellation and the reinstatement of the policy is calculated and charged.

### **Service 2209** - Change of premium amount

This service is used to send the correct amount of premium if the retainer is discounting an improper amount from the Policy Holder's salary. This needs an interface with 'Envíos' that is done through 'MUR'.

For example, a Policy Holder is expected to pay \$400 monthly and the retainer is discounting \$250 from his salary. This service should be applied to send the proper amount of premium to be discounted to retainer. The date of validity of the service is determined according to the retainer's calendar.

### **Service 2221** - Reinstatement of discounts

This service is applied in case a policy was cancelled, then it was reinstated and still the retainer is not doing the corresponding premium discounts. In this case, the retainer is informed with the amount of premium to be discounted. This movement is the same as that of 'Change of premium' (Service 2209).

### **Service 2222** - Suspension of discounts

This service is applicable only for cancelled policies. After a policy gets cancelled through the request of the insured (policy surrender) and still the retainer is discounting premiums from the Policy Holder's salary, this service sends a movement to the retainer to stop the discounting.

### **Service 2223 - Change in the Key of Payment**

This service is used to change the key of payment (retainer id, unit of payment, and concept) and the nominal id. Though it is not affecting premiums, it is sent to MUR as it deals with collections.

### **Service 2229 - Reserve Reconstruction**

This service recalculates the reserve amount by considering all movements happened on the reserve of the policy. The service will consider 'CA' type services and services with payments applied on the policy. This systemized way to calculate the reserve will improve accuracy of re-calculating reserve amount right from issuance till date and will also maintain the history of reserve of the policy correctly.

## **6.2. Services with payment**

In case of surrender and partial surrender, MLM pays the amount to the Policy Holder.

### **Service 2204 - Total Surrender/ Rescue**

When a Policy Holder applies to surrender the policy, MLM cancels the policy. The Policy Holder gets back the amount accumulated in the reserve and premium paid for the period after the cancellation date. The policy will no longer be in force. The payment made to the insured is calculated as:  
Net Payment = Reserve + Transit Premium (PET Primas en Tránsito) + Exceeding Payment Return (DPE Devolución de Pagos Excedentes)

### **Service 2206 - Returning of discounts for payment to the Policy Holder**

This service is used to return to the insured the payments made to a policy that were done in an incorrect manner.  
For example, if \$200 is the amount of premium that should be debited but the retainer debited \$300 then that excess amount goes to 'Premium in deposit' and that belongs to the Policy Holder.

The premium in deposit either can be adjusted against the premiums or it can be returned to the insured.

This service is applied only by the request of the insured.

These are the two cases where this service can be applied.

1. Policy is in force and the discount of premiums is more than expected.
2. Policy has been cancelled but the retainer is still discounting the premium.

This is one of the services that can be applied on 'CANCELLED' policies.

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This generates a payment as follows:

Calculation of payment for policies IN FORCE:

Fortnightly premium:

$$\text{PNS} = (\text{Last period of Returns} - \text{First period to be Returned}) * [\text{Nominal fortnightly premium} - (\text{Premium to be charged} / 2)].$$

OR

Monthly premium:

$$\text{PNS} = (\text{Last period of returns} - \text{First payment to be returned}) * [(\text{Nominal fortnightly premium} * 2) - (\text{Premium to be charged})]$$

Calculation for CANCELLED policies:

$$\text{PNS} = (\text{Last period of Returns} - \text{First period to be Returned}) * \text{Nominal Premium.}$$

Here, no premium is charged as a policy is cancelled so the Policy Holder gets back all the paid payments.

Where:

PNS: Net payment of the service.

Nominal Premium: The fortnightly premium that is actually being discounted to the insured.

### **Service 2216 - Partial surrender/Withdrawal**

Reserve is the amount which belongs to the Policy Holder and the Policy Holder can withdraw some percentage of the reserve fund of a policy as a loan through this service.

To apply this service, the policy should not be cancelled, i.e. it should be 'in force'.

The motive of the service is decided how the payment made (from risk reserve/ investment fund or from both),

The most common motive is the 445 and it's the one to appear by default in the screen.

The Policy Holder can withdraw 15% to 75% of amount from the risk reserve. The policy will still be in force as the reserve is positive. If payment for the service is done from risk reserve, then next 2216 service cannot be

applied within a year. But if the payment is done from the investment fund, the service 2216 can be applied after six months.

The percentage amount that is to be withdrawn is paid from both the risk and the investment reserve. First the investment fund is utilized for the payment and if the investment fund is exhausted, then payment will be done using Risk reserve. According to the following formula:

Payment= 50% amount from risk reserve + 50% amount from investment reserve

If the investment fund is zero then it is paid from the risk reserve.

When the reserve is negative it is shown as zero (0) in the screen of Provida.

### **Service 2220 - Re-expediciones de Pagos (Re-issue of cheque)**

This service re-issues the payment. The cheques or payment orders that are generated from the Treasury system as a result of operation of services 2204 (Total Surrender), 2206 (Devolution of premiums), 2216 (Partial Withdrawal) have a validity of 90 days. If the insured due to some reason is not able to receive them on time, then in order to settle the request for these services, a re-issuance of payment is necessary.

The cheques or payment orders which are no longer valid are cancelled by the Treasury and a payment cancellation transaction is registered in Provida under the service 2220. Later when the insured requests for re-issuance and there exists a payment cancellation, he is re-issued the payment. This saves a lot of time spent earlier in confirmation.

### **Service 2316 - Cancellation of Partial Withdrawal**

This service is used to cancel the partial withdrawal service i.e. 2216. This service is applied from the CP. E.g. If the Policy Holder has withdrawn amount of \$1000 in a month - February. The user can return this payment to MLM after a period of time - November. The reserve of the policy will be added with the amount returned. Service does not require the reserve of the current month. The latest reserve of the policy can be used to restore the amount of Partial Withdrawal.

### 6.3. Services that affect premiums

These services make changes in the policy that affect premiums. The validity of these services starts according to the retainer's calendar. A 'mirror' is created in the tables to indicate the current status and the new status of the policy that will be effective after the date of validity. Once the service is in effect, the mirror is erased.

#### Service 2208 - Increase/Cancellation of increase of Insured Amount

This service operates with two motive codes:

**Motive 631** - Increase of face amount.

This service increases the face amount of one or more coverage(s) present in the policy.

This service is important and operated frequently. Approximately, 1500 services to increase the face amount are being operated per day.

There are certain validations that need to comply in order to operate the service:

1. The user who is operating the service must be an authorized person. The user configuration is stored in the USUARIOS table.
2. The reserve of the policy must be positive.
3. The reserve should not have been negative in the past three months.
4. The policy should not have five or more unpaid receipts regardless the mode of payment (direct or payroll deduction) for any form of payment.
5. This service cannot be applied more than once in three months.

As the face amount changes, the premiums also change.

The commissions for the agents are calculated according to the increase in the insured amount of the policy.

An endorsement is sent to MUR and then to the retainer through Envíos.

**Motive 632** - Cancellation of increase of insured amount.

After the operation of the service that increases the face amount (2208-631), if the Policy Holder wants to cancel it, it is cancelled by applying the service 2208-632 if the service 2208-631 has been started its validity.

(If the service 2208-631 has not been started its validity and the Policy Holder wants to cancel it, the service 2208-631 gets 'annulled'.)

The service 2208-632 will only cancel the latest service (2208-631) that affected the premium. This does not involve any calculations. It just reverts the policy to the previous state, before applying the service of increment in face amount.

To cancel the service of increase in face amount it is required that no other service that affects premium is applied after that. Even though the service that affects premium is later cancelled, the service 2208-632 cannot be applied.

### **Service 2210 - Change of Form of Payment**

This service is used to change the form of payment. Provida policies have the following forms of payment:

- Monthly (Mensual)
- Quarterly (Trimestral)
- Half Yearly (Semestral)
- Yearly (Anual)

This is not a frequently applied service as the mode of payment for Provida policies, mostly, is the 'Payroll Deduction'. The service can change the mode of payment as 'Direct' or 'Payroll Deduction' for 'monthly' form of payment.

The insured requests the change in the form of payment due to several reasons for example:

1. He stops working in a company, so the discount won't be from payroll and still he wants to keep the policy.
2. It's easy for a Policy Holder to make one or two payments a year, etc.

For the policies having the type of payment 'Payroll Deduction', no change is done from monthly to other forms of a payment.

This service can only be operated by the services area in MLM offices through Provida application and not by Promotorias through CP.

Along with this service 2210, the user can internally apply another service 2223 (Change in Collection Key) - to change the Collection Key (Retainer / Unit of Payment / Concept of Retainer / ID Nominal combination and Mode of Payment). This gives the policy holder more flexibility while requesting change in form of payment.

These types of Service 2210 are applied with a different motive, so that they can be identified easily.

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### **Service 2211 - Change of plan**

This service is used to change the plan of a policy from term plan PT20 to permanent plan PP99 or vice versa, which is one of the characteristics of Provida application.

Unlike the service 2208 and 2214, this service is not treated as a new business and therefore commission for this service is not paid. The operation of the service goes back to issuance for calculating premiums.

This service is not frequently applied.

Currently, the service can be operated only in MLM offices through Provida application and not through CP.

At present, there are four plans:

- PP99: Traditional Provida Plan of 99 years
- PT20: Temporary Provida Plan of 20 years
- ML99: Permanent Met 99 Plan of 99 years
- Plan Maestro: Master Plan:

It is a new term plan of 20 years similar to the plan PT20 introduced in Sep-2004.

The premium changes (increases/decreases) according to the change in the plan.

### **Service 2212 - Age correction**

This service is used to correct the date of birth of the insured for primary as well as complimentary insured. Also the gender and the smoking habit of the primary insured can be changed by applying this service.

The service goes back to the issuance and recalculates the premium for all the 'CA' services applied on the policy considering the new verdict values. There may be two cases, the premium before applying service is less than or greater than what it should be. In case if the premium charged is less, it is the loss of MLM. And if the Policy Holder paid an extra amount, the Policy Holder can apply for that extra payment, which is handled by a separate process.



### **Service 2213 - Verdict reconsideration**

This service is used when the information in the policy changes that needs a verdict to be reconsidered. For example, if factors like gender, smoke habit or age of the Policy Holder is incorrectly captured at the time of issuance and later it is corrected, the service 2213 is applied in order to consider the correct factors for calculating the premiums.

This service is least applied. 15 to 20 numbers of this service are operated per month.

### **Service 2214 - Inclusion / Exclusion of coverages**

#### **Motive 633 - Inclusion of coverage**

This service with motive 633 is used to add a new coverage to the policy. This is second most frequently operated service that affects the premium. The operation of the service changes the premium based on the coverage added. Whenever a new coverage is added to a policy through the agent he is entitled to the commission.

This service is operated by 'Transaction and Issuance' area. This service is treated as a new business.

In case of the complimentary coverage, the relation of the Policy Holder with the additional insured needs to be provided. The policy cannot have a complementary coverage for a spouse if the policy already has other spouse coverage (VCCF/M, VGFC). The policy with VGFC can have a complementary coverage for a child that has been passed the age limit.

#### **Motive 631 - Exclusion of coverage**

This service is used to exclude coverage from the policy. After the exclusion of coverage, premium for that coverage reduces unlike in the mass cancellation where the premium for that coverage goes to the exceeding premium (VEXC). The corresponding commissions get cancelled.

The user has to be careful while operating the service as the basic information in case of the additional coverages gets lost and there is no way to rollback it.

As the face amount reduces, the premium reduces and an endorsement is sent to MUR in order to generate receipts. MUR sends an endorsement to retainer through Envíos.

#### **Motive 260 - Automatic cancellation of coverage**

Coverage gets automatically cancelled when the real age of the person who receives the benefit equals the age of cancellation. The premium for that

coverage goes to the exceeding premiums (VEXC) and thus premium doesn't change.

In case of VGFH (Funeral expenses of children) the coverage does not get cancelled if there are several children included in the coverage and one gets beyond the age limit. In such a case, the child who reached the maximum age limit is excluded and the number of children reduces by one. This coverage will now cover the rest of the children.

### **Service 2228 - Decrement of Sum Assured**

This service is used to decrease the Face Amount of the all the present coverages for the given policy.

The service was newly introduced in the project CP Release 3 Set 2. Unlike the service 2208 motive 632 (Cancellation in Increase of Face Amount), the Policy Holder can decrease the Face Amount of the coverages even if he does not increase the Assured Sum for some of the coverages.

In this service the Policy Holder, gives the new Sum Assured for the Basic coverage (VBAS) and the same percentage decrease as that of basic coverage would be applied for all the other coverages. The premium changes (decreases) according to the percentage decrease in Assured Sum for the coverages.

There are two motives for this service:

345 - By insured's request

245 - Internal reason

The service can be operated through PIP (Policy Information Portal).

### 6.4. Services of claims

All the risk coverages that a policy has can be claimed. As a result of these services the face amount for that coverage will be paid and the total face amount will be changed. These services change the policy conditions.

There is no direct interface between Provida and the Claims system. Claims only checks whether the information in Provida related to the policy and the coverages are valid. The rest of the process is done manually. After the necessary information is been verified (such as age of the insured) and the face amount is calculated, the beneficiaries receive the corresponding payment.

This service only checks the validity of the policy. This is an on line process and doesn't create mirrors.

All the claim services processed as 'indirect' as it requires the background checking and the interaction between the operational service area and claim area.

**Service 2200:** Claim for additional insured.

The coverages can be claimed are:

- VCCO: Complementary coverage

- VCCF/M: Spouse Coverage Feminine or Masculine

- VGFC: Funeral Expense for spouse coverage

To operate this service, the coverage and the policy must be in force at the time of the loss/death of the insured, which is covered.

The date of calculation for the claim is the last day of the month when the claim was made.

The net payment for the service is the insured amount that was in the contract at the date of the loss, even though this might not be the last contracted insured amount.

This service does not decrease the premium amount. The premiums for the claimed coverage are sent to the exceeding premium (VEXC). If the coverage VEXC does not exist, it is created.

This service sends an endorsement of Cancellation of coverage to MUR. The commissions for that coverage, if any get cancelled along with the coverage.

**Service 2201:** Claim for the death of the insured.

This is the service through which the beneficiaries claim for the loss of the Policy Holder. This service can be used to claim for the coverage VBAS and VCPM. VDEV is a coverage for the new plans, which is also linked with the Loss of the Policy Holder.

**VCPM:** Claim for temporary coverage by accidental death of insured.

This is the coverage that can be claimed before the issuance of policy that is in the period between the application for a policy and its issuance. This doesn't charge any premium. Once the application becomes a policy, this coverage gets cancelled. This coverage charges COIs for the first three months (for PP99 or PT20 plans) or for the first two months of the policy life (ML99 or Master 20 plans).

**VBAS:** This is a mandatory coverage that every policy has. This coverage can be claimed only after the death of the Policy Holder.

The policy must be in force at the time of the death of the Policy Holder. The conditions under which the service is paid are the ones that are in force at the time of death of the Policy Holder.

After the claim of either of these coverages, the payment is made to the beneficiaries and the policy gets cancelled.

The benefits of the service after the beginning of validity is the insured amount in the contract at the date of the loss even though this may not be the last contracted insured amount.

In case of VBAS:

Total Benefit = Face amount + reserve fund + investment fund + premiums in transit + premiums without master.

The net payment of the service before the beginning of validity is (in case of VCPM):

PP99 or PT20 plans:

Min (Insured amount, 200,000) - [Min (Insured amount, 200,000) \* factor / 1000]

ML99 or Master 20 plans:

Min (Insured amount, 500,000) - [Min (Insured amount, 500,000) \* factor / 1000]

This service does not decrease the premium; it just cancels the policy.

The commissions are not updated since there are no payments of commissions for cancelled policies. This service sends an endorsement to MUR.

As a result, all the receipts after the cancellation date are deleted.

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### Service 2202 - Claim for disability of the Policy Holder.

The coverages involved in the claim for disability are:

- Coverage for Total and Permanent Disability (VCII).
- Coverage of Waiver of Premium payments (VBIT).
- Coverage Triple Indemnity (VTIB)<sup>1</sup> is a coverage that gets affected after the claim of the disability coverage.

The coverage must be in force at the time of the loss, and the conditions under which the service is paid are the ones that are in force at the time of that date.

**VCII:** This coverage covers the risk for the total and permanent disability of the Policy Holder.

‘Disability’ is a medical term that indicates that the Policy Holder cannot work. In such a case, MLM pays the entire face amount of the VCII coverage contracted and in force at the time of the loss. The policy continues to be in force as the Policy Holder continues to pay the premiums for the rest of the policy life.

**VBIT:** This is the benefit of the waiver of premium payments due to total and permanent disability of the Policy Holder.

This coverage covers the risk of total and permanent disability for the rest of the age of policy. The Policy Holder doesn’t pay the premiums. MLM assumes the cost of mortality and the administrative expenses for the rest of the policy life. The reserve increases as it normally would, but the commissions are no longer paid.

The policy will change to DISABILITY status (MPOLIZAS.STATUS = ‘I’) if and only if the policy has the coverage VBIT.

When a policy has this disability status, no services that affect premium can be applied to the policy.

After the coverage VBIT is claimed, the service 2202 will automatically cancel the coverage VTIB (in case the policy has it).

**VTIB:** Loss of body parts due to an accident.

This coverage is paid only if the policy has one of the disability coverages (VBIT or VCII).

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<sup>1</sup> Indemnity = compensation. This coverage is not part of the claim, but if it’s in force, this service cancels it.

This is a particular coverage that is paid only under some specific circumstances of a collective accident, i.e. an accident doesn't occur due to the carelessness of the Policy Holder, if it occurs in a public place and at least 15 people are involved in the accident. If the Policy Holder gets disabled due to such an accident then MLM pays twice the face amount of the policy.

This service does not decrease the premium. The premium that gets cancelled by the claimed coverage is sent to 'Exceeding Premium' (VEXC) and if this coverage does not exist, it is created.

Finally, the commissions are updated canceling the ones that are being paid (if any) by the coverages that were claimed.

This service sends an endorsement to MUR in the daily closing process. In MUR, the status for disabled policies is 'IN'.

**Service 2203** - Claim due to loss of body parts of the Policy Holder.

This service is used to claim for the coverage VTIB (Coverage of Triple Indemnity). This coverage is paid only if the policy has one of the disability coverages (VBIT or VCII).

This is a particular coverage that pays only if the accident is a collective accident. For example, it is an accident not occurred due to the carelessness of the Policy Holder, if it occurs in a public place, at least 15 people are involved in the accident etc. If the Policy Holder is disabled due to such an accident then MLM pays twice the face amount.

The policy and the coverage must be in force at the time of the loss, and the conditions under which the service is paid are the ones in force at the time of that date.

Net payment of the service =

Insured amount of the VTIB coverage \* a percentage / 100

The percentage is determined by a qualified person and it is proportional to the loss of body parts of the claimer. The percentage is either 50% or 100% of the face amount of VTIB.

Finally, the commissions are updated canceling the ones that are being paid (if any) by the coverages that were claimed.

In a case if a person meet an accident and loses his body parts and if a person is declared as 'disable' by a medical report then 2202 should be applied otherwise 2203 can be applied.

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### Service 2284 - Claim due to terminal illness of the Policy Holder.

This service is for the claim done by the Policy Holder who has been diagnosed with a terminal illness. This claim is based on the basic coverage, but this service does not cancel VBAS.

The coverage claimed through this service is VBET. It is an implicit coverage (like VCPM) that comes with the coverage VBAS by default i.e. the Policy Holder doesn't request for this coverage. The expenses and the risk are included already in the coverage VBAS.

For this service, the policy must be in force at the time of the loss. Additionally, at the date of the claim, the policy must be up-to-date with the payments, i.e. there must not be debts of 2.5 months if it's discount from payroll (DxN) or up-to-date if its direct payment.

Net payment for this service =

Insured amount of the VBAS coverage \* 30%

Thus, the insured amount for the basic coverage (VBAS) is reduced by 30%. This service does not modify the premium, because it does not cancel any coverage. As the risk is certain, the age of the insured is increased by 20 years. The calculation of COI is done based on the increased age. As an effect, the reserve decreases and may result in a negative value. The policy could be in force as long as it is receiving the premiums even if the reserve becomes negative. The rules for the cancellation of a policy are the same as that for any other regular policy.

If a Policy Holder has been diagnosed with a terminal illness and is declared as 'disabled', he can claim for both the coverages VBET and VBIT, if the policy has the coverage VBIT.

As the premium doesn't change, no endorsement is send to MUR.

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### Service 2285 - Claim for funeral expenses of children

This service is claimed for the following coverages:

Funeral expenses for children (VG FH),  
Funeral expenses for spouse (VG FC) and  
Funeral expenses for the Policy Holder (VG FT)

The policy and the coverage must be in force at the time of the loss.  
Moreover, at the date of the claim, there should not be a debt of more than 2.5 periods, in case of discount from payroll and there should be zero delay of payment in the case of direct payment.

In case of the claim of VG FC, the coverage gets cancelled. While in the case of the coverage VG FH, this service does not cancel the coverage, if there are more than one child. The number of children that are covered is reduced.

There are two conditions to change the premium:

- When the number of children reduces from 2 to 1, or
- When the number of more than 3 children reduced to 2.

The change of premium is calculated with the same rules at the time of issuance.

The coverage gets cancelled only if all the children, mentioned in the coverage VG FH, are claimed.

The net payment of the service is the insured sum of the coverage VG FH.

This service may or may not modify the premium depending on the number of children covered at present, in which case an endorsement is sent to MUR accordingly.



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### **Service 2286 - Claim for the Cancer Coverage.**

This service is claimed for the following coverages:

- Cancer Coverage for Titular (VCAT)
- Cancer Coverage for Complementary Insured (VCA1, VCA2, VCA3)

The service 2286 work with two motives:

Motive 281/291 - Claim in Situ: - Can make a claim with this motive when he is diagnosed with cancer in situ. The insured (Titular / Complementary) will be paid 25% of the sum assured for the cancer coverage for medical expenses. After the claim in situ the insured will continue to pay the premiums for the cancer coverage. The cancer coverage stills continues to be in vigor (in force).

Motive 282/292 - Claim in Metastasis:- Can make a claim with this motive when he is diagnosed with cancer in metastasis. If the insured has already claimed the cancer in situ then he will be paid the remaining 75% of the sum assured for the cancer coverage. In case he has not claimed the cancer in situ, then he will be paid 100% of the sum assured for the cancer coverage. After the claim in metastasis the coverage will be cancelled and the premium for coverage VCAT/VCA1/VCA2/VCA3 can be adjusted with exceeding premiums.

The coverages can be claimed after 90 days from the beginning of validity of the coverage (Fecha de Inicio de la Cobertura). An in-situ claim cannot be applied twice. The policy and the coverages need to be in vigor (in force) to the date of claim (Fecha de siniestro).

**Service 2287:** Claim for VGE coverage.

This is the service through which the beneficiaries can claim VGE coverage. The service is applied at a time of death of policy holder and it will be claimed along with the service 2201 (Claim for VBAS coverage).

The policy and coverage must be in force at the time of the death of the Policy Holder. After claim for VGE, the payment is made to the beneficiaries.

In case of VGE: Total Benefit = Face amount of the VGE coverage.

**Service 2288 - Claim for VPXX coverage**

This is the service through which the insured persons can claim the VPXX coverage. The service is applied when the insured person under the coverage (Titular / Others) is injured / wounded in some manner.

The VPTT, VP01, VP02, VP03 and VP04 coverages can be claimed using this service.

Each of the coverages can be claimed only twice a year.

The history for the service will be maintained in the separate database table. The table will have information like: Service number, Coverage, Motive of claim, Date of claim, date of operation of claim service, date of last payment, and the amount claimed (payment) etc.

The motives of the service 2288 are dependent on the type of injury. The type of injury will be selected by the user, at the time of claim. The motives will be parameterized and will be stored in a supporting table.

Motive	Type of Injury
265	Fracture
266	Burn
267	Wound / Hurt
268	Poisoning
269	Sprain

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### Service 2289 - Claim for Serious Illness Coverage (EG)

This is a CA service. This is the service through which the insured persons (Titular/Complimentary) can claim the VEGT/VEGX coverage. The claim is done only in ML99 plan.

Each of the coverage (VEGT/VEG1/ VEG2/ VEG3) can be claimed once in five years of coverage duration. After the claim, the coverage will be cancelled from the policy and hence it cannot be included in that span of 5 years.

The service 2289 works with two motives:

1. **Motive 281** - Claim for VEGT i.e. Titular
2. **Motive 282** - Claim for VEGX (VEG1/VEG2/VEG3) i.e. Complimentary

### Service 2290 - Claim for Surgery Coverage (CR)

This is a SA service. This is the service through which the insured persons (Titular/Complimentary) can claim the VCRT/VCRX coverage. The claim is done only in ML99 plan.

Each of the coverage can have a maximum one claim in the coverage year and coverage will not be cancelled even after the claim.

The service 2290 works with two motives:

1. **Motive 281** - Claim for VCRT i.e. Titular
2. **Motive 282** - Claim for VCRX (VCR1/ VCR2/ VCR3) i.e. Complimentary

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## Closing Process

Provida executes a closing process periodically, normally every month. The purpose of this process is to close the transactions regarding the application of services.

When a service is operated from the Provida D2K application, the screen prompts the user if it should be registered as a 'direct' or 'indirect' service.

A direct service is the one that the Policy Holder requests personally and it is operated while he is present at the MLM offices.

An indirect service might not necessarily imply that the Policy Holder is present at the time of the process. Most 'indirect' services involve some investigation in order to find out if the service can be applied or not, for example in the case of claim services.

The closing process screen allows the user to choose the code and the range of dates of the service to be included in the tasks. The process completes the following tasks:

- Generates preview reports of the information that is going to be sent to the modules of 'Treasury' and/or 'Accounting'.
- Performs the actual interface with those modules.
- Sends the information to the module of 'Control of Services' which keeps track of all the services operated on the policies of MLM's policy administration system.
- Changes the status of the services to indicate that they have undergone the closing process.
- Issues reports with statistics of control.

### 6.5. Indirect

If the services are operated as indirect, the closing process takes care of the interface with Treasury as well as with Accounting for all the services that are in the range of selected dates.

Before each interface a preview report is generated in order to confirm the information before sending it to the other modules.

An additional task of the closing process for the indirect services consists of printing the endorsement letters that indicate the result of their operation. Such endorsement letters will be sent to the Promotorias to be distributed to the Policy Holders.

### 6.6. Direct

A direct service is the one that the Policy Holder requests personally and it is operated while he is present at the MLM offices. The Policy Holder receives an endorsement letter indicating the result of his request: if it was applied successfully and if not, the reason why his request could not be completed.

For the services with payment, in case they are operated as direct services, the processes interface with Treasury at the time of confirmation of the service, in order to generate the payments through cheque. The closing process will do the interface with accounting in order to register those cheques in the corresponding accounting entries.

## 7. Addendum

### 7.1. Commission Details

MetLife pays premium-based commissions to its agents. The commission percentage varies by layer contract year according to a schedule defined for the product.

The commission code or schema in PROVIDA is determined based on the following parameters:

- 1) Type of person
- 2) Agent
- 3) Promoter
- 4) Punishment
- 5) Cesion

The details of the same are stored in the supporting tables COMICUAD / COMICUA1.

DSTABLA	NMTABLA	Type Of Person	Agente	Promotor	Punishment	Cesion	From	To	Commission Code
COMICUAD	1158	F	S	S	S	N	1/1/1985	12/31/2099	C001
COMICUAD	1158	F	S	S	N	N	1/1/1985	12/31/2099	C002
COMICUAD	1158	M	N	S	S	N	1/1/1985	12/31/2099	C003
COMICUAD	1158		N	S	N	N	1/1/1985	12/31/2099	C004
COMICUAD	1158	M	S	S	S	S	1/1/1985	12/31/2099	C005
COMICUAD	1158	M	S	S	N	S	1/1/1985	12/31/2099	C006
COMICUA1	1343	F	S	S	S	N	8/4/2012	12/31/2099	C001
COMICUA1	1343	F	S	S	N	N	8/4/2012	12/31/2099	C002
COMICUA1	1343	M	N	S	S	N	8/4/2012	3/31/2013	C003
COMICUA1	1343	M	S	S	S	S	8/4/2012	12/31/2099	C005
COMICUA1	1343	M	S	S	N	S	8/4/2012	12/31/2099	C006
COMICUA1	1343	M	N	S	S	N	4/1/2013	12/31/2099	C007
COMICUA1	1343	M	N	S	N	N	8/4/2012	10/1/2012	C008
COMICUA1	1343	M	N	S	N	N	10/2/2012	12/31/2099	C010

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The commission details (percentage) is generated based on the following parameters -

- 1) Commission Code
- 2) Plan
- 3) Type of Agent
- 4) Type of Commission
- 5) Year

The details of the same are stored in the supporting table 'COMIDET'.

### **Punished Policies**

If a policy has been surrendered or lapsed and the policy holder applies for a new policy within 180 days of the cancellation then the policy is termed as punished policy. In such scenario the surrendered policy is said to be replaced and the new policy is termed as punished. As a result the commissions paid for the new policy will less.

For punished policies, a flag is set in the TVALOSIT table for the policy. This flag is set/reset against the CDATTRIBU = 6 in the TVALOSIT table. If the value is "5", then the policy is punished, else if the value is "1", then the policy is unpunished.

## 7.2. PROVIDA Plan Details

For the normal plans, coverage and plan details are as follows:

<b>ML99 (Met99)</b>					
COVERAGE	AGES OF THE INSURED		INSURED SUM		PERSON WHO IS COVERED
	LIMIT	CANCELATION	MINIMUM	MAXIMUM	
Basic Coverage (BAS)	15 - 70	When concluding the use of the policy	30,000	Limit of Normativity	TITULAR
Spouse Coverage (BACY)	15 - 70	When concluding the use of the policy	$SA^{BACY} \leq SA^{BAS}$ $SA^{BACY} \leq 200 VSM$ $SA_{\delta}^{BACY}$ and $SA_{xc}^{BAC}$ They are excluding when the spouse is the complimentary one as well		SPOUSE
Accidental Death coverage (CMA)	15 - 65	70	0	$SA^{CMA} \leq SA^{BAS}$	TITULAR
Coverage of Indemnification by Dissability (CII)	15 - 55	60	0	$SA^{CII} \leq SA^{BAS}$	TITULAR
Coverage of Accidental Death Triple Indemnification (TIBA)	15 - 65	70	0	$SA^{TIBA} \leq SA^{BAS}$	TITULAR
Coverage of Exemption of payment of premiums for Disability (BIT)	15 - 55	60	0	Sum of the Premiums	TITULAR
Complimentary Coverage (BAC)	15 - 70	To Conclude the use of the Policy	$SA_{xc}^{BAC} \leq SA_x^{BAS}$ $SA_{\delta}^{BACY}$ and $SA_{xc}^{BAC}$ they are excluded when the Spouse is the Complementary one as well		SPOUSE, FAMILY MEMBERS
Children Funeral Coverage Expenses (GFH)	0 - 24	25	20 vsmm	$SA^{GFH} \leq 35\% * SA_x^{BAS}$ $SA^{GFH} \leq 100vsmm$	CHILDREN
Spouse Funeral Coverage Expenses (GFC)	15 - 70	To conclude the use of the policy	20 vsmm	$SA_x^{GFC} \leq 35\% * SA_x^{BAS}$ $SA_x^{GFC} \leq 100vsmm$	SPOUSE
Title Funeral Coverage Expenses (GFA)	15 - 70	To Conclude the use of the policy	20 vsmm	$SA_x^{GFA} \leq 35\% * SA_x^{BAS}$ $SA_x^{GFA} \leq 100vsmm$	TITULAR
Coverage of return of premiums by death in the first 5 years (PFT)	15 - 70	After 5 years beginning of the use of the policy	Sum of the paid Premiums for the first five years		TITULAR
Advance payment for Terminal Disease (ET)	15 - 70	When concluding the use of the policy	30 % $SA^{BAS}$		TITULAR
Provision by Natural Death (CPMN)	15 - 70	Cancel after 60 days of the request of reception or to the Emission, which happens at first.	30,000	$SA^{GPMN} \leq 500000$ $SA^{GPMN} \leq SA^{BAS}$	TITULAR
Surplus Policy (EXC)	15 - 70	To Conclude the use of the policy	NA		TITULAR



## ML99 (Met99)

COVERAGE	AGES OF THE INSURED		INSURED SUM		PERSON WHO IS COVERED
	LIMIT	CANCELATION	MINIMUM	MAXIMUM	
Cancer Coverage for the Title Insured (CAT)	15 - 65	70	30,000	$SA^{CAT} \leq SA^{BAS}$ $SA^{CAT} \leq 1,000,000$	TITULAR
Cancer Coverage Complimentary 1 (CA1)	15 - 65	70	30,000	$SA^{CA1} \leq SA^{BAS}$	TITULAR
Cancer coverage Complimentary 2 (CA2)	15 - 65	70	30,000	$SA^{CA2} \leq SA^{BAS}$	TITULAR
Cancer Coverage Complimentary 3 (CA3)	15 - 65	70	30,000	$SA^{CA3} \leq SA^{BAS}$	TITULAR
General Education Coverage (GE)	15 - 70	To Conclude the use of the policy or 20 years of coverage	10,000	$SA^{GE} \leq SA^{BAS}$	TITULAR
Personal Accdent Coveage (VPTT)	0 - 55	Age attained 60 or 20 years of coverage	1,000 (Basic)	1,203 (Extra)	TITULAR
Personal Accdent Others 1 (VP01)	0 - 55	Age attained 60 or 20 years of coverage	1,000 (Basic)	1,203 (Extra)	SPOUSE, FAMILY MEMBERS
Personal Accdent Others 1 (VP02)	0 - 55	Age attained 60 or 20 years of coverage	1,000 (Basic)	1,203 (Extra)	SPOUSE, FAMILY MEMBERS
Personal Accdent Others 1 (VP03)	0 - 55	Age attained 60 or 20 years of coverage	1,000 (Basic)	1,203 (Extra)	SPOUSE, FAMILY MEMBERS
Personal Accdent Others 1 (VP04)	0 - 55	Age attained 60 or 20 years of coverage	1,000 (Basic)	1,203 (Extra)	SPOUSE, FAMILY MEMBERS
Complimentary Funeral Coverage Expenses (GFX) (1, 2, 3)	15 - 70	To conclude the use of the policy	20 vsmm	$SA_x^{GFX} \leq 35\% * SA_x^{BAS}$ $SA_x^{GFX} \leq 100vsmm$	SPOUSE, FAMILY MEMBERS

Additional Comment:  $SA^{BACY} + SA^{GFC} \leq SA^{BAS}$

Discounts in age:	Sex	Habit	Total
Men	0	Non Smoker	2
women	3	Non smoker	2
Note: Enter all the benefits of the holder with cancer exception			

## MAESTRO 20

COBERTURA	AGES OF THE INSURED HOLDER		INSURED SUM		TO WHOME THE BENEFIT COVERAGE	COMMENTARIES	Minium Premium
	ACCEPTATION	CANCELATION	MINIMUM	MAXIMUM			
Basic Coverage (BAS)	15 - 70	To Conclude the use of the Policy	10,000	Limit of Normativity	HOLDER		Annual premium > 240 Monthly Premium > 20 Quarterly Premium > 10
Coverage of Accidental Death Triple Indemnification (TIBA)	15 - 65	70	0	$SA^{TIBA} \leq SA^{BAS}$	HOLDER		
coverage of exemption of payment of premiums by disability (BIT)	15 - 55	60		Sum of all the Premiums	HOLDER	Basic coverage and GFA	
Coverage of Funeral Expenses of the Holder (GFA)	15 - 70	To conclude the use of the policy.	25,000	75,000	HOLDER		
Coverage of returned death premium, before the 5th year of use (DPF6A20)	15 - 70	After 5 years beginning the use of the policy and its finishing will conclude the use of the policy	All the insured premiums of all the paid risk coverages until the moment of death.		HOLDER	In case of total and permanent Dissability this coverage will cancelled automatically. Contributions for the investment fund are not considered.	
Terminal Diseases (ET)	15 - 70	To conclude the use of the policy	$30\% SA^{(BAS)} \leq SA \leq 50\% SA^{(BAS)}$ con tope de 500 000 pesos		HOLDER	The insured chooses the percentage at the time of the claim. He has a period of delay for 180 days	
Provisional death coverage (CPMN)	15 - 70	To conclude the use of the policy.	Min. S.A. ó 500,000		HOLDER		
Excessive Premium (EXC)	15 - 70	To conclude the use of the [policy			HOLDER		

Discounts in age:	<b>Not applicable</b>
	Since they have differentiated tariffs by sex and habits.

## PP99, PV99 y PT20

COVERAGE	AGES OF THE INSURED HOLDERS		ASSURED SUM		TO WHOME COVERAGE THE BENEFIT	COMMENTARIES
	ACCEPTATION	CANCELATION	MINIMUM	MAXIMUM		
Basic Coverage(BAS)	15 - 70	To conclude the use of the policy	1,000	Limit of Normativity	HOLDER	
Coverage of Spouse(CC)	F 15 - 65 M 15 - 70	To Conclude the use if the policy	$SA_{\delta}^{Cony} = 25\% * SA_x^{Bas}$ $SA_{\delta}^{Cony}$ And $SA_{xc}^{CCom}$ they are excluding When the Spouse is the Complementary one as well		SPOUSE	
Coverage of accidental Death(CMA)	15 - 65	70	0	$SA^{Acc} \leq SA^{BAS}$	HOLDER	CMA y TIBA They are excluding
Coverage of indemnification by Dissability(CII)	15 - 55	60	0	$SA^{CII} \leq SA^{BAS}$	HOLDER	
Coverage of Accidental Triple Indemnification Death (TIBA)	15 - 65	70	0	$SA^{Acc} \leq SA^{BAS}$	HOLDER	CMA y TIBA They are excluding
Coverage of exemption of payment by Dissability Premiums(BIT)	15 - 55	60	0	Sum of the Premiums	HOLDER	
Complementary Coverage(Ccom)	15 - 70	To conclude the use of the policy	$SA_{xc}^{CCom} \leq SA_x^{Bas}$ $SA_{xc}^{CCom}$ and $SA_{\delta}^{Cony}$ they are excluding When the Spouse is the Complementary one as well $SA_{xc}^{CCom}$ and $SA_{\delta}^{GFH}$ they are excluding When a son > = 18 years is the complementary one as well		SPOUSE,PARENTS	Ccom and GFA are excluding When the insured of the additional benefits is the same one (complementary and funeral expenses of son or spouse) cannot have more than one coverage at the same time
Coverage of children Funeral Expences(GFH)	0 - 24	25	$SA^{GFH} \leq 60vsmm$		CHILDREN	The assured GFH Sum could not be greater to the assured basic sum
Spouse Funeral Expenses(GFC)	15 - 69	70	$SA^{GFC} \leq SA_x^{BAS}$		SPOUSE	
Coverage of Funeral Expenses of the Holder(GAF)	15 - 70	To Conclude the use of the Policy	0	$SA_x^{GFA} \leq 20\% * SA_x^{BAS}$ $SA_x^{GFA} \leq 60 vsmm$	HOLDER	Only for PP99
Advance payment for Terminal Disease (ET)	15 - 70	To Conclude the use of the policy		$30\% SA^{BAS}$	HOLDER	
Provisional coverage for Accidental Death by 60 days (CPMA)	15 - 70	Cancel after 60 days, at the request of the reception or the Emission, which occurs first.	1,000	$SA^{CPMA} \leq 200000$ $SA^{CPMA} \leq SA^{BAS}$	HOLDER	
Excessive Premium(EXC)	15 - 70	To Conclude the use of the policy.			HOLDER	

Discounts of Age:	Sex	Habit	Total
Men	0	Non Smoker	1
Women	3	Non Smoker	4