

RMB

Scoping questionnaire - FTP

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## LEGAL NOTICE

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# 1. INTRODUCTION

MXpress is a global initiative at Murex which aims at reducing the cost of project implementation while increasing the quality of the configuration, by providing a repository of pre-packaged configurations (MXpress foundation) and an accelerated process of delivery (MXpress implementation methodology).

After having implemented the MX.3 platform for banks and financial institutions around the world using MXpress, in 2011 Murex started to enhance the initiative by elaborating a series of business solutions, based on the most common practices shared by most of the clients. These best practices rely on the business processes illustrated in Figure 1: MXpress Reference Business Solution.

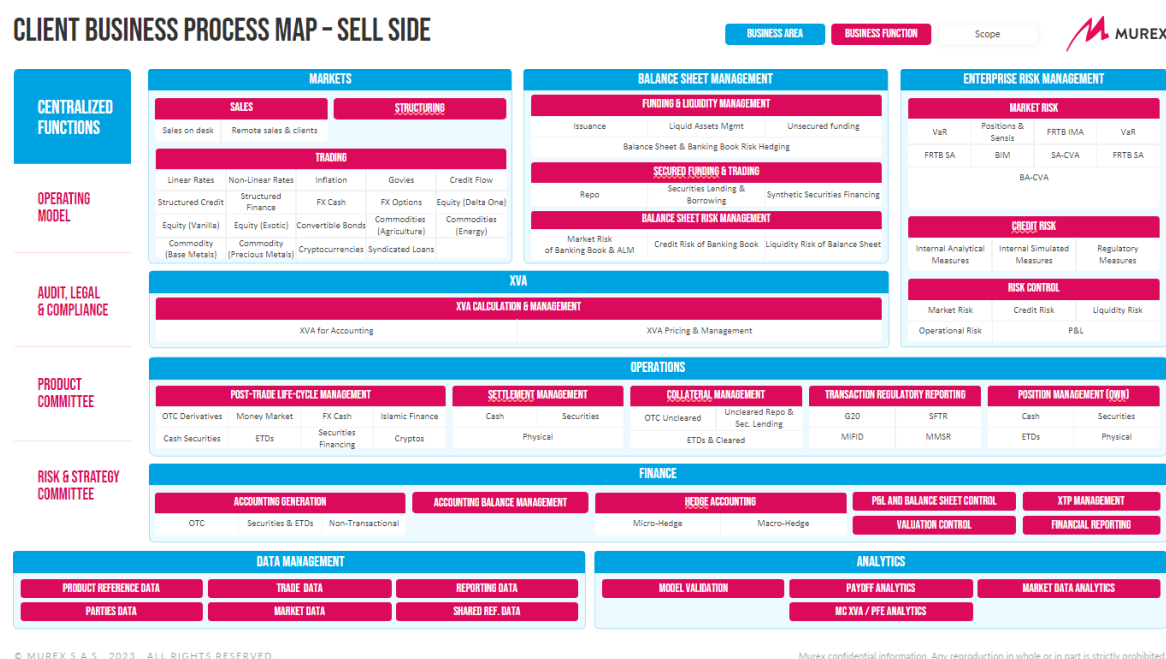


Figure 1: MXpress Reference Business Solution

These business processes are configured in the MX.3 platform and are described in Business Process Description documents (BPD).

This document is intended to help the project team define the project scope and to get a good understanding of the implementation complexity.

## 2. XTP MANAGEMENT (TRANSFER PRICING)

### 2.1. Mandates of pricing

Q\_2.1.1: Which types of transfer is in scope (liquidity, FX risk, credit, P&L selldown, sales/corporate margins,...)? Per type of transfer, which desks are involved?

**Risks:** Liquidity Risk, P&L selldown.

**Desks involved:** Money Market GTSY, FX Trading, Gold Desk, Equities Desk, Repo Desk, Secured Funding Desk

Q\_2.1.2: Could you please indicate, per desk, what are the expected funding methods (matched maturity, repo allocation, position funding, residual cash funding) ?

Desk	Applicable Funding Method

Q\_2.1.3: Could you please elaborate on the interactions between the different desks, BRM and GTSY with regards to funding?

### 2.2. Liquidity transfer pricing – Fund Transfer Pricing (FTP)

#### 2.2.1. FTP generic requirements

Q\_2.2.1: Which business units are concerned by the FTP? Which trades or liquidity pools in scope are concerned by the FTP? Describe the granularity of the FTP process for the different products/activities.  
IBD, ?

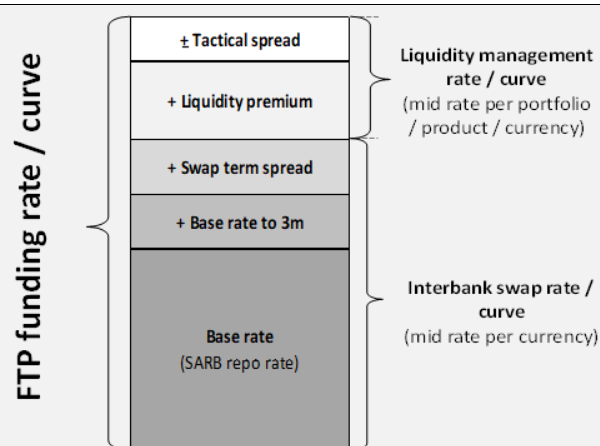
- **Trade funding process:** Real time, 1 to 1 matched maturity funding process. The system is configured via portfolio business rules to automatically generate the requisite internal funding transaction with matching CF profile and maturity at an FTP rate corresponding to the underlying transaction maturity.

Q\_2.2.2: How is the FTP pricing reflected across different business units?

Is there a unique pricing across the bank? Else what is applied for different desks? Are there any contingent/add-ons specifics? How are asset and liabilities managed (via bid/ask spread or two different curves)?

Currently, there is no differentiation. Can you please confirm this is going to be the case for the target solution in Murex?

Q\_2.2.3: For the matched maturity funding, kindly fill in the below table around the rate computation:



	Rate Component	Description	Curve
Base Rate	Base rate	SARB repo rate	N/A
	Base rate to 3m	3m Jibar rate of a quarterly resetting trade	?
	Swap term spread	For the applicable fixed tenor of the underlying	Swap Curve?
Liquidity Rate	Liquidity Premium	The spread over the relevant base rate charged or rewarded based on the liquidity characteristics of the underlying asset/liability.	?
	Tactical Spread	ad-hoc basis to incentivize target risk profile	User defined?

Q\_2.2.4: In which currencies is there an FTP process? How are the non-funding currencies handled in terms of the FTP process?

ZAR, USD, G8

Q\_2.2.5: If funding process is needed for the G8 currencies, which desks are involved?

Q\_2.2.6: Banking integration: Will other business units positions (e.g. retail, corporate, wholesales banking, ...) booked in the core banking system be imported with their external rate, internal ftp rate and interest rates rate? What are the transfer pricing functions expected in the system for such external positions? (interest rate management, liquidity management, P&L... ?)

## 2.2.2. Banking book maturing products/Issuance

Q\_2.2.7: Please confirm banking book maturing loans and deposits require matched maturity funding at trade level for all activities in MX.3. Could you please specify the business units impacted by this solution?

Q\_2.2.8: Which funding scenario requires matched maturity funding at aggregated level (e.g. retail)? At which level?

Not applicable; none

Q\_2.2.9: Please define the different risk transfer diagrams for the different products/payoff types/currencies i.e. trade replication schema (Funding loan and IRS, funding loan and IRS and cross currency swap, ...)

Only funding loan is expected to be generated.

Q\_2.2.10: Could you please confirm that callable loans or loan with embedded cap/floors are out of scope? If not, could you please specify how they are managed?

Q\_2.2.11: Do you issue securities not at Par? If so, how is funding done?

### 2.2.3. Banking book non-maturing products

Q\_2.2.12: Please confirm banking book non-maturing loans, deposits, saving accounts, credit card accounts, etc... require a funding at product level? If yes, how would it be funded (frequency, tenors, aggregation level ...)

Q\_2.2.13: Please define the risk transfer diagrams for the different non-maturing products/payoff types/currencies i.e. trade replication schema (Funding loan and IRS, funding loan and IRS and cross currency swap, ...)

### 2.2.4. Banking investment (held to maturity)

Q\_2.2.14: Please confirm the matched maturity funding is applied. Is it applied on a bond by bond or do you consider grouping categories and an average maturity? If yes, what are the categories?

[Matched maturity, funding happens 1-1. No grouping.](#)

Q\_2.2.15: How is a sell bond managed? Should it be considered as asset reduction/netting or as a new liability?

## 2.3. Existing Processes Summary

### Secured funding

Q\_2.3.1: How is secured funding handled in the Bank? Is it centralized in one repo desk or are repo transactions directly captured in the securities trading books? Is there an internal asset sweeping involving internal repo transactions?

[There is a specific repo desk that handles the repo funding activity.](#)

Q\_2.3.2: Could you please describe the current repo sweeping process you have?

Knowing that repo sweeping is out of scope of the funding project (current solution will remain as is), the aim is to understand the process to see how it would interact with other funding processes

Q\_2.3.3: In case of internal transactions, is there any haircut applied and at which granularity? What rate is used in case of internal transactions and what is the granularity (different repo curves and criteria...)?

Q\_2.3.4: Is there a cost charged by treasury for contingent risk of secured funding (i.e. 100% - internal transfer haircut)?

### FX Desk funding

Q\_2.3.5: Could you please describe the current funding process for FX desks?

Q\_2.3.6: Could you please confirm that no change is expected on the funding process for the FX desks?

## 2.4. Liquidity transfer pricing – Cost of Carry

### 2.4.1. Cost of Carry General Principle

Q\_2.4.1: Could you please confirm that funding will be based on theoretical and not on actual balances?

Q\_2.4.2: Could you please confirm that fees (and other PL adjustments) sitting in SMART will be funded in SMART?

Q\_2.4.3: Could you please confirm that the settlements that are sitting in a side portfolio can move to the live portfolio (Replace SMART balance)?

### 2.4.2. Trading derivatives books

Q\_2.4.4: Could you please explain how funding should be handled for trading derivatives?  
If uncollateralized derivatives are in scope, could you please specify the funding process?

#### **Collateral transfer pricing**

Q\_2.4.5: Could you please provide details around the expected collateral transfer pricing?

Q\_2.4.6: Could you please let us know how the funding of cash balances sitting in the collateral portfolios will be handled? What are the mandates and units involved?

### 2.4.3. Commodities

Q\_2.4.7: Could you please confirm that physical commodities funding is out of scope?

Yes, Out of scope

Q\_2.4.8: Would the commodities derivatives be managed the same way as derivatives above?

Yes, position funding.

### 2.4.4. O/N Cash funding

Q\_2.4.9: What is the scope for the cost of carry (whole cash balance, realized cash, live trades, ...)

Q\_2.4.10: How do you handle the funding of your cash balances (Cost of carry)? At what price?

Funding of cash balances should be done via O/N residual cash funding using the overnight funding rate (Repo Rate)

Q\_2.4.11: Do you physically book trades to reflect the allocation, or is it just calculated in a report? In case of physical booking, what types of trades are booked per desk?

In this case a physical deal will be booked as a Loan/Deposit with O/N maturity; this is applicable to all desks with trades eligible for O/N residual funding.

Q\_2.4.12: What is the funding currency ? (Native currency, accounting currency, etc...)

#### **Position Funding**

Q\_2.4.13: What is the scope that should be included in the position funding process?

Equities, Bonds (?), ? would be part of the position funding. Hence, it should be done overnight. The rate will be different depending on portfolio/instrument and the behavioral maturity of the instrument.

Q\_2.4.14: How are the positions categorized (ISINs, currency, ...)?



**Residual Cash Funding**

Q\_2.4.15: What is the scope for the residual cash funding?

This process will serve to fund any residual cash balance following the above funding methods (matched maturity, secured funding and position funding).

It should mainly serve to fund the realized cash, which is defined as received coupons, fees, realized cash coming from asset selling

**2.4.5. P&L Selldown**

Generally, there are two purposes for P&L selldown

- P&L transfer (EOY remittance) - Initialize P&L of books for new fiscal year - Automatic process for P&L components transfers
- FX risk transfer - Automatic process to convert foreign currency P&L into local accounting currency and to reallocate Daily or Monthly FX risk to FX desk

Q\_2.4.16: Which purpose do you need in terms of PL selldown - P&L transfer, FX risk transfer, both?

Q\_2.4.17: How do you handle P&L in other currencies than the accounting currency (keep in initial currency or convert)?

Q\_2.4.18: Which type of books do you need to transfer? Trading book (FX, Bond, STIR) or Banking book - Which desks are involved?

Q\_2.4.19: Which type of PL component do you need to transfer: MTM PL (without or without financing), Accrual PL, Past Cash, Theoretical financing, Brokerage fees?

Q\_2.4.20: What is the frequency of the transfer?

Q\_2.4.21: How do you intend to transfer the PL/FX Risk - Cash or PL adjustment (assignment)?

Q\_2.4.22: Apart from the PL selldown, is there any cash/position sweeping in the bank? If yes, how does it interact with the PL selldown?

**2.5. Impacts of Funding being moved into MX.3****2.5.1. General Topics**

Q\_2.5.1: Could you please confirm the below use cases:

Please also review the Scope column and complement/correct it if needed

Trade	Funding	Comment	Scope
Live on MX	in MX		Live trades under RSA entity
Live on MX	not in MX		LDN entity
Not live on MX	in MX	Settlement coming from source system	Non-live trades under RSA entity

Not live on MX	not in MX	Funding imported from SMART	-African subsidiaries -Commodity physicals under RSA entity (funded on Osiris)
Exception Handler: Only sends PL Vector	?	Do we send settlements? Is the funding in mx?	XH and Finesse imports under RSA entity

Q\_2.5.2: For RSA entity, could you please confirm that you have portfolios holding both Live and non-Live trades that require to fund on Murex?

Yes

### 2.5.2. Front Office

Q_2.5.3: Could you please confirm what is the current autofunder interface handling? What is being fed through the interface and what is the process happening outside MX.3?
Q_2.5.4: With regards to FO processes, the impact that will be handled within the scope of the project is the adaptation of Livebook. Could you please confirm?
Yes
Q_2.5.5: Are there any extra position monitoring needs that are required intraday by GTSY?
<i>To note that a reconciliation process will need to be carried out within the funding project to make sure past cash is reconciled.</i>

### 2.5.3. Risk

Q_2.5.6: Could you please confirm that risk will be based on theoretical and not on actual balances?
Q_2.5.7: Could you please confirm that a redesign of the PLVar solution will need to be considered taking into account the answer from Q2.5.1?
<ul style="list-style-type: none"> <li>To remove workaround and have a more native solution, the following items need to be considered <ul style="list-style-type: none"> <li>PLVAR Simulation views and outputs</li> <li>Datamart items</li> <li>SQL: <ul style="list-style-type: none"> <li>Recomputation of PC effects in the case of Cash/Physical settlements</li> <li>Past Cash offset logic between theoretical PC effects and Chameleon/Osiris balances</li> <li>Do you confirm that Commodity physicals will still be funded on Osiris and that we should not change the PC offset logic for Osiris?</li> </ul> </li> <li>Market Risk Configuration and Views</li> </ul> </li> </ul>
Q_2.5.8: Could you please confirm there is a need to redesign the NOFP solution to cater for the theoretical past cash for the FX Delta and COM Delta for the piece that will now be funded in MX.3?
Same question will apply to VAR, Stress testing, BIM and FRTB

Q\_2.5.9: Are there any extra position monitoring needs at the level of Market Risk

Q\_2.5.10: Could you please confirm that trades that are not live in MX but settling in MX will start funding in MX and should follow a similar logic to trades funded in SMART (Trade level attribution of the cash flows paying today)?

#### **2.5.4. Back Office**

Q\_2.5.11: Could you please confirm that funding messages need to be stopped from MX.3?

Q\_2.5.12: Could you please confirm if the generation of internal deliverables can be stopped?  
Are the internal deliverables being used elsewhere?

Q\_2.5.13: What are the implications on MX.3 in terms of needed extractions for reconciliation purposes, more specifically how will the reconciliation process evolve when it comes to nostro vs funded balance recon?

Q\_2.5.14: Could you please confirm that MX.3 will need to properly reflect the actual settlement status of the deliverables? What are the expectations on realtime integration of settlement status?

Q\_2.5.15: Could you please confirm if the funding trades will need to follow a specific validation cycle?

#### **2.5.5. Finance**

Q\_2.5.16: Could you please list the different controls needed from a finance perspective?

#### **2.5.6. Migration**

Q\_2.5.17: Given funding will be moved to MX.3, could you please confirm if any past cash migration will take place? If yes, could you please provide the details?