

TXS Covered Bond Management

Efficient and Effective Reporting

March 2014

Agenda

TXS ' General Mission

Test Cover Pool

Cash Flow and PV Reporting

The Cockpit: Current Overview

Covered Bond Rating

Investor Reporting

Trustee Processes

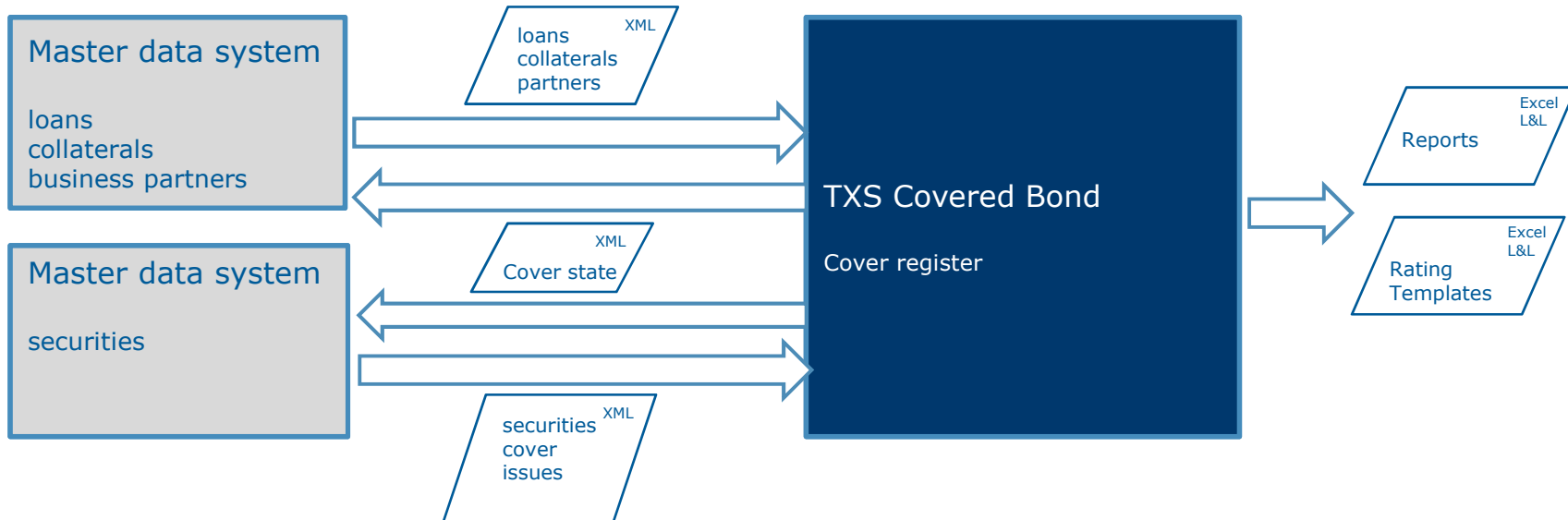
TXS Covered Bond: Central Mission

- Special Management Tool for Covered Bond Issuing Banks
- Efficient Cover Registry Processes
- Effective Cover Pool Analysis/Benchmarking
- Automatic Reporting for various Stakeholders

→ **TXS Covered Bond significantly improves the Delta Tasks arising in Covered Bond Issuing Banks**

TXS Covered Bond: Position in the IT Landscape

Covered Bond issuing bank



- Assets
 - select
 - export
 - import cover state (optional)

- Transfer XML files or use of TXS Connector (to raw data files or database)

- Cover register management
 - Business processes (Trustee, ...)
 - Key Figures
 - Net Present Value
 - Reporting

- Reports
 - Legal requirements
 - Rating Templates
 - User defined

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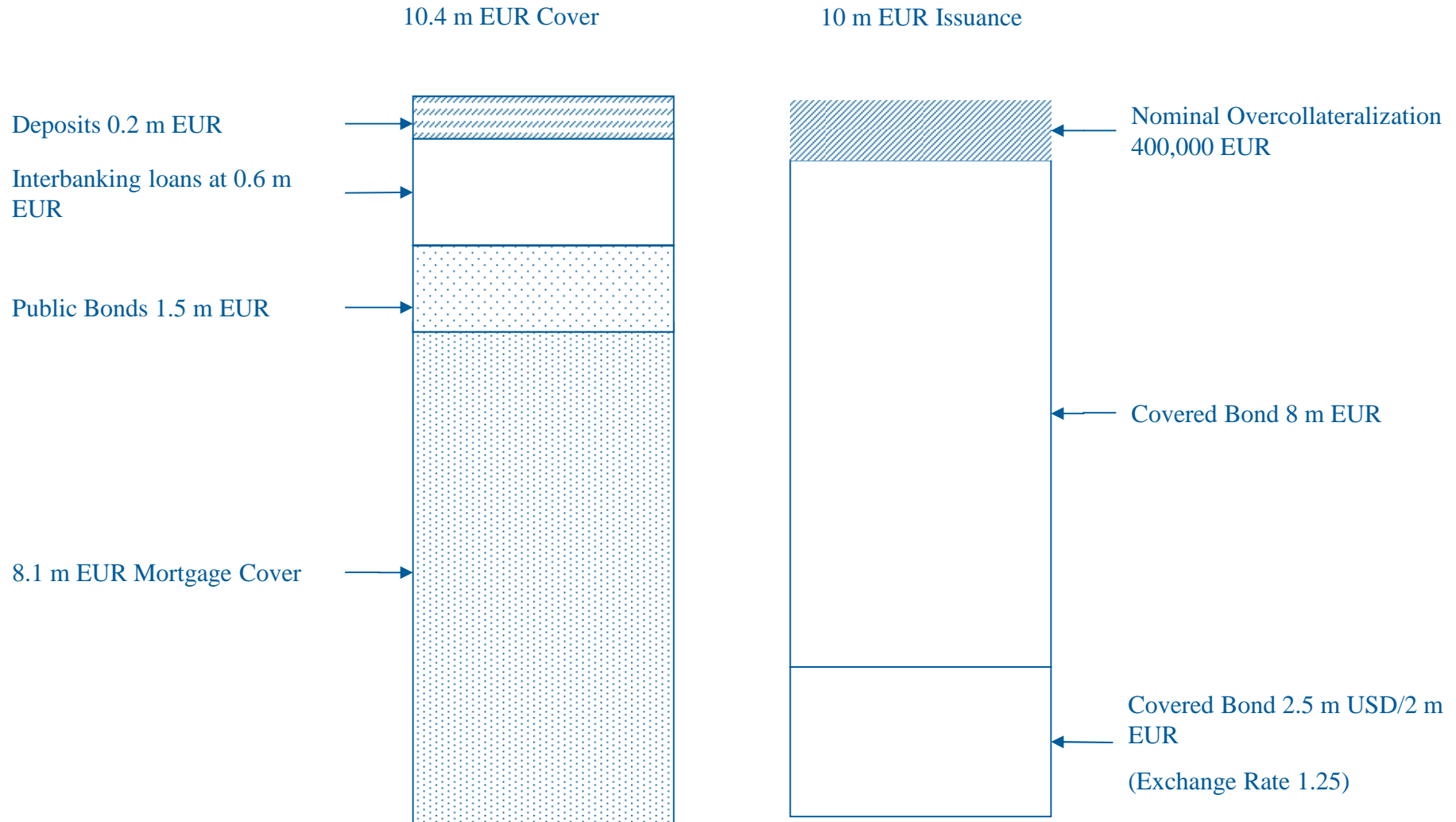
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Schematic Cover Pool (Mortgages)





Look and Feel!

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TXS Cash Flow and Present Value Calculation

- Integrated Cash Flow Engine
- Wide Range of Simulation Approaches
- Asset Liability Balance to facilitate Forecasting
- Flexible Perspectives to analyze Subpools

→ **Cash Flow and PV Calculation improve Planning and Monitoring**

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Cockpit: Benchmarking with Limits

TXS TXS - Transaction Platform - [Project - Pfandbrief (Workplace: Cockpit)]

TXS System Project View Warehouse Administration Extras Windows Help TQS

Tasks Workplace

Calculate Refresh Print Document Settings Scheduling CSV-Export

Key Figures	Mortgage	Valuation
Municipal & Mortgage Cover Pool		
Nominal capital overcollateralization (legally prescribed > 0) in accordance with current inspection book	400,000.00 EUR	●
Nominal capital overcollateralization (legally prescribed > 0) in accordance with the last register update	400,000.00 EUR	●
Eligible nominal capital overcollateralization (legally prescribed > 0) in accordance with current inspection bo...	300,000.00 EUR	●
with the last register update	300,000.00 EUR	●
y prescribed > 0)	1,129,969.36 EUR	●
ers (legally prescribed >= 2...	1.95 %	●
overcollateralization at net present value and at high interest parameters (legally prescribed > 0)	-379,996.01 EUR	●
Statutory overcollateralization at net present value and at high interest parameters (legally prescribed >= 2%)	2.03 %	●
Overcollateralization at net present value and at low interest parameters (legally prescribed > 0)	3,441,353.91 EUR	●
Statutory overcollateralization at net present value and at low interest parameters (legally prescribed >= 2%)	1.87 %	●
Overcollateralization at net present value in a combined interest/currency stress test (legally prescribed < 0)	-379,996.01 EUR	●
Statutory overcollateralization at net present value in a combined interest/currency stress test (legally prescri...	2.09 %	●
Percentage of class-based cover and other cover (legally prescribed >=100%)	102.00 %	●

Individual Benchmarks could be modeled following Polish Covered Bond Legislation

Limits can monitor legal as well as internal requests

→ Relevant Benchmarks can be monitored comfortably

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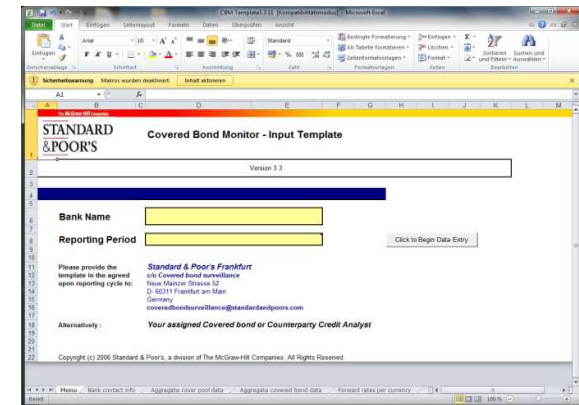
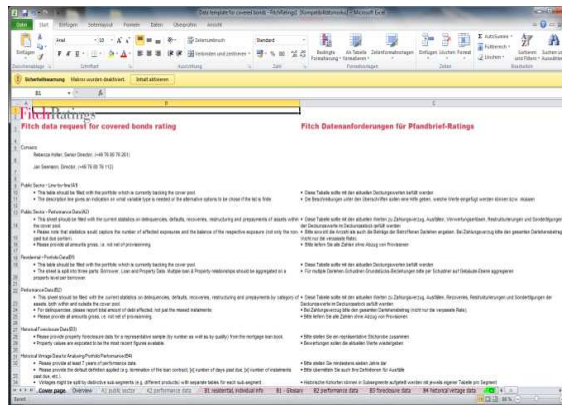
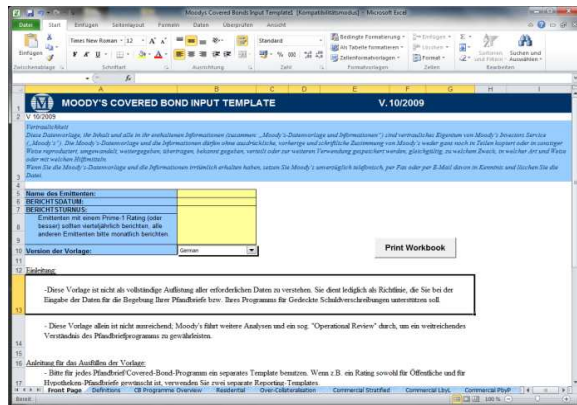
The Cockpit: Current Overview

Covered Bond Rating

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TXS Covered Bond Rating



- Support of the templates from all relevant Rating Agencies
- Automatic filling of the standard rating templates

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TXS Investor Reporting

External report - Mortgage covered bonds outstanding

Cut-off date	04.02.2014
Reference	04.02.2013

1) Details about the total volume and maturity structure

(Data in million Euro)

	Nominal value		Net present value		Risk-adjusted net present value (interest and currency stressed)*	
	04.02.2014	04.02.2013	04.02.2014	04.02.2013	04.02.2014	04.02.2013
Total volume of the covered bonds outstanding incl.	10,00	+	10,25	+	9,87	+
Total volume of the cover pools incl. Derivatives	10,40	+	11,38	+	9,49	+
% foreign currency derivatives v. liabilities	0,00%	+	0,00%	+	0,00%	+
% interest derivatives v. liabilities	0,00%	+	0,00%	+	0,00%	+
% foreign currency derivatives v. assets	0,00%	+	0,00%	+	0,00%	+
% interest derivatives v. assets	0,00%	+	0,00%	+	0,00%	+
Excess cover in %	4,00%	-	11,03%			

Special Polish version could be elaborated and implemented

	Covered bonds		Co
	04.02.2014	04.02.2013	04.02.20
up to 6 months	0,00		0,94
more than 6 months up to 12 months	8,00	+	1,40
more than 12 months up to 18 months	0,00		0,09
more than 18 months up to 2 years	0,00	+	0,75
more than 2 years up to 3 years	0,00	+	0,47
more than 3 years up to 4 years	0,00	+	0,50
more than 4 years up to 5 years	0,00	+	0,00
more than 5 years up to 6 years	2,00	+	0,02
more than 10 years	0,00	+	6,22

	04.02.2014	04.02.2013
HandBG		
assets	87,02%	+
d bonds	100,00%	+

- Automatic Production of standardised national Investor Reports

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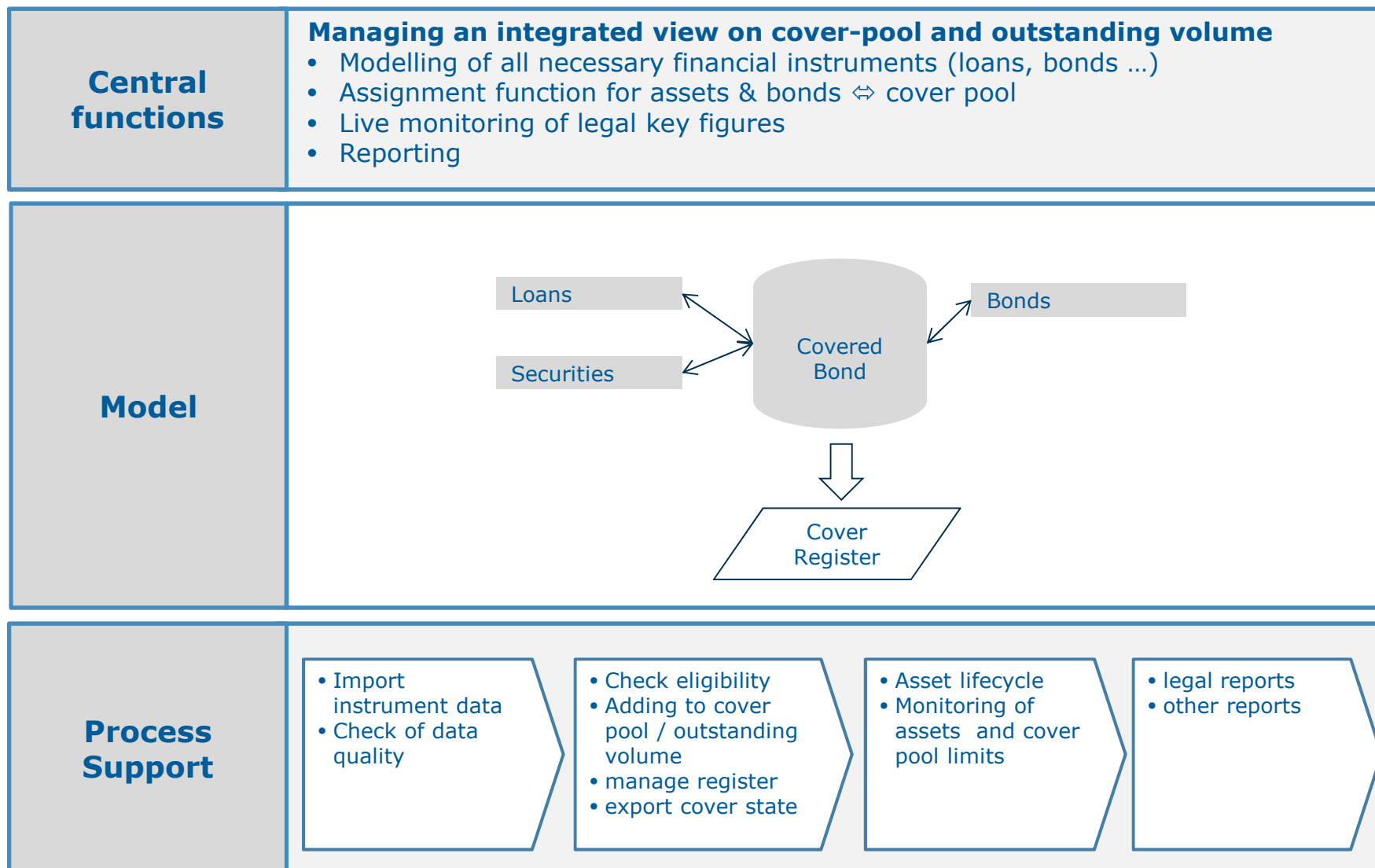
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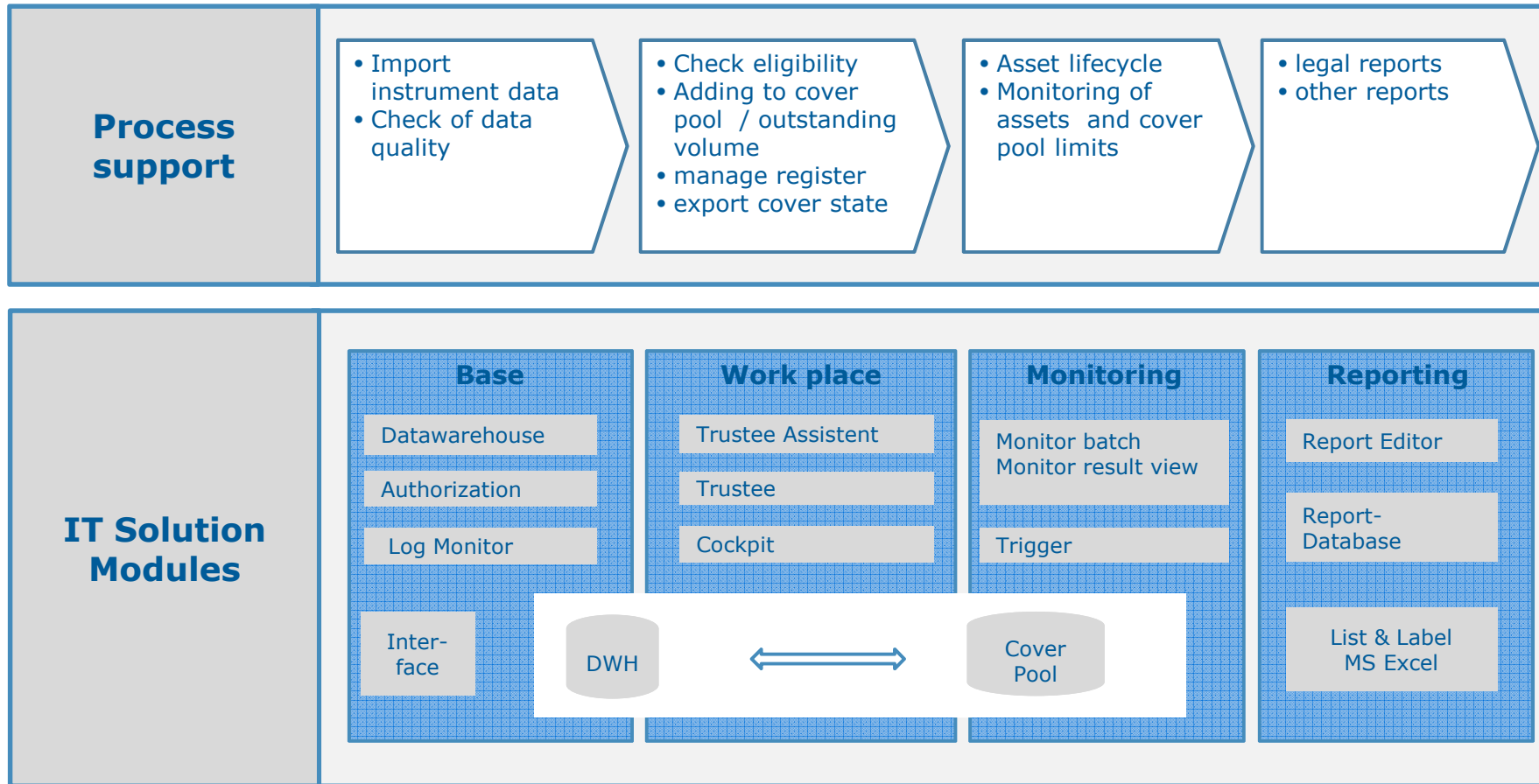
Investor Reporting

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Starting with an Overview of TXS Covered Bond



Details on TXS Covered Bond Modules



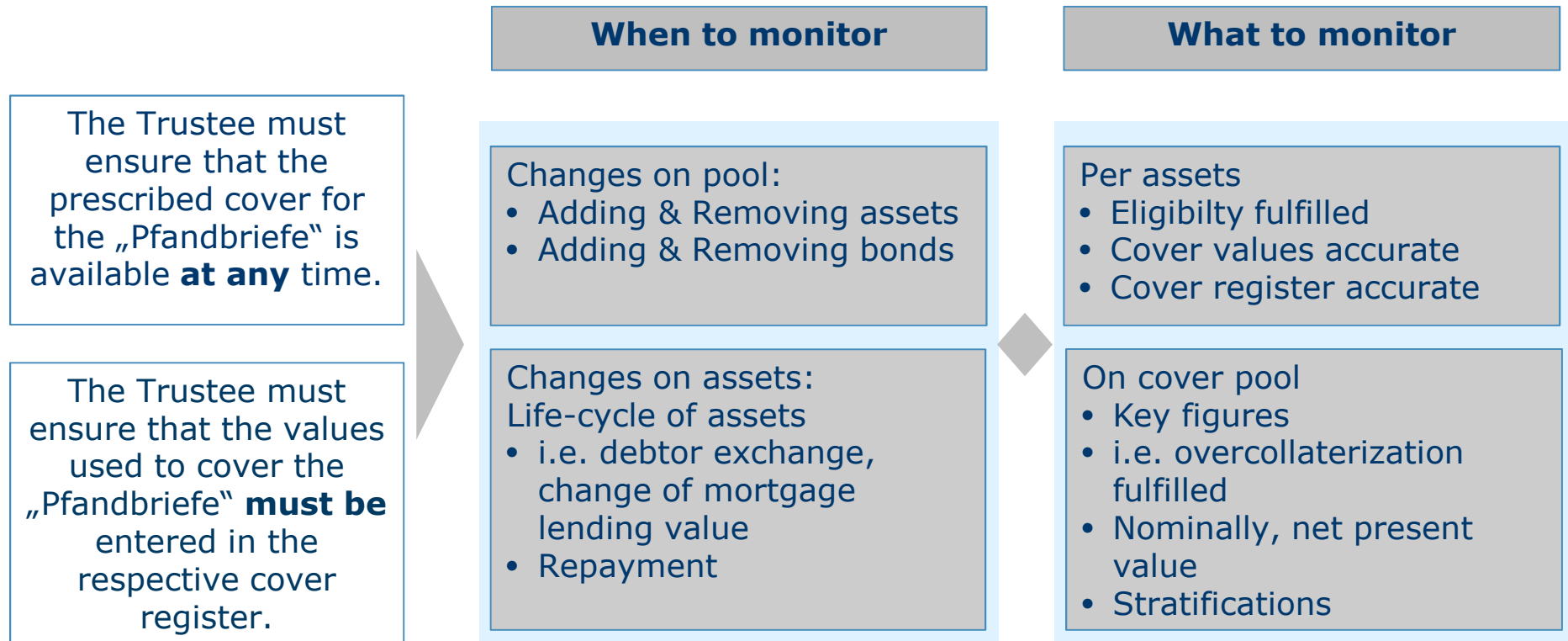
Trustee Processes

- German trustee process is similar to that in Poland
 - Multiple requirements in terms of quality and efficiency
 - Especially at high volume and increasing market-driven and legal requirements
- **Goal today: A short demonstration how TXS Covered Bond currently deals with these requirements in Germany**

Responsibilities of the Trustee

- (Simplified) German law extracts
 - The Trustee must ensure that the prescribed cover for the „Pfandbriefe“ is available **at any** time.
 - The Trustee must ensure that the values used to cover the „Pfandbriefe“ **must be** entered in the respective cover register.

Tasks of the Trustee



- => 1) Details on pool change process
- => 2) Details on asset change process

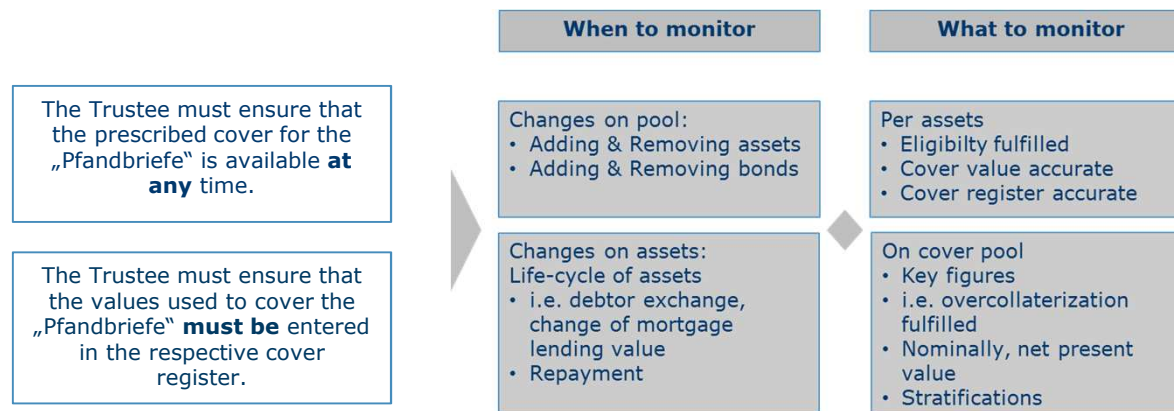
1) Changes on pool

Process	Loans processing Loan officer	Trustee Assistant	Trustee
Steps	For example <ul style="list-style-type: none"> • New loan • default of a loan 	<ul style="list-style-type: none"> • Todo-list • Look at loan data • Check eligibility • Calculate or check cover values (60%) • Release or reject 	<ul style="list-style-type: none"> • Todo list • Look at loan data • Check eligibility • Check pool figures • Preview pool figures • Release or reject • Check cover register
TXS CB Support	Interface	Assistant work place <ul style="list-style-type: none"> • Show current todos • Eligibility rules • Asset details, data quality validation • Cover value calculation • Workflow with trustee and loan officer 	Trustee work place <ul style="list-style-type: none"> • Show current todos • Figure preview • Fully automatic cover register • Workflow with assistant
Demo			

2) Changes on assets

Process	Loans processing Loan officer	Trustee Assistant	Trustee
Steps	<p>For example</p> <ul style="list-style-type: none"> • Debtor exchange • Change of mortgage lending value • New collateral • Repayment 	<ul style="list-style-type: none"> • Todo-list • Check eligibility • Check data quality • Check for register concerning data changes • Release or reject 	<ul style="list-style-type: none"> • Todo list • Release or reject changes • Check cover register
TXS CB Support	Interface	<p>Monitor changes</p> <ul style="list-style-type: none"> • Validations => Details in DWH • Register concerning => send to trustee • Eligibility => Workflow with loan officer 	<p>Trustee work place</p> <ul style="list-style-type: none"> • Current todos • Fully automatic cover register • Workflow with assistant
Demo			

TXS Covered Bond Trustee process support: Summary



- Support of the trustee and trustee assistance processes
- Focussed on very large numbers of residential and commercial mortgages
- Workflows between loan officer, trustee assistant and trustee
- Individually customizable
 - From mainly manual to fully automated (i.e. automatic acceptance into the cover pool)
 - Flexible eligibility rules concept
 - Flexible validation concept

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