SAP® Financial Consolidation 10.1, starter kit for financial and regulatory reporting for banking, SP7

Configuration design documentation

TABLE OF CONTENTS

A. INTRODUCTION

This documentation describes how the SAP® Financial Consolidation starter kit for financial and regulatory reporting for banking was designed. In part B, we describe the main principles used to structure the multidimensional database and the excel tools available. In part C, we describe and explain for each module of the Setup domain the configuration choices. Then, part D is focused on transverse topics such as "In-flow consolidation" or "FINREP reporting". Part E is dedicated to enhancement principles. Part F lists the annexes with excel files references.

It is very important to understand that one main configuration principle is the use of characteristics defined in the dimension builder in order to make it easy to enhance the customization.

It is highly recommended to read through this document before changing the configuration, in order to understand how configuration objects interact in the solution, and to enhance the starter kit in accordance with the way it was designed.

The functional scope of the starter kit for financial and regulatory reporting for banking is the following:

- Produce IFRS financial consolidated statements with the following assumptions:
    - Actual data is entered following IFRS, on a Year-to-date basis.
    - Entities are consolidated using the direct consolidation approach (and not the step-consolidation method).
    - The configuration uses the in-built feature of in-flow consolidation which enables the automatic production of the statement of cash flows and of the statement of changes in equity.
    - The following journal entries are automated: Elimination of internal provision, elimination of internal gain/loss on assets' disposal, elimination of internal dividends, elimination of reciprocal operations, elimination of investments, calculation of non-controlling interests, and conversion at closing rate.
    - The following methods are supported in the Starter kit for financial and regulatory reporting for Banking: Full method, Proportional method and Equity method.

- Produce a set of FINREP statements.
    - These statements offer a specific grouping of assets, liabilities and equity, based on the requirements from the European Banking Authority (EBA).
    - For entities to which FINREP reporting applies, the package includes additional schedules to break down the closing financial position of some assets, liabilities, and P&L accounts by types of counterparty, by products (types of market, types of risk), residence of the counterparty, etc.

- Secure the process of production of the data by:
    - Providing controls on data entry package, on manual journal entries, in central reports.
    - Having portfolios and scopes generated from data entered in the packages.
    - Providing analysis reports and configuration check reports.

The working language is English.

B.   DATA MODEL DESIGN

1.   Analysis of IFRS financial statements

1.1.   Chart of accounts

The Chart of accounts is common for IFRS and FINREP consolidations. Its organization is based on FINREP financial statements, i.e. by category of portfolios then by instruments for financial assets and liabilities.

Some usual reporting analyses (e.g. split between loans to bank and loans to customers, split of equity instruments between Shares, Units in investments funds, and other equity-related securities) are configured in the starter kit.

1.2.   Accounting flows

Flows used in data entry package allow you to identify variations in the balance sheet between the opening and closing balance and therefore automatically generate the Statement of Cash Flows.

The flows available in the package may be classified into two categories:

- Flows for current transactions (purchase, increase in depreciation, fair value, etc.)
- Flows for special transactions (changes in accounting policies, internal merger, etc.)

Other flows generated during the consolidation process allow you to retrieve changes due to currency translation differences and changes in scope consolidation.

These flows make it possible to automatically produce the following financial statements:

- Statement of Comprehensive Income
- Statement of Cash Flows
- Statement of Changes in Equity

1.3.   Dimensional analyses

Some analyses are required on indicators (account / flow pairs) for consolidation purposes. They are stored on the following dimensions:

- Partner dimension for internal transaction
- Share dimension for internal ownership
- Analysis dimension for issued capital, share premium, paid dividends, investment in subsidiaries by date
- Analysis dimension for correction of financial statements (OCI, statement of cash flows)

These dimensions are used to post automatic journal entries (internal eliminations, consolidation of investments, currency translation using the spot rate for acquisition of investments…).

2.   Analysis of FINREP templates

2.1.   Chart of accounts

The Chart of accounts must allow retrieving the following FINREP templates:

- Balance sheet statements (templates F01.01 Assets, F01.02 Liabilities, F01.03 Equity)
- Statement of Profit or Loss (template F02.00)
- Statement of Comprehensive income (template F03.00)

A first draft of the CoA can be designed, based on these templates and some usual reporting analyses in IFRS financial statements (e.g. split between loans to bank and loans to customers, split of equity instruments between Shares, Units in investments funds, and other equity-related securities).

Additional breakdowns of some accounts are required for templates like "F12.1 Movements in allowances and provisions for credit losses". These breakdowns make it possible to retrieve impairment of financial assets analyzed by stage and by method of assessment (collectively or individually assessed).

A list of all accounts configured in the starter kit, linked to the FINREP templates in which they appear is attached in Annex F.1.1.

2.2. FINREP flows

For consolidation purposes, the flow dimension is used to analyze the variation from opening to closing position in the balance sheet and therefore produce automatically the statement of cash flow and the statement of changes in equity. The closing position (carrying amount) is broken down by various axes in FINREP templates. For instance, financial assets are broken down by instrument and counterparty sector.

Other values of this flow dimension (FINREP flows) are combined to the account dimension to enter indicators required for FINREP purposes in the starter kit in addition to the carrying amount at closing. For instance, FINREP flows are used to break down the carrying amount of financial assets subject to impairment by maturity.

The use of these flows in FINREP templates is detailed in Annex F.1.2.

2.3. Design of the database model

Some indicators (account / flow pairs) need to be broken down by sector of counterparty, by product…as these analyses are required in FINREP templates. Consequently, several dimensions have been configured (see §C.3.1 Overview of the dimensions)

The partner dimension, used for consolidation of internal operations, stores also the information related to counterparties.

A list of all indicators (accounts in rows and flows in columns) with the analyses attached to each account is provided in Annex F.1.3. The code of the FINREP template filled by the intersection account / flow or account / flow / analyses is specified for all accounts.

This Annex consists in five files corresponding to the five types of accounts (assets, liabilities, equity, P&L, disclosures).

Each file contains several tabs grouping the accounts by type of instruments (derivatives, equity instruments, debt securities, loans & advances, short positions, debt securities issued, deposits) or group of accounts (fixed assets, provisions, commitments and guarantees…).

C.   PRESENTATION BY MODULE

3.   Dimension builder

3.1.   Overview of the dimensions

The table below lists all the dimensions (both built-in dimensions and additional dimensions created specifically) used in the starter kit, with a description of how they are used in the configuration.

Dimension	Use in the starter Kit	Main topic	Built-in	Hierarchy
CA-CATEGORY	One category scenario available in the Starter kit: A - Actual		√	
DP-DATA ENTRY PERIOD	Standard		√	
SC-SCOPE	Pre-configured scopes for demonstration and test sets of data		√	
VE-CONSOLIDATION VERSION	Pre-configured variants for consolidations		√	
CC-CONSOLIDATION CURRENCY	ISO 4217 list of currencies		√	
AN-ANALYSIS	Multi-purpose dimension: - Financial statements line items (Statement of Cash Flows/Statement of Changes in Equity /Statement of Comprehensive Income) - Data entry on a daily basis - Retrieval of rates and quotation convention - Storage of the components of goodwill calculation (Equity share, Investment price)	Financial statements & Conversion at spot rates		√
PE-PERIOD	Standard - Period = Data entry period as the Actual category is single-period		√	
RU-REPORTING UNIT	Pre-configured Reporting units for demonstration and test sets of data + Third parties	FINREP	√	√
ORU-ORIGINAL REPORTING UNIT	Standard (same reference table as Reporting unit) - ORU = RU as the starter kit does not manage step consolidation		√	√
AC-ACCOUNT	The main types of accounts are assets, liabilities and equity, Profit and Loss (P&L) and clearing accounts	Account/flow	√	√
FL-FLOW	- Opening/Closing Positions for Balance Sheet (B/S) & Year to Date for P&L accounts - Balance sheet movements - FINREP analysis - Specific analysis: Disposal	Account/flow	√	
AU-AUDIT ID	Identification of the entry type: - package - local or IFRS adjustments in the package - manual or automatic journal entries	Consolidation entries	√	
PA-PARTNER	- Identifies the reporting unit involved in the transaction (same reference table as Reporting unit) - Defines the sector of counterparty for transactions made with third parties	Consolidation entries & FINREP	√	√
SH-SHARE	Identifies the held company (same reference table as Reporting unit)	Consolidation entries	√	√
CU-CURRENCY	ISO 4217 list of currencies (same reference table as Consolidation currency)		√	

Dimension	Use in the starter Kit	Main topic	Built-in	Hierarchy
TO-TECHNICAL ORIGIN	Standard - used in a few consolidation rules and reports	Quarterly conversion	√	
GO-GEOGRAPHICAL ORIGIN	Standard			
LE-LEDGER	Standard - used in general ledger reports		√	
NU-JOURNAL ENTRY NUMBER	Standard - used in general ledger reports		√	
CO-COUNTRY	Analysis of financial assets by residence of counterparty	FINREP		√
MU - MANAGEMENT UNIT	Standard - Not used in the starter kit		√	
PMU-PARTNER MANAGEMENT UNIT	Standard - Not used in the starter kit		√	
PR-PRODUCT	Analysis by product, type of risk and market for Derivatives, by product for Loans & Advances, by nature of the activity for fees and breakdown of interests in unconsolidated structured entities, type of risks	FINREP		
FI – FINREP	Of which analyses, NACE codes of counterparties, type of investments	FINREP		
IS-ISIN	ISIN Codes (to be enhanced) used to collect data for FINREP table 40.2 Group structure instrument-by-instrument	FINREP		
FV-FAIRVALUE	Analysis of the fair value at closing by level, with a distinction between the historical value and accumulated changes in fair value	FINREP		

3.2. Account dimension

3.2.1. Balance sheet accounts

Financial assets and liabilities are classified by portfolio category then by instrument.

Portfolios categories stick to FINREP presentation, which is more detailed than IFRS 9, and are the following:

1/ Financial instruments measured at **F**air **V**alue **T**hrough P&L **(FVTPL)**

- HFT: Assets and liabilities **H**eld **F**or **T**rading
- MFVTPL: Assets **M**andatorily at **F**air **V**alue **T**hrough **P**&L
- DFVTPL: Assets and liabilities **D**esignated at **F**air **V**alue **T**hrough **P**&L

2/ Financial assets measured at **F**air **V**alue **T**hrough **OCI (FVTOCI)**

3/ Financial assets and liabilities at **A**mortised **C**ost (AC)

The naming convention for financial accounts is the following:

- the first letter of the code enables you to identify the accounting class: A for asset, E for equity, L for liabilities and P for profit and loss (net income).
- For financial assets and liabilities accounts, the second position indicates the portfolio category and the third position indicates the instrument.
- For equity accounts, there are specific code ranges for Other Comprehensive Income in Equity attributable to owners of the parent entity and in Non-Controlling Interests.

BALANCE SHEET ACCOUNTS

Code	Description	Code	Description
			EQUITY
		E1xxxx	Capital and group equity accounts except OCI
		E2xxxx	Other Comprehensive Income (OCI) accounts
		E8xxxx	Non-Controlling Interest (NCI) - all accounts except OCI
		E9xxxx	Non-Controlling Interest (NCI) - OCI
	ASSETS		**LIABILITIES**
A0xxxx	Cash		
A11xxx	Financial assets HFT - Derivatives	L11xxx	Financial liabilities HFT - Derivatives
A12xxx	Financial assets HFT - Equity instruments	L12xxx	Financial liabilities HFT - Short positions
A13xxx	Financial assets HFT - Debt securities	L13xxx	Financial liabilities HFT - Deposits
A14xxx	Financial assets HFT - L&A	L14xxx	Financial liabilities HFT - Debt securities issued
A22xxx	Financial assets MFVTPL - Equity instruments	L15xxx	Financial liabilities HFT - Other
A23xxx	Financial assets MFVTPL - Debt securities		
A24xxx	Financial assets MFVTPL - L&A		
A33xxx	Financial assets DFVPL - Debt securities	L33xxx	Financial liabilities DFVTPL - Deposits
A34xxx	Financial assets DFVPL - L&A	L34xxx	Financial liabilities DFVTPL - Debt securities
A42xxx	Financial assets FVTOCI - Equity instruments	L35xxx	Financial liabilities DFVTPL - Other
A43xxx	Financial assets FVTOCI - Debt securities		
A44xxx	Financial assets FVTOCI - L&A	L531xx	Financial liabilities AC - Deposits to banks
		L535xx	Financial liabilities AC - Deposits to customers
A53xxx	Financial assets AC - Debt securities	L54xxx	Financial liabilities AC - Debt securities issued
A541xx	Financial assets AC - L&A to banks	L551xx	Financial liabilities AC - Other fin liab to banks
A545xx	Financial assets AC - L&A to customers	L555xx	Financial liabilities AC - Other fin liab to customers
A61xxx	Hedging derivatives	L61xxx	Hedging derivatives
A62xxx	FV changes of the hedged items in portfolio hedge of interest rate risk	L62xxx	FV changes of the hedged items in portfolio hedge of interest rate risk
A7xxxx	Investments		
A8xxxx	Tangible and intangible assets	L8xxxx	Provisions
A9xxxx	Other assets	L9xxxx	Other liabilities

The other non-financial assets include two specific accounts "A97100 – Debt instruments held for sales" and "A97200 – Other non-current assets and disposal groups classified as held for sale", in accordance to standard IFRS5. Similarly, account "L97000 - Liabilities included in assets classified as held for sale and discontinued operations" is used.

In order to be able to reconcile the variation between the carrying value at opening and end of the period, Gross value, Amortization/Depreciation and Impairment are stored on different accounts for assets that can be amortized or depreciated/impaired. For example:

- A81111 - Property, plant and equipment in own use, gross value
- A81116 - Property, plant and equipment in own use, depreciation
- A81119 - Property, plant and equipment in own use, impairment

3.2.2. Income statement accounts

The income and expenses are classified by nature with a distinction between continuing and non-continuing operations on main types of assets and liabilities (Derivatives, Equity instruments, Deposits, etc.), The income statement is composed of the following blocks of accounts

P&L ACCOUNTS

Code	Description
P11xxx	Interest income
P12xxx	Interest expenses
P13xxx	Expenses on share capital repayable on demand
P14xxx	Dividends
P2xxxx	Fees and commissions
P31xxx	Gains and Losses derecognition assets not at FVTPL
P32xxx	Gains and Losses derecognition liabilities not at FVTPL
P411xx	Gains and Losses on financial assets HFT
P412xx	Gains and Losses on financial liabilities HFT
P421xx	Gains and Losses on financial assets MFVTPL
P431xx	Gains and Losses on financial assets DFVTPL
P432xx	Gains and Losses on financial liabilities DFVTPL
P5xxxx	Gains and Losses on hedge accounting
P6xxxx	Net exchange differences and other operating income/expenses
P71xxx	Administrative expenses
P72xxx	Depreciation of tangible/intangible assets
P73xxx	Modification gains or (-) losses, net on financial assets
P80xxx	Provisions / reversal of provisions
P81xxx	Impairment or reversal of impairment on financial assets not at FVTPL
P82xxx	Impairment or reversal of impairment on investments in subsidiaries, JV, associates
P83xxx	Impairment or reversal of impairment on non-financial assets
P84xxx	Negative goodwill recognised in P&L
P85xxx	G/L and share of the profit or (-) loss of investment in subsidiairies, JV and associates
P86xxx	Profit or (-) loss from NC assets and disposal groups classified as held for sale not qualifying as discontinued op.
P89xxx	Tax expenses or (-) income related to P&L from continuing operations
P9xxxx	Profit or loss attributable to discontinued operations

3.2.3. Other accounts pre-configured

- Clearing accounts (AxxCL, LxxCL, PxxCL) are used for the elimination of reciprocal accounts:
  - To retrieve contributive balance sheet balanced by entity
  - To ensure that data generated by the rules are balanced (Debit/Credit)

These accounts are retrieved in the financial statements IFRS and FINREP (Balance sheet and P&L). They are not taken into accounts in other FINREP templates because they may create inconsistencies (e.g. Geographical breakdown). Those accounts should be balanced and equal zero. If not, manual journal entries should be post.

- Balancing accounts for Business Units (xxxBU)

- Total accounts (TA99999, TLE9999, TP99999 and TX99999) are used to configure the properties of accounts according to their class in the CoA step of the category scenario (debit/credit, type of account…) and to calculate totals assets, liabilities and equity, and net income in the consolidated data table, thanks to the account rollup rule

- Disclosure accounts (Xxxxx)

3.2.4. Characteristics on the Account dimension

Characteristics of accounts are used to configure dynamically most of the objects in order to secure the enhancement of the starter kit.

The table below lists the characteristics and sub-characteristics defined in the starter kit:

Characteristic ▶ Sub charact.	Description	Built-in
SIGN	Debit for Assets. Credit for Equity, Liabilities and P&L and + for several disclosure accounts Distribute amounts in debit and credit columns in journal entry reports by journal entry number.	✓
CLASS	Assets, Liabilities, P&L, Total, Disclosures Used in formulas, controls, schedules, rules Also used to select accounts in the package Statement of cash flows and the MAPPING-1 reference table (consolidated SCF)	✓
DIGITS	Number of digits after decimal (0 in the starter kit)	✓
CONVERTED	Indicates whether the account must be converted (only number of stocks and Property accounts are not converted in the starter kit)	✓
FLOW Flow analysis	Assigns accounts to flow analyses in the category scenario. Also used in formulas, controls, schedules, filters	
DIMENSION Dimensional analysis	Assigns accounts to dimensional analyses in the category scenario. Also used in formulas, controls, schedules, filters	
TOTAL	This characteristic defines the parent account for any elementary account. It is used to build the CoA hierarchy in the category scenario, assign properties to accounts (e.g.credit/ debit in journal entry) and calculate total asset, total liabilities and net income. - For the Balance sheet: TA99999 account includes all asset accounts (Axxxxx), TEL9999 account includes all Equity accounts (Exxxxx) and Liability accounts (Lxxxxx); - For the Income statement: TP99999 account includes all P&L accounts (Pxxxxx).	
CONTEXT	Distinguish between accounts available in the package only with identification of those that will be impacted by the transition to IFRS9, and consolidated accounts -used in data entry restrictions	
RULE-SEL Rule selection	Selects accounts in consolidation and reconciliation rules	
▶ RULE-DEST Rule destination	Defines destination accounts in consolidation rules	
CFS Cash Flow Statement	Selects accounts in the package Statement of cash flows and the MAPPING-1 reference table (consolidated SCF)	
IFRS-L1 - IFRS retrieval level 1 ▶ IFRS-L2 ▶ IFRS-L3 ▶ IFRS-L4	Defines the structure of IFRS financial statements	
FINREP-L1 FINREP - Retrieval level 1 ▶ FINREP-L2 ▶ FINREP-L3 ▶ FINREP-L4	Defines the structure of the FINREP financial statements	
DIM-PA-TYPE Type of analysis	Identifies the type of intercompany detail that is required for some accounts: reciprocal, internal provisions, dividends, etc.	

Characteristic ▶ Sub charact.	Description	Built-in
P-ACCOUNT Account presentation in package	Makes it possible to configure dynamically data entry schedules	

3.3. Flow dimension

3.3.1. Balance sheet movements

Changes in the B/S items are captured or calculated as follows, which allows rules to calculate automatically the Statements of cash flows, of changes in equity and comprehensive income:

- For all the Equity accounts and the depreciation/amortization/impairment accounts, a detailed analysis of the movements is required,
- For all the other assets and liabilities, a detailed analysis of movements is required only when the Cash Flow Statement makes a distinction between increase and decrease of the corresponding item,
- Specific operations are identified separately for all B/S accounts: Transfer (F50), Changes in accounting policies (F09), restructuring (transfer of B/S accounts from the acquired to the acquiring company in case of an internal merger: F70),
- Two flows used only during the transition to IFRS 9 period, identify the reclassification of financial assets / liabilities (F08A) and the remeasurement impact (F08B).
- The flows used to handle scope changes are valid for all B/S items: Incoming entities (F01), Outgoing entities (F98), Change in consolidation rate (F04), Change in consolidation method (F02, F03), Change in interest rate (F92)
- Opening balances (F00) are automatically calculated from the closing balance (F99) of the previous year for all B/S items.

3.3.2. Other flows used in the IFRS reporting

For P&L accounts, a dedicated flow Year-to-date (Y99) is used. This flow has default values for conversion rate, carry over …in the category builder that are different from those of flow F99 - Closing flow. This enables a dynamic enhancement of B/S and P&L account families.

Two technical flows are used as part of internal gains/losses on disposal of assets:

- Flow X01 - Sales prices is configured to collect the sale price when you dispose of an asset
- Flow X02 - Depreciation adjustments of assets acquired internally is used to store the amount of adjustment that you must post on depreciation after the asset has been disposed of.

The built-in YTD and PER flows are not used in the starter kit.

3.3.3. Flows used for FINREP purposes

For FINREP analyses, the starter kit uses the flow dimension to collect additional information, such as the number of days past due, the distinction between impaired and unimpaired assets, etc. For more detail on FINREP analyses, see § D.4.

3.3.4. Characteristics and properties of the Flow dimension

Characteristic	Use in the Starter kit	Built-in
BALANCED	Standard - Ensures that flows in the same manual journal entry are balanced	✓
FLSET Set of flows	Sorts FINREP flows by categories such as Performing exposures, transferred assets…	☐
USE	Groups together the flows in 4 categories in order to ease dynamic selection of flows in rules, filters and reports and create data restriction excluding FINREP flows for non FINREP entities - BS: Accounting flows used in the BS - PL: Accounting flows for P&L - FINREP: Analysis flows used for FINREP - A: Analysis of internal acquisitions / disposals	☐

3.3.1. Naming convention

Accounting flows used in the balance sheet start with F, whereas FINREP flows start with T. P&L flow is named Y99 and analysis of internal acquisition / disposals start with X.

3.4. Audit ID dimension

The native AU - Audit ID dimension is defined to identify the origin of the data. Each type of data is assigned with a different audit ID:

- Data entered in packages
- Data from automatic processing
- Data entered by manual journal entries.

3.4.1. Naming convention

The naming convention enables the end-user to:

- Distinguish data generated automatically (ending with 0) from data generated manually (ending with 1 or 2).
- Retrieve the calculation on non-controlling interests (e.g. 4NCI-DIV10 - Calculation of NCI on elimination of internal dividends) along with the basis of calculation (e.g. 3DIV10 and 3DIV11 - elimination of internal dividends automatic/manual).
- To order the audit ID in the local to consolidated statements 0: local, 1: adjustments, 2: reciprocal elimination, 3: internal elimination, 4: consolidation entries, 8: correction of reports, 9 goodwill declaration)

3.4.2. Characteristics and properties of the Audit ID dimension

The table below lists the characteristics / properties assigned to the Audit ID dimension.

Characteristic	Use in the Starter kit	Built-in
JEN-CUR Journal entry currency	Standard - Indicates at which amount level of the consolidated data table the amounts are loaded for each audit ID	✓
JEN-RESTRICT JE restriction on variant and scope	Standard – There is no requirement to enter neither scope nor variant in the starter kit	✓
LEVEL	Standard - Indicates if the Audit ID is available in the package or only centrally (carry-over of closing flow triggered or not)	✓

Characteristic	Use in the Starter kit	Built-in
OB-AUDITID Opening balance audit ID	Identifies the Audit ID for opening balances	✓
MANUAL-JEN Manual journal entry	Standard - Indicates whether a manual journal entry can be posted on this Audit ID	✓
DOC-RESTAT Document restatement	Standard - Identifies the audit IDs used for adjustments in the package	✓
CONSO-RATE Apply conso rate	Standard - Indicates whether the consolidation rate is applied to this Audit ID	✓
SET Set of audit ID	Distinguishes between the different types of Audit ID: local, adjustment, reciprocal elimination, internal profit, consolidation and technical	
SPLIT	Identifies Audit IDs that should be broken down between Group and NCI, and defines the corresponding split Audit ID	

The values taken by these characteristics are summarized in the following table:

Set of Audit ID	Example of Audit Ids	Level	Opening Balance Audit ID	Journal entry currency	Apply conso. rate	Split
Local IFRS data	Package data: 0PACK01	S Original	Each Audit ID is carried forward to the same Audit ID except in specific cases. Example: 0PACK91- Package data - Central correction	1: Reporting ID currency	YES	For each audit ID that must be split between the Group and NCI, a rule generates automatically the correct destination Audit ID. Example: split of audit ID 0PACK91 is generated on 4NCI-PACK90
	Local adjustments: 0PACK11	R Local adj.				
	Central corrections: 0PACK91	G Central JE				
Adjustments	1ADJ90, 1ADJ91	G		1	YES	
Elimination of reciprocal operations	2ELIM10, 2ELIM11	G		3: Consolidation currency -included at conv. level	NO (c)	
Elimination of internal profit	3DIV10, 3PRO10, 3DIS10	G		1 or 3 (a)	YES (c)	
Consolidation entries	4INV10, 4GW20, 4CTA10, 4NCI-PACK01	G		4 (b): Consolidation currency -included at conso. level	NO (d)	NO

(a)   Elimination of internal provisions: 1
      Elimination of internal gains and losses on sale of asset and dividends: 3
(b)   Except for Currency Translation Adjustment (CTA): 3 and,
      Adj. on gains and losses on disposal of a subsidiary: 1 or 3
(c)   No application of the consolidation rate for reciprocal operations and internal gains and losses on sale of assets (rate is calculated by a coefficient)
(d)   Except for CTA and adjustments on gains/losses on disposal of a subsidiary

4.   Category builder

The starter kit provides one single Category Scenario: A - Actual (version: C - Current).

4.1. Chart of accounts

4.1.1. Hierarchical chart of accounts

The hierarchical chart of accounts enables the automatic calculation of total accounts in the package (environment: Original package audit ID and adjustment audit IDs) and, together with the Account Rollup rule, of total accounts at consolidated level.

It is initialized using the TOTAL characteristic of the ACCOUNT dimension.

In the starter kit, the Category Builder hierarchical chart of accounts is the same as the one initialized in the Dimension Builder.

To ensure the correctness of data retrieval, the account hierarchy defined in the dimension builder (based on the TOTAL characteristic) and the one set up in the category scenario should always be identical.

If it is not the case, you should know that:

- Total calculation is done using the Category Builder hierarchical chart of accounts
- The Category Builder hierarchical chart of accounts is retrieved in reports initialized with the hierarchical mode

This could generate discrepancies with totals that are initialized in schedules using the TOTAL characteristic of the Dimension Builder.

4.1.2. Calculation properties

Calculation properties enable you to define:

- the journal entry sign that is used to store a positive or a negative amount in the database depending on the Debit or Credit position chosen in manual journal entries
- in the starter kit, the journal entry sign of Asset accounts is Debit and the journal entry sign of Equity, Liabilities and P&L accounts is Credit (for instance, for an asset, an amount posted in a manual journal entry on the credit position will be stored in the database with a minus)
- the rollup sign that is used to calculate total accounts (aggregation or subtraction of amounts)
- in the starter kit, the rollup sign is always positive

The combination of the Type and the Data entry sign enables to define the correct Journal entry sign for each account, it doesn't force the data entry sign in the schedule.

Calculation properties defined in the category scenario must be consistent with the SIGN and CLASS characteristics of the ACCOUNT dimension in the dimension builder:

| | Dimension Builder | | Category Builder | |
| | Account characteristics | | Calculation properties | |
Account	Class	Sign	Type	Journal entry sign
TA99999 Axxxxx	Assets	Debit	Assets	Debit
TLE9999 Lxxxxx/Exxxxx	Equity & Liabilities	Credit	Liabilities	Credit
TP99999 Pxxxxx	Profit & Loss	Credit	Income	Credit
TX99999 Xxxxxx	Disclosures	+/D/C	Other accounts	D/C

Sign convention defined in the starter kit

The following sign convention applies to closing balances:

- Assets: gross values are entered as positive amounts; amortization, depreciation and impairment are entered as negative amounts
- Equity & liabilities: amounts are entered as positive amounts
- Income statement: revenues are entered as positive amounts, expenses as negative amounts.

	Assets	Amort. Depr & Impairment	Liabilities & Equity	Income	Expenses
Entry	+	-	+	+	-
Storage	100	-100	100	100	-100

In addition to the sign logic defined for accounts, the flows use the following rules:

- Assets (Gross values) and Equity & Liabilities: increases are entered as positive amounts, decreases as negative amounts
- Assets (Amort. Depr & Impairment): increases are entered as negative amounts, decreases as positive amounts

	Assets				Equity & Liabilities	
	Gross Values		Amort. Depr & Impairment			
	Increase	Decrease	Increase	Decrease	Increase	Decrease
Entry	+	-	-	+	+	-
Storage	100	-100	-100	100	100	-100

Advantages of the sign convention defined in the starter kit:

- Financial statements can be retrieved directly with stored amount (no amount reversal needed)
- It enables total calculation as a simple addition of amounts, for instance:
- In the P&L, income is positive amount and expenses are negative amounts: the net income is the sum of income and expenses
- In the Assets, gross value are positive amounts, depreciation & impairment are negative amount: the TOTAL ASSETS is the sum of all asset accounts

Do not change the sign convention as it has a strong impact on the design of formulas and controls in the category scenario, consolidation rules, and on some formulas used in reports (for example, in schedule C42-05 - Consolidation control dashboard).

If the sign convention used in ledgers is different, the best practice is to use the interface mapping table to change the sign if necessary before importing data in Financial Consolidation.

4.1.3. Comments

In the starter kit, comments are authorized on all accounts.

4.2. Option

4.2.1. Journal entries

The starter kit for banking configuration allows posting adjustments in the package within schedules and not manual journal entries. This choice was made in order to ease import of IFRS adjustments from accounting systems.

4.2.2. Data entry and restrictions

The starter kit follows the direct consolidation approach. No step consolidation method and no sub-consolidation package are defined for entities consolidated using the full consolidation or the proportional consolidation method.

Depending on the type of data entry, different data entry restrictions are defined on the package:

- Standard package: PACK-10
- Package used for the transition from IAS39 to IFRS9: PACK-10-TRANS

Data entry restrictions use filters on the account and flow dimensions (e.g. FINREP flows are not allowed to IFRS only package). In addition, the IFRS data entry restriction use filters on the partner and share dimensions.

4.2.3. Other tabs

The tabs used for the in-flow consolidation process (Opening balance, Changes to scope, Changes to consolidation method) are detailed in the § D.1.5 Scope changes.

4.3. Periods

The Actual Category Scenario is single-period.

4.4. Account families and flows behavior

This major step consists of grouping accounts from the chart of accounts that have the same behavior into account families:

- defining the authorized flows for these accounts that could be entered in the package schedules and in the manual journal entries, based on the tool
- specifying:
  o the opening balance flow
  o the carry-over flow, the context in which this carry-over flow is filled in
  o the applied conversion rate and whether there is a flow for storing the conversion difference. (See § D.1.4 Foreign currency translation)

The Account families are loaded automatically using the FLOW characteristic of the ACCOUNT dimension.

4.4.1. Criteria to build the account families

Criterion #1: Class of accounts

- Profit and loss accounts:

  - Defined on Year to date flow (Y99)
  - Double-sided journal entry authorized

- All Balance sheet accounts:

  - Defined on opening flow (F00), closing flow (F99), Change in accounting policies (F09), reclassification flow (F50), currency translation flow (F80), internal merger (F70) + scope changes flows (except Change in interest rate flow (F92)) and variation flow (F15); for the other flows, see criterion #2
  - Double-sided journal entry authorized on every accounting flow

- Totals:

  - Defined on flow F00, F09, F99 for balance sheet subtotals and flow Y99 for P&L subtotals
  - No manual journal entry

- Disclosures: Single-side journal entry authorized

Criterion #2: Financial statement purposes / FINREP flows analyses

The account/flows pairs that can be entered are defined in order:

- to produce automatically the statement of cash flows and the statement of changes in Equity,

- specify which FINREP flows are to be entered to collect the information required in EBA's templates.

The second criterion is therefore the authorized flows.

Annex F.2.1" Accounts families" displays a list of all the account families with the following details:

- A list of the flows allowed in each family,
- The currency conversion rate relevant for each flow

The distinction between local and central accounts is not a criterion to make two different account families. Only the class of accounts and journal entry contexts (single-side, dual-side journal entry) and then the authorized flows are used to define the account families.

4.4.2. Balance sheet

An additional column in the file presented in Annex F.2.1 Accounts families , "F15" indicates whether flow F15 is used as a control flow (C) –that is, flow F15 must be equal to 0– or net variation flow (NV). Note that this information is not relevant for central accounts, because flow F15 is never calculated.

The following flows are allowed in each and every Asset, Liability and Equity account family:

- F01 - Incoming units
- F02 - Change in consolidation method (old)
- F03 - Change in consolidation method (new)
- F04 - Change in consolidation rate
- F09 - Change in accounting policies
- F15 - Net variation
- F50 - Reclassification
- F70 - Internal mergers
- F80 - Currency Translation Adjustment
- F98 - Outgoing units

Assets and liabilities families are presented for all flows existing in the configured design.
Equity families are presented for accounting flows only as the other flows are not authorized for these accounts.

4.4.3. Statement of Profit or Loss

All profit and loss accounts are grouped together in four account families:

AC_FLOW NAME	ACCOUNT_FAMILY_LDESC	Y99	T020	T720	T725
FP-010	P&L except interests to banks/customers G/L on assets/liabilities DFVPL & personnel expenses	Y99			
FP-020	P&L - Interest income / expenses to banks and customers	Y99			
FP-030	P&L - Gains / losses on financial assets & liabilities DFVTPL	Y99	T020		
FP-040	P&L - Personnel expenses	Y99		T720	T725

4.4.4. Total accounts

For these accounts, the account families are defined as indicated in the following table:

AC_FLOW NAME	ACCOUNT_FAMILY_LDESC	F00	F99	Y99
FT-000	Total Balance sheet	F00	F99	
FT-002	Total Profit and Loss			Y99
FT-004	Total other off-balance exposures		F99	

Note that the totals on the Balance sheet accounts are calculated only for flows F00 and F99.

4.4.5. Other accounts

For these accounts, 27 account families are defined.

4.5. Dimensional analyses

The Dimensional analysis step enables to define the analyses required to:

1/ perform the consolidation:

- Internal transactions (PARTNER dimension)
- Internal ownership (SHARE dimension)
- Issued capital, share premium, paid dividends, investment in subsidiaries by date (ANALYSIS dimension)
- Correction of financial statements (ANALYSIS dimension)

2/ produce FINREP tables:

- Of which analyses (FINREP dimension) e.g. "OW10 of which at cost"
- Analyses by sector of counterparty (PARTNER dimension), residence of the counterparty (COUNTRY dimension), PRODUCT (for derivatives, Loans,…), Fair value hierarchy (FAIRVALUE dimension)

Financial assets and liabilities accounts (except investments that are analyzed by SHARE and debt securities issued that are analyzed by FAIRVALUE) are analyzed by counterparty as first level of analysis.

The following counterparty filters are used in the dimensional analyses, in the formulas and in the controls [1]:

- RU2-200   All reporting units and all third parties (TP-9999 incl.)
- RU2-220   All reporting units except FINREP counterparties and TP-9999
- RU2-225   All reporting units except FINREP counterparties (TP9999 included)
- RU2-250   All third parties (TP%)
- RU2-260   FINREP third parties: TP9010 TP9020 TP9030 TP9040 TP9050 TP9052
- RU2-275   FINREP third parties: TP9010 TP9020 TP9030 TP9040
- RU2-280   FINREP third parties: TP9050, TP9052 non-fin. corp.
- RU2-285   FINREP third parties: TP9010 to TP9060
- RU2-290   FINREP third parties: TP9020 TP9030 TP9040
- RU2-TP9010   Central banks
- RU2-TP9030   Credit institutions
- RU2-TP9060   Third parties Households

For codified counterparties (RU2-220), amounts generated at this level by automatic journal entries are always posted on the indicator, which simplifies the configuration of rules eliminating intercompany amounts.

This principle applies only for accounting flows.

---

[1] It is mandatory to use filters that are identical in dimensional analyses, formulas and controls steps of the category scenario but when no elementary partner value is used in dimensional analyses (only filters), the syntax % (all partners) can be used.
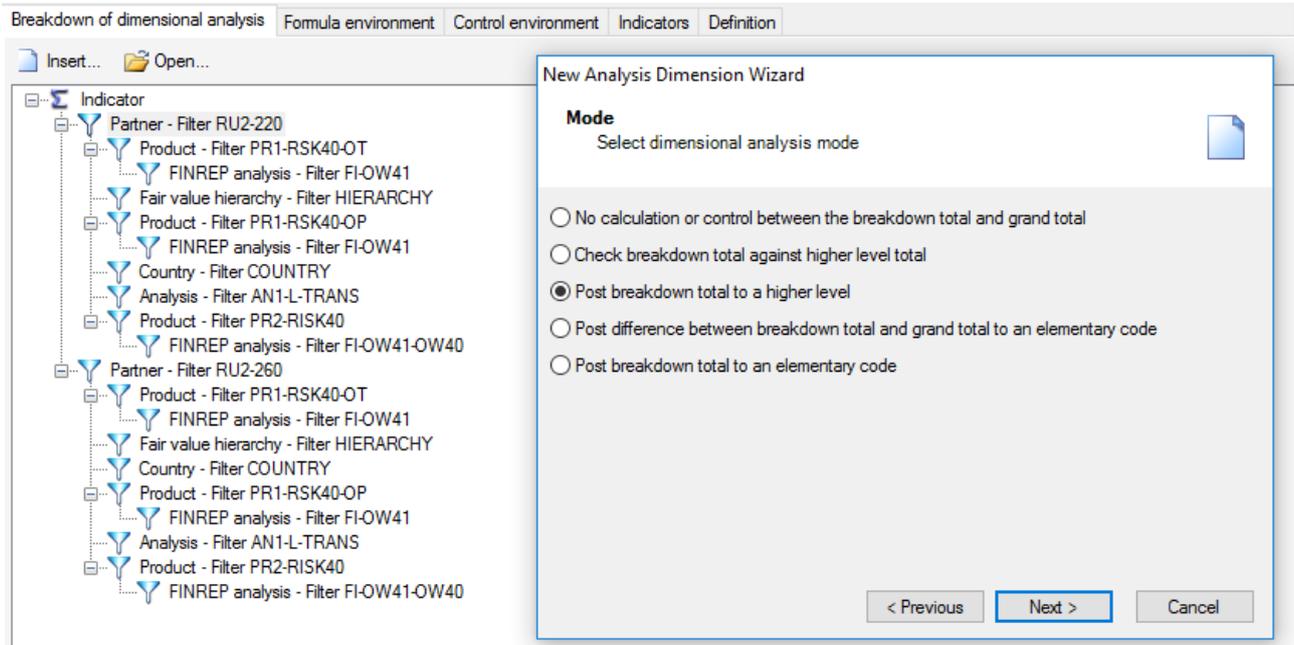
Then, depending on the flows, further analyses are configured, with manual controls checking the consistency of data entered in parallel. In the above example (derivatives HFT),

- Codified counterparties (RU2-220) are analyzed by product then "Of which: economic hedge". In parallel, they are analyzed by fair value hierarchy. They are also analyzed by country.
- FINREP Third parties (RU2-260) are analyzed by product then "Of which: economic hedge". They are in parallel analyzed by fair value hierarchy. They are also analyzed by country.
- Manual controls check that the sum of country analysis is equal the total entered for each counterparty. They are written as follows:

- Similarly, a control checks that the sum of Fair Value analysis is equal to the total entered for each counterparty. Another control checks that the sum of Product analysis is equal to the total entered for each counterparty.

In order to avoid having a mix of manual and automatic controls checking the consistency of analyses entered, no automatic control has been configured.

Regarding accounting flows, they are all included in the same dimensional analysis even if the breakdown is only required at closing for FINREP purposes. In packages, data is entered for FINREP analyses on F99 (and eventually on flow F00) whereas in manual journal entries, it is possible to enter these analyses on movement flows with carry-forward on F99. Therefore, data is controlled on closing flow (F99) for packages and manual journal entries, as shown hereafter for derivatives HFT, but not on movements:

Code	Text	Factor	Expression
PF21-002	Derivatives HFT assets analysed by counterparties must = the total amount (F99, T505, T510)	{AC = A11000 ; FL in (F00; F99; T505; T510)}	{PA sum %} = {#PA}
PF21-006	Derivatives HFT assets analysed by country per counterparties must = the total amount (F99)	{AC = A11000 ; FL = F99 ; PA in %}	{CO sum COUNTRY} = {#CO}
PF21-010	Derivatives HFT assets analysed by type of derivatives per counterparties must = the total amount (F99, T505, T510)	{AC = A11000 ; FL in (F99; T505; T510) ; PA in %}	{PR sum %} = {#PR}
PF21-014	Derivatives HFT assets analysed by fair value hierarchy per counterparties must = the total amount (F99)	{AC = A11000 ; FL in (F00; F99) ; PA in %}	{FV sum HIERARCHY} = {#FV}
PF21-018	Derivatives HFT assets economic hedge must be < or = to the risk / other markets except credit risk (F99, T505)	{AC = A11000 ; PA in % ; PR in PR1-RSK40-OT ; FL in (F00; F99; T505)}	{FI sum FI-OW41} <= {#FI}
PF21-020	Derivatives HFT assets economic hedge must be < or = to the risk / options markets except credit risk (F99, T505)	{AC = A11000 ; PA in % ; PR in PR1-RSK40-OP ; FL in (F00; F99; T505)}	{FI sum FI-OW41} <= {#FI}
PF21-022	Derivatives HFT assets economic hedge must be < or = to the credit risk (F99, T505)	{AC = A11000 ; PA in % ; PR in PR2-RISK40 ; FL in (F00; F99; T505)}	{FI sum FI-OW41-OW40} <= {#FI}
PF21-024	For derivative HFT, by product and counterparties, the carrying and notional amounts of which sold must be <>0 if the notional amount exists	{AC = A11000 ; PR in % ; PA in %}	IF (EXIST ({FL = T505}) ; {FL = F99} <> 0 AND {FL = T510} <> 0)
PF21-030	For derivative HFT, by product and counterparties, the notional amount must be >= to the of which sold analysis (T505 >= T510)	{AC = A11000 ; PR in % ; PA in %}	{FL = T505} >= {FL = T510}

Accounts are assigned to dimensional analyses dynamically, using the DIMENSION characteristic of the Account dimension.

The naming convention for the members of the DIMENSION characteristic builds on the name of the first dimension used for the breakdown. For example, characteristic D-PA-120 – "Derivatives HFT" uses the dimension PARTNER as first breakdown in the various dimensional analyses:
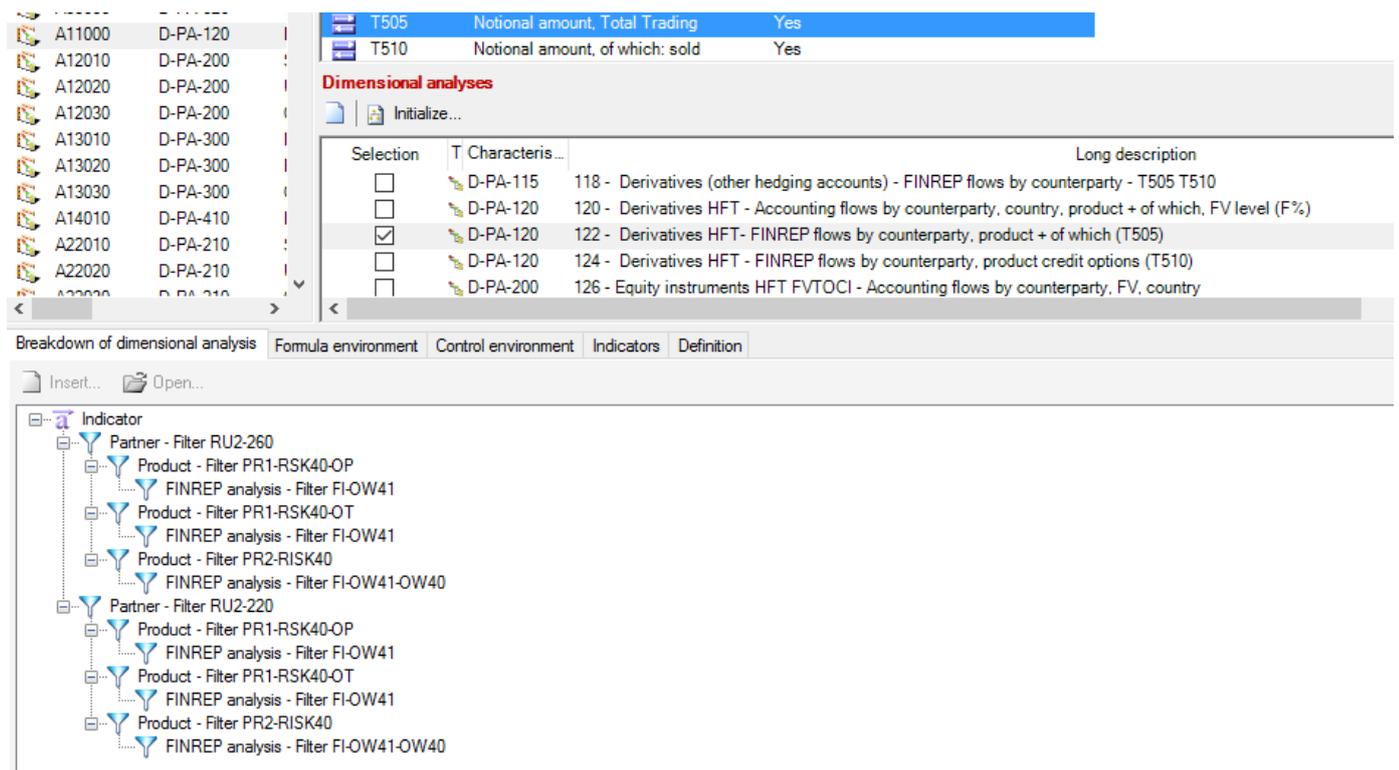
Refer to the tool presented in Annex (F.2.2 Dimensional analyses) to access the complete list of dimensional analyses.

4.6. Formulas

4.6.1. Description of the formulas

The formulas are organized in two sets in the A-Actual category scenario:

- IFRS: Formulas relevant for all types of package
- FINREP: Formulas specific to FINREP flow (not relevant for entities only included in IFRS scope)

Reminder: The following entity filters are used in formulas

- RU2-200: All codified counterparties and third counterparties
- RU2-220: Codified counterparties (used for intercompany accounts)
- RU2-275: All FINREP third counterparties except non-financial counterparties and households
- RU2-280: All FINREP non-financial third counterparties

IFRS set of Formulas

Long description	Formula	Context	See §
Breakdown by shares of profit or losses on sale of shares	{AC in (DIMENSION=D-SH-90); FL = Y99; SH in RU2-200} = {AC sum AC1-FLOW06; FL sum FL1-150; SH in RU2-200}	Package only	4.6.1
Dividends paid	{AC = XE16000 ; FL = F06} = - {AC sum (E12010; E12020; E16000; E86000)}	Package and central manual journal entries	4.6.2
Interim dividends paid	{AC = XE16000 ; FL = F07} = - {AC sum (E12010; E12020; E16000; E86000)}	Package and central manual journal entries	4.6.2
Net income of the period in the Balance Sheet	{AC = E16000 ; FL = F10} = {AC sum (CLASS=P) ; FL = Y99} - {AC = E86000 ; FL = F10}	Package and central manual journal entries	4.6.3
Long description	**Formula**	**Context**	**See §**
Net variation flow	{FL = F15} = {FL = F99} - {FL sum FL2-105}	Package only	4.6.4
Property account	{AC = XY-PROP} = 1	Package only (original audit ID)	4.6.5
Sales price by share of investments in subsidiaries	{AC = A71100 ; FL = X01 ; SH in RU2-200} = {FL = X01 ; SH in RU2-200 ; PA sum RU2-200}	Package and central manual journal entries	4.6.6

FINREP set of Formulas

Long description	Formula	Context	See §
Forbone exposures by counterparty: gross (T400) = performing (T405) + non-performing (T425)	{AC in AC1-DIM40 ; FL = T400 ; PA in %} = {FL = T405} + {FL = T425}	Package and central manual journal entries	4.6.7
Forbone exposures: gross (T400) = performing (T405) + non-performing (T425)	{AC in AC1-DIM05 ; FL = T400} = {FL = T405} + {FL = T425}		
Related parties: Commitments and guarantees received (F99) = commitments (T905) + Guarantee max (T910)	{AC = XGF0010 ; FL = F99 ; PA in %} = {AC sum AC1-FLOW46 ; FL = T905 ; PA in %} + {AC sum AC1-FLOW47 ; FL = T910 ; PA in %}	Package and central manual journal entries	4.6.8
Related parties: Commitments given (F99) = Loans and Commitments given nominal value (T905)	{AC = XGF0000 ; FL = F99 ; PA in %} = {AC sum AC1-DIM60 ; FL = T905 ; PA in %}		
Related parties: Commitments given (T320 of which non performing) = Loans and Commitments given entered by counterparty	{AC = XGF0000 ; FL = T320 ; PA in %} = {AC sum AC1-DIM60 ; FL = T320 ; PA in %}		

Related parties: Debt securities (F99)	{AC = XGA0010 ; FL = F99 ; PA in %} = {AC sum AC1-DIM08 ; FL = F99 ; PA in %}
Related parties: Debt securities (T320)	{AC = XGA0010 ; FL = T320 ; PA in %} = {AC sum AC1-DIM08 ; FL = T320 ; PA in %}
Related parties: Deposits	{AC = XGL0000 ; FL = F99 ; PA in %} = {AC sum AC1-FLOW33 ; FL = F99 ; PA in %}
Related parties: Derivatives	{AC = XGF0020 ; FL = F99 ; PA in %} = {AC sum AC1-FLOW01 ; FL = T505 ; PA in %} + {AC sum AC1-FLOW31 ; FL = T505 ; PA in %}
Related parties: Equity instruments	{AC = XGA0000 ; FL = F99 ; PA in %} = {AC sum AC1-FLOW02 ; FL = F99 ; PA in %}
Related parties: Fee and commission expenses	{AC = XGP0040 ; FL = Y99 ; PA in %} = {AC = P22000 ; FL = Y99 ; PA in %}
Related parties: Fee and commission income	{AC = XGP0030 ; FL = Y99 ; PA in %} = {AC = P21000 ; FL = Y99 ; PA in %}
Related parties: Interest expenses	{AC = XGP0010 ; FL = Y99 ; PA in %} = {AC sum AC1-FINREP02 ; FL = Y99 ; PA in %}
Related parties: Interest income	{AC = XGP0000 ; FL = Y99 ; PA in %} = {AC sum AC1-FINREP01 ; FL = Y99 ; PA in %}
Related parties: Loans and advances (F99)	{AC = XGA0020 ; FL = F99 ; PA in %} = {AC sum AC1-DIM04 ; FL = F99 ; PA in %}
Related parties: Loans and advances (T320)	{AC = XGA0020 ; FL = T320 ; PA in %} = {AC sum AC1-DIM04 ; FL = T320 ; PA in %}

4.6.1. Calculation of breakdown by shares of profit or losses on sale of shares

To avoid entering twice the breakdown by share of profit or loss on sale of share (in schedule PA2300 that analyses the acquisition and disposal of share, and in a schedule analyzing the breakdown of the account P85010 of the P&L), a formula carries over the amount entered in PA2300 by share on account P85010.

4.6.2. Calculation of dividends paid

The analysis by beneficiary of dividends paid and interim dividends paid is entered in a technical account XE16000. To ease the data collection, flows F06 (dividends paid) and F07 (interim dividends) for this account are populated by formula as being the sum of the authorized accounts of the equity (and the same flows).

4.6.3. Calculation of the net income in the balance sheet

The movement related to the net income of the period, stored on flow F10 - Net profit (loss), is calculated from the Income statement. This calculation is done for all audit IDs except for manual journal entry at consolidated level (e.g. CONS01) in order to be able to post corrections to the non-controlling interest calculation of net income.

4.6.4. Calculation of net variation flow

In order to ensure that Closing flow= Opening flow + Movements (see § B 1.2), flow F15 is always calculated for any B/S account on which F15 is allowed (only in the package, not in manual journal entries). The formula will be automatically updated with any new account added to the Balance sheet.

Note that this calculation applies automatically to any dimensional analysis, so whenever a dimensional analysis (by Partner, Share, etc.) is defined on an indicator allowed on flow F15, F15 is also calculated on the detail by Partner, Share, etc.

4.6.5. Calculation of property account

This technical account is calculated in order to store and retrieve centrally the scope rates, the currency exchange rates used during the consolidation process and the quotation convention (multiply/divide) used in the exchange rate table. A rule selects this technical account and generates the above-mentioned data.

4.6.6. Calculation of sales prices by share

The sales prices are entered in the package by share and partner. This formula aggregates all the partners to calculate the sales prices by share

4.6.7. Calculation of FINREP flow for forborne exposures

Flow T400 (Forborne exposure) = flow T405 (performing exposure) + T425 (non-performing forborne exposure).

4.6.8. Calculation of the technical accounts dedicated to related parties (XCGxxxx)

These technical accounts are calculated from the data entered on balance sheet, P&L and off-balance sheet accounts by counterparty. It is then possible to check that the analysis by related parties is lower or equal to the amount recognized in financial statements.

4.7. Controls

One set of controls P-A has been created. It contains two types of controls, assigned to two distinct levels:

- Level 1: Controls valid for any entity filling in a package used in the IFRS consolidation
- Level 3: Controls only valid for entities consolidated in the FINREP scope

4.7.1. Structure of the set of controls

To facilitate correction of data inconsistency in the package, the set of controls is structured the same way as the list of data entry schedules in the package.

The P-A set of controls contains the following control subsets:

- PA10   Balance
- PA20   Securities & shareholdings
- PA30   Flow analysis
- PA41   Reciprocal operations
- PA42   Internal gains and losses
- PA43   Dividends
- PA44   Internal provisions
- PF10   Cash
- PF21   Derivatives HFT and hedging (assets)
- PF22   Equity instrument at FVTPL
- PF23   Debt securities at FVTPL
- PF24   Loans and Advances at FVTPL
- PF31   Equity instrument at FVTOCI
- PF32   Debt securities at FVTOCI
- PF33   Loans and Advances at FVTOCI
- PF41   Debt securities AC
- PF42   Loans and Advances AC
- PF51   Derivatives HFT and hedging (liabilities)
- PF52   Financial liabilities FVTPL
- PF53   Financial liabilities AC
- PF60   Other assets liabilities
- PF70   Profit & Loss
- PF80   Other disclosures

4.7.2. Control configuration principles

The controls are built using characteristics of the account dimension (CLASS, DIMENSION, FLOW) but in several cases (Controls checking that Gross value > Impairment + Depreciation), you must update manually the list of controls when adding a new account.

Type of controls

Hereafter, we list the main type of controls. Please refer to Annex F.2.3 Controls for full detail.

Aim	Example	IFRS reporting	FINREP reporting
Check balances	Assets = Equity + Liabilities at opening, closing, on reclassification flow…	X	X
Check gross value versus impairment / depreciation	Gross value of L&A AC is greater or equal to L&A impairment (also checked for the analysis by partner)	X	X
Exhaustive breakdown by share, partner	Reciprocal accounts, dividends, gains and Losses on disposal of assets, provisions	X	X
Complete analyses by accounting flow on total account	Net equity by flow (flow F15 net variation =0) Transfer flow (F50) must balance	X	X
Complete analyses by accounting flow for each partner/share	Investment in subsidiaries by share by flow (F15=0 for each share)	X	X
Exhaustive breakdown of indicators at closing and for some FINREP flows	Breakdown by counterparty equals total indicator for Debt instruments AC at closing (F99), on flows T3xx (performing and non-performing exposures, on flows T4xx (Forborne exposure) and on flows T2% (maturity). Exhaustive breakdown by country of derivatives HFT on flow "T505 Notional amount - Total trading"		X
Consistency of flows on total account	Flow T300 (performing exposure) is equal to the sum of T305 (performing exposure <= 30 days) and T310 (performing exposure >30 days <=90 days)		X
Consistency of flows for each counterparty and further detail if any	For each counterparty, Flow T300 is equal to the sum of T305 and T310		X
Exhaustive breakdown of indicators	Breakdown by country, fair value hierarchy, product, is exhaustive for each counterparty at closing and for some FINREP flows		X
Consistency of "Of which analyses" with total indicator	L&A AC analysed by collateral per counterparties must be <= the total amount (F99, T910)		X

Environment

All controls are blocking errors except controls checking:

- the entry of the number of shares in capital and securities
- the consistency of a breakdown by date (used for the spot conversion which is an option)
- the existence of an amount (e.g. notional amount when carrying amount exists)

For all subsets of controls, the package audit ID 0PACK01 is tested in addition to audit IDs specified in one of the following filter:

- AU1-R: Local adjustments in the package (0PACK11)
- AU2-PACK: All audit IDs except 0PACK01

For each control type, a detail is provided on the environment (context and Audit IDs) in which the controls apply. The following principles have been applied to select the context and audit IDs of each control:

- Controls that check the equality between two amounts (i.e. Assets = Equity + Liabilities) are triggered audit ID by audit ID
- Controls that check the sign of an amount (i.e. Gross amount + impairment / depreciation of an asset >=0) are triggered for a filter of aggregated audit IDs. This makes it possible to post an adjustment on audit ID 0PACK11 to change the value of a depreciation entered on audit ID 0PACK01.

  Example: In the package (0PACK01), the gross value of an investment property is 500 and depreciation -200. A local adjustment of -50 can be posted on audit ID 0PACK11 to increase this depreciation. The control will check that the net value of the investment property is greater than 0 based on the aggregated values entered on 0PACK01 + 0PACK11.

For controls checking Assets = Liabilities at opening and at closing, the tolerance is set to 1 in order to deal with rounding problems when interfacing the package.

Controls are linked to the package schedules where the data can be corrected.

5. Report designer

5.1. Package schedules

5.1.1. Package folders

There are two package formats available for data entry, corresponding to different folders. The data entry packages available in the starter kit are:

- Folder (P-A), which contains schedules relevant for all entities (named PAxxxx) and schedules appropriate for entities that need to report FINREP data (named PFxxxx). This includes both consolidated entities and entities that are not consolidated (especially because they are below the materiality levels) but still need to be included in the scope for FINREP.
  FINREP schedules are used to enter specific breakdown of balance sheet, profit and loss or off balance sheet accounts: analysis by counterparty sector, by product, or by country of counterparty…; analysis of past due assets and impaired assets.

- Folder P-A-TRANS, which is the same as folder P-A but contains an additional book PA55, that collects data specific to transition IFRS 9

5.1.2. Design principles of package schedules

All the schedules are using the same style book and header/footer template.

To help the end-user, blue arrow on the left side of a cell indicates that you can enter data.

Linking from the balances until the most detailed schedules (breakdown by flow, then by partner, then FINREP analysis…) is used to facilitate data entry and ensure its completeness.

A guide tab is defined for each schedule.

The use of characteristics of the account dimension makes the application as dynamic as possible. Nevertheless, some schedules – FINREP data entry schedules - had to be hard-coded in order to make them user-friendlier with visual controls. The table hereafter indicates which folders are configured dynamically (as long as you don't create new characteristic reference members):

DYNAMIC UPDATE?	Account Characteristics

Books/Schedules	CLASS	FLOW	TOTAL	RULE-SEL	RULE-DEST	DIM-PA-TYPE	DIMEN-SION	FINREP	IFRS	CFS
PA10 - Balances	X	X								
PA20 - Securities and shareholdings (1)		X								
PA30 - Flow analysis	X	X								
PA41 - Reciprocal operations					X					
PA44 - Internal provisions				X						
PA50 - Notes										
PA60 - Annual reports -legal reporting	X							X	X	X
PA70 - Control statements - legal reporting	X			X	X	X	X			X
PF10 to PF80 – FINREP data entry schedules (2)		X								
PF90 - FINREP tables (3)		X	X				X	X		
PF95 - FINREP control statements		X								

(1) All the schedules are hard-coded except PA2700 Equity statement which is based on characteristic FLOW
(2) All the schedules are hare-coded except the one listed hereafter, that are based on the FLOW characteristic
(3) Except hard coded accounts in tables F02.00, F10.00, F11.01, F12.00, F16.01, F16.02, F16.03, F16.05, F16.06, F16.07, F22.01, F22.02, F43.00, F44.01, F44.02, F44.03, F45.01, F45.02, F45.03

The following reports should be updated manually:

- PA20 - Securities and Shareholdings:

    - Account "XE16000 - Dividends paid" is hard coded in schedule **PA2700 – Equity statement**. The rest of the schedule is based on characteristic FLOW
    - Other schedules in this book are hard-coded

- PA30 - Flow Analysis

    - Schedule **PA3180 - Other assets** is hard-coded
    - Schedule **PA7400 - Other liabilities** is hard-coded.
    - The rest of the schedule is based on characteristic FLOW and CLASS

- PA42 - Internal gains and losses:

    - Tangible assets (A811xx) and intangible assets (A821xx) accounts are hard coded in schedules (respectively) **PA4220 -Purchase and disposal of tangible assets** and **PA4230 - Purchase and disposal of intangible assets**.

- PA43 - Dividends:

    - "P14900 - Dividend income - Investments in subsidiaries, joint ventures and associates" and "XE16000 - Dividends paid" are hard coded in schedules **PA4310 – Dividend received**, **PA4320 – Dividend paid** and **PA4330 – Dividend paid by beneficiary- Date**.

- PA70 - Control statements:

    - Account "P14900 - Dividend income - Investments in subsidiaries, joint ventures and associates" is hard coded in schedule **PA7200 - Intercompany - Income and expenses**
    - Accounts "A71100 - Investments in subsidiaries, joint ventures and associates – gross", "A71900 - Investments in subsidiaries, joint ventures and associates – impairment", and "P85010 - Gains or (-) losses on derecognition of investments in subsidiaries, joint ventures and associates, net" are hard coded in schedule **PA7400 - Purchase and disposal of investments in subsidiaries** (Control)

- PF10 to PF80: All the data entry schedules included in these books select accounts thanks to the characteristics FLOW or DIMENSION **except**:

    - PF1005 - Cash balances and other demand deposits by counterparty - Main flows
    - PF2430 - Loans and advances FVTPL to non-financial corporations by NACE and Of which analysis
    - PF3228 - Debt securities FVTOCI detailed by "Of which: purchased credit impaired/non-perf." (Impairment)

- PF3324 - Loans and advances FVTOCI to non-financial corporations by NACE and Of which analysis (Gross)
- PF3332 - Loans and advances FVTOCI by product, collateral, purpose, subordination (Gross)
- PF3334 - Loans and advances FVTOCI by product, collateral, purpose, subordination (Impairment)
- PF4128 - Debt securities AC detailed by "Of which: purchased credit impaired/non-perf." (Impairment)
- PF4224 - Loans and advances AC to non-financial corporations by NACE codes (Gross)
- PF4244 - Loans and advances AC by product, collateral, purpose, subordination (Gross)
- PF4246 - Loans and advances AC by product, collateral, purpose, subordination (Impairment)
- PF6005 - Debt instruments held for sale: Performing and non performing exposures
- PF6010 - Debt instruments held for sale: Forborne exposures
- PF7020 - Fee and commission income and expenses by activity
- PF8005 - Commitments and guarantees: Main flows
- PF8010 - Commitments and guarantees by counterparty
- PF8020 - Benefit plan
- PF8030 - Assets involved in the service provided
- PF8035 - Interests in unconsolidated structured entities
- PF8040 - Interests in unconsolidated structured entities by nature of the activities
- PF8055 - Group structure: instrument-by-instrument by share and ISIN

- PF90 – FINREP tables (local retrievals)

All the schedules are based on the FINREP characteristic except the ones listed hereafter:

- PF91008 - F4.3.1 - Financial assets at fair value through other comprehensive income
- PF91010 - F4.4.1 - Financial assets at amortised cost
- PF91024 - F9.1.1 - Off-balance sheet exposures: Loan commitments, financial guarantees, and other commitments given
- PF91034 - F11.4 - Hedge items in fair value hedges
- PF91052 - F16.1 - Interest income and expenses by instrument and counterparty sector
- PF91054 - F16.2 - Gains or losses on derecognition of financial assets and liabilities not measured at fair value through P&L
- PF91056 - F16.3 - Gains or losses on financial assets and liabilities held for trading by instrument
- PF91062 - F16.5 - Gains or losses on financial assets and liabilities designated at fair value through P&L by instrument
- PF91064 - F16.6 - Gains or losses from hedge accounting
- PF91066 - F16.7 - Impairment on non-financial assets
- PF91096 - F22.2 - Assets involved in the services provided
- PF91116 - F43 - Provisions
- PF91118 - F44.1 - Components of net defined benefit plan assets and liabilities
- PF91120 - F44.2 - Movements in defined benefit plan obligations
- PF91122 - F44.3 - Memo items [related to staff expenses]
- PF91124 - F45.1 - Gains or losses on financial assets and liabilities designated at FV through P&L by accounting portfolio
- PF91126 - F45.2 - Gains or losses on derecognition of non-financial assets other than held for sale
- PF91128 - F45.3 - Other operating income and expenses

Summary reports should be updated when adding a new schedule.

5.2. Output reports

A series of output reports is available (folders: Cx). These reports may be used to edit the financial statements at the end of the consolidation process, as well as to check the consolidation process as you go along.

5.2.1. Organization of reports

- C0 - Home pages and summary reports

This book includes a retrieval main home page, used to navigate easily to several retrieval reports. The consolidation you want to query data from is specified when running the document, and this initialization will

be passed to any other document you open using the predefined links. Several reports enable the consolidation manager to monitor the consolidation process (e.g. list of the available consolidations).

- C1 - Annual report

    - Book C11: This book is composed of the Financial statements (B/S, Statement of profit or loss, Statements of cash flows, changes in equity, other comprehensive income).
    - Book C14: This books contains some disclosures required for the transition from IAS39 to IFRS9

- C2 - Analysis

The reports in this folder enable a detailed analysis of the financial statements:

    - Financial statements detailed by reporting unit (in column): book C21
    - Detail of the financial statements items by account or reporting unit: book C22
    - Other breakdown (including details of Statement of comprehensive income and Statement of cash flows by line item): book C23

- C3 - Accounting reports

A series of accounting reports is available in the starter kit. This includes:

    - Closing balances (B/S by flows, Statement of profit or loss): book C31
    - General ledgers (for one account and one entity): book C32
    - Ledgers for one reporting unit: book C33

- C4-Control reports

Folder C4 consists of books that are used to check the overall consolidation process

    - C41 - Check packages: This book is used to control data integration and opening balances. Besides, some reports are designed to check consistency of data in case a company's data is split by Business units using several packages.
    - C42 - Check main balances: When a consolidation process has been run, you can use the reports of book C42 to perform consistency controls on consolidated data, such as:
        o Some flows (F00, F99, other flows for example, F01) must balance, clearing accounts must be equal to 0, and Closing position (F99) must be equal to opening (F00) + movements,
        o Consistency check between net income in the B/S and the P&L,
        o Cash flow statement must balance.

Schedules C42-05 and C42-10 are overall control dashboards. You can use the defined links to more detailed schedules if you discover an inconsistency.

    - C43 - Check conversion by transaction date: The schedules of this book allow the central user to check and solve errors that may occur in data conversion using spot rate.
    - C44 - Intercompany reconciliations: This book contains reports to perform intercompany data reconciliation (they show the possible mismatch between the declaration of each reporting unit by partner and the opposite declaration of the partner). Some reports display all the reconciliation data (regardless of whether there is a reconciliation mismatch or not), while others display only differences over 1. These reports are initialized with the Intercompany reconciliation data source.
    - C45 - Transition from local to consolidated figures: This book is made up of schedules displaying the balance sheet and P&L accounts with a detail in columns by set of Audit-ID. If needed, each Audit-ID set can be detailed by elementary Audit-ID.
    - C46 - Net equity, dividends and goodwill: You can use these schedules to check the elimination of internal dividends, display a detail of total equity by account or company (with flows in column), analyze the changes in foreign currency exchange reserve or check goodwill of incoming companies.

- C5 - FINREP Tables

This folder consists of books used for the FINREP reporting.

    - C50 - Financial statements: This book is composed of the core information required by FINREP (Assets, Liabilities, Equity, Statement of Profit and Loss) and the Statement of comprehensive income.
    - C51 – Other FINREP tables: This book is composed of 64 tables required for the non-core information.
    - C52 - Analysis: This book enables a more detailed analysis of the financial statements, by reporting unit or by account. It is also possible to get details about one line of the FINREP Statement of comprehensive income.

- C53 - Accounting reports: This book contains balances and general ledgers dedicated to the analysis of FINREP flows (Txxx) and closing flows (F99, Y99). To get detailed information about an Fxx flow, you can use the schedules of book C32 - General ledgers.

- **C6 - FINREP/IFRS reconciliation**

This folder consists of books used to compare the IFRS and FINREP data.

- C61 - Scope Comparison (FINREP / IFRS): This book provides some reports to check the differences between the IFRS and the FINREP scopes of consolidation.
- C62 - Balances reconciliation (FINREP / IFRS): This book enables the comparison of the FINREP and IFRS balance sheets.
- C63 - Analysis of line items (FINREP / IFRS): This book provides general ledgers and a balance to compare the FINREP and IFRS financial statements.

Note that a dedicated chapter D.4.4 explains in more details the reconciliation process between FINREP and IFRS consolidation scope and financial statements.

5.2.2. Configuration principles

The main configuration principles are the following:

- Several header/footer templates are designed according to the nature of the report and its purpose
- Consistent and complete links between reports have been configured in order to provide an audit trail.
- Use of in-built features such as Dimension formulas. This makes it possible to build control reports that check
    - main balances such as Assets = Liabilities
    - validation rules for financial assets such as T300 = T305 + T310:
        - Flow T300 "Gross carrying amount – Performing"
        - Flow T305 "Not past due or Past due <= 30 days"
        - Flow T310 "Past due > 30 days <= 90 days"
    These formulas can be re-used in several reports. (see hereafter).
- Use of characteristics to build the reports as dynamically as possible. Financial reports use either the dimension ACCOUNT or the dimension ANALYSIS (for changes in equity, other comprehensive income and statement of cash flows).

5.2.2.1. Use of characteristics to configure reports

The tables hereafter indicate which folders are configured dynamically (as long as you don't create new characteristic reference members on these dimensions):

DYNAMIC UPDATE?		Account Characteristics					Analysis	Dynamic
Folder	**Books (number of reports)**	**CLASS**	**FLOW**	**TOTAL**	**FINREP**	**IFRS**	**PARENT**	
C1 - ANNUAL REPORT	C11 - Financial statements (5)					X	X	Yes [1]
	C14 – Disclosures on transition to IFRS 9 (2)	X	X					No
C2 - ANALYSIS	C21 - Financial statement by reporting unit (4)	X				X		Yes [1]
	C22 - Analysis of line items in financial statements (6)							Yes
	C23 - Specific breakdowns (5)		X	X				Partially
C3 - ACCOUNTING REPORTS	C31- Closing balances (5)	X						Yes
	C32 - General ledgers (4)						X	Yes
	C33 - Ledgers (3)	X						Yes

(1) dynamic configuration with some exceptions listed hereafter

| Folder | Books (number of reports) | Account Characteristics | | | Analysis | Dynamic | ITEMS TO UPDATE MANUALLY |
	DYNAMIC UPDATE?	CLASS	FLOW	TOTAL	PARENT		
C4 - CONTROL REPORTS	C41 - Check package (6)	X				Yes [1]	C41-30 Elementary account L9600BU
	C42 - Check main balances (9)	X				Yes [1]	C42-05 Elementary accounts in schedule, dimensions formulas and filters C42-10 Elementary accounts in filters C42-25 Elementary accounts in filters C42-30 Elementary accounts in filters C42-35 Elementary account P38100 C42-40 Elementary account P38100 C42-45 / C42-50 Elementary accounts xxxxCL in filter
	C43 - Check conversion by transaction date (6)		X		X	No	Hard coded accounts
	C44 - Intercompany rec. (8)	X				Yes	Update list of reconciliation rules in filters if new rules
	C45 - Transition from local to consolidated figures (4)	X				Yes	None
	C46 - Net equity, dividends and goodwill (9)		X	X		Yes [1] but check Audit Ids if enhancements	C46-15 - Account P14900 Dividends C46-25 Audit IDs to check if new values added C46-30 Audit Ids and flows to check if new values added C46-40 / C46-45 Elementary accounts / flows

(1) dynamic configuration with some exceptions listed in column "ITEMS TO UPDATE MANUALLY"

The following reports should be updated manually:

- C11 – Financial statements:

  - Account "E16000 – Retained earnings" and "E26000 – NCI- Retained earnings" are hard coded in schedule **C11-10 –Statement of profit or loss**. The rest of the report is based on characteristic IFRS
  - Analysis value "SCI1000 – Profit (Loss) for the period" is hard coded in schedule **C11-15 – Statement of OCI**. The rest of the report is based on characteristic PARENT of the ANALYSIS dimension
  - Schedules **C11-25 – Statement of Cash Flows** and **C11-30 – Statement of Changes** in equity are configured with elementary analysis values in schedules and filters.

- C21 – Financial statement by reporting unit:

  - Account "E16000 – Retained earnings" and "E26000 – NCI- Retained earnings" are hard coded in schedule **C21-10 –Statement of P&L by reporting unit**. The rest of the report is based on characteristic IFRS
  - Analysis values "SCI1000 – Profit (Loss) for the period" and "SCI9000 – Control" are hard coded in schedule **C21-15 – Statement of OCI by reporting unit**. The rest of the report is based on characteristic PARENT of the ANALYSIS dimension
  - Schedule **C21-25 – Statement of Cash Flows by reporting** is configured with elementary analysis values in schedule and filters.

- C23 – Specific breakdowns:

  - Schedules **C23-05 Statement of OCI and FINREP equity breakdown** and **C23-10 Statement of Cash flows breakdown** are using the "To be set" value for the analysis dimension.
  - Other schedules are hard-coded

DYNAMIC UPDATE?		Account Characteristics					Analysis		Dynamic	ITEMS TO UPDATE MANUALLY
Folder	Books (number of reports)	CLASS	FLOW	TOTAL	DIMEN-SION	FINREP	FINREP	FINREP_P		
C5 - FINREP tables	C50 - Financial Statements (5)					X	X	X	Yes [1]	C50-20 Use of FINREP characteristic except for elementary account E86000
	C51 - Other FINREP tables (65)	X	X	X	X	X	X		Yes [1]	Manual update required for Chart of Accounts enhancements: - C51-008 , C51-010, C51-034, C51-052, C51-054, C51-056, C51-062, C51-064, C51-066, C51-073, C51-096, C51-098, C51-106B, C51-116, C51-118, C51-120, C51-122, C51-126, C51-128 Manual update required when changes in the PRODUCT, FAIRVALUE or FINREP dimensions FINREP "of which analysis": C51-008, C51-010, C51-014, C51-018, C51-028, C51-030, C51-042, C51-060, C51-062, C51-066, C51-106B, C51-084, C51-102, C51-104 PRODUCT C51-014, C51-018, C51-030, C51-034, C51-060, C51-094, C51-096, C51-100 FINREP Nace C51-016, C51-090 Fair Value Hierarchy: C51-048, C51-110
	C52 - Analysis (13)				X					C52-10 (Table F2 by reporting unit): Use of FINREP characteristic except for elementary accounts E16000 / E86000
C6 - FINREP/ IFRS Recon-ciliation	C531 - Balances - Closing and FINREP flows (2)	X							Yes	None
	C532 - General Ledger - FINREP analyses (5)								Yes	None
	C61 - Scope comparison (3)	X							Yes	None
	C62 - Balances reconciliation (2)	X							Yes	None
	C63 - Analysis of line Item (4)	X							Yes	None

(1) dynamic configuration with some exceptions listed in column "ITEMS TO UPDATE MANUALLY"

5.2.2.2. Configuration of controls via dimension formulas

The following dimension formulas, used in local and central reports, have been configured in order to check main accounting balances and consistency of data entered on FINREP flows:

Code	Formula	Description of control
AC-CTRL01	{AC sum (CLASS=A)} - {AC sum (CLASS=L)}	Controlling Assets - Liabilities
ACFL-CTRL01	{AC = E16000 ; FL = F10} + {AC = E16010 ; FL = F10} + {AC = E86000 ; FL = F10} - {AC sum (CLASS=P) ; FL = Y99}	Controlling Balance Sheet income = P&L income
ACFL-CTRL02	{AC sum (CLASS=A) ; FL = F70} - {AC sum (CLASS=L) ; FL = F70} - {AC = P85020 ; FL = Y99}	F70 Internal merger
FL-CTRL02	{FL = F99} - {FL sum FL2-100}	Controlling closing = opening + variation
FL-CTRL04	{FL = T300} - {FL = T305} - {FL = T310}	Control on performing exposure (gross): T300 = T305 + T310
FL-CTRL05	{FL = T320} - {FL = T325} - {FL = T330} - {FL = T335} - {FL = T340} - {FL = T345}	Control on non performing exposure (gross): T320 = T325 + T330 + T335 + T340+T345
FL-CTRL06	{FL = T365} - {FL = T370} - {FL = T375} - {FL = T380} - {FL = T385} - {FL = T387}	Control on non performing exposure (impair): T365 = T370 + T375 + T380 + T385 + T387
FL-CTRL07	{FL = T405} - {FL = T410} - {FL = T415}	Control on forbearance - performing exposure: T405 = T410 + T415
FL-CTRL08	{FL = T425} - {FL = T430} - {FL = T435}	Control on forbearance - non performing exposure: T425 = T430 + T435

A dedicated chapter, § D.6, explains the configuration of the statement of cash flows, the statement of changes in Equity and the statement of other comprehensive income.

6.   Rules

6.1.   Sets of rules

The automatic journal entries posted in a consolidation are triggered by a set of rules. The following sets of rules are available in the starter kit, depending on the currency translation process you want to apply:

- A-YTD: currency translation on a YTD basis,
- A-QCT: currency translation on a Quarterly basis,
- A-MCT: currency translation on a Monthly basis.

Note that there is just one additional subset of rules in the A-QCT and A-MCT sets of rules (respectively, 01-QCT and 01-MCT), compared with set A-YTD. All the other rules are common to the three sets of rules used for consolidation purposes.

A subset of rules 0-OPB is dedicated to rules triggered in consolidations without opening balance.

The sets of rules used to run a consolidation process include two subsets of rules designed for retrieval purposes (24-BUT and 26-FSP) and the two following rollup rules:

- ROL-RU - Reporting Unit rollup
- TOTAL – AC - Sub totals calculation (account rollup)

The reconciliation process relies on a dedicated set of rules: A-REC.

6.2.   Design principles

6.2.1.   Naming convention

The rule code indicates which audit ID is generated by the rule.

Example: Rule PRO-120 - Elimination of other internal allowances for bad and doubtful debts and provision - Movements generates data on audit ID 3PRO20 - Elimination of internal provisions - Auto.

6.2.2.   General design principles

As a consequence of using the in-flows consolidation features, the following principles must be adhered to:

- Manage amount levels consistently in the rules and Dimension Builder: one audit ID must correspond to one amount level only
- Ensure that no modifications can be made to the opening balances except for 00-OPB subset of rules. You must therefore never customize a rule to change the opening flow.
- Guarantee that balances are carried forward correctly
- Never have the closing flow F99 impacted directly by a rule

Rules are configured to generate balanced entries by Reporting Unit/Audit ID/journal entry n°, which implies:

- Use of clearing accounts to balance the journal entries by reporting unit
- Entries that impact P&L accounts also impact the B/S result (Net Equity)
- One rule generates one audit ID

6.2.3.   Selection and processing of data

In the design of consolidation rules, whenever it is possible, the selection and generation of amounts are triggered using characteristics, which makes configuration enhancement easier.

Account dimension

The selection is mainly based on the RULE-SEL-Rule selection characteristic (directly or via filters). The RULE-DEST-Rule destination sub-characteristic is used in some rules to determine the destination reference values on the account dimension (for instance, the clearing accounts to populate when eliminating intercompany accounts).

The CLASS characteristic is also used in consolidation rules, especially in the processing tab to restrict amounts based on the sign convention that applies.

Flow dimension

The flows selection is essentially based on filters. Some of these filters on the FLOW dimension are initialized using, among other criteria, the USE characteristic, which distinguishes between B/S flows, P&L flows, FINREP flows and analysis flows.

The USE characteristic is also employed directly in some reconciliation rules.

Audit ID dimension

The selection of Audit IDs in consolidation rules relies mostly on the following characteristics:

- LEVEL, used to distinguish data entered in package schedules, local restatement and central journal entries
- JEN-CUR-Journal entry currency, used to determine at which amount level of the consolidated data table the amounts are loaded for each Audit ID,
- SPLIT, used to determine whether the Audit ID should be split between the Group and Non-controlling interests; this characteristic is also used to define the destination Audit ID in most NCI-xxx consolidation rules (Non-controlling interests' calculation).

In most rules, a filter of audit IDs excluding the audit ID generated by the rule and its corresponding manual journal entry is selected. This makes it possible to post corrections.

In specific situations, however, the consolidation engine or some consolidation rules may impact these audit IDs. For instance:

- When an entity is outgoing, the flow F00 of all B/S items is reversed on flow F98 by the consolidation engine, and this is done regardless of the audit-ID;
- If a provision was previously booked on a partner that exits the scope during the current year, a rule is designed to write off the former elimination; this rule will select both Audit IDs PRO10-Elimination of impairment on investments - Auto and PRO11 to ensure an exhaustive write-off.

FINREP analysis, Fair value hierarchy, Product, Country dimensions

These dimensions are set to "All or no members" in the selection tab of rules eliminating internal provision, intercompany transactions on accounting flows. This is necessary to maintain the consistency at closing (F99, Y99) between the accounts and their analysis by counterparty, product, of which analyses,.. at consolidated level.
In the processing tab of rules eliminating internal operations on accounting flows, the counterparty is posted with the analyses assigned to the destination account. For example, the impact on E16000 retained earnings is post without any detail except the partner dimension. The impact of the elimination of the total of the source account is calculated automatically thanks to the dimensional analysis configured in the category scenario.
In the processing tab of rules eliminating internal operations on FINREP flows, there are no destination account. A row with partner dimension set to "no value" in destination must be configured in order to impact the total of the indicator.

Amount level

Use of the journal entry currency characteristic of the generated audit ID to determine at which amount level of the consolidated data table the amounts should be selected and processed.

Impact on retained earnings for elimination journal entries

When an elimination journal entry impacts the retained earnings (for example, the elimination of an internal provision or a gain/loss on an internal asset transfer), the following principles apply:

- The detail by partner (used to trigger the elimination journal entry) is entered on the B/S flows,
- In case the data to eliminate was posted on a flow that impacts the P&L (for example, flow F25-Increase in depreciation for an internal provision), the automatic journal entry will impact a P&L account (and also flow F10 of retained earnings) with a detail by partner (or share)

- In case the data to eliminate was posted on another flow (for example, flow F00 or F01 - Incoming units), the elimination impact on the retained earnings is posted on the same flow. The elimination impact on the retained earnings is also detailed by partner (or share), in order to make it possible to reconcile FINREP and IFRS consolidation tables.

6.3.   Internal provisions (subset 04-PRO)

The internal provisions must be eliminated from the B/S and the P&L for accounting flows and FINREP flows.

The internal provisions are eliminated based on the intercompany data entered in the package and on the information of the scope. The automatic journal entries eliminate the amount on the original account, and impact the P&L and/or net Equity.

The elimination applies to any consolidated partner/share, regardless of its consolidation method.

The elimination process is triggered by two different kinds of rule, based on the dimension used to collect intercompany data:

- Impairment on investment in subsidiaries: the dimensional analysis uses the SH - Share dimension,
- Other B/S items: the dimension to collect detailed data is PA - Partner.

6.4.   Elimination of internal gains/losses on transfer of assets (subset 06-DIS)

When an asset is transferred within the group, the gain or loss must be eliminated, and the asset must keep its original value in the consolidated accounts. This applies to the following categories of assets:

- Investment in subsidiaries, JV and associates
- Property, plant and equipment in own use
- Investment property in own use
- Intangible assets in own use

The elimination of internal gain/loss on transfer of assets applies to entities (Reporting units and Partners) consolidated using the full or proportionate consolidation method and weighted with the lowest consolidation rate between both companies.

In case the buyer or seller of the asset is consolidated using the Equity method, no automatic elimination journal entry is posted.

The elimination is triggered based on the intercompany data entered in the package. This data is collected on flow F30 (regular flow to detail decrease of a B/S item) and flow X01 - Sale price, used to detail the price paid by the acquirer for this asset.
The intercompany detail is stored using the PA - Partner dimension.

The impact on the P&L depends on the category of asset (one P&L account, P610xx, by asset type).
Dedicated clearing accounts are defined to keep the B/S balanced by entity.

Example

SELLER Company (S)

P62020 Net gains/losses on Investment property		**A8121CL Clearing account - Investment property**	
❷ 100	100 ❶		100 ❷

BUYER Company (B)

A81211 Investment Property in own use, gross value		**A8121CL Clearing account - Investment property**	
❶ 600	100 ❸ ❸	100	

❶ Company S has sold investment property (NBV=500) to Company B for 600. Gain on sale=100.

❷ Elimination of the gain/loss at the seller

❸ Elimination at the buyer - The asset value is corrected to the previous net book value.

Optionally, the depreciation booked in the buyer's accounts can be automatically corrected in order to take due account of the adjustment to historical value in the consolidated account. This correction is triggered by a dedicated manual journal entry which specifies the amount of adjustment which is applicable for each consolidation period till the end of the asset depreciation period.

This journal entry must be posted to flow X02 and is applicable only to the depreciation accounts for the following categories of assets:

- Property, plant and equipment in own use
- Investment property in own use
- Intangible assets in own use

Dedicated analysis values representing consolidation periods are available to specify which adjustments need to be accounted for all corresponding accounting periods. For monthly or quarterly consolidations, amounts must be posted on a year to date basis.

6.5. Reciprocal accounts elimination (subset 08-ELIM)

Several groups of reciprocal accounts are defined.

In the Balance sheet:

- Derivatives HFT
- Loans and advances HFT / Deposits HFT
- Loans and advances FVTPL / Deposits FVTPL
- Loans and advances FVTOCI & AC to banks / Deposits not measured at FVTPL to banks
- Loans and advances AC to customers / Deposits AC to customers

In the Income statement:

- Reciprocal interest and similar – Income / Expense
- Reciprocal fee and commission – Income / Expense
- Reciprocal other operating – Income / Expense

For accounting flows only, IC accounts are eliminated against dedicated clearing accounts. Therefore, these elimination accounts show the Intercompany mismatch at group level. These clearing accounts are not considered in FINREP templates except in core templates (balance sheet and P&L)

Intercompany amounts are eliminated between entities consolidated using full or proportional methods, and weighted with the lowest consolidation rate between both companies.

Example

❶ Input amounts

❷ Elimination at the seller

❸ Elimination at the buyer

6.6.   Elimination of dividends (subset 10-DIV)

Dividends paid and received are automatically eliminated based on the payer's declaration. An additional detail, however, is collected in the dividend receiver's package to allow dividends reconciliation.

In the equity, dividends paid can be reported by the subsidiary on flows F06 - Dividends and F07 - Interim dividend, and the following accounts (with no partner detail):

- E12010 - Share premium - ordinary shares
- E12020 - Share premium - preference shares
- E16000 - Retained earnings

An additional input by partner is required on a technical account XE16000 – Dividends paid, on flows F06 and F07. The elimination journal entry is posted in the receiver's accounts (P&L and Equity).

The impact on reserves / net income is shared between the group and non-controlling interest, based on the ownership rate of the receiver company.

In case of differences (for instance, due to exchange rates), an automatic journal entry reclassifies this difference to flow F80 of the receiver's equity (account E16000 - Retained earnings).

A manual adjustment journal entry can be posted if the difference is not due to an exchange rate difference but, for example, to a mismatch in declarations between the payer and the receiver.

Foreign currency conversion

When the package of the dividend payer is in a foreign currency, flows F06 and F07 are converted by default using the average rate type. When the payer has entered the detail of paid dividend by partner and by transaction date on account XE16000, flows F06 and F07 on the net equity of the payer are converted using the spot rate entered in the exchange rate table and corresponding to the payer's currency exchange rate at the date when the dividend was agreed by the Annual general meeting.

In case there is a conversion difference, dedicated audit IDs DIV20 (auto) and DIV21 (manual journal entry) have been created to post this difference.

Example

- Owner company O holds 100% of subsidiary S
- O received a dividend of 100 CUR from S
- S dividend of 100 CUR was paid to O on June 30
- Both O and P are foreign subsidiaries reporting in CUR. Exchange rates are as follows:

OR	AR	CR	June 30
0.25	0.27	0.2	0.286 *

* spot rate at the date the dividend was paid

Subsidiary (S)

P14900 Dividend income - Investments in subsidiaries, joint ventures and associates					E16000 Retained earnings			
Audit ID	**Share**				**Audit ID**	**Share**		
0PACK01	S		❶	370				
3DIV10	S	❷	350		DIV10	S	❷	350
3DIV20	S	❸	20		DIV20	S	❸	20

❶ Manual entry — Dividend declared in the package, converted at the average rate (100 / 0.27)

❷ Automatic entry — Elimination of the dividend received, triggered by the declaration of S (100 / 0.286)

❸ Automatic entry — Processing the conversion difference between dividends received (100 / 0,27) and dividends paid (100 / 0.286). This amount is transferred later to the Foreign Currency Translation reserve.

Dividends paid by an incoming entity

In case dividends are paid by an incoming entity, dedicated rules are designed to transfer the amount stored on XE16000/F06 and XE16000/F07 to flow F01.

6.7. Elimination of investments (subset 14-INV)

Investments in group's subsidiaries, joint ventures and associates are collected and detailed by owned entities, using the SH - Share dimension.

An automatic elimination of group investment is triggered based on the information found in the consolidation scope (for instance, no elimination will occur when the detail on the Share dimension corresponds to a non-consolidated entity). It is posted at the consolidated level, on a dedicated audit ID: 4INV10 - Elimination of investments - Auto.

The elimination journal entry impacts both the owner and held companies:

-   Owner company (Parent): the investment values are eliminated against the elimination account A711OC - Elimination of investments in subsidiaries - Owner company.
-   Held company (Subsidiary): the investment elimination triggers an entry on the group retained earnings against the elimination account A711HC - Elimination of investments in subsidiaries - Held company. In case there are indirect non-controlling interests in the owner company, the impact on the retained earnings is split between group and NCI, based on the group's share of the owner.

Example

Owner Company (O)

(owned at 80% by the group)

A71100 Investments in subsidiaries, joint ventures and associates - gross				A711OC Elimination of investments in subsidiaries - Owner company	
❶ Share H	100	Share H	100 ❷	❷ Share H	100

Held Company (H)

(incoming, owned at 100% by O)

	E16000 Retained earnings			**A711HC Elimination of investments in subsidiaries - Held company**	
❸	Share O	80		Share O	100

	E86000 NCI - Other reserves and retained earnings	
❸	Share O	20

❶ Input amounts

❷ Elimination of the investment in O

❸ Counterpart of the elimination of O investment in H

6.8.   Goodwill calculation (subset 11-GWC)

This subset of rules is dedicated to the calculation of goodwill or bargain purchase and its declaration on technical accounts. Automatic booking of goodwill in consolidated accounts is handled by the next subset of rules, 12-GW.

As for the manual declaration, automatic declaration of goodwill is done on technical accounts (XA82100 - Declared bargain purchase analyzed by owner or XA82110 - Declared goodwill analyzed by owner, Gross) and flow F01 for incoming entities, with a breakdown per share to identify the owner company. It is stored in the subsidiary's reporting currency, using audit ID 9GW00 - Disclosure of goodwill and bargain purchase.

This calculation applies only to the acquisition of a new subsidiary, joint-venture or associate.

The automatic calculation is done in three steps:

- The calculation of the investment acquisition price (rule GWC-110). Data generated is stored on the dedicated technical accounts XA821xx with a detail on the ANALYSIS dimension reference member INV-PRICE. The coefficient SCP210 is used to limit the calculation to the relevant pairs of owner and held companies.
- The calculation of share in net equity (rule GWC-120). Data generated is stored on the technical accounts XA821xx with a detail on the ANALYSIS dimension reference member: EQU-SHARE. The coefficient SCP220 stores the direct financial interest rate of owner companies in held companies used to calculate the share in net equity.
- The calculation of goodwill or bargain purchase (rule GWC-130) is the difference between the investment acquisition price paid by the holding company and the share in net equity of the held company previously calculated. Data generated is stored on accounts XA821xx with no detail on the ANALYSIS dimension. A coefficient, DAT140, is needed to translate goodwill in the held company's reporting currency, because the two previous amounts needed for this calculation have been previously calculated in consolidation currency.

To know more about goodwill calculation and coefficients description, you can read the dedicated How to guide How to configure automatic goodwill calculation.

The automatic calculation of goodwill is optional. It can easily be deactivated by removing the subset of rules 11-GWC from the consolidation set of rule.

This feature requires a statutory consolidation scope initialized with a portfolio. Indeed, coefficients configured in the rules need to search portfolio tables for the list of pairs of owner/held companies and the direct financial interest rate of owner companies in held companies used to calculate goodwill. This information is not available in the consolidation scope.

6.9.   Goodwill recognition (subset 12-GW)

Goodwill values are declared centrally via a technical journal entry posted at the held company. This technical journal entry is either automatically posted by the above-mentioned subset of rules 11-GWC, or entered manually.

Based on this information, an automatic journal entry impacts the Goodwill (assets) against the Equity. If needed, the impact on equity is split between the Group and Non-controlling interests, based on the Group's share in the owner company.

It is possible to apply the full goodwill method.

In the event of a bargain purchase, the technical journal entry triggers an automatic posting of the gain to the P&L (account P84000 - Negative goodwill recognized in profit or loss).

Manual declaration

Goodwill values (or bargain purchase) are declared by a manual journal entry posted on one of the following accounts:

- XA82100 - Declared bargain purchase analyzed by owner
- XA82110 - Declared goodwill analyzed by owner, Gross
- XA82190 - Declared goodwill analyzed by owner, Impairment

This single-side journal entry is posted on a dedicated Audit ID: 9GW01 - Disclosure of goodwill (gross value and impairment) and bargain purchase - Man. Owner and held company are identified as follows:

- The technical journal entry is posted in the held company's accounts (dimension RU - Reporting unit),
- The intercompany detail provided, using the SH - Share dimension, corresponds to the owner company.

Note that 9GW01 audit ID forces the journal entry currency to the reporting unit's currency.

If you want to apply the full goodwill method, you must use the same accounts, and add to the technical journal entry a row for share TP-9999, representing the share of goodwill attributable to the Non-controlling interests.

Automatic declaration

The automatic calculation of goodwill is proposed for the acquisition of a new subsidiary, joint-venture or associate, see § C.6.8 above.

Automatic journal entries

Based on the information entered in the technical account XA82110, automatic journal entries are posted in the held company's account, at the consolidated level, using the 9GW10 audit ID. Generally, there are three types of rules used for one consolidation event:

- Goodwill booking - Owner company's share. This is the common case for subsidiaries consolidated using the full or proportionate method. The goodwill is booked on account A82110 - Goodwill gross value against account E16000 - Retained earnings. If there are NCI in the owner company, the impact on Equity is shared between group (account: E16000) and NCI (account: E86000)
- Goodwill booking - None controlling interests (full goodwill method). This automatic entry is triggered if you have declared goodwill with a share detail on TP-9999. It impacts the Goodwill (account: A82110) against the NCI (account: E86000)
- Goodwill booking - Equity method. This type of rules applies to entities accounted for using the Equity method. In that case, the Goodwill is not posted to account A82110 - Goodwill gross value, but to account A72100 - Investments in associates and joint ventures accounted for using the equity method gross.

Based on the information entered in the technical account XA82190, automatic journal entries are posted in the held company's account, at the consolidated level, using the 9GW10 audit ID. As for the gross value, there are three types of rules used for booking impairment:

- Goodwill impairment - Owner company's share. The impairment is booked on account A82190-Goodwill, impairment against account E16000 - Retained earnings (P83030 – Impairment of goodwill). If there are NCI in the owner company, the impact on Equity is shared between group (account: E16000) and NCI (account: E86000)
- Goodwill impairment - Non-controlling interests (full goodwill method). This automatic entry is triggered if you have declared goodwill with a share detail on TP-9999. It impacts the goodwill impairment (account: A82190) against the NCI (account: E86000) and account: P83030 - Impairment on goodwill in the P&L.
- Goodwill booking - Equity method. This type of rules applies to entities accounted for using the Equity method. In that case, the Goodwill impairment is not posted to account A82190-Goodwill, Impairment, but to account A72100 - Investments in associates and joint ventures accounted for using the equity method gross.

Goodwill conversion

According to IFRS, the goodwill must be accounted for using the held company's currency. Due to this principle, the value of the goodwill may vary over time for subsidiaries reporting in a foreign currency. This variation of the goodwill's converted value, however, should never impact the Retained earnings but the foreign currency translation reserve.

In the starter kit, this is handled by three dedicated consolidation rules (GW-250, GW-260 and GW-270), using flow F80 - Currency translation adjustment of technical accounts XA82110 and XA82190. Note that the amounts stored on the technical accounts are expressed in the held company's currency, so the flow F80 can be automatically generated by the consolidation engine.

A dedicated audit ID, 4GW20 - Currency translation adjusts. on goodwill - Auto, has been created for handling goodwill conversion.

Bargain purchase

If a business combination causes a bargain purchase, the dedicated account XA82100 - Declared bargain purchase analyzed by owner, must be used to declare the corresponding gain.

The automatic journal entry impacts the P&L account P84000 - Negative goodwill recognized in profit or loss, or P85030 - Profit of associates and joint ventures accounted for using the equity method in case the held company is consolidated using the Equity method).

To ensure that flow F01 - Incoming units keeps balancing, account A8211CL - Clearing account - Bargain purchase is used (flow F25 balances flow F01).

Example

| Held Company (H) (owned by O) | | Owner entity O is owned at 80% by the group |

XA82110 Declared goodwill analyzed by owner, Gross

❶ share= O   100 |

A82110 Goodwill gross value

❷   100 |

E16000 Retained earnings

                              | 80 ❷

E86000 NCI - Other reserves and retained earnings

                              | 20

❶ Amount entered on the technical account

❷ Automatic journal entry (incl. split group/NCI)

6.10.   Non-controlling interests' calculation (18-NCI)

The equity values of consolidated companies are split between the Group and Non-controlling interests. Additionally, the accounts Issued capital and Share premium are transferred to the retained earnings for any entity except the group's Parent company.

The subset of rules triggers the following entries on the consolidated equity:

- Split total equity between the Group and Non-controlling interests,
- Reclassification of the capital (E11xxx) and Share premium (E12xxx) to Retained earnings (E16000); this is done for any consolidated entity except the group's parent company,

To ease the design of the rules, characteristics are used as follows:

Account dimension

The RULE-SEL - Rule selection characteristic is used to select the group equity accounts (characteristic values: CONS-E01 to CONS-E19). The sub-characteristic RULE-DEST for each of the group equity accounts is the corresponding account in the NCI equity.

For example, when triggering the NCI calculation, all the group equity accounts (E11xxx to E16xxx) except E19000-Treasury shares are selected, and for each of them the share attributable to NCI is reclassified to the correct NCI account.

Group equity account (selection)		NCI equity account (destination)	
E11110	Paid up capital - ordinary shares	E86000	NCI - Other reserves and retained earnings
E11120	Paid up capital - preference shares	E86000	NCI - Other reserves and retained earnings
E11210	Unpaid capital which has been called up - ordinary shares	E86000	NCI - Other reserves and retained earnings
E11220	Unpaid capital which has been called up - preference shares	E86000	NCI - Other reserves and retained earnings
E12010	Share premium - ordinary shares	E86000	NCI - Other reserves and retained earnings
E12020	Share premium - preference shares	E86000	NCI - Other reserves and retained earnings
E13100	Equity component of compound financial instruments	E82100	NCI - Equity component of compound financial instruments
E13200	Other equity instruments issued	E82200	NCI - Other equity instruments issued
E14000	Other equity	E86000	NCI - Other reserves and retained earnings
E16000	Other reserves and retained earnings	E86000	NCI - Other reserves and retained earnings
E17000	Reevaluation reserve	E86000	NCI - Other reserves and retained earnings
E18000	Other reserves	E86000	NCI - Other reserves and retained earnings
E19000	Treasury shares	E89000	NCI - Treasury shares
E21010	Revaluation reserve - tangible assets	E91010	NCI - Revaluation reserve - tangible assets
E21011	Income tax - revaluation on tangible assets	E91011	NCI - Income tax on revaluation reserve - tangible assets
E21020	Revaluation reserve - intangible assets	E91020	NCI - Revaluation reserve - intangible assets
E21021	Income tax - revaluation on intangible assets	E91021	NCI - Income tax on revaluation reserve - intangible assets

Group equity account (selection)		NCI equity account (destination)	
E21030	Actuarial gains/loss on defined benefit pension plans	E91030	NCI - Actuarial gains/loss on defined benefit pension plans
E21031	Income tax on actuarial gains/loss on defined benefit pension plans	E91031	NCI - Income tax on actuarial gains/loss on defined benefit pension plans
E21040	NC assets and disposal groups classified as held for sale that will not be reclassified to P&L	E91040	NCI - NC assets and disposal groups held for sale
E21041	Income tax relating to NC assets and disposal groups held for sale that will not be reclassified	E91041	NCI - Income tax - NC assets and disposal groups held for sale
E21050	Share of OCI that will not be reclassified to P&L accounted for using the Equity method	E91050	NCI - Share of OCI that will not be reclassified to P&L accounted for using the Equity method
E21110	Fair value changes of equity instruments measured at FVTOCI	E91110	NCI - Fair value changes of equity instruments measured at FVTOCI
E21111	Income tax - fair value changes of equity instruments measured at FVTOCI	E91111	NCI - Income tax on fair value changes of equity instruments measured at FVTOCI
E21210	Fair value changes of equity instruments measured at fair value through other comprehensive income [hedged item]	E91210	NCI - Accumulated hedge ineffectiveness for equity instruments at FVTOCI - Fair value changes of hedged item
E21211	Income tax -Fair value changes of equity instruments measured at fair value through OCI [hedged item]	E91211	NCI - Income tax on Acc. hedge ineffectiveness for equity instruments at FVTOCI - Fair value changes of hedged item
E21220	Fair value changes of equity instruments measured at fair value through other comprehensive income [hedging instrument]	E91220	NCI - Accumulated hedge ineffectiveness for equity instruments at FVTOCI - Fair value changes of hedging instrument
E21221	Income tax - FV changes of equity instruments measured at fair value through OCI [hedging instrument]	E91221	NCI - Income tax on Acc. hedge ineffectiveness for equity instruments at FVTOCI - FV changes of hedging instrument
E21300	Fair value changes of financial liabilities at fair value through P&L attributable to changes in their credit risk	E91300	NCI - Acc. change in FV of a financial liability at FVTPL attributable to changes in the credit risk of that liability
E21301	Income tax - acc. change in FV of a fin. liability at FVTPL attributable to changes in the credit risk of that liability	E91301	NCI - Income tax acc. chge in FV of a fin. liability at FVTPL attributable to chges in the credit risk of that liability
E25010	Hedge of net investments in foreign operations - eff. port.	E95010	NCI - Hedge of net investments in foreign operations - eff. port.
E25011	Income tax on hedge of net investments in foreign operations - eff. port.	E95011	NCI - Income tax on hedge of net investments in foreign operations - eff. port.
E25020	Currency translation reserve	E95020	NCI - Currency translation reserve
E25021	Income tax on currency translation reserve	E95021	NCI - Income tax relating to currency translation reserve
E25030	Cash flow hedges reserve [effective portion of hedging derivatives]	E95030	NCI - Hedging derivatives. Cash flow hedges reserve [effective portion of hedging derivatives]
E25031	Income tax - Cash flow hedges reserve [effective portion of hedging derivatives]	E95031	NCI - Income tax relating to Hedging derivatives. Cash flow hedges reserve [effective portion of hedging derivatives]
E25040	Revaluation reserve - Fair value changes of financial assets measured at FVTOCI that may be reclassified to P&L	E95040	NCI - Revaluation reserve - Fair value changes of financial assets measured at FVTOCI
E25041	Income tax - Revaluation reserve - Fair value changes of financial assets FVTOCI that may be reclassified to P&L	E95041	NCI - Income tax - Revaluation reserve - Fair value changes of financial assets measured at FVTOCI
E25050	Hedging instruments [not designated elements]	E95050	NCI - Hedging instruments [not designated elements]
E25051	Income tax on hedging instruments [not designated elements]	E95051	NCI - Income tax on hedging instruments [not designated elements]
E25060	NC assets and disposal groups held for sale that may be reclassified	E95060	NCI - NC assets and disposal groups held for sale that may be reclassified to P&L
E25061	Income tax - NC assets and disposal groups held for sale that may be reclassified to P&L	E95061	NCI - Income tax relating to NC assets and disposal groups held for sale that may be reclassified to P&L
E25070	Share of OCI that may be reclassified to P&L accounted for using the Equity method	E95070	NCI - Share of OCI that may be reclassified to P&L accounted for using the Equity method

Audit ID dimension

The SPLIT characteristic is used for two related purposes:

- Identify which Audit IDs must be split between the Group and Non-controlling interests,
- Generate the correct destination Audit ID based on the source Audit ID.

Selected Audit ID		Generated Audit ID
0PACK01	Package data	4NCI-PACK01
0PACK11	Local adjustments to Group accounting policies	4NCI-PACK10
0PACK91	Package data - Central correction	4NCI-PACK90
1ADJ90	Other adjustments - Central - Auto.	4NCI-ADJ90
1ADJ91	Other adjustments - Central - Man.	4NCI-ADJ90
1FVA10	Fair value for incoming entities (central) - Auto.	4NCI-FVA00
1FVA11	Fair value for incoming entities (central) - Man.	4NCI-FVA00
1FVA20	Adjustment on incoming entities (central) - Auto.	4NCI-FVA00
3DIS10	Elimination of internal gains and losses on disposal of assets - Auto.	4NCI-DIS10
3DIS11	Elimination of internal gains and losses on disposal of assets - Man.	4NCI-DIS10
3DIV10	Elimination of internal dividends - Auto.	4NCI-DIV10
3DIV11	Elimination of internal dividends - Man.	4NCI-DIV10
3DIV20	Currency translation adjustments on dividends - Auto.	4NCI-DIV20
3DIV21	Currency translation adjustments on dividends - Man.	4NCI-DIV20
3PRO10	Elimination of internal impairment on investments - Auto.	4NCI-PRO10
3PRO11	Elimination of internal impairment on investments - Man.	4NCI-PRO10
3PRO20	Elimination of internal provisions - Auto.	4NCI-PRO20
3PRO21	Elimination of internal provisions - Man.	4NCI-PRO20
4CTA01	Currency translation adjustments - Equity - Man.	4NCI-CTA10
4CTA10	Currency translation adjustments - Equity - Auto.	4NCI-CTA10
4INV31	Adjustments on gains and losses on disposal of a subsidiary, JV or associate (Local currency)	4NCI-INV30
4INV32	Adjustments on gains and losses on disposal of a subsidiary, JV or associate (Consolidation currency)	4NCI-INV30

6.11. Equity method (subset 20-EQM)

The consolidation engine (see § A 2.3) keeps only some accounts at the consolidated level (mostly Equity accounts) for entities consolidated using the Equity method. Consequently, the B/S does not balance at the beginning of the consolidation process for EM entities.

The rules configured in the subset 20-EQM generate account A72100 - Investments in associates and joint ventures accounted for using the equity method gross based on the owner's share in the held company's total Equity. It also generates account P85030 - Profit of associates and joint ventures accounted for using the equity method, based on the amounts selected on E16000 - Retained earnings and flow F10 - Net profit (loss) for the period.

6.12. Currency Translation Adjustment (16-CTA)

6.12.1. Equity

Consolidation rule CTA-110 is designed to transfer the conversion differences (flow F80) on the group's equity accounts to a dedicated account: E25020 - Currency translation reserve. This automatic journal entry is triggered on flow F80 at the converted level, using a dedicated Audit ID: 4CTA10 - Currency translation adjustments - Equity - Auto.

Note that these entries are not triggered for the accounts E25010 - Hedge of net investments in foreign operations - eff. port., E25030 – cash flow hedge reserves, E25040 - Reevaluation reserves, E25050 - Hedging instruments, E25060 - NC assets and disposal groups held for sale that may be reclassified, or for the corresponding Income tax accounts E25011, E25031, E25041, E25061.

The currency translation reserve is split between the Group and Non-controlling interests (automatic journal entries are triggered by the NCI-xxx consolidation rule). The dedicated NCI account is E95020 - NCI - Currency translation reserve, as shown above, in § C.6.10.

6.12.2. Investments

The currency translation difference on investments is transferred to the conversion reserves of the held company as follows: a dedicated consolidation rule, INV-620 (positioned in the 14-INV subset of rules), selects the currency translation difference (flow: F80) of investments (account: A71100 - Investments in subsidiaries, joint ventures and associates - gross) and transfers it to the conversion reserves, using the same clearing accounts (A711HC and A711OC) as the ones used for eliminating the investments (see § C.6.7above).

Rule INV-620 also splits conversion reserve between group (account: E25020 - Currency translation reserve) and Non-controlling interests (account: E95020 - NCI - Currency translation reserve). The split is done using the financial rate of the Group in the holding entity. The generated entries are posted on a dedicated Audit ID: 4INV20-Currency translation adjust. on investments - Auto.

6.13. End of consolidation rules (22-END)

This subset of rules contains rules specific to change in consolidation method and rules END-310, END-320 and END-330. These last three rules store on the account XPROP and the ANALYSIS dimension the detail of the rates used during the consolidation process (exchange rates and scope rates) and some technical information used to reconcile FINREP and IFRS consolidations. (see §D.7)

6.14. Reconciliation rules

Accounts for which a breakdown by Intercompany is entered in Actual are reconciled in the application. This includes:

- Reciprocal accounts of the Balance sheet
- Reciprocal accounts of the Income statement
- Internal gain/loss on disposal of assets
- Internal dividends

Amounts are reconciled based on converted amounts. Consequently, no input in transaction currency is required at the local level.

A dedicated set of rules A-REC designed for intercompany reconciliation with four subsets of rules:

- 02-REC (Reciprocal balance sheet accounts): reconciliation of accounting flows, including closing flow F99
- 04-REC (Reciprocal profit & loss accounts)
- 06-REC (Internal gains & losses)
- 08-REC (Clearing accounts): enables you to identify which entity/partner pairs generate discrepancies in an unbalanced clearing account

The accounts to reconcile are selected by the reconciliation rules based on the RULE-SEL characteristic of the account dimension. Using this characteristic (rather than the individual accounts) makes the enhancement of the chart of accounts easier.

The reconciliation rules generally select all audit IDs except eliminations (for example, 2ELIM10, 3DIS10). The reconciliation rules for clearing accounts, however, select the amounts stored on all audit IDs (incl. eliminations).

When reconciling B/S accounts, all the flows (incl. F00 - Opening position and F99 - Closing position) are selected. This allows the user to display reconciliation data both on the movements and on the closing position. For the Income statement, amounts are reconciled on flow Y99.

There is no automatic adjustment defined in the reconciliation rules. Any adjustment must be done by a manual journal entry.

D.   TRANSVERSE TOPICS

1.   In-flow consolidation

For balance sheet accounts, running an in-flow consolidation process means managing:

- Opening balance (carry forward of the previous year)
- Closing balance (Opening position + movements flows)
- Net profit (loss) for the period
- Conversion
- Scope changes

The main advantages of the in-flow consolidation are the following:

- Limitation of the consolidation entries and of the analysis to the current variance of the period
- Automatic production of the statement of changes in equity and of the statement of cash flows
- Secured process (intangible opening balances) with the automatic carry forward from previous year's consolidated data.

1.1.   Intangibility of opening balances

Opening balances of the current year result from the carry forward of closing balances from the previous year except if there is no opening balance (for example, it is the first consolidation you run with Financial Consolidation).

This calculation is triggered at the beginning of the consolidation process, based on the category scenario. It applies to all the B/S items, for all audit-IDs (according the opening audit-ID characteristic assigned in the dimension builder) and all entities. The three amount levels (local, converted, consolidated) are populated in a parallel manner (meaning there is no amount conversion, nor is the consolidation rate applied, on flow F00).

In case there are no opening balances to populate flow F00, the following processes will be triggered on F00 by the consolidation engine:

- Data conversion (based on the opening rate defined in the exchange rate table),
- Application of the consolidation rate for PC and EM (based on the scope information).

1.1.1.   Dimension builder

In the dimension builder, the characteristic Opening balance audit-ID takes for each Audit ID the same Audit ID.

There is one exception to the principle: audit ID 0PACK91 - Package data - Central correction is carried forward to 0PACK01 - Package data, which allows the central users to make a correction in the package that will impact the opening balances of next year's package. To be consistent, 4NCI-PACK90 is carried forward to 4NCI-PACK01.

1.1.2.   Category scenario

Options step

The opening flow and the closing flow are defined in the Opening balance tab.

To ensure the intangibility of opening balances in the packages, the Opening flow F00 is defined as read-only flow in the Restriction tab. It means that no data can be modified in F00 if there is an opening balance.

Opening balance in the package is by default loaded from the consolidated data of the previous year in order to consider potential manual or automatic journal entries posted on package audit IDs or on central audit IDs that are assigned to a package audit ID in the opening balance (audit IDs with the prefix "0PACK" in the starter kit).

Account families

In the environment tab, each account of the starter kit is posted to the same account at opening.

Flow behavior

F00 is set as opening balance flow of the closing flow (F99) for all balance sheet accounts.

Reminder:

For each account analyzed, F00 and F99 should belong to the same dimensional analysis. Additionally, Formulas should never impact the opening flow on account total.

1.1.3.　　　　Rules

Rules never impact the opening flow except rules of the subset 00-OPB (that are only triggered in case of a consolidation without opening balance).

1.2.　　　Ensuring the consistency of data (Closing balance = Opening balance + movements)

Package data

Flow F99 can be entered in order to ease the use of interfaces. If needed, the increase / decrease is analyzed. The flow F15 is calculated to ensure the consistency of data, and a control is triggered when a distinct analysis of increase and decrease is required (F15 must then equal 0).

Automatic and manual journal entries

For B/S accounts, automatic and manual journal entries must be booked on movement flows. The impact on the closing balance (flow F99) is automatically calculated.

This calculation is defined in the category scenario (account families step) and applies to the 'Central manual journal entries' and 'Central automatic journal entries' contexts (flows behavior step).

No manual journal entry can be entered on flow F99 as it is calculated by carry over in the category scenario, and the consolidation rules never impact the flow F99.

Reminder: closing data in input schedules

A different logic applies to data input in schedules: the closing balance is not calculated. It is used to calculate the variation flow (F15).

1.3.　　　Ensuring the consistency of data (Flow F10 = Income + Expenses)

In the package and in the manual journal entries, a formula defined in the category scenario calculates the flow F10 of retained earnings as the sum of P&L accounts (see § C.4.6.3).

In the rules, when a consolidation rule impacts income or expenses, a specific row is added to manage the impact on the Net profit (loss) for the period (F10) on account E16000 - Retained earnings.

1.4.　　　Foreign currency translation

The income statement is translated using the average rate. The balance sheet closing balance is translated using the closing rate, except for investments and equity accounts which are maintained at their historical value. Most common B/S movement flows are translated using the average rate. In the case of a consolidation with opening balance, B/S opening balances - which are carried forward - have been translated using the closing rate of the previous year.

For equity accounts, the currency translation differences are recorded in dedicated accounts, in the reserves.

For the flows converted at the average rate, two conversion methods are available:

- YTD conversion: amounts are converted on a YTD basis, applying the conversion rate between Jan 1 and the closing date,

- Periodic conversion: amounts are converted on a monthly (resp. quarterly) basis, applying the exact conversion rate for each month (resp. quarter).

1.4.1. Year-to-date conversion

Conversion process

The process for converting data relies on:

- The property "To be converted", on the Account dimension defined in the dimension builder,
- The list of rate types, defined in the dimension builder,
- The flow behavior specified in the category scenario for each account family.

Some rules are designed to deal with specific conversion processes (esp. maintaining equity and investment at historical value, converting paid dividends at distribution rate, handling periodic conversion).

Property "To be converted" on account dimension

All accounts are converted (Property « To be converted » = yes), except specific accounts (Number of stocks).

Rates in the dimension builder

The following rates are defined in the starter kit:

Name	Description	Used for
AR	Average exchange rate, current period	B/S movements, P&L
ARPP	Average exchange rate, prior period	Quarterly or Monthly conversion
CR	Closing exchange rate, current period	B/S closing position (F99)
OR	Opening exchange rate, current period	B/S opening position (F00) and some flows dedicated to scope changes (for example, F01 - Incoming units or F03 - Change in consolidation method)

Additionally, a series of rate types (one per day) has been defined. The purpose of these rate types is to facilitate the conversion of some flows related to specific events. For instance, when the group acquires a subsidiary, the flow F20 - Increase/Purchase will be converted using the exact rate at the date of this event.

Flow behavior in the category scenario

The category scenario defines the conversion process that will be triggered by the consolidation engine.

For any B/S item, flow F80 - Currency Translation Adjustment, is designed to store the conversion difference between one flow (for example, F20, generally converted at the average rate) and the corresponding carry-over flow (F99, converted at closing rate).

For flow F00-Opening position, the conversion is made by the consolidation engine (according to the account family definition) ONLY when you run a consolidation without opening balances. If that is not the case, the converted amounts on flow F00 are loaded directly from the consolidation defined as "opening balances". However, you must ensure that the values of OR - Opening rate used for the current consolidation are equal to values of CR - Closing rate used for the opening balances consolidation.

The table below lists the flows defined in the starter kit and the exchange rate applied.

Type	Subtype	Description	Code	Exchange rate
Position	Opening	Opening position	F00	OR
	Closing	Closing position	F99	CR
Movement	Detailed movements	Increase/Purchase	F20	AR *
		Increase in depreciation	F25	AR
		Decrease/Disposal	F30	AR
		Decrease in depreciation, used	F35	AR
		Decrease in depreciation, not used	F36	AR
	Net variation	Net variation	F15	AR
	Equity	Dividends	F06	AR *
		Interim dividends	F07	AR *
		Net profit (loss) for the period	F10	AR
		Capital increase	F40	AR *
		Capital decrease	F45	AR *
	Other variations	Reclassification	F50	AR
		Fair value changes	F55	AR
		Change in accounting policies	F09	OR
		Internal mergers	F70	AR
	Transition IFRS 9	Reclassification at Date of Initial Application	F08A	OR
		Remeasurement at Date of Initial Application	F08B	OR
	Conso-lidation	Incoming units	F01	OR
		Change in consolidation method (old)	F02	OR
		Change in consolidation method (new)	F03	OR
		Change in consolidation rate	F04	OR
		Currency Translation Adjustment	F80	AR
		Change in interest rate	F92	AR
		Outgoing units	F98	CR
Cumulated	Closing	Year To Date	Y99	AR
FINREP	Closing	Analysis flows (for B/S accounts) except for movements	Txxx	CR
	Opening	Opening amount for provisions for pension	T800	OR
	Movements	Movements in allowances and provisions	T12x	AR
		Values recorded directly to P&L	T14x	AR
		Transfers between stages (gross values)	T16x	AR
		Variations of provisions for pensions	T801 to T810	AR
	Cumulated	Carrying amount (for P&L accounts)	T010 T720 T725	AR
Other	Internal disposal of assets	Sale price	X01	AR
		Depreciation adjustement (after disposal)	X02	AR

* Optional conversion on a daily basis when analyses by date entered in the package and daily rate entered*

Investment accounts

The currency difference stored on flow F80 is reclassified from Consolidation reserves to foreign currency translation reserve by consolidation rules. Consequently, the investments are maintained at their historical value.

Equity accounts

To keep equity accounts at their historical value, the same automatic process (based on data stored on flow F80) is defined on equity accounts.

Goodwill

According to IFRS, in case goodwill is booked on an entity using a foreign currency, the goodwill value may change in the consolidated assets, but all the corresponding impact in the equity will be booked in foreign currency translation reserve by automatic rules.

1.4.2. Periodic conversion

The starter kit has been designed to allow monthly or quarterly conversion for the Balance sheet movements that are converted at the average rate, and the Income statement.

This periodic conversion consists of calculating these items based on the average exchange rate applicable to each period (each month or each quarter) rather than the exchange rate applicable to the YTD period.

The principles for data entry are the same even if you opt for a periodic conversion, that is, data is entered on a year-to-date basis.

In the following paragraphs, we will explain how the quarterly conversion process is configured. The same principles apply to the monthly conversion process.

Principles

The periodic conversion relies on the following principles:

Data entry is still made on a year-to-date basis. The same packages and journal entries can be used to run two consolidations: one with YTD conversion and another with quarterly conversion

The way to populate the exchange rate table is different when you opt for a quarterly conversion process

A subset of technical consolidation rules, 01-QCT, is added to the set of rules A-QCT to correct the conversion that was triggered by the consolidation engine based on a YTD approach; these rules have one particularity: they select the data from the consolidation of the previous quarter.

Updating the exchange rate table

When you want to apply quarterly conversion, you must populate the exchange rate table as follows:

AR: Enter the average rate of the current quarter (do NOT enter the average rate between Jan 1 and the end of current quarter, as you would do for a YTD conversion)

ARPP: Enter the average rate of the previous quarter (this rate must be consistent with the AR rate that was entered in the exchange rate table used for the consolidation of the previous quarter)

The diagram below shows the differences between updating the YTD and Periodic rate tables.

Rate period: September 2016   (Fiscal period starts Jan 1)

Rate type	A-YTD (Year-to-date)	A-PER (Periodic)
ARPP - Average exch. rate, prior period	*[Not used]*	**Average rate from April 1 to June 30**
OR - Opening exch. rate, current period	Rate at Jan 1	Rate at Jan 1
AR - Average exch. rate, current period	Average rate Jan 1 to Sept 30th	Average rate from **July 1** to Sept 30
CR - Closing exch. rate, current period	Rate at Sept 30	Rate at Sept 30

Because of the method used to populate the exchange rate table when you apply quarterly conversion, any consolidation defined with such an exchange rate table must use a set of rules including the 01-QCT subset of rules. Otherwise, you would apply the last quarter's average rate to the YTD amount, which would not be relevant.

Set of rules

We will illustrate the correction calculated by rules for the Income statement:

Account: P11110 – Interest income, flow: Y99

Quotation type: Multiply	Q1	Q2	Q3	
Average rate for the quarter	2	2.2	2.3	
YTD amount (in currency)	100	150	220	
YTD amount (converted by the consolidation engine)	200	330	506	(1)
Periodic amount (in currency)	100	50	70	
Periodic amount (quarterly conversion)	200	110	161	
YTD amount (correct conversion)	200	310	471	(2)
Correction to apply	0	-20	-35	(2 - 1)

When the consolidation runs, the correction is calculated by the QCT rules directly from the converted amounts, as follows:

For Q2: 200 - (200 x 2.2 / 2)

For Q3: 310 - (330 x 2.3 / 2.2)

Note that in Q3, the correction calculation formula refers to both YTD converted amounts of Q2 BEFORE and AFTER correction. In the correction rules, this is done by a restriction on technical origins (for the second part of the formula).

A dedicated coefficient, calculated as AR (quarter) / AR (previous quarter), is used by the QCT rules. It handles both conversion types (multiply / divide), and will be correctly calculated even if specific rates are entered for some entities.

Note that due to the design of the automatic processing, you must run all the consolidations related to the same fiscal period in the correct order.

Control of the conversion process

Dedicated reports have been created to ease the control of the quarterly periodic conversion. These reports are available in book T10 (folder T - Check configuration).

1.4.3. Optional conversion at spot rate

By default, for any B/S account, flows F06 - Dividends, F07 - Interim dividends, F20 - Increase/Purchase, F40 - Capital increase and F45 - Capital decrease is converted using the average rate of the period. It is possible to perform a more accurate conversion (based on the exact daily rate/spot rate) on the following account/flow combinations:

Accounts		Flows	
A71100	Investments in subsidiaries, joint ventures and associates - gross	F20	Increase/ Purchase
		F40	Capital increase
		F45	Capital decrease
E11110	Paid up capital - ordinary shares	F40	Capital increase
E11111	Paid up capital - preference shares		
E11210	Unpaid capital which has been called up - ordinary shares	F45	Capital decrease
E11220	Unpaid capital which has been called up - preference shares		
E14000	Other equity		
E12010	Share premium - ordinary shares		
E12020	Share premium - preference shares		
XE16000	Dividends paid	F06	Dividends
		F07	Interim dividends

This can be useful to handle more easily some scope changes such as an entry in the scope or the subscription to a capital increase. Indeed, this will avoid central users to post manual journal entries to refine conversion process on these account/flow combinations.

This optional conversion process is based on:

- an additional detail by date provided in the package for these accounts/flows,
- daily rates entered in the conversion rate table,
- additional consolidation rules BGN-900, BGN-910, BGN-920 and BGN-930, designed to update the conversion triggered by the category scenario to reflect the daily-specific rates. These consolidation rules transfer the correction between flow F06, F07, F20, F40 or F45 and flow F80-Currency Translation Adjustment.

1.5. Scope changes

1.5.1. Typology of scope changes

Financial Consolidation is designed to identify automatically the following types of scope changes:

- Incoming entity,
- Change in consolidation method (Full/Proportional -> Equity method, Equity method -> Full/Proportional),
- Change in consolidation rate,
- Internal merger (at the beginning of the year or during the year),
- Outgoing entity (at the beginning of the year or during the year).

All these situations can be tested distinctly when building a consolidation rule.

Additionally, other changes in scope are not recognized by the consolidation engine, and must be handled via consolidation rules (for example, by using specific coefficients) or manual journal entries or both. E.g.: Acquisition/Disposal of shares that has no impact on the consolidation method (change in ownership rate).

1.5.2. Flows

The flows used to show changes in consolidation scope are as follows:

- F01 - Incoming units
- F02 - Change in consolidation method (old)
- F03 - Change in consolidation method (new)
- F04 - Change in consolidation rate
- F70 - Internal mergers
- F92 - Change in interest rate
- F98 - Outgoing units

In case there is a scope change for a subsidiary, one or several of these flows are populated automatically by the consolidation engine, based on the specifications of the category scenario (in the Options step, Changes to scope tab and Changes to consolidation method tab). The handling of the scope change is also made by automatic or manual journal entries.

Note that flow F92, however, is never populated by the consolidation engine but only by automatic or manual journal entries.

Additionally, it may be pointed out that other flows are used to trigger automatic journal entries related to scope changes, especially:

- F20 (acquisition of shares),
- F30 (disposal of shares),
- F40 (subscription to capital increase),
- F45 (impact of a capital decrease).

Here is a summary of the flow transfers triggered by the consolidation engine on the B/S items:

Scope change type	Consolidation engine action
Incoming entity	F00 of package data and manual JE transferred to F01
Change in consolidation method	F00 (all technical origins) reversed to F02 (old method) and transferred to flow F03 (new method)
Change in consolidation rate	F00 (all technical origins, only Audit-ID to which consolidation rate is applied) multiplied by the rate difference, and stored in flow F04
Internal merger (at the beginning of the year)	F00 (all technical origins) transferred to F70
Internal merger (during the year)	F99 (all technical origins) reversed to F70
Outgoing entity (at the beginning) of the year)	F00 (all technical origins) transferred to F98
Outgoing entity (during the year)	F99 (all technical origins) reversed to F98

Note that the 02-BGN subset of rules also triggers flow transfer in case an EM is outgoing or acquired and in case there is a change in consolidation method.

2. Consolidation methods and rates

The following consolidation methods are supported in the starter kit:

- Full method (purchase method)
- Proportionate consolidation
- Equity method

Since 2014, proportionate consolidation is no longer allowed for most of the joint ventures of groups reporting in IFRS, according to standard IFRS11 (the equity method will be used instead).

The consolidation process uses the following rates:

- Consolidation rate
- Financial rate

2.1. Portfolio and scope

The consolidation scope can be:

- Entered manually,
- Initialized using a portfolio that is entered manually,
- Initialized using a portfolio that is built automatically based on the information on investment/shares (in number of shares/stock) collected in the package.

The indicators defined to collect portfolio data are:

- XE11110 - Issued capital - Number of stocks
- XE11120 - Paid up capital - preference shares - Number of stocks
- XE11210 - Unpaid capital which has been called up - ordinary shares - Number of stocks
- XE11220 - Unpaid capital which has been called up - preference shares - Number of stocks
- XA71100 - Investments in subsidiaries, JV & associates - Nb of stocks

The information is entered on these indicators using schedules PA2900 (for XExx accounts) and PA2600 (for account XA71100) of the P-A package.

Based on the information either entered or transferred (by initialization) or both, the scope will contain for each entity the following data regarding the consolidation process:

- Status: Parent or Subsidiary,
- Consolidation method: Full consolidation, Proportional consolidation or Equity method,
- Consolidation rate: Rate to apply to converted amounts to calculate consolidated level (for Proportional consolidation or Equity method only),
- Financial interest: used to share a subsidiary's net asset between Group and Non-controlling interests.

If the scope definition specifies an opening scope, the change in consolidation method, consolidation rate and financial interest will also be calculated.

Note that the scope can also contain a hierarchical structure of the entities, which is a pre-requisite to generate consistent rollup data in the consolidated data source when the consolidation process runs.

2.2. Proportionate method

When a subsidiary is consolidated by the proportionate method, the consolidated amounts are calculated by applying the consolidation rate to the converted amounts. This principle applies to most audit IDs used in the package or at central level for adjustments.

The calculation is triggered automatically by the consolidation engine, based on the property CONSO-RATE - Apply consolidation rate defined on the AU - Audit ID dimension. The flows for which the opening consolidation rate should apply are defined at the Option step of the category scenario setup, in the Scope change tab. In the starter kit, these flows are F00, F01, F02, F06 and F09.

2.3. Equity method

The equity method consists of cancelling any B/S or I/S amount at the consolidated level, except for the following specific accounts listed in the category scenario (Options step, in the Changes to consolidation method tab):

- Equity accounts E1xxx used to calculate the subsidiary's contribution to the group total equity,
- Technical accounts A711HC (held company) and A711OC (owner company) used when eliminating the investment,
- Technical accounts XA82100, XA82110 and XA82190, which are used to declare bargain purchase or goodwill (gross value or impairment).

3.   Analysis by partner and share

Objective: Ensure the consistency between the total of an account and its breakdown by partner or by share.

3.1.   Partner

The PA - Partner dimension is used for two different but related purposes:

-    For accounts that require an Intercompany analysis to enable elimination (reciprocal accounts, internal dividends, internal profit/loss on disposal of assets, etc.) the detail is entered on group reporting units using the Partner dimension.
-    The Partner dimension is also used to store detailed information by counterparty sector that is required by FINREP. It consists of creating a dimensional analysis with dedicated third-parties TP-90xx by counterparty sector. For example, TP-9010 - Central banks.

This second type of dimensional analysis uses the Partner dimension to breakdown the non-group amount by counterparty sector.

In the case of an Intercompany account that is also analyzed by counterparty on flow F99 (for example, A11000 - Derivatives HFT), you use the same data entry schedule (in book PA20) and the same flow to give both the intercompany information (group partners) and the counterparty sector (either on identified counterparties that are assigned a sector, or TP-90xx for generic third-parties by sector). This flow will then be retrieved in schedules in which additional FINREP analyses can be entered (in book PF10 to PF80).

In the case of a non-intercompany account that is analyzed by counterparty, you will enter the breakdown by counterparty on flows F00 and F99 on TP-90xx « partners ». Variation between opening and closing will be automatically posted on flow F15 in the packages.

-    When entering data in a package, the amounts are first entered with no detail (total amount), then broken down by partner in dedicated data entry schedules; the consistency of the breakdown is checked by controls created in the category scenario.
-    The behavior of automatic journal entries (such as intercompany eliminations) is different: the rules are designed to populate only data with a detail on the PA - Partner dimension; however, the non-detailed data rows are also generated due to the dimensional analysis, which includes a formula to calculate the indicator as the sum of its detail for accounting flows (not for FINREP flows).

Consequently, the detail of eliminations by partner is available for audit trail purposes. It makes it possible to analyze discrepancies between IFRS and FINREP version of consolidated data due to partner included in IFRS scope and not in FINREP scope or conversely. This logic is illustrated in the following table.

Example: Elimination by partner and on the grand total

Rep. unit	Account	Flow	Partner	Audit ID	Amount	
S001	P11110 Interest income - Derivatives - HFT	Y99	-	0PACK01	50	❶
S001	P11110 Interest income - Derivatives - HFT	Y99	S002	0PACK01	40	❷
S001	P11110 Interest income - Derivatives - HFT	Y99	S003	0PACK01	10	❷
S001	P11110 Interest income - Derivatives - HFT	Y99	S002	2ELIM10	- 40	❸
S001	P11110 Interest income - Derivatives - HFT	Y99	S003	2ELIM10	- 10	❸
S001	P11110 Interest income - Derivatives - HFT	Y99	-	2ELIM10	- 50	❹

❶   Package data - Not detailed

❷   Package data - Breakdown by partner

❸   Elimination by partner

❹   Total elimination

Link between dimensional analyses and consolidation rules

The behavior described above shows that there is a very strong relationship between the design of automatic journal entries and the dimensional analyses set up in the category scenario.

Because of the principle applied to consolidation rules (that is, to generate only detailed data), the dimensional analyses should always be designed with a post of the breakdown by group partners (RU2-220) to the indicator. This calculation must apply to the 'Central automatic journal entries' context.

3.2. Share

- When entering data in a package and by manual journal entry, the amounts are first entered with no detail (total amount), then broken down by share. Third parties must be entered and the consistency of the breakdown is checked by controls created in the category scenario.
- The behavior of automatic journal entries is like partner analysis: the rules are designed to populate only data with a detail on the SH-Share dimension; however, the non-detailed data rows are also generated due to the dimensional analysis, which includes a formula to calculate the indicator as the sum of its detail.

4. FINREP Statements production

4.1. Data collection

Data collection of FINREP data is based on the carrying amount (closing position).

The FINREP-specific data entry schedules are used to provide additional details on balance sheet, profit and loss accounts and some off-balance sheet accounts. The data entry schedules are grouped together into books as follows:

Book \Sub-book	P-A - Package - Actual Standard
PF10	Cash balances at central banks and other demand deposits
PF20	Financial assets at fair value through profit or loss
PF21-	Derivatives HFT and Hedging (assets)
PF22 -	Equity instruments FVTPL
PF23 -	Debt securities FVTPL
PF24 -	Loans and advances FVTPL
PF30 -	Financial assets at fair value through other comprehensive income
PF31 -	Equity instruments FVTOCI
PF32 -	Debt securities FVTOCI
PF33 -	Loans and advances FVTOCI
PF40 -	Financial assets at amortised cost
PF41 -	Debt securities AC
PF42 -	Loans and advances AC
PF50 -	Financial liabilities
PF51 -	Derivatives HFT and Hedging (liabilities)
PF52 -	Financial liabilities FVTPL
PF53 -	Financial liabilities AC
PF60	Other assets/provisions
PF70	Profit or loss
PF80	Other disclosures
PF90	FINREP Tables

4.1.1. Typology of FINREP analyses

The types of detailed data required by FINREP include:

- Analysis of financial assets and liabilities by counterparty sector (financial or non-financial institutions, households, etc.),
- Analysis of financial assets and liabilities by residence of counterparty,
- Analysis of financial assets and liabilities by fair value hierarchy
- Breakdown of some impaired assets depending on the impairment method (individually, collectively) used to evaluate their fair value. The chart of accounts makes it possible to retrieve this analysis.
- Analysis of past due assets by number of days past due,
- Breakdown of loans and advances, fees, … by product,
- Information about the notional amount of derivatives and their underlying financial instrument,

Depending on the type of analysis, you must enter detailed amounts either in an exhaustive or a non-exhaustive way:

- In most cases, the total and the sum of the detail must be equal.
- In some non-exhaustive "of which" analyses, a control checks that this total is greater than or equal to the sum of the detail.

4.1.2. Dimensions used for FINREP analyses

The FINREP analyses rely on the following dimensions:

Flow

The Flow dimension is used to store the closing position on flow F99, on which the dimensional analyses (see below) are entered. If needed, additional flows Txxx are available to make the flow dimension another FINREP analysis axis: for example, the analysis of past due but not impaired assets by number of days past due is stored on flows T205 to T215.

Product

- Balance sheet accounts: The Product dimension is used to break down the derivatives and loans and advances by product. For derivatives, each product is assigned a characteristic Market and a characteristic Type of risk. It is also used to analyze asset management by activity.

- P&L accounts: The Product dimension is used to break down fees income and expenses by product and the G/L on financial assets HFT by risk.

FINREP analysis

The FINREP analysis dimension is used to collect "Of which" analyses, information on NACE code for non-financial counterparties and breakdown by type of relationship for investments at closing and addition/reversal and accumulated changes in impairment on investments.

Partner

The Partner dimension is used to enter the breakdown by counterparty sector.

The accounts requiring an analysis by counterparty sector allow data entry on the following types of partners:

- (for intercompany accounts only) Classical partners (legal entities or business units) are used to provide intercompany detail, which is the general purpose of the Partner dimension. For these partners, the counterparty sector is derived from the partner's sector characteristic (EN-TYPE-CTP characteristic on the Reporting Unit reference table).
- Generic third-parties (named TP-90xx): one TP-90xx is available for each counterparty sector (for example: TP-9060 - Households). On each TP-90xx, you can enter the amount for non-codified entities that belong to the corresponding sector.

The generic third-party TP-9999 should not be used, except to detail some indicators for which an analysis by counterparty sector is not required, such as the detail of the capital by owner.

Country

The Country dimension is used to enter the breakdown by residence of counterparty.

ISIN

This dimension is used to collect the information required by table F40.02 "Group structure – Instrument by instrument".

Fair value hierarchy

The Fair value hierarchy dimension is used to enter the breakdown by level, with a split between historical amount and accumulated fair value changes. The example below explains how this dimension is used in the configuration:

Example

In year N-1, Entity A acquires shares HFT for 70, with quoted prices in markets that are not active and Other equity-related securities HFT for 30, for which fair value measurement uses unobservable inputs. At the end of the year, the fair values of these instruments are respectively 120 and 30.

At the end of year N, Entity A measures the fair value of shares HFT to 210 whereas the fair value of Other equity-related securities HFT is recorded as being of 20.

For year N, Entity A enters information in the package as follows:

Schedule PA3120 Financial assets at FVTPL

Account		Opening	Acquisition	FV changes	Closing
Code	Description	F00	F20	F55	F99
A12010	Share - HFT	120		90	210
A12030	Other equity-related securities - HFT	30		-10	20

Schedule PF2210 - Equity instruments FVTPL by counterparty

Account		Opening	Closing
Code	Description	F00	F99
A12010	Share - HFT	120	210
	To be broken down	*0*	*0*
TP-9030	3rd parties - Credit institutions	120	210
	Total counterparty	**120**	**120**

Account		Opening	Closing
A12030	Other equity-related securities - HFT	30	20
	To be broken down	*0*	*0*
TP-9030	3rd parties - Credit institutions	30	20
	Total counterparty	**30**	**20**

Schedule PF2220 - Equity instruments FVTPL by Fair Value hierarchy

Breakdown for TP-9030 Account		Opening	Closing	Variation
Code	Description	F00	F99	F15
A12010	Share - HFT	120	210	
1HFV20	Historical value- Level 2	70	❶ 70	
2CFV20	Acc. Changes in fair value- Level 2	50	❺ ❶ 140	❸ 90
	Total fair value hierarchy	**120**	**210**	
	To be broken down	*0*	*0*	
A12030	Other equity-related securities - HFT	30	20	
1HFV20	Historical value- Level 2	30	❷ 30	
2CFV20	Acc. Changes in fair value- Level 2		❻ ❷ -10	❹ -10
	Total fair value hierarchy	**30**	**20**	
	To be broken down	*0*	*0*	

Extract of table 14

ASSETS	Fair value hierarchy			Changes in fair value for the period		Accumulated changes in fair value before taxes		
	Level 1 010	Level 2 020	Level 3 030	Level 2 040	Level 3 050	Level 1 060	Level 2 070	Level 3 080
010 Financial assets held for trading								
020 Derivatives								
030 Equity instruments		❶ 210	❷ 20	❸ 90	❹ -10		❺ 140	❻ -10

4.2. Data processing

To ensure the consistency of FINREP data (stored on flows Txxx), it is necessary to make sure that any manual or automatic journal entry impacting the closing position of the balance sheet (F99) or the P&L (Y99) also impacts the FINREP analysis.

This is done by selecting the following dimensions **Product**, **Fair value hierarchy, Country** and **FINREP analysis** for "All or no value" in elimination rules of subset 04-PRO, 08-ELIM and 14-INV.

Warning: Regarding the elimination of internal gains/losses on tangible and intangible assets, the impact on FINREP flows analyzing the model used to measure the assets (T550 Revaluation model, T555 Cost model, T560 Fair value model) must be entered by manual journal entry. On the same way, the breakdown by type of investment when an internal transfer of investment occurs must be entered by manual journal entry.

4.3. Data retrieval

The retrieval of FINREP data is based on the following dimensions and characteristics:

- The FINREP-L1 characteristic on the Account dimension is used to structure the main financial statements (assets, liabilities) as well as some FINREP-specific analyses. This characteristic has sub-characteristics up to level 4.
- The Partner dimension is used to retrieve information by counterparty sector (as entered in the package), alongside with the Flow dimension and other FINREP-specific dimensions such as the Fair value, Product or Country dimensions.

4.4. IFRS-FINREP reconciliation

The starter kit offers a set of reconciliation reports so that you can list then check the differences between IFRS and FINREP financial statements.

The reconciliation IFRS and FINREP data involves two main stages:

- First, analyze the differences between the IFRS and FINREP scopes (for example, an entity is included in the FINREP scope but not consolidated in IFRS). This is done by technical rules included in the 22-END subset of rules.
- Then, based on this analysis, break down the differences between IFRS and FINREP data according to this typology and present reconciliation balances. It is also possible to do this reconciliation audit ID by audit ID, regardless of the scope difference type. This data retrieval is done directly in the documents.

4.4.1. Reconciliation process

Consolidation processing

The FINREP-IFRS reconciliation process uses the following customization objects:

- A characteristic of the VE-Version (consolidation version) dimension. This characteristic, VE-LINK (Linked version), is used to specify, for any FINREP consolidation version, what the corresponding IFRS consolidation version is.
- Technical rules END320 and END330 populate the consolidation table with information about the scope status as regards FINREP vs. IFRS reconciliation. This information is stored on the technical account "XY-PROP", and the type of scope difference is identified with the ANALYSIS dimension.

This calculation is done for the Reporting unit, and for the Partner and Share. This enables to identify some additional reconciliation amounts, such as intercompany eliminations that are triggered differently in the two consolidations, not because of a difference in the entity's status but because of a difference in the Partner's or Share's status.

The ANALYSIS reference table contains the following members:

Code	Description	Comments
SCP-CASE1	Entities consolidated in current scope only	The entity is only included in the FINREP scope.
SCP-CASE2	Entities consolidated in linked scope only	The entity is only included in the IFRS scope.
SCP-CASE3	Entities consolidated in PC in the current scope and in EM in the linked scope, with the same rates	The entity is consolidated using the proportionate method in FINREP and the equity method in IFRS, with the same integration and interest rates.
SCP-CASE4	Entities consolidated in both scopes with the same methods and the same rates	The entity has the same consolidation method and rates in both scopes. This case mainly corresponds to consolidation entries that differ for this entity because one or several related entities (such as an IC partner, a subsidiary, etc.) are not consolidated equally in the FINREP and IFRS scope.
SCP-CASE5	Entities consolidated in both scopes with different methods or different rates	The entity is included in both consolidation scopes but with different methods or integration rates or interest rates.

Comparison reports configuration

The comparison reports use the XY-PROP technical account to assign each entity to one of the five above-mentioned cases.

For either consolidation scopes or consolidated data comparison, there are two kinds of reports:

- Some reports make an exhaustive classification of all the entities (for example, C61-05 - Scope comparison (FINREP / IFRS) or C62-05 - Balance reconciliation by case).
- Some other reports, conversely, only analyze cases 1, 2 and 4 (for example, C61-10 - Scope comparison - control of differences (FINREP/IFRS). Case 5, indeed, should normally lead you to correct discrepancies.

Warning: The reports included in books C62 and C63 are configured for consolidation version FINREPYTD and IFRSYTD. If you want to reconcile other variants, you should copy these reports and change the variants' name. Indeed, you must hard-code the variants to ensure that data retrieved from both consolidations is exhaustive.

In book C61, the only configuration restriction is that you must assign a characteristic VE-LINK to the FINREP version and run the FINREP version after having run the linked version.

5. Calculation of total accounts

Objective: Calculate and store total accounts at local and central level.

5.1. Dimension Builder

The starter kit provides a TOTAL characteristic with the following values:

- TA99999: TOTAL ASSETS
- TEL9999: TOTAL EQUITY AND LIABILITIES
- TP99999: TOTAL PROFIT AND LOSS
- TX99999: All other accounts

This characteristic initializes the hierarchical chart of accounts in the category scenario.

5.2. Category builder / Step Chart of Accounts

The sign convention enables total calculation as a simple addition of amounts (Rollup sign is +).

In the starter kit, the Category Builder hierarchical chart of accounts (CoA) is the same as the one initialized in the Dimension Builder. At customer, if the CoA defined in the Category builder is different from the one initialized in the Dimension Builder:

- Total calculation is done according to the Category Builder hierarchical chart of accounts
- The Category Builder hierarchical chart of accounts is retrieved in reports initialized with the hierarchical mode

If the Category Builder hierarchical Chart of accounts is updated after running a consolidation process, it is necessary to choose Synchronize hierarchy to recalculate total amounts according to the updated hierarchy (at local level) and to re-run the consolidation to recalculate the total amounts (at consolidated level).

5.3. Rules

Account Rollup rule configuration best practice: In the starter kit, total accounts are not calculated on analysis dimensions as this information is not needed in retrieval reports.

At customer, be very careful to analyze if total accounts should be calculated and stored on several analysis dimensions in order to not reduce application performance.

5.4. Reports

The Statement of Financial Position and the Income Statement are not configured with the hierarchical mode but use either the IFRS hierarchy or the FINREP hierarchy.

6. Automated financial statements (SCF, SCE, SCI)

Objective:

- Generate automatically the Statement of Profit or Loss and Other Comprehensive Income (SCI), the Statement of Cash Flows (SCF) and the Statement of Changes in Equity (SCE).

6.1. General principles

6.1.1. Principles common to IFRS and FINREP reporting

The automatic processing and storage of the financial statements data relies on the following objects:

- Dimension ANALYSIS: It contains all the cash flow items (elementary SCFxx and subtotals TSCFxx), all the items of the statement of changes in equity (SCExxxx and TSCExxx) and the items of the other comprehensive income (SCIxxxx, TSCIxxx)
    - For IFRS reporting, these items are organized hierarchically thanks to the characteristic PARENT, so that the subtotals can be calculated easily, on-the-fly.
    - For FINREP reporting, a characteristic FINREP Retrieval and FINREP retrieval Parent makes it possible to present these items according FINREP requirements.
    In order to identify easily the items used for the SCF, from those of the SCE, SCI, a characteristic KIND has been created in addition to the naming convention.
- 2 reference tables:
- MAPPING-1 "Mapping for SCF"
- MAPPING-2 "Mapping for SCE" (including SCI, SCE)

- A dedicated subset of rules (26-FSP) and 3 coefficients to populate the ANALYSIS dimension.

6.1.2. Retrievals specific to IFRS reporting

3 types of reports are available in the IFRS reports:

- Retrieval reports (Book C11 - Financial Statements): SCI, SCF & SCE reports are initialized with the hierarchical mode (Totals are calculated on the fly) or members of the analysis dimension.
- Analysis reports (Book C23 - Specific breakdown): give the detail of account/flow pairs used to calculate the financial statement line items.
- Check configuration reports (Book T20 - Check financial statement-): enable to check SCI, SCF & SCE configuration consistency (for example, schedule T20-20 checks consistency between the MAPPING-1 table and accounts/flows defined in the Category Scenario).

6.1.3. Retrievals specific to FINREP reporting

- Book C50 Financial Statements: They are initialized with members of the analysis dimension grouped together using the FINREP characteristics
    - C50-25 *F3.0 Statement of comprehensive income*
- Book C51 Other FINREP tables
    - C51-120 *F46 Statement of changes in equity*

6.2. Statement of Cash Flows

The Statement of Cash Flows is calculated automatically according to the indirect method from the Balance Sheet flows and several Income Statement accounts. It discloses cash effect from operating, investing and financing activities, as required by IAS7.

6.2.1. Storage principle - the AN–Analysis Dimension

The configuration relies on a dimension (ANALYSIS), the reference table MAPPING-1 and the characteristics CLASS and CFS of the Account dimension.

Each item of the Statement of cash flows is stored in the consolidated table on the same account/flow pairs used to calculate it, and identified by the member of the ANALYSIS dimension.

Here is an example of how the purchase of an intangible asset generates the corresponding item of the statement of cash flows.

Account	Flow	Analysis	Amount	
A82211 - Other intangible assets in own use	F20 - Acquisition	-	100	❶
A82211 - Other intangible assets in own use	F20 - Acquisition	SCF4150 - Purchase of intangible assets	100	❷

❶ Data found in the consolidated table

❷ Cash-flow item generated by the consolidation rule

Among the SCF items of the ANALYSIS dimension, some items (codified SCF9xxx) do not form part of the SCF (meaning, they do not contribute to the calculation of the net cash variation over the period), but are created for control purposes.

6.2.2. Mapping table

The mapping table, called MAPPING-1, defines how an account/flow combination of the B/S or P&L generates a cash-flow item. The structure of this table is as follows:

CODE **	M1-AC-CFS	M1-FLOW	M1-AC-CLASS	M1-ITEM	M1-FACTOR
...					
108	CF-FIN-L1	F20		SCF3100	1
...					
323		F55	A	SCF2050	-1
334		F55	L	SCF2050	1

Charact / Property	Is used to …
M1-AC-CFS*	select source accounts via the CFS account characteristic
M1-AC-CLASS*	select source accounts via the CLASS account characteristic (only 'A' or 'L')
M1-FLOW	select source flows
M1-ITEM	specify the destination SCF item depending on the source accounts and the source flow.
M1-FACTOR	specify if the cash effect of the account/flow combination is positive or negative. Values must be 1 or -1.

* M1-AC-CFS and M1-AC-CLASS are exclusive and should not be used together for one given mapping definition row in the MAPPING-1 reference table.

** CODE is just a numeric increment with no functional purpose

In the example provided above, CF-FIN-L1 refers to the financial liabilities held for trading, that comprise the following accounts:

Code	Description	CFS characteristic
L11000	Derivatives - HFT	CF-FIN-L1
L11000CL	Clearing account - Derivatives HFT	CF-FIN-L1
L12200	Equity instruments - HFT	CF-FIN-L1
L12300	Debt securities - HFT	CF-FIN-L1
L13010	Current accounts / overnight deposits - HFT	CF-FIN-L1
L13020	Deposits with agreed maturity - HFT	CF-FIN-L1
L13030	Deposits redeemable at notice - HFT	CF-FIN-L1
L13040	Repurchase agreements - HFT	CF-FIN-L1
L1305CL	Clearing account - Financial Loans & Advances / Deposits HFT	CF-FIN-L1
L14010	Certificates of deposits - HFT	CF-FIN-L1
L14020	Asset-backed securities - HFT	CF-FIN-L1
L14030	Covered bonds - HFT	CF-FIN-L1
L14040	Hybrid contracts - HFT	CF-FIN-L1
L14050	Convertible compound financial instruments - HFT	CF-FIN-L1
L14060	Non-convertible - HFT	CF-FIN-L1
L15000	Other financial liabilities - HFT	CF-FIN-L1

Using this mapping table along with the M1-AC-CFS account characteristic makes the configuration much easier to audit and to enhance. Indeed, when you create a new account, defining the CFS characteristic is the only thing you need to ensure that this account is correctly handled in the SCF (provided the new account's behavior is the same as an existing account).

6.2.3. Rules and coefficients

FSP-100 is the main rule to generate the items of the financial statements. It populates the Analysis dimension using the information of the MAPPING1 (as shown previously) and MAPPING2 tables.

This is made possible by the use of two "generator" coefficients. These coefficients browse the mapping table and generate the Analysis dimension automatically.

Here is how the mapping table data is used depending on the origin accounts selection mode:

Origin accounts selection mode	M1-AC-CFS	M1-AC-CLASS
Selected accounts	Accounts with the CFS characteristic specified in the mapping table	Accounts with the CLASS specified in the mapping table
Selected flow	Flow specified in the mapping table	Flow specified in the mapping table
Generated accounts	Same as selected accounts	XY-SCF-A or XY-SCF-L
Generated flow	Same as selected flow	Same as selected flow
Coefficient used	DAT050	DAT060

When B/S accounts are selected using the CLASS characteristic, the data is not generated on the same accounts, because this would generate a lot of data and would not provide additional audit capabilities. Instead, dedicated accounts XY-SCF-A and XY-SCF-L are used. The amounts generated on these accounts are the total assets (XY-SCF-A) or total liabilities (XY-SCF-L) for the specified flow.

Example (extract of the data generated by the FSP-100 rule):

Account		Flow	Analysis		Cons. Amount
E11110	Paid up capital - ordinary shares	F40	SCF5010	Proceeds from capital increases	100
E12010	Share premium - ordinary shares	F40	SCF5010	Proceeds from capital increases	35
XY-SCF-A	Total assets	F55	SCF2050	Adjustments for fair value gains (losses)	20
XY-SCF-L	Total equity and liabilities	F55	SCF2050	Adjustments for fair value gains (losses)	5

Additional consolidation rules (FSP-110 to FSP-290) handle situations, in which an account/flow combination may generate a different cash flow item depending on scope changes. An Audit ID, 8CFS10, is dedicated to these automated corrections.

A specific rule (FSP-900) cancels amounts generated by the Category Scenario when carrying forward the closing balance on the opening balance of the following year. For example, A01000 - Cash on hand / F99 - Closing generates the cash flow line item SCF7200 - Cash and cash equivalents at end of period, data is automatically carried forward to the opening balance (F00) of the following year and will be aggregated with the new amount generated on the SCF7200 line item).

6.2.4. Manual journal entries

The starter kit is designed to allow central users to post manual journal entries to correct the statement of cash flows, if needed.

The dimensional analysis D-AN-010 created in the Category scenario allows posting manual journal entry to account "XY-R-SCF: Statement of cash flows - reclassifications and calculations", with a mandatory detail by SCF item on the Analysis dimension.

The control JA10-002 created in the Category scenario checks that the correction entry has no impact on item SCF7200 - Cash and cash equivalents at end of period.

6.2.5. Package report-based Statement of Cash Flows

In the package, the automated generation of the Statement of cash flows, with the audit trail stored on the original account/flow combination, is not possible. Indeed, each indicator should be detailed on the ANALYSIS dimension, making the configuration of the Category scenario much more complicated. Furthermore, using package rules for this purpose could lead to performance issues.

However, a report-based statement of cash flows is available (schedule: PA5300). It is automatically calculated on the fly when data (especially movement flows) is entered in the package.

Another schedule, PA6500, enables a consistency check of the Statement of cash flows by displaying control rows.

Both reports are configured with the CFS characteristic of the Account dimension and flow filters (SCF line items are not stored).

6.3. Statement of Changes in Equity / Statement of Other Comprehensive Income (IFRS and FINREP)

There are two different formats according to IFRS and FINREP reporting.

The statement of changes in equity discloses an analysis of the variation of total Equity (Group and Non-controlling interests) over the current and the previous period. It includes one row for the total of the other comprehensive income. This row is calculated as the sum of all other comprehensive income items displayed in the comprehensive income reports.

The statement of other comprehensive income starts from the Net income for the period and provides a detailed view of the other components. The total comprehensive income is split between Group and Non-controlling interests.

6.3.1. Principles

The statement of changes in equity and the statement of comprehensive income use the same storage and retrieval approach as the statement of cash flows.

The ANALYSIS dimension contains:

- a set of reference members (elementary items: SCExxxx, and subtotals: TSCExxx) dedicated to the statement of changes in equity (KIND="SCE") used in IFRS financial statements
- a set of reference members (elementary items: SCIxxxx, and subtotals: TSCIxxx) dedicated to the statement of comprehensive income (KIND="SCI")

The audit trail is provided the same way as for a SCF item that is, by keeping the origin account/flow combinations on the rows detailed by SCE or SCI item on the ANALYSIS dimension.

Rows in the statement of changes in equity and the statement of comprehensive income	
TSCE999	Balance at closing
▼ TSCE0000	Balance at opening as restated
▼ SCE0100	Balance at opening
▼ TSCE0200	Changes in accounting policies
▼ SCE0210	Effects of changes in accounting policies
▼ SCE0220	Effects of corrections of errors
▼ TSCE1000	Comprehensive income
▼ SCE1100	Profit (loss)
▼ SCE1200	Other Comprehensive income
=TSCI200	OCI, net of tax
▼ TSCI210	Total OCI not reclassified to P&L, net of tax
▼ SCI2101	Gains (losses) on revaluation of tangible assets, before tax
▼ SCI2102	Gains (losses) on revaluation of intangible assets, before tax

▼	SCI2103	Actuarial gains or (-) losses on defined benefit pension plans
▼	SCI2104	NC assets and disposal groups held for sale, not reclassified to P&L
▼	SCI2105	Share of OCI of associates and JV accounted for using EM, not reclassified to P&L
▼	SCI2121	Equity instruments (FVTOCI) fair value changes, before tax
▼	SCI2131	Equity instruments (FVTOCI) fair value changes (hedged items), before tax
▼	SCI2132	Equity instruments (FVTOCI) fair value changes (hedging instrument), before tax
▼	SCI2133	Financial liability (FVTPL) fair value changes attributable to changes in credit risk, before tax
▼	TSCI211	Income tax relating to items that will not be reclassified
▼	SCI2111	Income tax on gains (losses) on revaluation of tangible assets
▼	SCI2112	Income tax on gains (losses) on revaluation of intangible assets
▼	SCI2113	Income tax on actuarial gains or (-) losses on defined benefit pension plans
▼	SCI2114	Income tax on NC assets and disposal groups classified as held for sale, not reclassified to P&L
▼	SCI2115	Income tax on equity instruments (FVTOCI) fair value changes
▼	SCI2117	Income tax on equity instruments (FVTOCI) fair value changes (hedged items)
▼	SCI2118	Income tax on equity instruments (FVTOCI) fair value changes (hedging instrument)
▼	SCI2119	Income tax on financial liability (FVTOCI) fair value changes attributable to changes in credit risk
▼	TSCI220	Total OCI reclassified to P&L, net of tax
▼	TSCI221	Hedge of net investments in foreign operations [effective portion]
▼	SCI2211	Hedge of net invest. in foreign operations valuation gains (losses) taken to equity, before tax
▼	SCI2212	Recycling of hedge of net invest. in foreign operations gains (losses), before tax
▼	SCI2213	Other reclassification of hedge of net invest. in foreign operations gains (losses), before tax
▼	TSCI222	Foreign currency translation
▼	SCI2221	CTA gains (losses), before tax
▼	SCI2222	Recycling of CTA gains (losses), before tax
▼	SCI2223	Other reclassification of CTA gains (losses), before tax
▼	TSCI223	Cash flow hedges [effective portion] Adjustments to the cash flow hedges reserve
▼	SCI2231	Cash flow hedges valuation gains (losses) taken to the equity, before tax
▼	SCI2232	Recycling of cash flow hedges gains (losses), before tax
▼	SCI2233	Transferred to initial carrying amount of hedged items, before tax
▼	SCI2234	Other reclassification on cash flow hedges, before tax
▼	TSCI224	Hedging instruments [not designated elements]
▼	SCI2241	Hedging instruments valuation gains (losses) taken to equity, before tax
▼	SCI2242	Recycling of hedging instruments gains (losses), before tax
▼	SCI2243	Other reclassification of hedging instruments gains (losses), before tax
▼	TSCI225	Financial assets at fair value through other comprehensive income
▼	SCI2251	Financial assets (FVTOCI) valuation gains (losses) taken to equity, before tax
▼	SCI2252	Recycling of financial assets (FVTOCI) gains (losses), before tax
▼	SCI2253	Other reclassification of financial assets (FVTOCI) gains (losses), before tax
▼	TSCI226	Non-current assets and disposal groups held for sale
▼	SCI2261	NC assets and disposal groups held for sale gain or loss taken to equity
▼	SCI2262	Recycling of NC assets and disposal groups held for sale gain or loss,
▼	SCI2263	Other reclassification of NC assets and disposal groups held for sale gain or loss,
▼	SCI2271	Share of OCI of associates and JV accounted for using EM, reclassified to P&L
▼	TSCI228	Income tax relating to items that may be reclassified to profit or (-) loss
▼	SCI2281	Income tax on hedge of net invest. in foreign operations gains (losses) on equity, before tax
▼	SCI2282	Income tax on recycling of hedge of net invest. in foreign operations gains (losses), before tax
▼	SCI2283	Income tax on other reclassification of hedge of net invest. in foreign operations gains (losses), before tax
▼	SCI2284	Income tax on CTA gains (losses), before tax
▼	SCI2285	Income tax on recycling of CTA gains (losses), before tax
▼	SCI2286	Income tax on other reclassification of CTA gains (losses), before tax
▼	SCI2287	Income tax on cash flow hedges gains (losses), before tax
▼	SCI2288	Income tax on recycling of cash flow hadges gains (losses), before tax
▼	SCI2289	Income tax on transferred to initial carrying amount of hedged items, before tax
▼	SCI2290	Income tax on other reclassification on cash flow hedges, before tax
▼	SCI2291	Income tax on hedging instruments gains (losses), before tax
▼	SCI2292	Income tax on recycling of hedging instruments gains (losses), before tax
▼	SCI2293	Income tax on other reclassification of hedging instruments gains (losses), before tax
▼	SCI2294	Income tax on financial assets (FVTOCI) gains (losses), before tax
▼	SCI2295	Income tax on recycling of financial assets (FVTOCI) gains (losses), before tax
▼	SCI2296	Income tax on other reclassification of financial assets (FVTOCI) gains (losses), before tax

	▼ SCI2297	Income tax on NC assets and disposal groups held for sale gain or loss,	
	▼ SCI2298	Income tax on recycling of NC assets and disposal groups held for sale gain or loss,	
	▼ SCI2299	Income tax on other reclassification of NC assets and disposal groups held for sale gain or loss,	
▼ TSCE2000		Issue of shares	
▼ SCE2010		Issuance of ordinary shares	
▼ SCE2020		Issuance of preference shares	
▼ SCE2030		Capital reduction	
▼ SCE3000		Dividends paid	
▼ TSCE4000		Transfers	
▼ SCE4010		Reclassification of financial instruments from equity to liability	
▼ SCE4020		Reclassification of financial instruments from liability to equity	
▼ SCE4030		Transfers among components of equity	
▼ TSCE5000		Issue of convertible notes	
▼ SCE5010		Issuance of other equity instruments	
▼ SCE5020		Exercise or expiration of other equity instruments issued	
▼ SCE5030		Conversion of debt to equity	
▼ SCE6000		Share-based payments	
▼ TSCE7000		Purchase and disposal of treasury shares	
▼ SCE7010		Purchase of treasury shares	
▼ SCE7020		Sale or cancellation of treasury shares	
▼ SCE8000		Transactions with non-controlling interests	
▼ SCE9000		Other movements	

6.3.2. Mapping table

The mapping table, called MAPPING-2, defines how an account/flow combination of the B/S or P&L generates SCE and SCI items. In this table, you select directly the account members without using any characteristic. So, the structure of the table is simpler than the one used to generate SCF items:

CODE *	M2-ACCOUNT	M2-FLOW	M2-ITEM	M2-FACTOR
1	E11110	F40	SCE2000	1

Charact / Property	Is used to …
M2-ACCOUNT	select source accounts
M2-FLOW	select source flows
M2-ITEM	specify the destination SCE or SCI item depending on the source accounts and the source flow
M2-FACTOR	specify if the impact of the account/flow combination on SCE and SCI is positive or negative. Values must be 1 or -1.

* CODE is just a numeric increment with no functional purpose

6.3.3. Rules and coefficients

The rule FSP-100 used to generate the SCF items also generates the SCE and SCI items. It populates the ANALYSIS dimension using the information of the MAPPING-2 table and the "generator" coefficient DAT070.

A specific rule FSP-800 selects equity method companies and allows the generation of the following SCI line items:

- SCI2105 - Share of OCI of associates and JV accounted for using EM, not reclassified to P&L
- SCI2271 - Share of OCI of associates and JV accounted for using EM, reclassified to P&L.

Another rule, FSP-810, handles the calculation of SCE1100 - Profit (loss) and SCE1200 - Other Comprehensive income items in the statement of changes in equity as the sum of SCI line items.

6.3.4. Manual journal entries

The starter kit is designed to allow central users to post manual journal entries to correct:

- The statement of comprehensive income, if needed.

The dimensional analysis D-AN-015 created in the Category scenario allows posting manual journal entry to account XY-R-SCI, with a mandatory detail by SCIxx item on the ANALYSIS dimension.

- The statement of changes in equity presented in IFRS and FINREP financial statements
The dimensional analysis D-AN-025 created in the Category scenario allows posting manual journal entry to account XY-R-SCE190 and XY-R-SCE210, with a mandatory detail by SCE item on the ANALYSIS dimension.

7. Storage of exchange rates, scope rates and quotation convention

7.1. Description

For retrieval purpose, the starter kit provides the automatic calculation and storage of:

- Consolidation and financial interest rates, per reporting unit and per owner company, at opening and at closing,
- Opening, average, closing and daily exchange rates,
- The quotation convention selected in the exchange rate table (multiply or divide option).

7.2. Configuration principles

Rates and quotation convention are stored on the property account XY-PROP and on dedicated reference members of the ANALYSIS dimension.

The storage principles can be summarized as follows:

Source table	Type	Account	Flow	Audit ID	Analysis	Share
Scope	Opening consolidation rate	XPROP	F00	9RATE10	INTEG-RATE	N/A
	Closing consolidation rate		F99			N/A
	Opening consolidation rate of owner companies (Reporting unit = held company)		F00			Reference member of owner companies
	Closing consolidation rate of owner companies (Reporting unit = held company)		F99			Reference member of owner companies
	Opening financial interest rate		F00		INTER-RATE	N/A
	Closing financial interest rate		F99			N/A
	Opening financial interest rate of owner companies (Reporting unit = held company)		F00			Reference member of owner companies
	Closing financial interest rate of owner companies (Reporting unit = held company)		F99			Reference member of owner companies
Portfolio	Direct financial interest rate of owner companies in held companies (Reporting unit = owner companies)		F99		DIRECT-RATE	Reference member of held companies
Conversion rate	Opening exchange rate		F00		EXCH-RATE	N/A
	Average exchange rate		F15			N/A
	Closing exchange rate		F99			N/A
	Daily exchange rate		F99		reference member of the date	N/A

Source table	Type	Account	Flow	Audit ID	Analysis	Share
	Quotation convention		F99		QUOTATION	

The rule END-310 is configured with 10 coefficients (DAT010 to DAT150) that are necessary to read conversion rate tables, portfolio tables and scope tables. Among them, six are generating coefficients in order to generate the analysis by share (consolidation and financial interest rates of the owner company at opening and closing), and the analysis by date (daily exchange rates).

The calculation of rates and quotation convention requires the storage of the amount "1" on the technical account XY-PROP. This account is selected in rule END-310 in order to store the result of the coefficient only (the amount "1" is selected by the consolidation rule and multiplied by the coefficient).

This technical account is generated by:

- a category builder formula (see § A 2.6.10)
- the rule BGN-100 and the generating coefficient DAT000

Both formula and rule are needed to guarantee that the amount "1" is calculated for all Reporting units included in the consolidation scope.

A report, T10-00, enables you to check that rates and quotation conventions are correctly calculated.

Note that rules END-320 and END-330 are described in more detail in § C.6.13.

7.3.   Retrievals

Consolidation and financial interest rates per reporting unit are used to check the correct application of the consolidation rate and the correct NCI calculation in the net Equity.

Consolidation and financial interest rates per owner company are used to check the correct application of the consolidation rate and the correct NCI calculation for goodwill and elimination of investment.

These controls are done in the following reports:

- C46-25 - Detailed analysis of net equity
- C46-30 - Analysis of changes in Foreign currency exchange reserve - Year-to-date conversion

The direct financial interest rate is used in report C46-45 - Check calculation of goodwill or bargain purchase. It enables the calculation of a theoretical goodwill to be compared with the stored amount.

Exchange rates are used to check data conversion in the following reports:

- Book C43 - Check conversion by transaction date
- Book T10 - Check conversion
- C46-25 - Detailed analysis of net equity
- C46-30 - Analysis of changes in Foreign currency exchange reserve - Year-to-date conversion

The quotation convention is used to build retrievals to check the conversion, whatever quotation convention is applied.

8.   Control process

To secure the correctness of consolidated statements, including the Statements of Cash Flows, Comprehensive Income and Changes in Equity, the quality of reported data is checked at several steps in the reporting cycle:

- at local level, the data entered in each package must be valid before the package is published,
- at central level, some retrieval reports are designed to make overall controls on consolidated data.

Some controls apply to all versions of consolidated statements, other controls check the quality of additional data entered for FINREP purposes, making it possible to pass EBA's validation rules.

8.1.   Types of controls

The following types of controls are performed:

Types of controls	Blocking controls		Control	Relevant
	in package	in MJE	reports	for IFRS
Balance of the opening and closing position (assets – liabilities = equity)	X	X	X	Yes
Consistency of the gross value vs. amortization, depreciation and impairment	X			Yes
Allowance & write back in B/S accounts versus P&L accounts	X			Yes
Balancing flows (F01 F09, F50…)	X	X	X	Yes
Consistency of the breakdown by partner / share on intercompany accounts	X	X		Yes
Breakdown of variance on B/S accounts by flows	X			Yes
Controlling Closing = Opening + Variation	*	**	X	Yes
Controlling B/S income = P&L income	***	***	X	Yes
Controlling the statement of cash flows	X		X	Yes
Clearing accounts balance			X	Yes
Consistency of the breakdown by counterparty, product, country, NACE…. on closing and FINREP flows	X	X		No
Check consistency within data entered on flows for exposures (T3xx and T4xx)	X			No
Check consistency between Carrying amount (F99) and FINREP flows	X			No
Check consistency within data entered on flows for transferred assets (T6xx)	X			No

*   Variation flow is calculated as the difference between closing and opening + other flows

**   Closing is calculated by carry-over in manual journal entries (MJE)

***   B/S income calculated by the category scenario for package and manual journal entries, except CONS01 audit ID for which a blocking control is configured

8.2.   Configuration of the blocking controls

Blocking controls in the package are configured in the category scenario.

Blocking controls in manual journal entries are configured:

- In the category scenario by indicating which account/flow pairs must be entered with a double-sided manual journal entry. This is the case for all B/S accounts on accounting flows (with exception of F99) and for P&L accounts on flow Y99
- In the category scenario by activating the property "validity of manual journal entry" in the Environment tab when configuring manual controls
- In the dimension builder by activating the property 'Balanced" of the FLOW dimension when applicable (F00, F01, F50)

8.3.   Configuration of the control reports

The P-A package include schedules for checking the consistency of the entered data on topics, such as intercompany breakdown, balance of cash flows, and purchase/disposal of investment in subsidiaries. These schedules are in book P-A70.

At central level, some reports are available to check packages consistency (Book C41 - Check packages) and to perform consistency controls on consolidated data regarding IFRS reporting (Book C42 - Check main balances).

When a consolidation process has been run, the first schedules to be used are the overall control dashboards for IFRS reporting (C42-05 and C42-10). You can use the defined links to more detailed schedules if you discover an inconsistency.

E. ENHANCEMENT PRINCIPLES

1. Organization of the database

At customer side, we recommend the following organization:
- A database including an unmodified starter kit for IFRS should be kept as a reference database
- A development and test database should be configured, starting from the starter kit for IFRS
- A production database, with a configuration transfer from the development database to the production database should be provided

Advantages:
- Secure the operating process
- Avoid to have test data and test objects in the production database
- Enable a development schedule not linked with the production schedule

2. Best practices

2.1. Auditing the configuration

An Audit task should be run and its result analyzed:
- When adding a new dimension or characteristic member
- Before archiving any configuration item

The limits of audit are the following:
- Cell formulas in schedules are not identified by the audit task
- For several dimension members, the Audit task result retrieves configuration objects that do not use the items selected in the audit task

In any case, all configuration items should be checked.

2.2. Archiving configuration items

You should not delete any configuration objects after having run the first consolidation process. In order to keep consistent historical data, it is recommended to archive the objects that are no longer used.
Archiving means:
- For reference members in the Dimension Builder, add a Z before the member name and cancel all characteristic members. Then, run an Audit task and update all configuration objects where members are used
- For reports, add a Z before the report name and delete reports from books and folders
- For controls / rules, add a Z before the control/rule name, save as the sets/subsets where archived controls /rules are inserted and add a Z before then delete the control/rule from the new sets/subsets

If you choose to delete an object, it is permanently deleted (no undo).
Several objects should never be deleted (dimensions, several reference members of dimensions such as TP-9xxx - Third parties, Reporting Units outgoing in the consolidated scope …).

3. Updating dimension members

3.1. Updating the list of entities

When updating the Reporting Unit dimension, the Partner and Share dimensions will be updated automatically, because they share the same reference table.

For each new Reporting Unit, the following characteristics should be filled in:

- Purpose: Indicates whether the reporting unit is a Business Unit, a legal company or a sub-consolidation, or a technical entity (TP-90xx)
- Company: should be the same as the new Reporting Unit (close and re-open the new Reporting Unit to update the list) if the Reporting Unit is a legal company or a sub-consolidation, should be the primary Business Unit if the Reporting Unit is a Business Unit
- Currency: local currency used to enter data in the package
- Country: used to generate segment information by geographical area
- Division (not used in the starter kit)
- Type of counterparty
- NACE code
- LEI – Legal entity Identifier code
- ENTRY-DATE: required for FINREP table F40.01

Entities TP-9999 - Third parties and TP-90xx - Third parties by counterparty sectors, should never be deleted.

3.2.   Adding a new account

When updating reference members in the Dimensions Builder, you should first save the dimension or characteristic members in an Excel file (use the copy/paste functionality). Then you should respect the following procedure:

- Step 1: Find an account similar to the one you want to add (the 'reference' account) i.e. same total, same analysis by flow, same IC analysis… Run an audit of the configuration for the reference account
- Step 2: Create the new account by saving as the reference account. Check properties and characteristics and update them if necessary
- Step 3: Update the Category Builder

    - Insert the new account in the hierarchy of accounts
    - Update account families
    - Depending on the audit report: Update dimensional analysis, formulas, controls
    - Save, validate and publish the Category Scenario

- Step 4: Check/modify all other objects listed in the audit report (if any) such as filters, data entry schedules, retrieval reports, rules, …
- Step 5: Synchronize hierarchy in the Reporting Organizer module
- Step 6: Perform local data entry tests and consolidation test

3.3.   Adding an audit ID

When updating reference members in the Dimensions Builder, you should first save the dimension or characteristic members in an Excel file (use the copy/paste functionality). Then you should respect the following procedure:

- Step 1: Find an Audit ID similar to the one you want to add (the 'reference' Audit ID) i.e. same Journal entry currency, same Split behavior…Run an audit of the configuration for the reference Audit ID
- Step 2: Create the new Audit ID by saving as the reference account. Check properties and characteristics and update them if necessary
- Step 3: Check/modify all objects listed in the audit report (Filters, data entry schedules, retrieval reports, rules, …)
- Step 4: Perform local data entry tests and consolidation tests

Reminder: In the starter kit, there is one 4NCI-XXX audit ID corresponding to one XXX audit ID, which implies that when you want to add an audit ID, it often means adding 2 audit IDs.

3.4. Adding a flow

The consolidation by flow principles (opening balance, conversion, scope changes…) is based on the list of flows defined in the starter kit. This list cannot be easily updated as each accounting flow is defined with a very specific behavior in the starter kit.

Because each accounting flow has a specific behavior, many configuration objects using flows cannot be updated dynamically.

Adding a new accounting flow means to analyze carefully configuration impacts in the different modules:

- Dimension builder -> an audit should be run on each flow filter to check if the new flow should be added and/or new filters created
- Category builder
- Analyze which account families should display the new flow (redefinition of account families could be necessary) and the conversion process that should apply to it
- Update dimensional analysis and formulas
- Update and/or add new controls
- Data entry schedules -> Most should be updated manually as cell formats are specified by flow
- Reports -> several reports should be updated manually
- Rules -> deep analysis of consolidation rule updates should be planned (especially regarding return to historical value and scope changes processes)
- You should perform advanced local data entry tests and consolidation tests

Please note that is not the same level of complexity if you want to add a FINREP flow to store additional analyses

F. ANNEX

1. Design of multidimensional database structure

1.1. List of accounts with link to FINREP templates

Design1_COA_by_template.xlsx
- Tab Assets
- Tab Liabilities
- Tab Equity
- Tab P&L
- Tab Disclosures

1.2. FINREP templates design tool with flows values and other analysis dimensions

Design2_FINREP_templates.xls
- Tabs with templates FINREP with flows and other dimensions mentioned

1.3. Design tool for multidimensional metadata structure

Design3_db_model_Assets.xlsx
- Tab Cash and cash equivalent
- Tab Derivatives & hedging derivative assets
- Tab Equity Instruments
- Tab Debt Securities
- Tab Debt instruments held for sale
- Tab Loans and Advances
- Tab Investments in subsidiaries
- Tab Fixed assets
- Tab Other assets

Design3_db_model_Liabilities.xlsx
- Tab Derivatives & hedging derivative liabilities
- Tab Short Positions
- Tab Deposits
- Tab Debt securities issued
- Tab Other financial assets and liabilities
- Tab Provisions
- Tab Other liabilities

Design3_db_model_Equity.xlsx
- Tab Group share
- Tab NCI

Design3_db_model_P&L.xlsx
- Tab Interest income / expenses
- Tab Fees and Commissions income / expenses
- Tab Derecognition gains/losses on financial assets / liabilities
- Tab Other P&L accounts

Design3_db_model_Disclosures.xlsx
- Tab Asset management, custody and other service functions

- Tab Benefit Plan
- Tab Commitments and guarantees given
- Tab Commitments and guarantees received
- Tab Collaterals obtained by taking possession during the period [held at the reporting date]
- Tab Group Structure "entity by entity", "instrument by instrument"
- Tab Hedge items in fair value hedges
- Tab Interests in unconsolidated structured entities and Breakdown by nature of the activities
- Tab Related parties
- Tab Other disclosures

2. Design tools for the category scenario

2.1. Accounts families

Design4_Account_families.xlsx
- Tab Flow behavior by Accounts
- Tab Flow behavior by family

2.2. Dimensional analyses

Design4_Dimensional_analyses.xlsx
- Tab Dimensional analyses
- Tab Filters used in the dimensional analyses
- Tab Link Characteristic DIMENSION to accounts

2.3. Controls

In the files that are specific to FINREP reporting, each group of accounts is presented through 2 tabs: controls analysis and list of corresponding controls

Design4_Controls_FINREP_Assets.xlsx

- Tabs Cash and cash equivalent (analysis / list)
- Tabs Derivatives & hedging derivative assets (analysis / list)
- Tabs Equity Instruments (analysis / list)
- Tabs Debt Securities (analysis / list)
- Tabs Debt instruments held for sale (analysis / list)
- Tabs Loans and Advances (analysis / list)
- Tabs Fixed assets (analysis / list)

Design4_Controls_FINREP_Liabilities.xlsx

- Tabs Derivatives & hedging derivative liabilities (analysis / list)
- Tabs Short Positions (analysis / list)
- Tabs Deposits (analysis / list)
- Tabs Debt securities issued (analysis / list)
- Tabs Other financial liabilities (analysis / list)
- Tabs Provisions (analysis / list)

Design4_Controls_FINREP_P&L.xlsx

- Tabs Interest income / expenses (analysis / list)
- Tabs Fees and Commissions income / expenses (analysis / list)
- Tabs Derecognition gains/losses on financial assets / liabilities (analysis / list)
- Tabs Other P&L accounts (analysis / list)

Design4_Controls_FINREP_Disclosures.xlsx

- Tabs Asset management, custody and other service functions (analysis / list)
- Tabs Benefit Plan (analysis / list)
- Tabs Commitments given (analysis / list)
- Tabs Commitments received (analysis / list)
- Tabs Hedge items (analysis / list)
- Tabs Interests in unconsolidated structured entities (analysis / list)
- Tabs Related parties (analysis / list)

Design4_Controls_IFRS_FINREP.xlsx

- Tab PA10   Balance
- Tab PA20   Securities & shareholdings
- Tab PA30   Flow analysis
- Tab PA41   Reciprocal operations
- Tab PA42   Internal gains and losses
- Tab PA43   Dividends
- Tab PA44   Internal provisions

3.   Design of SCE, SCI, SCF reports

3.1.   Statement of changes in equity

Design5_SCE.xlsx
- Tab SCE report
- Tab SCE mapping

3.2.   Statement of comprehensive income

Design5_SCI.xlsx
- Tab SCI report
- Tab SCI mapping

3.3.   Statement of cash flows

Design5_SCF.xlsx
- Tab SCFI report
- Tab SCF mapping

4.   Dimensions with main characteristics

Design9_Annex_Dimensions.xlsx
- Tab ACCOUNT
- Tab FLOW
- Tab AUDIT ID
- Tab PARTNER
- Tab PRODUCT
- Tab ANALYSIS (Values used for Transition from IAS39 to IFRS9)
- Tab FINREP
- Tab FAIR VALUE