



FirstRand

GTSY FUNDING BUSINESS REQUIREMENTS DOCUMENT(BRD)

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1 INTRODUCTION

Given the planned decommission of Chameleon (the current funding solution for RMB), funding is scheduled to migrate to Murex. GTSY wholesale funding will be migrated to Murex following the successful migration of all FICC products. The proposed go live date is scheduled for March 2026.

This document details the high-level business requirements for GTSY funding.

2 BUSINESS CONTEXT

Business objectives driving the implementation for the GTSY funding solution on Murex are as follows.

- Enable decommissioning of the Chameleon application - currently used to record funding arrangements between business areas and GTSY.
- Migration from the current 'cash-based' funding approach where portfolio cash balances (TS accounts) are recorded in the RADA GL to a trade-based solution.
- Cash controls to ensure completeness and validity to be embedded in source system. Full attribution/detail on all events recorded at a portfolio level in the source system.
- Automated application of relevant FTP rates based on a GTSY ruleset to the underlying funding transactions (term & residual) – fully attributed into various components (base rate, liquidity premium).
- Common funding platform across RMB and GTSY, upfront transparency through real-time views.
- Decommission of RADA GL cash controls – ensure controls are run off operational platform rather than finance platform enabling business to expedite exception management.

3 GTSY FUNDING

3.1 The GTSY Funding Principles

The GTSY FTP framework has guiding principles to ensure funding is consistently and fairly applied across the FirstRand Group.

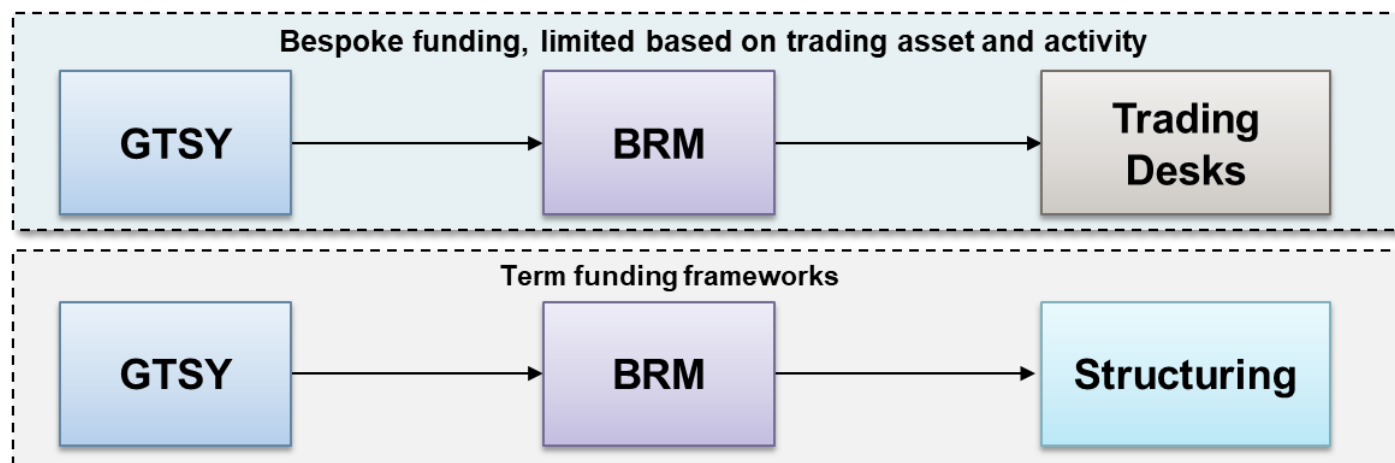
- The bank uses a fully funded model which means that all cash is FTP'd centrally.
- Retained earnings or residual cash earns the interdivisional funding rate (IDTRF, currently the SARB monetary policy rate).
- On default, funding obligations are extinguished at book value and capital is impaired.
- All funding exposures must be match-funded contractually - unless an approved funding arrangement is in place to determine a different expected run-off/sell-down or monetization of assets financed.

- Liquidity risk is housed and managed centrally unless a delegated mandate is in place with limits and reporting.
- All liquid assets should be under the control of the Treasurer in times of stress. Other assets with agreed funding arrangements, could be called for liquidity.

Funding & FTP principles for trading portfolios to recognize liquidity inherent in securities or stock purchased.

- Group Treasury have in place funding frameworks that determine how funding should be booked within limits, based on agreed budgets each year.
- MTM portfolios should exhibit no liquidity risk (measured by funding/repo PV01, a MTM measure), all open non-contracted risk should be hedged centrally through BRM.
- Trading activities have agreements in place based on underlying assets and liquidity characteristics.
- Structured funding (deposit) activities are match funded.
- Breakage is often done at curve based on quotes agreed between business area and GTSY.

RMB /GTSY Funding



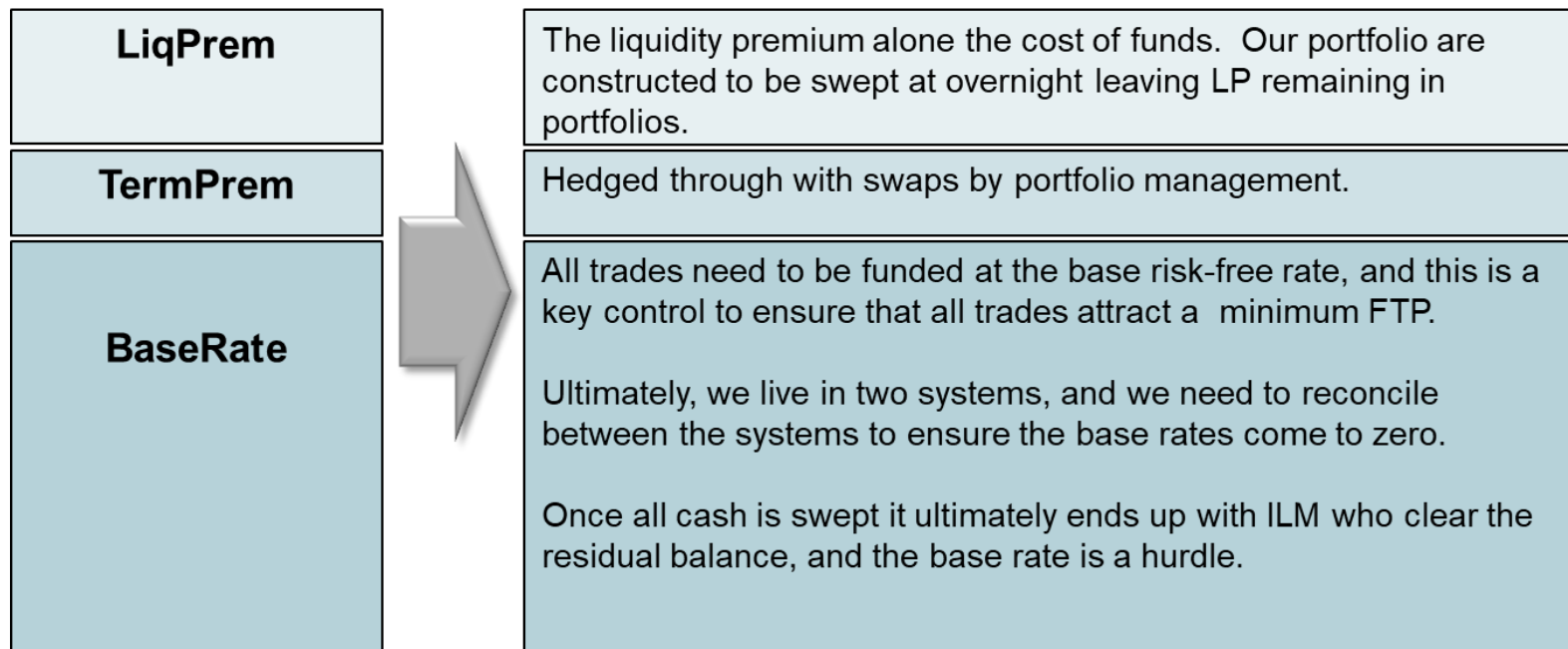
Funding and FTP principles for banking portfolios and selected Global Markets portfolios.

- Where funding frameworks do not apply, assets must be funded to term at the relevant funding curve.
- Approved funding arrangements for assets with differentiated liquidity characteristics may be booked to a different tenor.
- There is no breakage charged on accrual assets (Banking book). However, where assets are contracted at a fixed interest rate, GTSY would have a hedge in place and would have the gain/loss on the derivative. The FV of the derivative will define the breakage charged.

- No residual liquidity exposure should remain in asset portfolios.
- Basis risk should be transferred to Treasury unless a mandate exists to manage this basis.

Funding is arranged for risk, performance management and settlements in a way to ensure that it can be managed and tracked through our financials.

- The funding cost charge is segregated into the Base Rate, Term premium, and Liquidity premium.

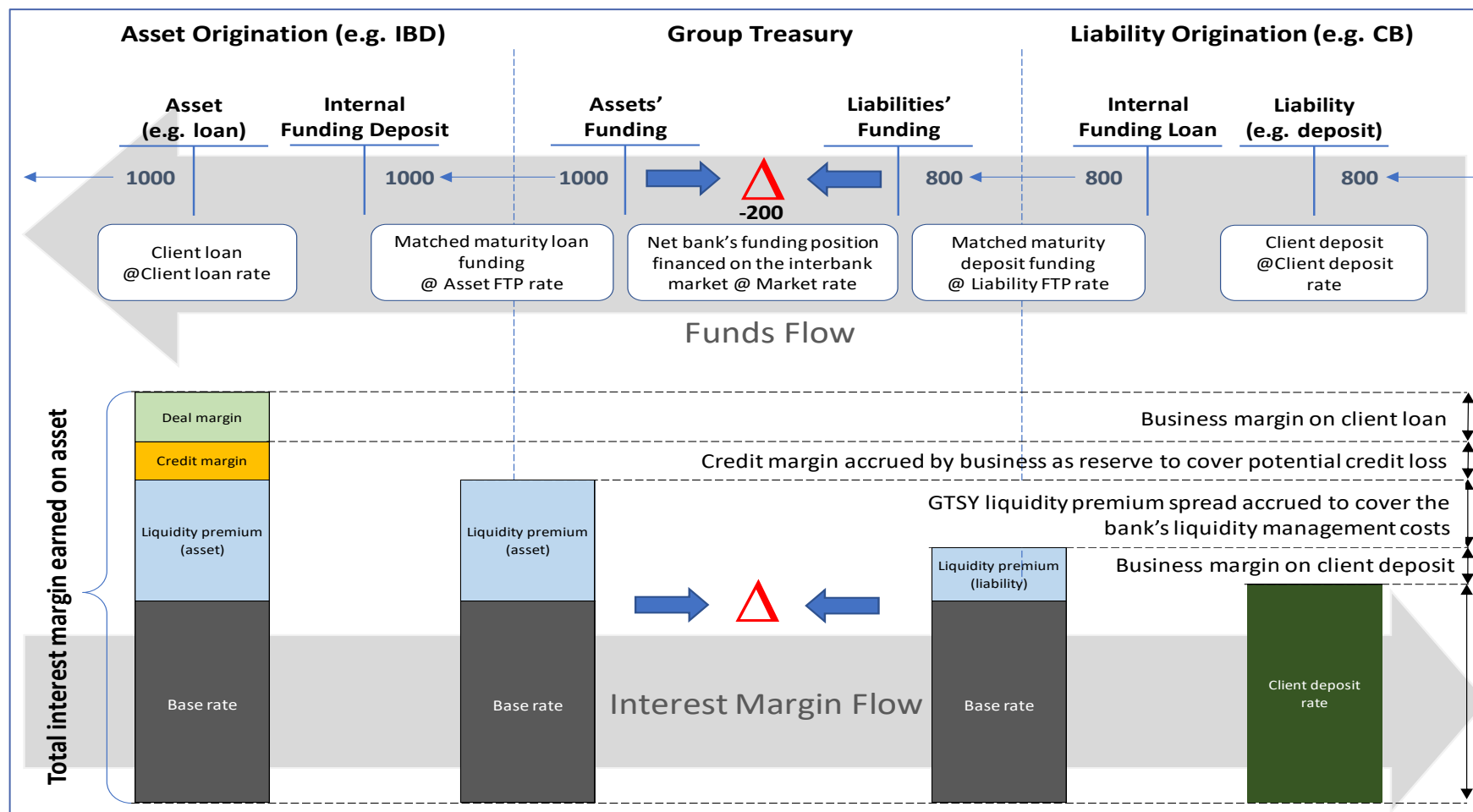


3.2 The GTSY Funding and FTP Business process

The high-level funding process is described below.

- The objective of GTSY's funding frameworks is to consolidate the bank's funding requirements and risk resulting from the underlying business areas, centrally. This allows Treasury to control and manage the bank's funding and maturity mismatch effectively, and efficiently.
- Pricing funding costs/benefits of bank's products/business lines, enabling the determination of the true profitability of these products/business lines.

The following diagram illustrates the funding & (FTP) mechanism:



All funds required for, or resulting from the provision of bank's products are sourced (for asset products) from / deposited (for liability products) with GTSY via internal loan and deposit transactions. GTSY underwrites the prices of the internal funding transactions by administering the liquidity premium curve used to price these transactions on top of the bank's base rate (interbank swap rate or repo/JIBAR), which together comprise the FTP rate.

GTSY maintains different liquidity premium curves for different products to reflect their specific impact on banks funding requirements (assets may exhibit differing liquidity characteristics, different currency requirements).

On the business side, FTP provides a base funding cost for pricing client products. For example:

- The FTP rate for liabilities provides a cap rate for client deposits – i.e. to realise a profit, the business may pay the client lower rate on their deposit.
- The FTP rate for assets provides a floor rate for client loans – i.e. the business must charge the client a higher rate to realise any profit. Moreover, for assets, this margin must provide for a credit risk implicit in the loan (credit margin), so to realise any profit, business must charge a client rate higher than FTP + credit margin and any other costs (capital, statutory costs, fixed and variable costs where applicable).

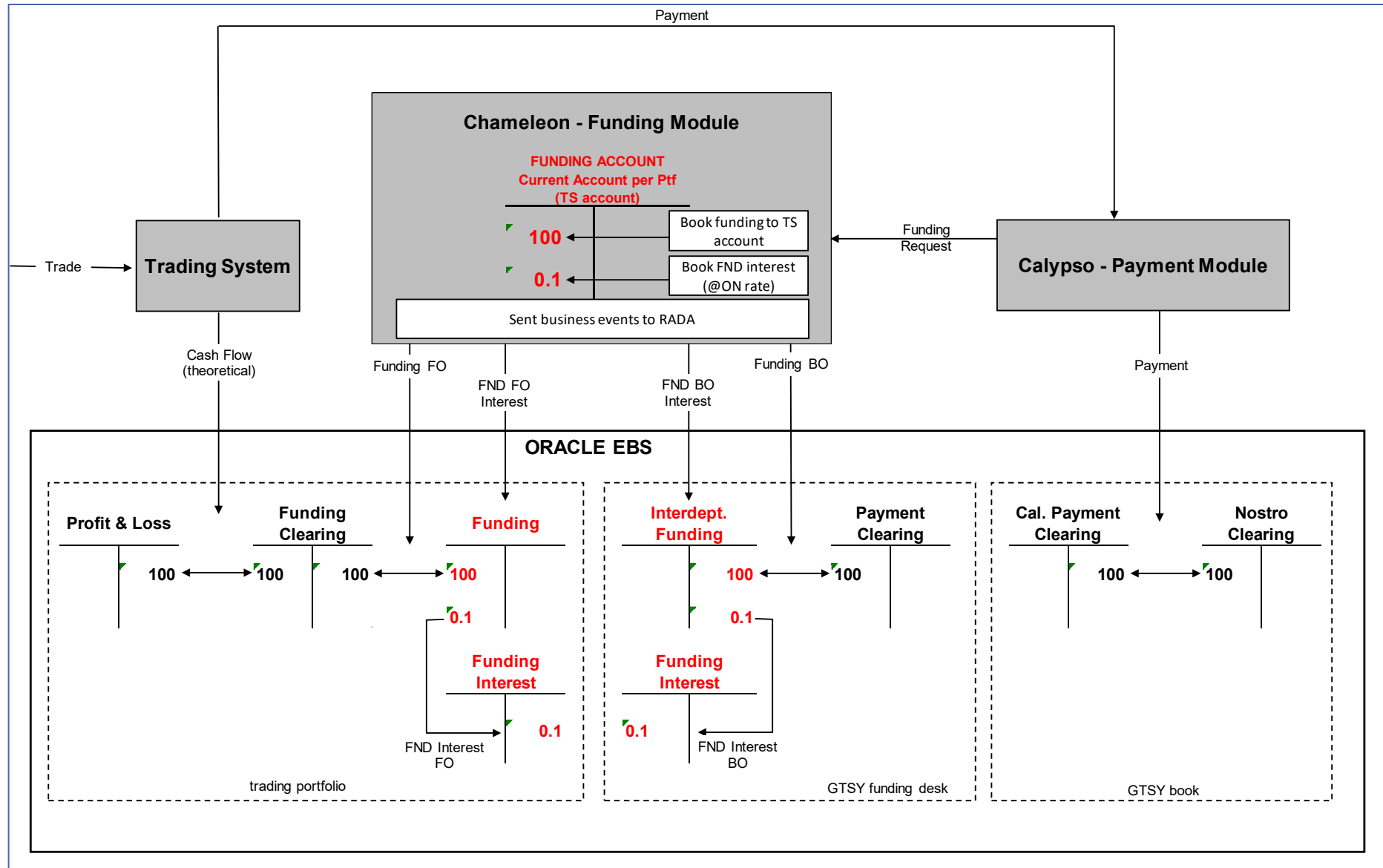
3.3 The Current Funding Solution

RMB currently uses a 'cash-based funding' approach to record funding. This funding mechanism requires that each portfolio has a dedicated funding account set up in Chameleon (the TS call account) which maintains the balance of the funds flowing from and into the portfolio, i.e. the portfolio funding balance. All settlements on the portfolio (internal and external) must be affected through the TS account.

A portfolio is charged / receives overnight funding interest on the end of day (EOD) TS balance, with the contra funding benefit / cost posted to the central GTSY funding portfolio. Funding interest is accrued throughout the month in Chameleon and capitalised at the end of each month. The portfolio funding balances are replicated in the RADA general ledger at EOD as internal balances. Once recorded at a business/portfolio level and the contra balance is recorded under GTSY Dept FND.

A 3-way funding reconciliation is run off the RADA GL to ensure completeness and validity of funding balances whereby the portfolio funding balance in Chameleon is compared to portfolio balance (front end) recorded in the RADA GL and to the contra balance recorded in Dept FND (back end). The daily RADA IM10 reconciliation control has been implemented to ensure completeness and validity of all funding events. This recon compares/matches portfolio cashflows to funding events processed to RADA GL via trade referencing.

Secondly, a daily RADA IM19 recon control has been implemented to ensure completeness of validity of funding events on back end dept FND. This recon compares/matches settlements to same funding events as above, processed to RADA GL under dept FND. This completes the circle and ensures all cashflows recorded at portfolio (internal or external) are fully reconciled to actual settlements recorded under GTSY department FND. The following diagram outlines current RMB residual cash funding solution in Chameleon cash funding and RADA GL.



Matched maturity funding or term funding is currently captured using the following process with all resultant internal flows settled via the portfolio's TS account and recorded in Chameleon.

- RMB GM term funding trades are manually captured on Murex using mirror deal functionality – this control ensures the matched but opposite term funding trade is recorded in the relevant GTSY funding portfolio and department.
- The relevant FTP rate is captured on the funding trade.
- There is currently no attribution of the FTP rate components (this is expected to be enabled with MX funding).
- For RMB IBD and TTS ZAR funding trades, term trades are captured on Chameleon and mirrored into GTSY funding portfolio at relevant FTP rate.
- For RMB IBD and TTS CCY funding trades, business is looking to leverage the Murex mirror deal business process.

4 FUNDING REQUIREMENTS

This chapter provides a general overview of the requirements of the Murex Funding solution.

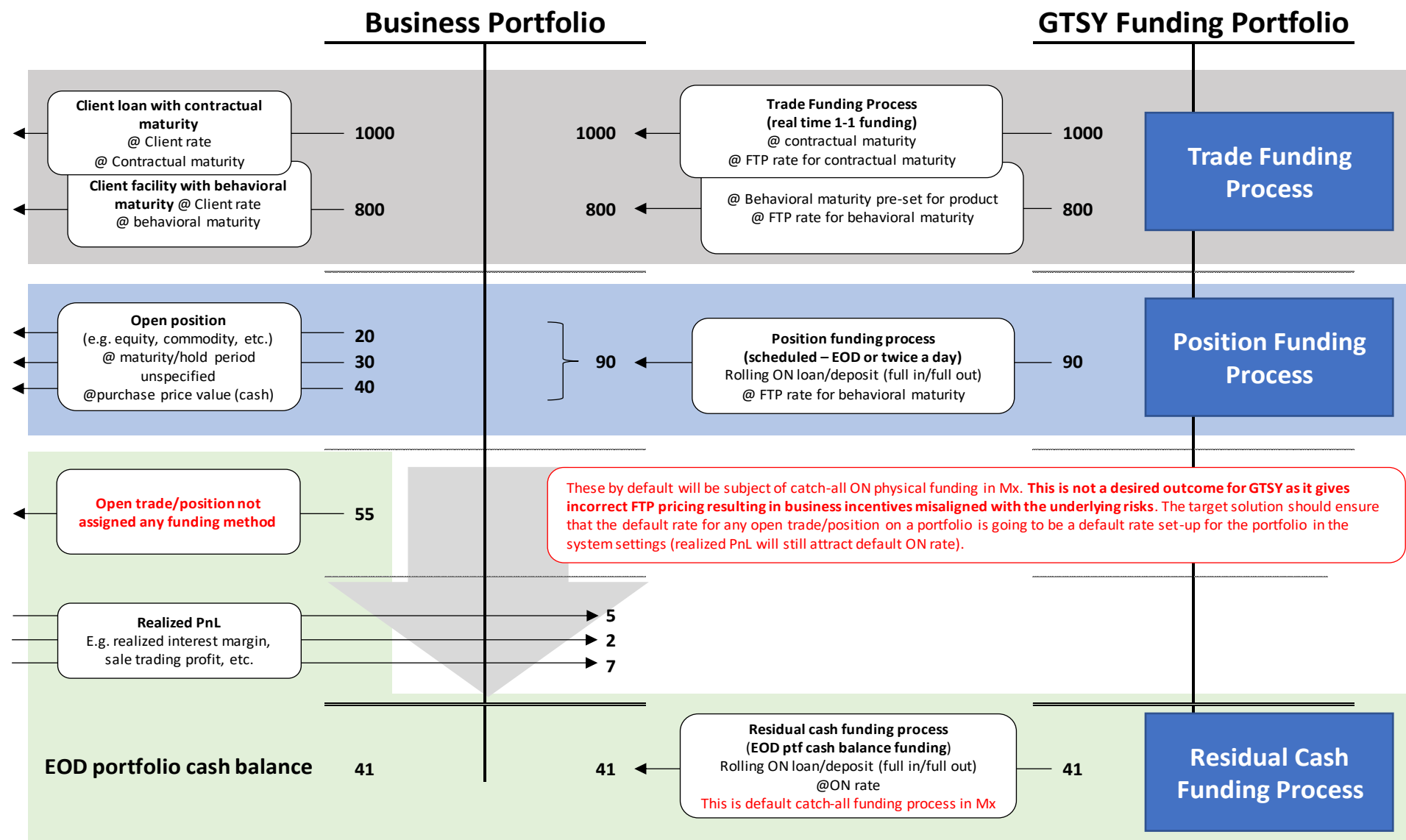
4.1 Funding Methods

The target business architecture shall enable the following funding processes for RMB GM, IBD and TTS.

- **Trade funding process:** Real time, 1 to 1 matched maturity funding process. The system is configured via portfolio business rules (we need to understand the functionality and the attributes funding can be assigned on) to automatically generate the requisite internal funding transaction with matching CF profile and maturity at an FTP rate corresponding to the underlying transaction maturity. Where there are no portfolio business rules, the funding term trade must be manually captured in Murex by relevant business area and mirrored into GTSY funding portfolio.
- **Position funding process:** Scheduled process that will run daily, prior to the residual funding process, which will fund at a predefined behavioural rate, open trading / banking portfolio positions, not captured by the trade funding process. For a definition of open trade banking positions please refer to the next section.
- **Residual cash funding process:** This funding process will be fully automated and runs at EOD, after trade and position funding processes are complete. The residual portfolio cash position will be funded at the overnight rate. This should only capture residual cash and not used for anything else.

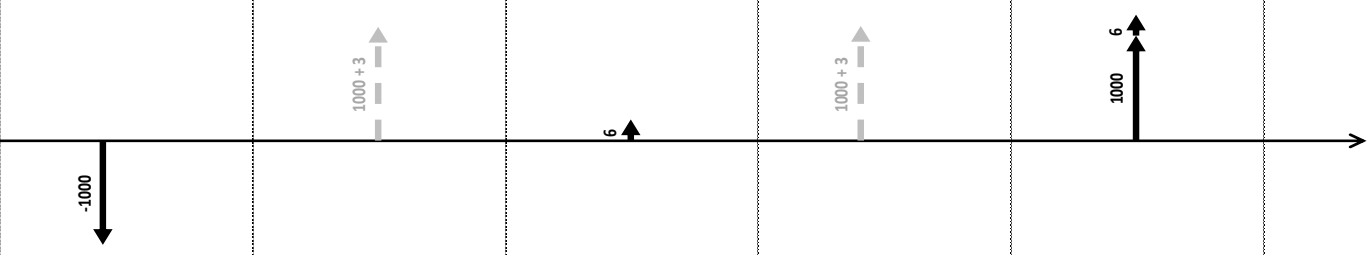
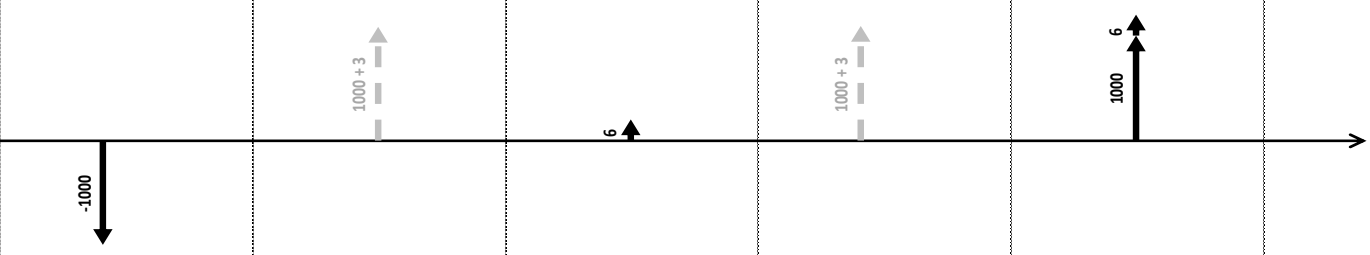
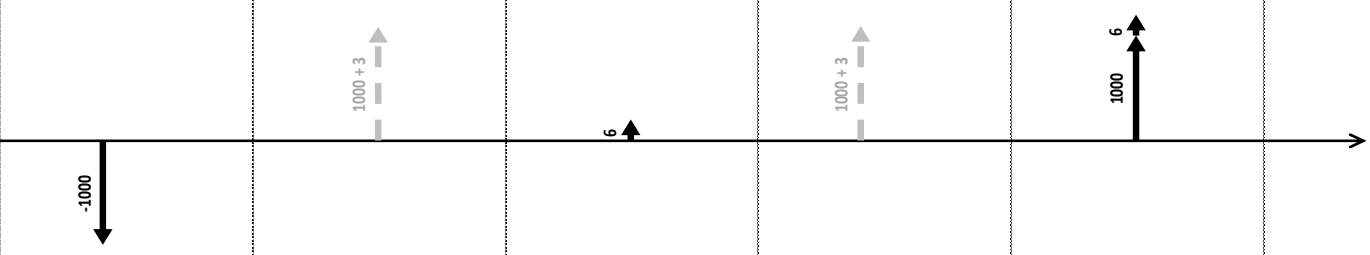
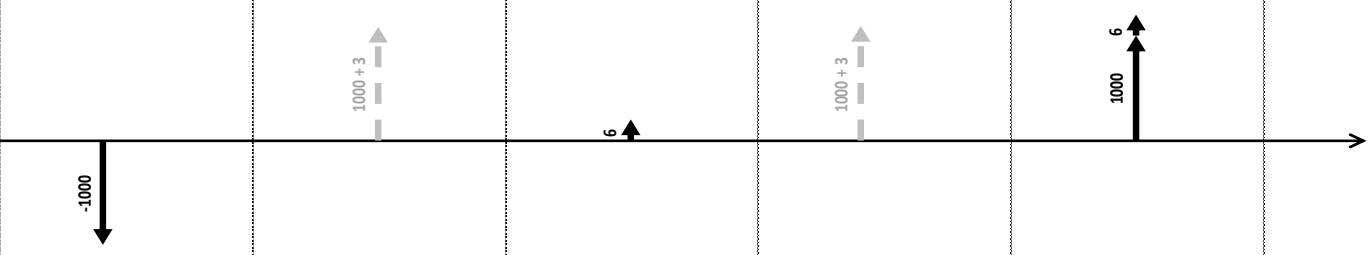
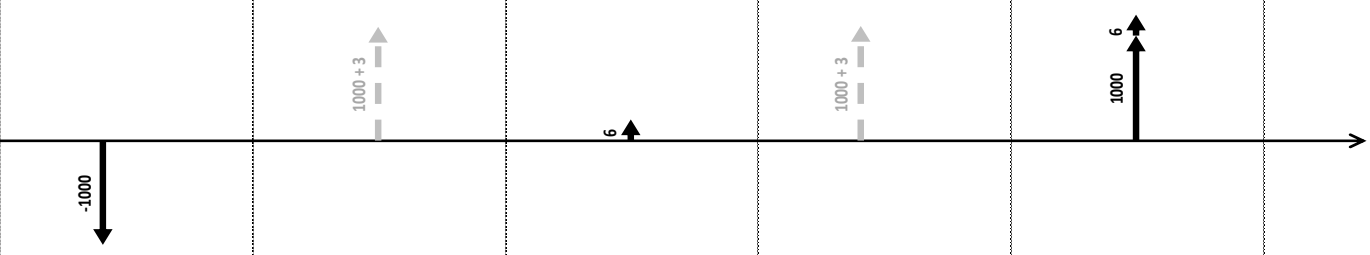
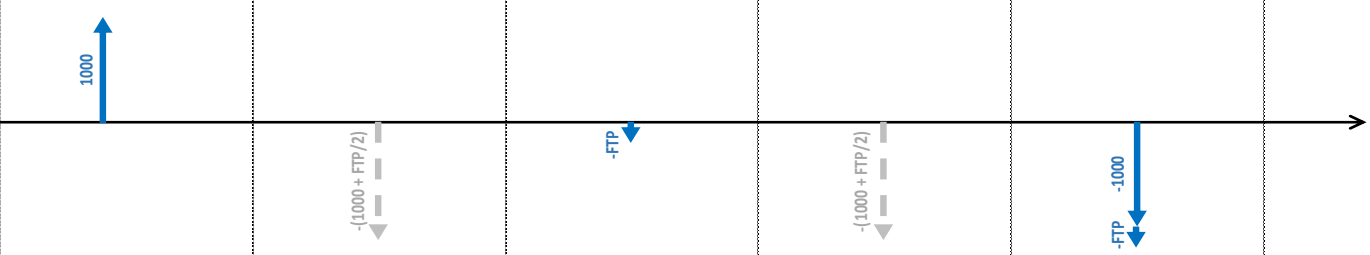
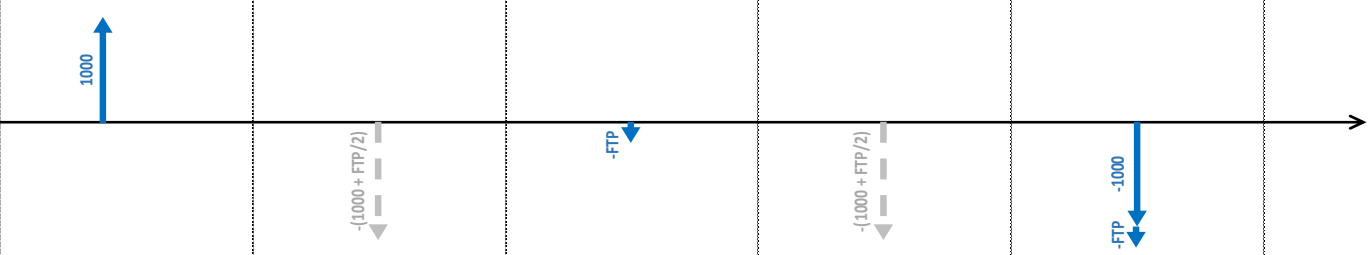
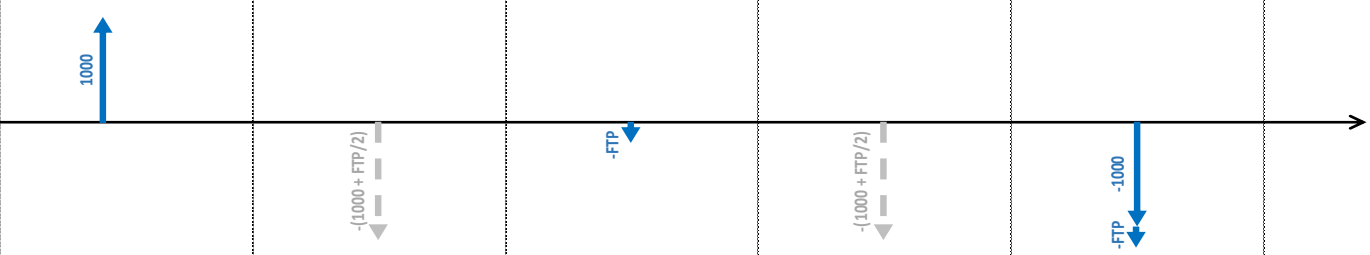
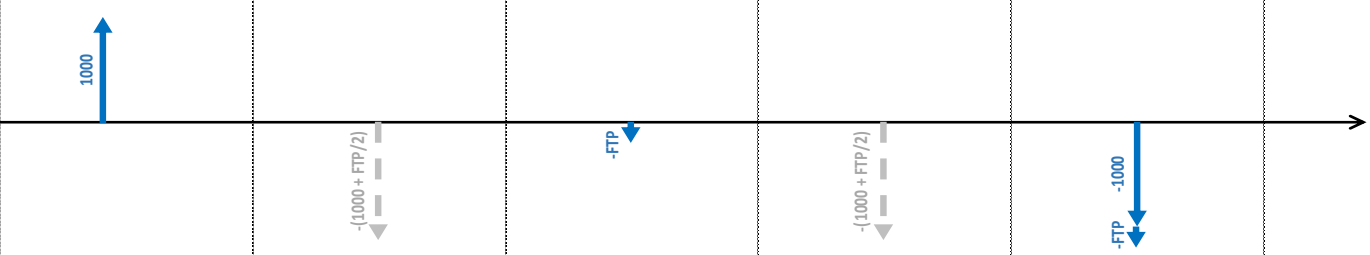
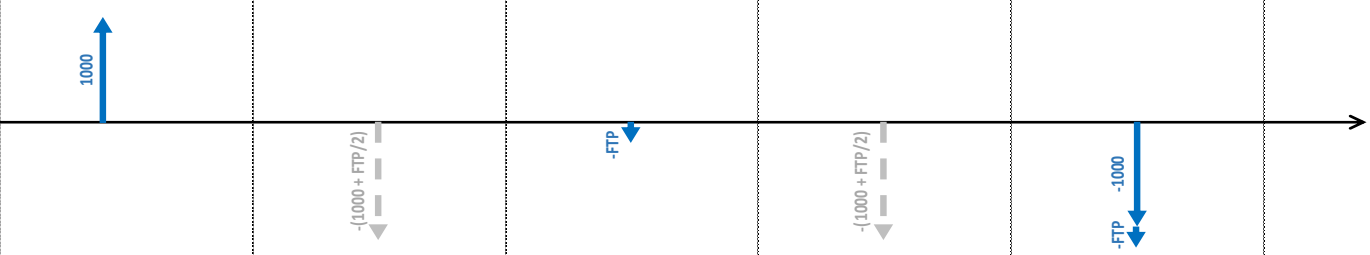
These processes run in a logical sequence, with the trade funding process running on a real time basis throughout the business day, followed by the position funding process at the EOD, which in turn will be followed by the residual cash funding process to cater for residual portfolio cash after the prior two processes have concluded (catch-all default funding). GTSY has a strong preference for an automated solution, that will ensure that all cash related to open positions attract the product appropriate FTP rate either through trade funding or by position funding, leaving residual cash funding to cater only for realised profits or losses. Term funding trades may also be manually captured by the relevant business area where no automated business rules are pre-configured at portfolio level. Manually captured trades need to be exceptions and well understood why no rule is in place.

The three funding processes are outlined in the diagram below:



4.1.1 Trade funding process

The real time, 1 to 1 matched maturity funding process generates an internal funding transaction, with a matching CF profile of the underlying transaction and is booked at an FTP rate corresponding to the underlying transaction maturity. This mirror trade is posted automatically to the GTSY term funding portfolio. The system will use either contractual maturity of the underlying instrument, or a behavioural maturity set-up for that instrument/portfolio combination. These term funding trades can be automated based on business rules set at a portfolio level. The term trades can also be manually captured via mirror deal functionality with the contra booked in GTSY portfolio. This is the only process of the three funding processes executed on a 1-1 basis, where the cashflow profile / maturity of the underlying trade determines the FTP price. The following illustrates the trade funding process:


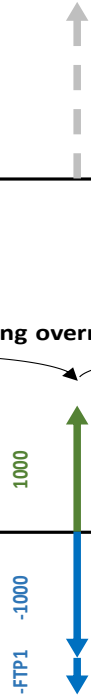
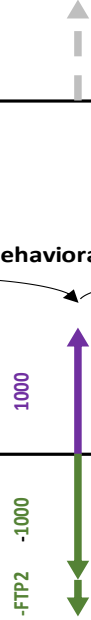

	Drawdown date	3 months	6 months	9 months	12 months
	Drawdown of loan R1000	Accrued value of the loan R1003	Interest paid R6	Accrued value of the loan R1003	Repayment of the loan R1006
					
Funding matching trade 1-1, including matching cashflow profile and maturity (contractual or behavioral) @ corresponding FTP rate					
					
Open trade position (pre fnding)	-1000	-1000	-1000	-1000	0
Unrealized PnL	0	$3 - \text{FTP}/2$	0	$3 - \text{FTP}/2$	0
Realized PnL	0	0	$6 - \text{FTP}$	$6 - \text{FTP}$	$12 - 2 * \text{FTP}$
Residual cash** (post funding)	0	0	$6 - \text{FTP}$	$6 - \text{FTP}$	$12 - 2 * \text{FTP}$

**Any residual cash left over after the trade funding process above will be subject to the EOD residual cash funding process. PnL resulting from that process is not reflected in the table above

4.1.2 Position Funding

This is an EOD process which will fund positions at a predefined behavioural rate. This process will apply to open trading/banking portfolio positions which are not already funded via the trade funding process. This process funds cash related to open positions, which includes nominal/capital settlements (e.g. settled purchase of open bond positions, drawdown of a loan, etc.), but excludes realised PnL cashflows. The system will aggregate all open cash positions for each pre-determined combination of portfolio/instrument at EOD, and automatically generates the requisite rolling overnight funding transaction at an FTP rate corresponding to the behavioural maturity determined for that portfolio/instrument combination in the system.

In principle this is the same funding method as residual cash funding, where funding is rolled over every night between portfolio and GTSY via overnight funding deposits/loans. However, the key difference is the FTP rate used, where residual cash funding always uses only the overnight funding rate (repo rate), position funding enables pricing aligned to the behaviour of the underlying portfolio. As such, GTSY prefers to use this method for open cash positions that weren't catered for by trade funding, as it more realistically prices the actual funding costs incurred. The following example illustrates the position funding process:

	Day 1	Day 2	Day 3	Day 4
	Purchase of position for R1000	Market value of position at 1400	Market value of position at 800	Sale of position for R1200
				
	Rolling overnight funding @ behavioral FTP rate			
Open position* (pre funding)	-1000	-1000	-1000	0
Unrealized PnL	0	400	-200	0
Realized PnL	0	-FTP1	-(FTP1+FTP2)	200 - (FTP1+FTP2+FTP3)
Residual EOD cash** (post funding)	0	-FTP1	-(FTP1+FTP2)	200 - (FTP1+FTP2+FTP3)

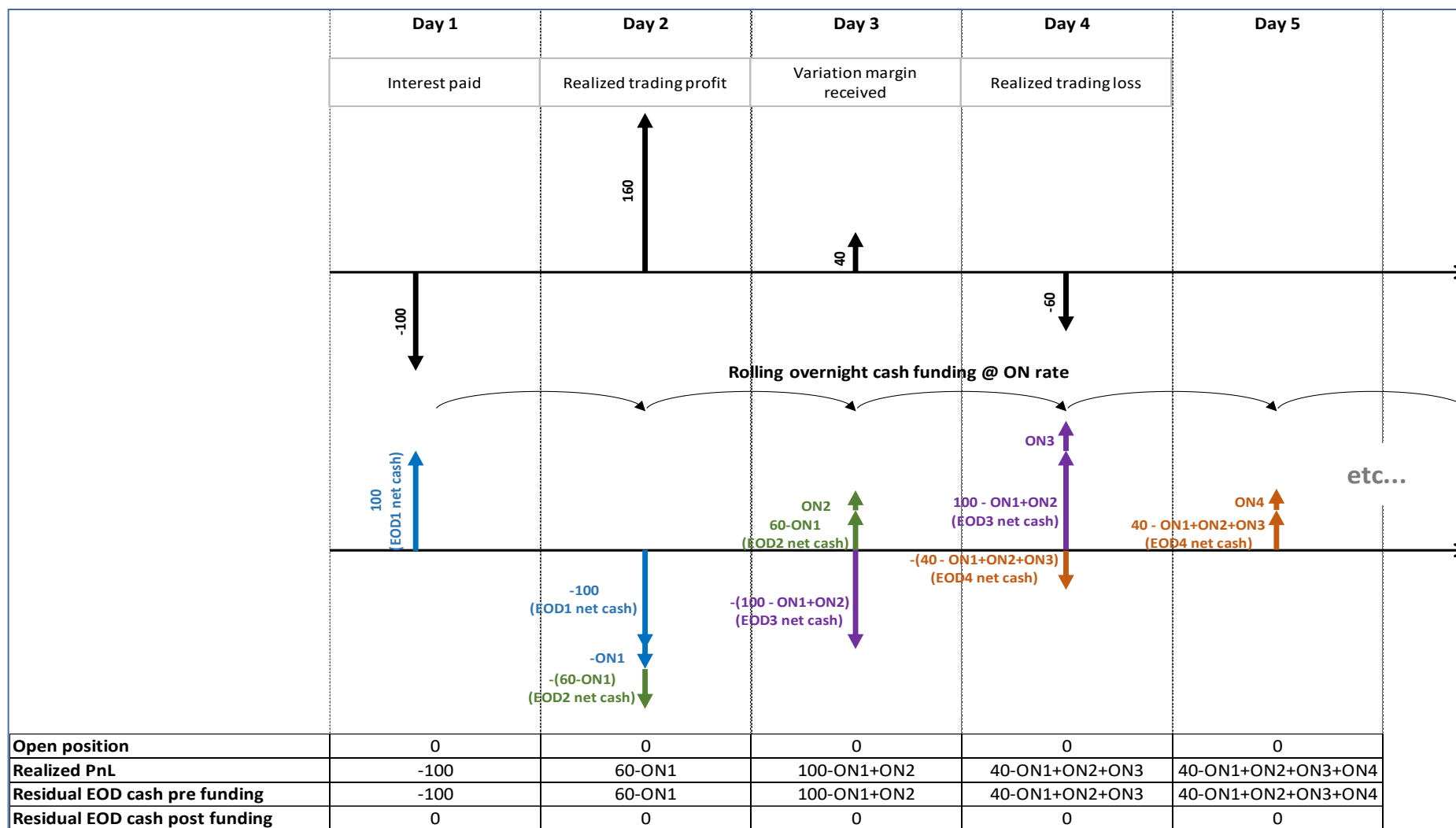
* The example above works with stable open position over the depicted period. In real world the open position may change every day and the funding will always reflect the up to date EOD open position on the portfolio.

**Any residual cash left over after the trade funding process above will be subject to the EOD residual cash funding process. PnL resulting from that process is not reflected in the table above.

4.1.3 Residual cash funding

This is a requisite and default funding process that will run at EOD following the position funding process. All residual cash left over after the trade funding and position funding processes have been run will attract the overnight funding rate (currently repo). This is a default catch all method in Murex, i.e. if the prior two processes are not activated for a portfolio, all cash on that portfolio will be funded via the residual cash funding process. Hence, the overnight rate is the default funding rate in Murex.

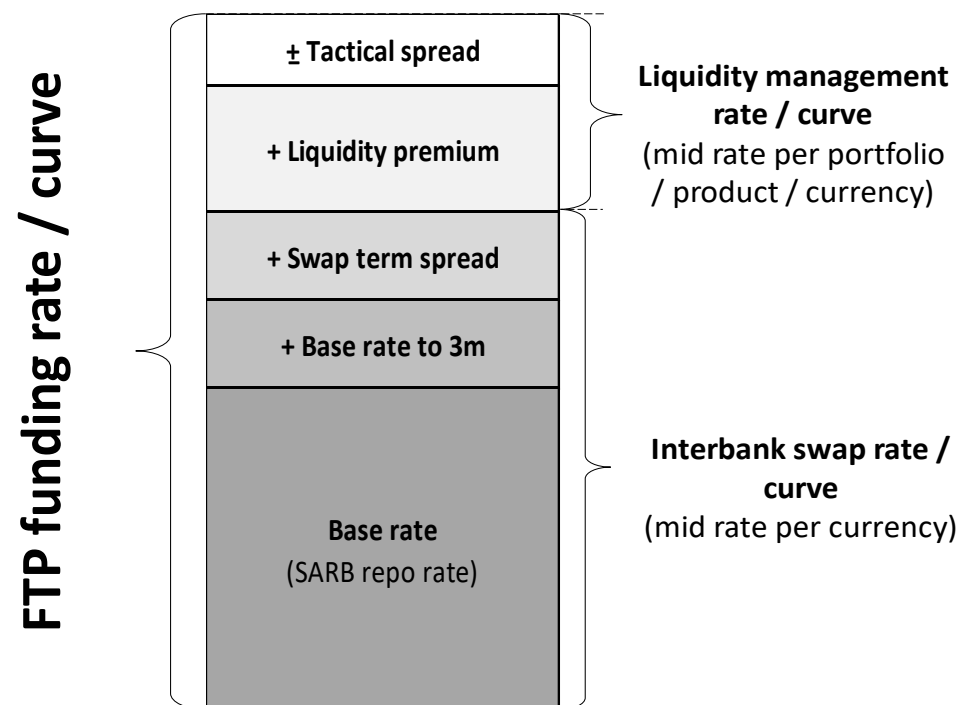
GTSY prefers to use this method to fund realised profits or losses (unless specified differently) and all other cash to be funded either via trade funding or position funding at the contractual / behavioural rates. The following example illustrates the residual cash funding process:



Note: While the process above is in principle similar to the current 'cash-based' funding on TS account in Chameleon, insofar as the position is charged or receives the overnight funding rate for an overnight cash position, there is one important distinction. Murex will capture a new overnight funding deposit / loan between each business portfolio and the GTSY residual funding portfolio daily. The funding interest will be capitalised daily in Murex (as part of funding transaction settlement), instead of the current monthly interest capitalisation in Chameleon.

4.2 FTP rate / curve

The matched maturity funding method is based on FTP rates / curves that are administered by GTSY Funding and Liquidity. To manage the bank's liquidity requirements, GTSY must be able to apply **specific FTP rates / curves per each unique combination of instrument, portfolio, and currency**. As a principle, each asset / liability will be funded in the currency of the underlying. The following diagram outlines RMB funding rate/curve and its components:



The FTP funding rate / curve comprises the following components:

- **Base rate:** The market interest rate matching the reset maturity of the asset/liability. Depending on the embedded interest rate reset the base rate may be set as one of the following:
 - SARB repo rate for overnight resetting instruments
 - 3m-JIBAR for assets resetting quarterly swap for example. This includes the repo to 3m-Jibar basis. This is due to change with following the adoption of ZARONIA.

- Term swap rate for the applicable fixed tenor of the underlying. The rate is determined using the cash flow profile of the underlying from the appropriate swap rate curve. GTSY will use one swap rate / curve (mid-rate) per currency for FTP curve construction. Two base currency interbank swap rates / curves will be set-up – one for ZAR and one for USD. Other currency rates / curves will be derived from USD rates using the appropriate FX swap. Following the implementation of ZARONIA, ZAR swaps will be adjusted accordingly – the principles should follow though, just with different curves.
- **Liquidity spread / curve:** The spread over the relevant base rate charged or rewarded based on the liquidity characteristics of the underlying asset/liability. GTSY will manage this curve and it will consist of two components:
 - Liquidity premium (LP): covering standard liquidity characteristics of asset/liability (maturity, HQLA, etc.). Different liquidity premium rates/curves can be set-up for different products (e.g. different types of assets), portfolios and currencies.
 - Tactical spread: from time to time on ad-hoc basis GTSY may use tactical spread to incentivize target risk profile.
- Statutory charges are not going to be part of the FTP rate/curve and will be calculated and charged out to business units by GTSY monthly in a separate process.

The general principles guiding the FTP curve construction include:

- GTSY will leverage interbank swap curves maintained by GM. To construct the FTP curve, GTSY will always use the mid-rate from these curves as a base funding rate regardless of the underlying trade/position direction (buy/sell).
- The Liquidity Premium (LP) curve will be administered by GTSY. GTSY will set-up all LP curves as mid curves, with bid/offer bps specified for each curve. Bid/offer LP rates will be used for the FTP pricing on top of the applicable base rate (always mid).

GTSY will maintain specific LP curves for difference currencies as follows:

- ZAR: Dedicated set of LP curves for ZAR
- USD: Dedicated set of LP curves for USD
- Other than USD (RMB mostly trades G8 currencies): System will generate FTP rate for other currencies on the fly off the USD curve applying up to date FX Swap rates between the underlying currency and USD. Apart from USD, system will not physically maintain curves for FCCY currencies.
- African currencies from RMB subsidiaries/branches: *FTP curves for these currencies will not be maintained in Murex. These subsidiaries/branches source/deposit their funding deficit/surplus directly with GM at the prevailing market rates. These currencies will not be managed by GTSY.*

For each currency GTSY will maintain the following set of LP curves:

- **Unsecured LP curves:** these will be used for non-HQLA products. GTSY will use three non-secured LP curves:
 - Asset LP curve to price unsecured assets (non-HQLA)
 - Liability LP curve to price unsecured liabilities (non-HQLA)
 - Derivative funding curve (FVA curve) – to price derivative funding.
- **Secured LP curves:** these will be used for HQLA assets.
 - ZAR HQLA assets: RMB holds levels (1 to 4) of quality of HQLA assets in ZAR. Each level will have its own LP curve.
 - USD HQLA assets: RMB currently holds 2 levels of quality of HQLA assets in USD. Each level will have its own LP curve.

Key requirement: the FTP curves used for pricing of the funding leg, will also be used for MTM revaluation (discounting) of the funding leg throughout its lifecycle – unless specified differently.

5 OPERATIONAL REQUIREMENTS

5.1 Control Principles

- All portfolio funding trades (term, position, and residual) are mirrored into the GTSY funding portfolios unless there is a delegated mandate within limits. (GM Funding Desk).
- All funding types and processes are consistently applied on the Murex platform.
- All trades captured on Murex FO must be settled via Murex BO and flow to RADA GL.
- To ensure completeness and validity of settlements, all Murex FO cashflows (Assumed) must be reconciled to Murex BO settlements (Actual).
- All portfolio positions are fully funded via the relevant funding process at close of business each day. An audit trail of cash movements represented at a portfolio level is required.
- All asset classes to be funded with relevant funding instrument. For example, bonds need to be funded in the repo instrument. Residual balances funded overnight with GTSY.
- Operational controls ensuring completeness of cash and funding are enabled in Murex. This is a departure from the current control architecture whereby operational recons (IM10 & IM19) are run off RADA GL. Financial controls are required to record the results of operational controls in RADA GL.
- Operational controls to differentiate between external and internal settlements. Net daily settlements to be reconciled to net funding on Murex.
- On go live, all Murex portfolios cash positions aligned to SMT TS balances and converted to overnight trade with GTSY for day 1 PL.
- All funding processes to be automated via business rules.

5.2 Process and Controls

The overall daily control required-is to ensure Murex FO module is fully reconciled to Murex BO module and RADA GL, from position and cash perspective. *This control is in the process of being implemented and will be deployed before funding go live.*

5.2.1 Cash Controls

An **operational cash recon** is required daily using Murex, whereby trade cashflows from the Murex FO module is reconciled to the corresponding settlement from the Murex BO module. The cashflows and settlements will be processed to RADA GL, with the current GL recon process discontinued. The Murex operational recon thus includes a control to ensure alignment to RADA GL balances.

Given the volume of internal trading and mirror deal functionality, it is proposed the internal settlements are split from external settlements recon with separate GTSY RADA GL accounts respectively. Internal and external settlements to be processed to separate RADA GL accounts on GTSY balance sheet - with controls to ensure aligned to underlying operational recons. In addition, a **funding recon** will also be required from Murex, whereby daily settlements (internal and external) are fully reconciled to daily net funding on Murex. The system controls to facilitate different perspectives to ensure the recon can be run at a portfolio level, department, and at a consolidated level for GTSY. These controls should be automated and flag any exceptions.

5.2.2 GTSY funding portfolios

All internal funding trades with business will be mirrored to GTSY portfolios. To facilitate segregation and review, 3 new portfolios are proposed under GTSY, **Term, Position and Residual** to mirror the proposed funding processes. The key controls for funding include mirror deal functionality so all funding deals are aligned between business and GTSY. All deal amendments are thus automatically updated on the GTSY contra trade. Also as articulated above, all funding processes are required to be automated as far as possible utilising business rules set at a portfolio level. Monitoring of residual funding needs to be carefully monitored to ensure that portfolios are funded correctly. Residual funding should never be too large unless there are large retained earnings.

Where the funding mandate has been delegated to RMB GM (BRM desk), funding processes must be uniformly applied across the platform, within the same control framework. Under this scenario, GM would also set up term, position and residual funding portfolios which serve as an aggregation point for all portfolios funded under the RMB GM mandate. The net funding position would then be booked against GTSY to ensure all square at end of each day.

All FTP charges must be fully attributed by Murex and clearly differentiate between components like liquidity premium.

5.2.3 Clear funding (Capital Sweep)

At the end of the financial year (30 June), all portfolio profits/losses are swept via non-reversing trades to the GTSY capital portfolio. This business process is currently run annually in July and must be fully reconciled to reported profits. The sweep is processed in July once business unit financials have been finalized. The clear funding trade must be differentiated from other funding types with no interest rate attached. The profits swept to the GTSY capital portfolio follow the originating portfolio's accounting designation (MTM or Accrual).

6 RMB GLOBAL MARKETS (GM)

Consistent with GTSY's requirements, 3 funding methods (term, position & residual) are required for GM to ensure all portfolios are fully funded. All GM assets are funded via the BRM desk, except for derivatives.

The FX business is largely "self-funded" as all customer FX trades are hedged internally with the RMB FX IB desk. The RMB FX IB bank desk has a mandate to manage the net FX exposures. Any net USD funding requirement is sourced or placed with GTSY ILM desk.

All portfolio residual cash positions need to be swept and funded directly with GTSY residual funding portfolio.

6.1 Funding Requirements

The following funding principles underpin all the MX funding requirements for GM:

- Ability to manage and report on all marketable instrument positions.
- GTSY Funding and Liquidity management must have visibility and 'control' of all trades funded using HQLA curves.
- All residual cash positions are swept to the GTSY residual cash portfolio.
- All funding processes and workflow must be automated as far as possible.

6.1.1 Money Market desk (GTSY)

The Money Market desk trades Treasury Bills, and issues Negotiable Certificates of Deposit (NCD's) and Floating Rate Notes (FRN's) on behalf of GTSY to raise funding. The desk is mandated by the bank to conduct market activity for South African T-bills and commercial paper. This activity includes both primary and secondary market trading.

- Position funding trades are booked between relevant business & GTSY funding portfolio.
- Position funding trades and workflow between business portfolios and GTSY to be automated.
- Typically, a net position funding trade is booked per tranche or deal.

6.1.2 Repo desk

The GM fixed income desk trades South African Government Bonds, Currency Bonds and Corporate Bonds. The desk largely funds all GM bond portfolios – only the net position is funded via GTSY ILM desk.

- Repo desk trades repos (Sell and Buy Back) / reverse repos (Buy and Sell backs) in the market.
- Bonds owned outright (longs and shorts) by the trading desks are repo'd to the Repo desk via a trade sweeping process. These are then funded by the repo desk either in the market or with GTSY. This covers both SA government and SA corporate bonds.
- The repo desk will cover all short positions for the trading desks either in the market or by borrowing bonds from GTSY.
- Once trading concludes (for all 3 trades above) the net position, per asset is booked and captured by BRM.
- BRM books the net position with the GTSY ILM desk, typically less than a year in duration.
- The BRM desk captures mirror trades into the following GTSY portfolios and pricing automated where possible:

- Bond Buffer – Core 1 assets.
- Bond Optimise – Core 2 assets.
- Bond Wallet – Corporate Bonds.

6.1.3 Equities desk

RMB interacts with the equities market through two brokers, each with specific mandates. These are the GM Equities desk (RST – RMB Securities) and the RMB Morgan Stanley Joint Venture (RMB MS JV).

- Position funding trades are booked between relevant business portfolios and the BRM desk at the relevant rate.
- The assets funded are held in a custody account.
- GTSY have an agreement with both desks whereby assets may be liquidated at any point should the need arise.

6.1.4 Gold

The gold desk trades gold, gold loans and gold consignments. The desk also holds propriety position for the bank.

- Funding trades are booked between relevant gold portfolios and the BRM desk & GTSY.
- Funding trades are typically position funding trades.
- The funding process and workflow must be automated where possible.

6.1.5 Secured Funding desk

The role of this desk is to optimize the current pool of collateral through any available means.

- Funding trades are captured between relevant business portfolios and the BRM desk and GTSY.
- Funding trades include position and term funding trades.
- The funding process and workflow must be automated where possible.

6.1.6 FX Trading

The RMB FX desk participates and trades in the number of international FX markets. FX products include spot, forwards, FX swaps and FX derivatives.

The FX business is largely self-funded via FX risk transfer process between FX customer dealing and FX IB portfolios. The net funding position under the FX IB portfolio is funded with the GTSY ILM desk at close of business each day. This funding trade is booked as USD with ILM desk, usually through an FX Forward but funding trades in each currency would be better. This EOD process is automated.

7 RMB CORPORATE & INVESTMENT BANKING

7.1 Funding Business Processes

The Corporate and Investment banking funding processes are summarized in the table below. Under the current business process, ZAR term funding trades are captured in Chameleon. CCY term trades are captured in Chameleon but will be migrated to Murex during Q1 2025 and mirror to GTSY term funding portfolios. The RMB team is currently documenting the target business architecture and the implementation roadmap and will be published Q1 2025. Once the C&I funding roadmap has been published and circulated to stakeholders the requisite governance would be put in place under the GTSY Funding program and implemented under phase 2. This BRD is relevant for the GTSY/RMB GM murex funding enablement and is referred to as phase 1.

IBD&TTS Funding Solution – Product Allocation to Funding Principles 2024

	Matched Maturity Funding (1 instrument)	*ST Behavioural Funding– (Known profile)	Open Position Funding (No defined profile)	Residual Cash Funding
	<ul style="list-style-type: none"> Matched but inverted cashflow profile between Asset and Funding Matched for the LIFE of the DEAL 	<ul style="list-style-type: none"> Deal is priced with a rate based on the behaviour of the client Booked on client profile (typically shorter, rolling draws) Matched for the LIFE of the DEAL 	<ul style="list-style-type: none"> No pre-defined cashflow profile Each instrument has assigned behavioral maturity based on analysis of 'stickiness' of its capital. Fund overnight open capital cash position for each instrument using FTP rate corresponding to the behavioral maturity. 	<ul style="list-style-type: none"> Funds overnight and @ overnight any residual cash left on a portfolio / deal at the end of the day Realised PnL
Products	<ul style="list-style-type: none"> Pref Shares Fixed Rate Loans Infrastructure Loans REIB Development Loans CPI Loans HQLA portfolio Non-Zar book *Step-Up Behavioural funded LT deals (Zar) Client Term Deposit Equity (Fund, Listed, Unlisted, BPref) – rolling 3y point ? 	<ul style="list-style-type: none"> ACBS ST Lending Behavioural funding tenor deals e.g working Cap, CMA *Pref Call Reserve Accounts (TBC) Money Market deposits (Hogan) GBF Call (notice) Loans booked as Overnight Call Accounts (Chameleon) Call (notice) Deposits booked as Overnight Call Accounts (Chameleon) Working Cap 		Any residual cash left on a portfolio / deal at the end of the day (Interest Margin)– realised cash
Target Capability	Present: CCY Mirrors in MX, ZAR TS + FTP recovery Interim (until '26/'27): CCY Mirrors in MX, ZAR Chameleon Mirrors, Target: CCY + ZAR Mirrors in MX		Present: Chameleon TS account + FTP monthly journal process Target ('27) : Mx Call Accounts ? Capability doesn't exist for currency (TS)	Present: Chameleon TS account Interim: Chameleon TS account Target ('27) : Murex Residual Funding-Mirror overnight rolling trades
Funding Principles	<ul style="list-style-type: none"> Immunised Funding per Deal No Back dating of Funding Funding Interest must be serviced even if the Asset is in a Past Due . Not a requirement for compounding on Funding even though we allow for this on the Asset. 			

❖ No specific solution has been agreed for RMBIA, MIPiNguza, iVuzi, APM etc. platforms as yet. There is a dependency on the platform design for floating rate notes, CLNs, bonds etc.

8 APPENDIX

The table below provides a high-level summary of the primary business use cases for reference. The use cases can be used in preparation for detailed business design sessions for RMB GM and GTSY business areas.

8.1 Funding Process

Type	Business Area	Business Process	Requirements
Term Funding	GTSY /RMB GM	Mirror term funding trade between 2 portfolios	1.Mirror trades to be captured manually or based on automated business rules set at a portfolio level. Trade captured under relevant business portfolio to mirror into TSY term portfolio. 2. Reference correct funding curve and funding rate. Trade rate can be fully attributed. 3. Funding trade to match maturity and cashflow profile of underlying transaction 4. Generate MTM and accrual values
Position Funding	GTSY /RMB GM	Mirror position funding trade between 2 portfolios	1.Mirror trade to be captured manually or based on business rules set at a portfolio level. Trade captured under relevant business portfolio to mirror into TSY term portfolio. 2. Reference correct funding curve and funding rate. Trade rate can be fully attributed. 3. Generate MTM and accrual values
Residual Funding	GTSY/RMB GM	EOD cash sweep of all live portfolio residual cash positions and mirror overnight trades into GTSY residual funding portfolio	1.EOD process and generate trade in each business portfolio and mirror into GTSY residual funding portfolio. 2. Reference correct funding curve and ensure all trades booked at overnight rate 3. Generate MTM and accrual values
Retained Income Sweep	GTSY/RMB GM	End of year process where all profits are swept to GTSY capital portfolio	1.Business process run at end of financial year and requirement to sweep all portfolio profit and losses from portfolio to GTSY capital portfolio 2. Non reversing trade with no maturity date. 3. profit weep based on portfolio accounting designation – MTM or Accrual

8.2 FTP Curves

Type	Business Area	Business Process	Requirements
FTP Rates	GTSY /RMB GM	FTP curve/rates	<ol style="list-style-type: none"> 1.FTP curve to reference relevant swap curve in murex. 2. Add liquidity spread in murex to swap curve to generate funding curve 3. GTSY to maintain 2 LP curves in murex – ZAR & USD
FTP rate attribution	GTSY /RMB GM	FTP/rates	<ol style="list-style-type: none"> 1.Funding rates to be fully attributed for PL purposes 2. Liquidity premium to be attributed reported separately from swap rate
FTP rates	GTSY /RMB GM	LP Curves	<ol style="list-style-type: none"> 1. GTSY to maintain a secured and unsecured LP curves in murex with different spreads for assets and liabilities. 2.System will generate FTP rate for other currencies on the fly off the USD curve applying the FX Swap rate between the underlying currency and USD. Apart from USD, system will not physically maintain curves for FCCY currencies.

8.3 Operational Processes

Type	Business Area	Business Process	Requirements
Cash controls	GTSY/RMB	Operational Recon	1.Ensure completeness of cash in murex - operational recon comparing FO (assumed) to BO (actual) settlements
External /Internal flows	GSTY/RMB	Operational Recon	1. Differentiate between internal and external flows and reconcile separately 2. Net external flows should all be fully funded or allocated. Murex to reconcile net daily funding to net external cash inflow or outflows.
Funding Processes	GSTY/RMB	Operational Process	1.All daily funding processes must be automated where possible via business rules set at a portfolio 2. EOD residual cash sweep to GTSY must be automated and run as a scheduled process -funded at overnight rate 3. Unfunded positions to funded at overnight rate by default