

IFRS

SOLUTION FOR THE CALCULATION OF AMORTIZED COST, EFFECTIVE INTEREST RATE AND LOAN PROVISIONING

T · Systems ·



1. INTRODUCTION

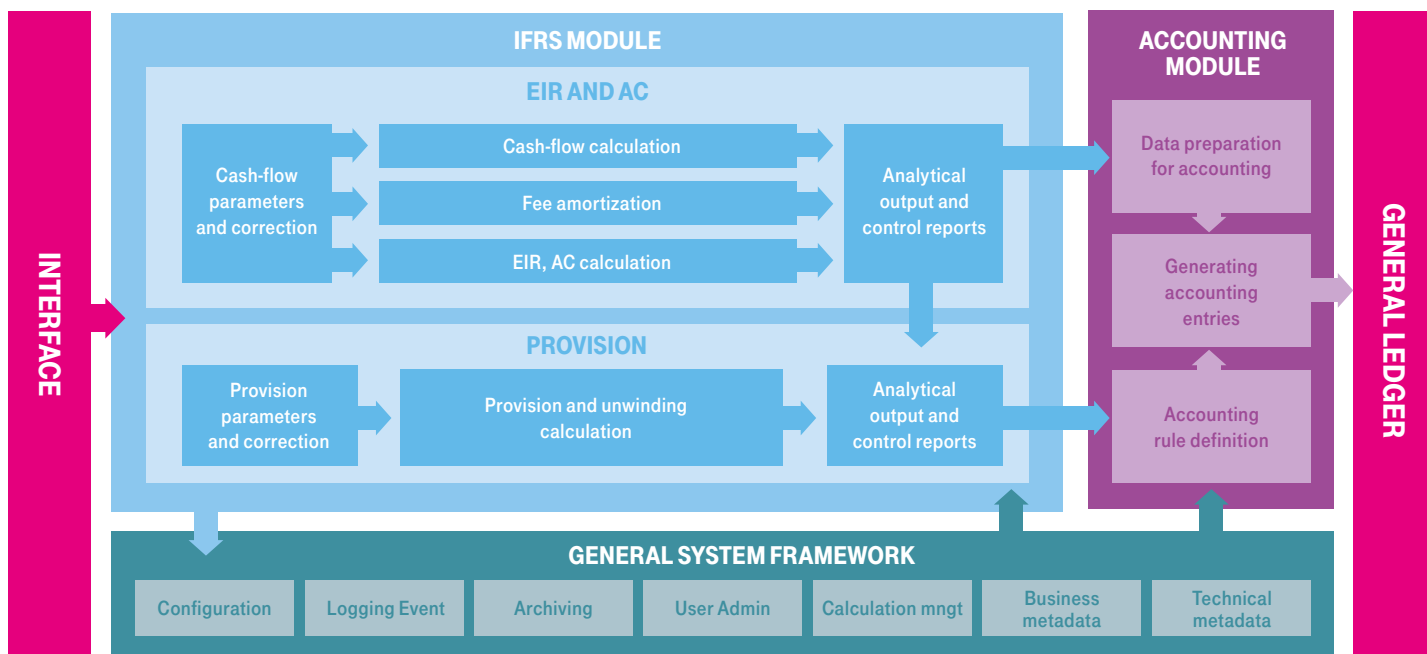
Meeting the International Financial Reporting Standards (IFRS) requires great effort from many business areas of the financial institutions, such as IT, Accounting, Taxation and Risk Management. T-Systems Hungary can not only offer you its more than **10 years' experience with regulatory reporting** in major banks of Central-Europe, but we also provide for our clients **business and IT consultancy**.

Based on its long-standing history and extensive connections in the banking market, T-Systems Hungary offers you a standard, **out of the box**, but at the same time highly customizable **IT solution for the support of the preparation and presentation of financial statements according to IAS/IFRS standards**.

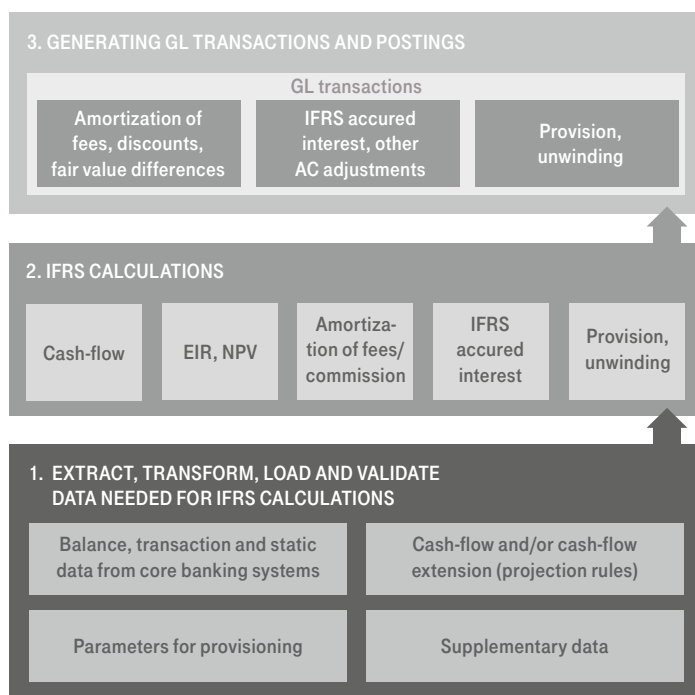
Besides complying with regulatory standards, T-Systems Hungary's IFRS module also spares time and expense for the users. The module is designed to alleviate **the most calculation intensive task** of IFRS compliance, the calculation of **amortized cost** of financial instruments using the **effective interest rate (EIR)** method.

2. FEATURES

- **Flexibility and scalability:**
 - adapting to the Bank's own accounting specialties with respect to the IFRS
 - **no software development required to maintain the operative value of the application**
- Ready-made components on the other hand **bring about major savings in time and costs** both in terms of business and IT development efforts, as the proposed system **carries all the IFRS related know-how** gained in previous projects.
- **Accommodates all calculations** compliant with both **international and local regulations** and posts "differences" between local and IFRS standards to the General Ledger.
- Although T-Systems Hungary's solution is **SAS based**, it is able to handle complex IT environments and the **different core banking or data warehouse systems**, such as **Oracle or Microsoft**. **Output data** can be provided in the **data structure desired** by the bank.



3. FUNCTIONALITIES



1. Amortized cost calculation for financial instruments:

- The built-in **parametrisations** make it possible to handle **every type of instrument** with **various features** e. g. uneven cash flows, multiple types of fees, variable interest rates, fees collected in a currency different from the instrument's currency etc.
- Financial instruments include:**
 - loans
 - deposits
 - securities classified as held to maturity, available for sale and trading

2. Identification, collection and supplement of cash flows required for the effective interest rate calculation:

- The input interface includes **two separate tables** for cash-flows:
- one for **individual cash-flows** that come from the **core banking system**,
 - one that contains **rules** for **cash-flow generation**.

The module can handle **principal payments, interests** and various types of one-time and periodical **fees and commissions**

3. Cash flow calculation and cash flow extension:

- Generation and storing of principal and interest type cash movements derived from the deal parameters collected from the core system(s).
Attributes added:
 - commission and fee,
 - contingent interest,
 - impaired cash flows;
 - expected recovery from collateral.

4. Special cases of cash flow:

- If the fee is collected or paid in different currency compared to the original currency of the financial instrument, the fee amount is converted to and represented in the instrument's currency.
- Fee amount allocation is available for multiple disbursement loans

5. Effective interest rate and fee amortization schedule calculation

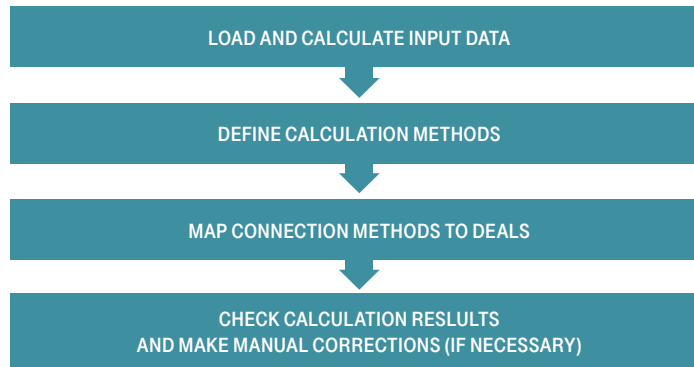
- Calculated amortized cost = amortized cost + EIR (changing daily).
- Commission to be deferred = debit/credit amount + deferred interest - daily
- calculated amortized cost.
- This value therefore changes and is recalculated at every run of the calculation process.
- For **cash-flow elements** subject to **retrospective changes**, the module **performs a recalculation for "recent" changes**.
- The computation algorithms implemented in the application have been **verified by the internal and external (Big4) auditors of the Banks** where it is in use.

6. Handling of events during the life of the financial instrument

- The application manages each event that may occur during the life of each financial instrument and recalculates the effective interest rate and amortized cost when required. Examples for such events include:
 - partial repayment,
 - restructuring,
 - change of interest rate (both actual and predicted changes),
 - additional fees collected or paid.

7. Impairment loss calculation:

- a. All types of provisions are estimated at **deal level**
- b. The **impaired amortized cost** is calculated by **discounting** the **impaired cash-flows at the financial asset's original effective interest rate** (based on normal/planned cash-flow). The impaired net present value is also calculated from impaired cash-flows using yield curves.
- c. The **provision ratio can be given** for each loan individually or can be mapped to the individual instruments using **custom rules or can be calculated** from other data such as PD and LGD.
- d. Specific impairment loss provisions estimated on homogenous groups of loans
- e. Collective provisions
- f. Unwinding of discounting



8. Unwinding of interest:

- f. The application **allows the computation of the interest income for loans** that have been **written down** as a result of an impairment loss, **in accordance with** the requirements of IFRS.

9. IFRS 7 disclosure functionalities: Fair value computation

- g. The application **calculates the fair value of each instrument based on market yield curves and other predefined parameters** (margins) for each of the different types of cash-flows described in the impairment functionalities.

10. Journal entries postings (GL accounts):

- a. A separate user interface is available for the definition of accounting rules. The defined rules are stored in the system's metabase. While performing the booking entries generation, the module performs both consistency and data integrity checks.
- b. At the end of the process the **system can generate the interface files for the General Ledger system** according to the GL system's interface specification and other requirements (aggregation level, file naming convention etc.).

11. Reconciliation and manual correction functionalities (optional):

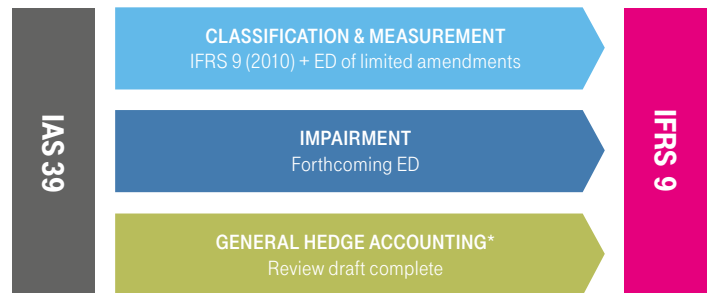
- a. During the loading of interface data the application summarizes the received input data and compares them with the General Ledger. **The differences will be reported according to the dimensions.**

12. Reporting functionalities (optional):

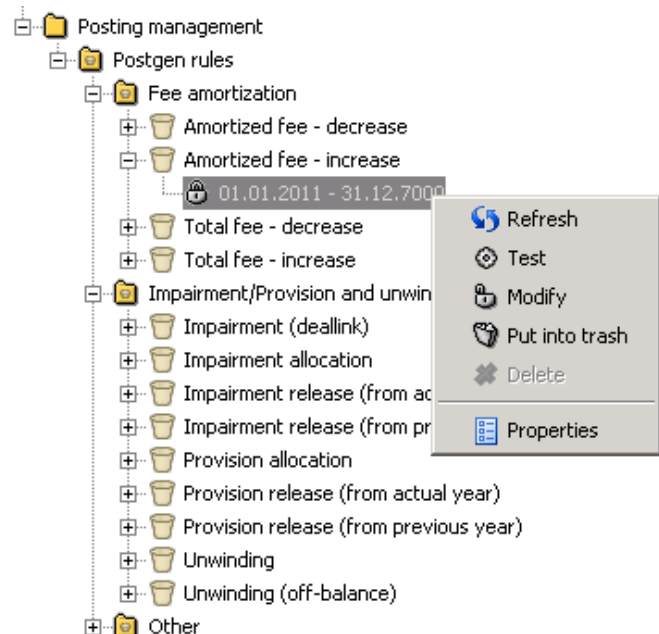
The reporting function of the application supports the **preparation of standard, user-defined reports** in regular intervals as well as on demand.

13. IFRS 9 functionalities (available from the next release)

Our aim is to develop the system and always have it up-to-date and ready for new requirements. Therefore the **new release of the IFRS module** is already under development **to meet new IFRS regulatory requirements.**



*Macro hedge accounting is being deliberated separately from this project



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