



ESKA[®] IFRS 17

Software Solution



ESKADENIA adopted the “**Integrated IFRS 17**” solution approach to meeting the new data, system and process requirements, building the requisite capabilities through the introduction of a dynamic engine that is fed from various data sources:

- Core insurance systems – policy administration, claims and reinsurance
- Financial system (GL, AR, AP)
- External actuarial input

The IFRS 17 engine fulfills the following:

- Cohorts, portfolios and groupings based on pre-defined rules and dimensions
- Inputs, contract boundaries and assumptions management
- Allocation of contracts to profitability groups (profitability assessment)
- CSM calculations and coverage units to allocate the CSM to the coverage period of the groups
- Risk adjustment
- Liability for remaining coverage (LFRC), liability for incurred claims (LIC) and deferred acquisition costs (DAC) calculations
- Loss component for onerous groups of contracts

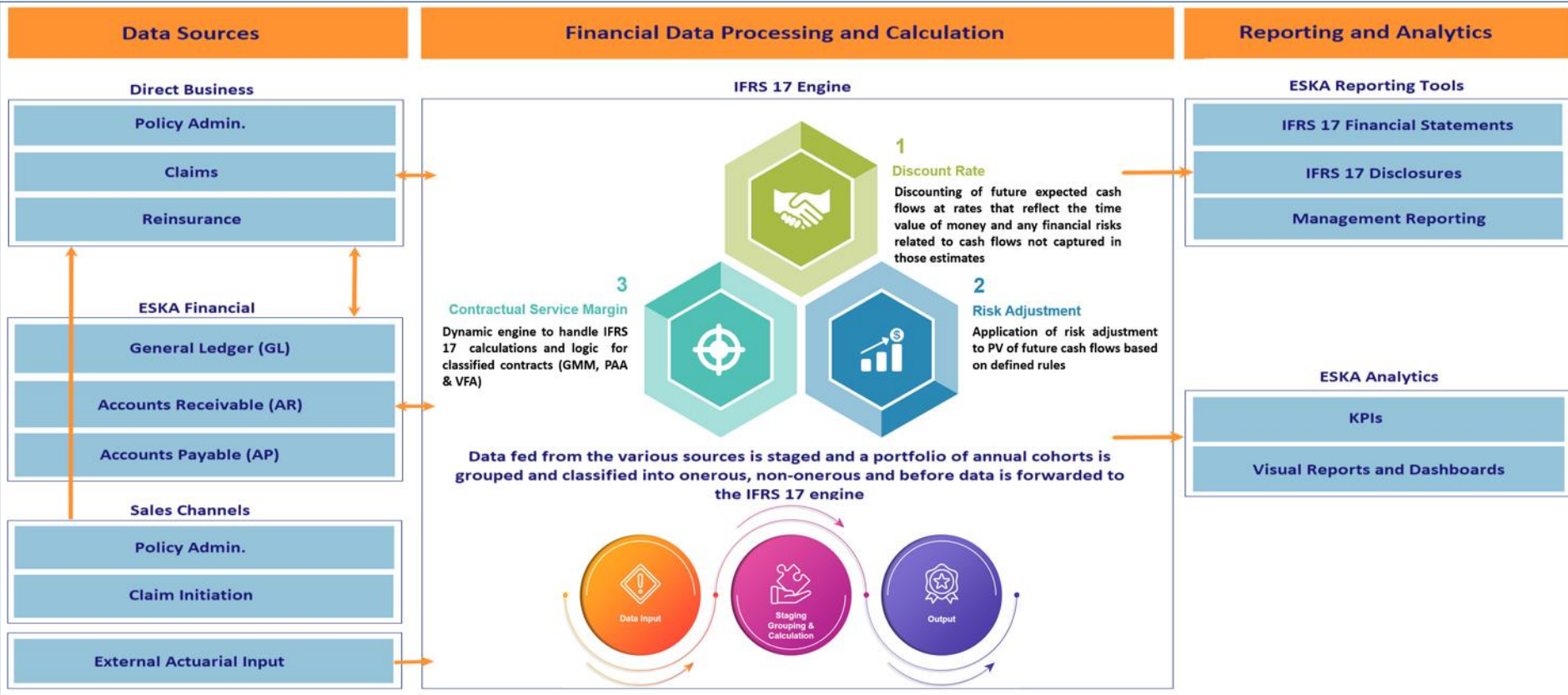


The IFRS 17 engine fulfills the following:

- Reinsurance recovery component for onerous groups of contracts
- Opening and closing balances for LFRC, LIC, DAF and reinsurance LIFC, LIC and expected cash flows
- Dynamic calculation models pre-configured to cover GMM, PAA and VFA based on each insurer's portfolio and needs
- Fulfillment cash flows and changes in the fulfillment cash flows for groups of contracts
- Locked-in and current rates and cash flows' discounting to arrive at the present value of future cash flows
- CSM roll-forwards and profit and loss releases
- OCI option whenever applicable
- Disclosures and financial statements
- Updated chart of accounts that is IFRS 17 compliant
- Controls and compliance checks



ESKA IFRS 17 - The Model





Step 1: Building the IFRS 17 data warehouse:

- Data retrieval from various sources including:
 - ESKA core insurance and financial systems – automatic data capture and retrieval via the API mapper
 - External sources (e.g. actuarial input)

Create Table

Create your data tables and import their entries from various data sources such as Excel sheets and APIs..

Table Name	Description
<input type="text"/>	<input type="text"/>

Data Source

Select..

- Select..
- API
- Excel
- CSV

i

- * Build your tables and set their data sources as APIs (to derive insurance and financial data for instance) or file uploads (Excel/CSV for actuarial input)
- * Supported file formats: .XLS and .XLSX files
- * For APIs, fill API details appearing in pop-up after defining needed APIs
- * To import a sheet, locate it on your directory by clicking on "Choose" and then "Upload" to commit selection



Step 2: Contracts aggregation, bundling and unbundling:

- Groups, cohorts and portfolios' definition
- Portfolio mapping - allocation of contracts to profitability groups and portfolios

Financial Data Processing and Calculation

IFRS 17 Engine



Data fed from the various sources is staged and a portfolio of annual cohorts is grouped and classified into onerous, non-onerous and before data is forwarded to the IFRS 17 engine



Portfolios Search

Name: Entity: Line Of Business:

Currency: Contract Type: Profitability:

Measurement Model:

Portfolios List

<input type="checkbox"/>	Code	Name	Entity	LOB	Currency	Profitability	Model
<input type="checkbox"/>	1	Motor Other -Jordan	Non-Life	General Insurance	JOD	Non-onerous	Premium Allocation Approach "PAA"
<input type="checkbox"/>	1	Fire_RI	Non-Life	General Insurance	JOD	Non-onerous	Premium Allocation Approach "PAA"
<input type="checkbox"/>	2	Motor TPL -Jordan	Non-Life	General Insurance	JOD	Onerous	Premium Allocation Approach "PAA"
<input type="checkbox"/>	2	Property_CAT_RI	Non-Life	General Insurance	JOD	Non-onerous	Premium Allocation Approach "PAA"
<input type="checkbox"/>	3	Fire- Jordan	Non-Life	General Insurance	JOD	Non-onerous	Premium Allocation Approach "PAA"

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Step 3: Data Transformation, Modeling and Processing:

- Parameters' definition (e.g. interest rate, currency exchange)
- Events' definition (e.g. fulfillment cash flows, CSM, LIC, etc.)

Events Search

Event Name	Abbreviation	Status
<input type="text"/>	<input type="text"/>	<input type="text" value="Select ..."/>
Currency	Measurement Model	Portfolio
<input type="text" value="Select"/>	<input type="text" value="Select ..."/>	<input type="text" value="Choose"/>

Events List

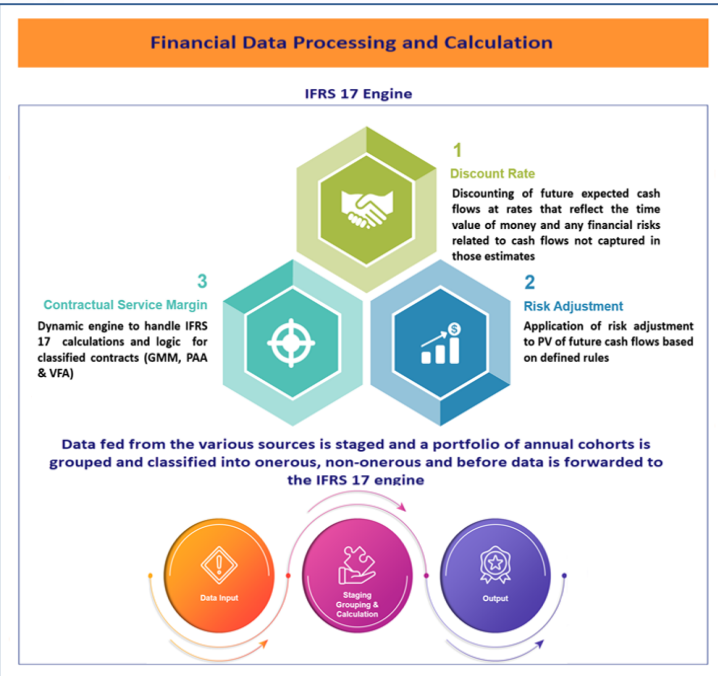
	Abbreviation	Event Name	Measurement Model	Currency	Status
<input type="checkbox"/>	LRC	Liability for Remaining Coverage	PAA	JOD	Active
<input type="checkbox"/>	PVFC	Present Value of Future Cash Flows	PAA	JOD	Active
<input type="checkbox"/>	CO	Cash Outflows	PAA	JOD	Active
<input type="checkbox"/>	CI	Cash Inflows	PAA	JOD	Active
<input type="checkbox"/>	CSM (sub)	Contractual Service Margin (subsequent)	PAA	JOD	Active

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Step 3: Data Transformation, Modeling and Processing:

- Event formulae injection into engine per model
- Formulae execution scheduler



Events List

Abbreviation	Event Name	Measurement Model	Currency	Has Parameters Linked?	Has Formula Defined?
CSM (i)	Contractual Service Margin (initial)	PAA	JOD	✓	✓

Dynamically structure your formula by dragging and dropping element options into the formula drop area.

Element Types	Abbreviation	Element Options	Formula
Filter	Filter		
Event Parameters	PVFC	Present Value of Future Cashflows	-(PVFC+RA)
Arithmetic Operators	RA	Risk Adjustment	
Relational & Logical Operators			
Mathematical & Trigonometric Functions			
Text & String Functions			
Aggregate Functions			

Validate Formula

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Step 4: Discounting and Risk Adjustment:

Input is needed/expected from the insurers' actuaries/consultants as to which approaches need to be included within system's scope of work for:

- Discounting (top-down vs. bottom-up method)
- Risk adjustment (Bootstrap vs. Value at Risk (VaR) method)



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Step 5: Posting to ESKA Financial/Accounting Hub:

- Accounts' and vouchers' definition
- Transactions' posting

Event Accounts List

Event	Currency	Nature
<input type="checkbox"/> Liability for Incurred Claim		Debit
<input type="checkbox"/> Present Value of Future Cash Flows		Debit
<input type="checkbox"/> Contractual Service Margin (subsequent)		Credit

Event Accounts Entry

Event	Currency	Exchange Rate	nature
Contractual Service Margin (subsequent)	JOD	1	Credit

Vouchers' Definition

Event / Parameter	GL Account	Cost Center
Select	Select	Select

Side	Event / Parameter	GL Account	Cost Center	Notes
<input type="checkbox"/> Debit	Cash Inflows	LRC - Customer receivable	Select	
<input type="checkbox"/> Credit	Contractual Service Margin (subsec	Contractual Service Margin	Select	





Step 6: Outputs:

Library/tables' repository

The screenshot displays a user interface for a 'Library/tables' repository. It is divided into two main sections: **Favorite Tables (Count: 3)** and **User-Defined Tables (Count: 9)**. Each table entry includes an Excel icon, the table name, creation and modification dates, and the user who created it. Each entry also has a heart icon for favoriting and a three-dot menu for additional actions.

Table Name	Created On	Modified On	By
IncomeStatement	09/10/2020	09/10/2020	admin
BalanceSheet	09/10/2020	09/10/2020	admin
TrialBalance	09/10/2020	09/10/2020	admin
NonLifePremiums	09/10/2020		admin
Revenues	09/10/2020		admin
Acquisition	09/10/2020		admin
DiscountRates	09/10/2020		admin
Expenses	09/10/2020		admin
CreditRating	09/10/2020		admin
RiskAdjustment	09/10/2020		admin
NonLifeExposure	09/10/2020	09/10/2020	admin
Claims	09/10/2020		admin





Step 6: Outputs:

Disclosures and Reports

ESKADENIA Software		
Income Statement as of 31 December, 2020		
	<i>31-Dec</i>	<i>31-Dec</i>
	2020	2019
Insurance service revenue	71,264,803	77,733,736
Insurance service expenses	(55,043,009)	(68,374,476)
Net expenses from reinsurance contracts held	(14,620,273)	(7,994,550)
Insurance Service Result	1,601,521	1,364,710
Interest revenue from financial assets not measured at FVTPL	445,450	319,819
Net gains on investments in debt securities measured at FVOCI reclassified to profit or loss on disposal	1,320,424	300,624
Net gains from the derecognition of financial assets measured at AC		
Net impairment loss on financial asset	(81,625)	(401,850)
Net Investment Income	1,684,249	218,593
Finance expenses from insurance contract issued		
Finance income from reinsurance contract held		
Net insurance finance expenses		
Net insurance and investment result	1,684,249	218,593
Other operating expenses	(1,992,444)	(1,828,638)
Other finance cost	294,406	305,009
Net income for the year	1,587,732.00	59,674
Net income attributed to the policy holders		0
Net income attributed to the share holders	1,587,732.00	59,674

For the below areas, based on the insurance company's consultants input, configuration of the below will be implemented:

- ▶ PAA eligibility test
- ▶ Controls and checklists
- ▶ Discounting and risk adjustment

As for actuarial input and in order to feed into the system, actuaries are expected to provide their input in terms of calculation formulae, ESKADENIA will then evaluate and reflect to the engines (might require development depending on their nature and whether the previously developed already cater for their structure).

Some of ESKADENIA's core insurance systems' updates to cater for IFRS17 requirements:

1. Production

At time of underwriting of a contract:

- Profitability flag (onerous/profitable)
- Measurement model to be adopted for insurance (GMM, PAA or VFA)

2. Reinsurance

- Measurement Model to be adopted for reinsurance (GMM, PAA or VFA)
- For proportional contracts, data related to onerousness of underlying contracts and the date on which the onerous underlying contract was recognized in ESKADENIA's system shall be extracted



ESKA implementation journey for the period spanning from 2021 to 2023

Timeline



Discussion



Thank You

