

**Oracle Insurance Quantitative
Management and Reporting for
Hyperion Financial Management**

Admin and User Guide

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Preface

This Preface contains information about this documentation.

Audience/Purpose

This Admin and User Guide is designed for those users within an insurer who will access the Oracle Insurance Quantitative Management and Reporting for Hyperion Financial Management (“QMR”) to:

- enter QIS5/QRT risk and capital data for onward transmission to corporate/head office
- consolidate, aggregate and validate risk and capital data and generate QIS5/QRT reports (Corporate users)
- create this new application and provide access to users (System administrators)

This guide assumes that users are already familiar with the structure and usage of Hyperion Financial Management (HFM) and purely focuses how to utilise the QMR application. Please refer to the relevant sections of the HFM user guide for further information.

External Documentation

This documentation contains references to documentation produced by companies or organisations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accuracy or suitability of this documentation.

Conventions

The following text conventions are used in this document:

Convention	Description
bold	Boldface type indicates graphical user interface elements associated with an action.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Chapter 1

Introduction

This chapter introduces the Oracle Insurance Quantitative Management and Reporting for Hyperion Financial Management system.

Related topics:

- *QMR Overview* on page 2
- *HFM Overview* on page 3
- *Rules* on page 19

QMR OVERVIEW

Oracle Insurance Quantitative Management and Reporting for Hyperion Financial Management (QMR) is a dedicated financial reporting and consolidation application that operates on the Hyperion Financial Management (HFM) platform. It provides the capability for users across the organisation to enter risk, actuarial and capital data (via a web data capture screen) and submit to Corporate who can then review, consolidate and aggregate.

Most insurers currently undertake this exercise by using a series of Microsoft Excel spreadsheets based on the EIOPA template. Doing so is both time-consuming and potentially error-prone, as well as a breach of Pillar II governance requirements. QMR provides a repeatable and auditable process for QIS5 generation. It can also be customised to clients' specific requirements and future regulatory changes from both EIOPA and local regulators.

Whilst the QMR application fulfils the current requirement for QIS5 generation, it can also support the Quantitative Reporting Template (QRT) process, the quarterly Solvency report required by Solvency II. Whilst EIOPA has not yet finalised the precise content of the QRT report, market analysis and client feedback strongly suggests that it will follow the QIS5 format.

In addition, the information contained in QRT will be a major source of input into a number of associated Solvency processes, including the Solvency Financial and Condition Report (SFCR), the Report to Supervisor (RTS) report, and the Own Risk and Solvency Assessment (ORSA). The QRT will also support the information required to implement the Use Test within the business.

Functionality includes:

- Consolidation functionality (currency translation, inter-company elimination)
- Built-in functionality to calculate MCR and SCR (for solo and groups)
- Reporting capabilities using Hyperion reporting standard roles and responsibilities
- Strong validations
- Capability to support approval and sign-off procedures

HFM OVERVIEW

Hyperion Financial Management (HFM) is a web-based, enterprise-class financial consolidation and reporting application with powerful multidimensional analysis capabilities. HFM is part of the Hyperion Enterprise Performance Management (EPM) applications. HFM is modular and can be used stand-alone, as well as integrated with other EPM applications to deliver even more comprehensive functionality, greater administrative ease-of-use, and faster deployment. The product is delivered with:

- Hyperion Financial Reporting
- Hyperion Foundation Services

HFM helps organisations shorten the financial consolidation and reporting cycle while providing more in-depth analysis capabilities. It provides enhanced decision-support capabilities to employees across the enterprise and allows organisations to continually adapt and align strategic and operational plans. Ultimately, this leads to better execution and greater bottom-line financial returns.

The system uses today's most advanced web technology, yet is designed to be used and maintained by the finance team. With purpose-built features, HFM is the cornerstone of any sustainable compliance framework and helps businesses comply with today's stringent reporting regulations on an ongoing basis.

HFM is an automated, web-enabled reporting solution for analytic applications that transforms data into meaningful business information and empowers users to make critical time-sensitive business decisions. Users can quickly create reports without IT assistance and deliver them immediately or schedule them for later delivery through a variety of channels.

Note We believe a subset of this guide would function as an end-user manual, and with some modifications could function as a company-specific user guide.

Chapter 2

Installing QMR

The following topics deal with installing the Oracle Insurance Quantitative Management and Reporting for Hyperion Financial Management system.

- *Prerequisites* on page 6
- *Installation Guidelines* on page 7

PREREQUISITES

The following are pre-requisites for the QMR application:

- HFM version 9 or 11 installed
- Weblogic, HSS, WS Web and Agent, FR Web and Services, HFM Web (IIS) and Application Server. MSAD account and Database.9x
- Admin and access rights to application
- A fully-trained administrator

Also, deployment (remote access) needs to be completed to allow remote access to the application; Excel QIS5 template would stand alone; Version 11 also supports web data entry using Excel add in (smart view)

Tip Refer to *Remote Access Solution – Citrix, etc.* on page 73

INSTALLATION GUIDELINES

OVERVIEW

The QMR application is not like software that can be installed with an installation routine. It's more like a pre-packaged base application that needs more work at the client when received by:

- Adding the own entity structures to the application
- Adding security classes to the application
- Assigning users to the application
- Assigning access rights to the users
- Determining where in the Workspace folder directory the QIS5 reports will be stored

Additional steps are:

- Extracting the ZIP file to a temporary directory
- Copying extracted files to appropriate directory

Tip Refer HFM Admin Guide, chapter: Load instruction new app (rules, metadata etc.)
Refer HFM Admin Guide, chapter: Load instruction forms and reports

- Loading instructions EIOPA dat files
- Copying language packs

Tip Refer to HFM admin guide, chapter 2: Managing Applications

ZIP FILE CONTENTS

Extension	File Type	Notes
*.des	reports	
*.WDF	WDFs	
*.RLE	Rule file	load rules into app
*.Per	Period file	use per file during app creation
*.XLS	template file and language template	
*.dat	Data file data EIOPA config data into new app	
*.XML	App file	upload app definition file into new app
*.sec	security file	upload security into app

Chapter 3

Organisational Structure

Topics in this chapter:

- *Add Your Own Organisational Structure* on page 10
- *Add Your Organisation into Geographic Structure* on page 10

ORGANISATIONAL STRUCTURE

ADD YOUR OWN ORGANISATIONAL STRUCTURE

- For an Administrator user this should be clear. Users of this application can either copy metadata structure from an existing application or create a new organisational structure as may be required for QIS5.

ADD YOUR ORGANISATION INTO GEOGRAPHIC STRUCTURE

- For an Administrator user this should be clear. QIS5 requires to report data on insurance obligations by geographical area. We advise the administrator to complete the structure of the GEO organisational structure based on your internal organisational structure

Note Refer to HFM admin guide, chapter 4: Defining Entity Members

Rationale We offer multiple options to support geographical areas:
Option 1: Through organisational roll-up (predefined in org structure) - each reporting entity resides in single area
Option 2: By inputting geo-specific data into Form 1001 Geo Div.
Option 3: A mix of Option 1 and Option 2

Chapter 4

Technical/Admin Description of Application

This chapter includes details of the technical and administrative areas of QMR, and includes the following topics:

- *Application Settings* on page 12
- *VAL/PVA* on page 12
- *Validation Account* on page 12
- *Consol Methods* on page 12
- *Specific Application Settings: QIS1 to QIS2 Reconciliation Process* on page 13

TECHNICAL/ADMIN DESCRIPTION OF APPLICATION

APPLICATION SETTINGS

Calendar file -> is client-specific. For HFM users it is easier to use their own calendar file. Clients are advised to use their current calendar file in order to retain reporting consistency across the applications, in case a different calendar file is used.

Tip Refer to HFM admin guide, chapter 2: Creating Applications

Note Even though the reporting calendar contains, for example, monthly data, the same calendar file can be applied by selecting quarters for reporting only.

VAL/PVA

Users are advised to use VAL method only as intermediate reporting periods are possibly missing so PVA calculations cannot be performed accurately and consistently; the application does not calculate Fx on BS movements. Users are also advised to use the same Fx for AVG and Closing rates.

VALIDATION ACCOUNT

The validation account is currently not assigned; System admin can set up account for lock in order to ensure consistency in data submissions.

If the validations block any submission of data, the following account has to be assigned as Validation account:

- Validations

Tip Refer to HFM admin guide, chapter 11, page 324

Rationale During implementation a decision needs to be made on the level of consistency endorsed by the corporate office (application development department). We advise to set the initial validation level of this application at a low level. Over the next periods the level of validation can be gradually increased.

CONSOL METHODS

The application is set up to work with full consolidation. Furthermore the following is supported via consolidation rules:

- Minority interest
- Equity elimination

- Partial consolidation (JV accounting)

Note If possible, data from other application can be interfaced to this application. For example, an IFRS balance sheet can be uploaded into the QIS5 application from the main HFM application.

Rationale In our view the QIS5 reporting process would not require the need to fully support equity eliminations and full equity consolidation. This can better be supported in a regular IFRS annual reporting process. Also, support for complicated cross-ownerships and so-called joint-venture accounting seems to be out of place in this application. Best practice shows that full equity consolidations, minority interest calculations, and equity/participation eliminations are better performed in a dedicated annual reporting environment. Data transfers from annual reporting processes to QIS5 should include all eliminations to ensure data consistency.

SPECIFIC APPLICATION SETTINGS: QIS1 TO QIS2 RECONCILIATION PROCESS

Reference to 1) QIS1 to QIS2 recons

We support three options for current accounting principles to QIS5 reconciliation:

- Input of complete balance sheets and validations of differences (current set up)
- From current GAAP + movements to QIS5
- From QIS5 + movements to current QIS5

For implementation of the last two options, the hierarchy SI_to_SII has to be rearranged.

Rationale We decided to support several methods as we have learnt from our experience various approaches are applied across the industry. Whichever method you select is a matter of preference, and changing the application to support your preferred method is described in further detail.

1. Specified Tiering on basic own funds

We have made the following modifications to the default spreadsheet as issued by EIOPA dated Sep/07/10:

- Filling the Own funds data
- Upload and download facility into HFM
- Data sheet
- Other minor changes
 - Flags capturing
 - Text capturing (non financial information)

On the **I. Valuation** tab, the formula regarding the balance sheet information on **basic own funds** has changed. The new formula in column H and row 110 until 140 will populate the total of the specified tiering.

The QIS5 Valuation Principles figures should be reported per tier and as a total. Instead of inputting the total and inputting per tier, in this sheet the Own funds will only be input per tier and added up as a total for QIS5 Valuation Principles. With this checks between the total and the specifications per tier are no longer necessary.

Tip Refer to the EIOPA template for QIS5 reporting.

2. Balance sheet and intra-group reporting

Balance sheet accounts (row 10 until 104) should be filled as a total value, which means that the intra-group figures should be included. The intra-group figures which can be specified after row 215, will be automatically deducted from this total values. The figures will be stored separately, where the intra-group figures will be stored as specified and the other figures will be **stored** as the sum of the total value minus the intra-group value.

Rationale Better practice within HFM application support IC eliminations. We offer multiple options to support IC reconciliation and elimination:
 Option 1: IC entry on dummy counterpart (not specified) and elimination on group totals
 Option 2: IC entry by counterpart and subsequent elimination
 Option 3: No IC and manual elimination

For example:

Participation

On row 118 you will report 100 (Total value including the intra-group value). On row 219 you will report the intra-group value of 40.

HFM will store...

60 on the participation account, 40 on the participation intra-group account, 100 will be shown automatically by the roll-up hierarchy.

From SI to SII

Both the Solvency I and QIS5 balance sheet are input as separate balance sheets, with an explanation of the differences. If the difference explanation is not equal to the delta between the QIS5 and the SI value, this difference will be stored on a separate member in the Custom2 dimension SI-to-SII (AbsDiff). The absolute difference per account will be aggregated and stored on a validation account.

Rationale We use Custom 2 dimension to support S1 to S2 reconciliation.
 As we also use Custom 1 for account analysis, we have introduced Custom 2 for additional account analysis.

Flags

Flag accounts have been set up in HFM to support pull-down selections from the QIS5 template. Users are advised to enter 1 in the appropriate cell reflecting a Yes and a empty value (in other words: nothing) reflecting a No

Note 1 represents a Yes, and empty represents a No.

Rationale As HFM does not support drop-down menus with text to support Y/N, we selected a 1/0 approach to simulate a selection box.

Non-financial data (cell text)

For qualitative information, such as contact information, accounts have been created that will be filled with cell text. In the upload spreadsheet and in the data forms, the cell text can be input in pre-defined cells.

Rationale We selected cell text feature of HFM to support non-financial data elements.

Chapter 5

Rules

Topics in this section:

- *Consolidations Rules* on page 18
- *Noinp Rules* on page 18
- *Pull-through Rules* on page 18
- *SCR Rules* on page 18
- *Validation Rules* on page 23
- *Rates/Currency* on page 23
- *Dimension Set-up* on page 23
- *Accounts Structure* on page 24
- *Scenarios* on page 28
- *ETL* on page 29
- *Upload and Download QIS5 Template* on page 29
- *Workspace Navigation: Filling out Forms* on page 31
- *Running Reports* on page 31
- *Making Corrections to Data* on page 32
- *Running a Consolidation (Group SCR Calculation)* on page 32
- *Security, Users and Processes* on page 32
- *QMR Baseline Security and Roles* on page 33
- *Multi-Language* on page 33
- *Working Instructions for Corporate Users Quick Reference Guide* on page 33
- *Working Instructions for Data Entry Quick Reference Guide* on page 34

RULES

CONSOLIDATIONS RULES

A standard set of consolidation and elimination rules has been used with

- Equity elimination
- Minority interest calculation
- Proportional consolidation

NOINP RULES

- All blocked cells in the template have been blocked with noinp (no-input) rules.

PULL-THROUGH RULES

- Linked all cell-based formulas from the template (to prevent validations and potential data inconsistency). All linked cells are blue-marked and all input cells are yellow-marked. The blue-marked cells cannot be changed and will be calculated after data has been sent into the HFM application.

Rationale We have created so-called noinp rules to prevent data from being entered and uploaded in to the HFM database in places where we would not expect any data. In order to retain data consistency, we have included rules to prevent data input. We have also built pull-through rules to ensure data consistency of data elements.

We have incorporated all cell references from the QIS5 template.

SCR RULES

Special rules have been created to support SCR and MCR calculations. In order to support the specific calculations for SCR, a number of new functions have been made available. To allow for future changes, the functions are driven by user-defined attributes in the account metadata. This saves having to re-write the rules if the SCR calculation requirements change.

The table below shows what functions are available. These are put into the UserDefined1 attribute in the accounts metadata.

Rule Name in UserDefined1	Explanation
<blank> nothing entered	If no calculation is specified, perform the following: $\text{Capital Requirement} = [\text{Init_NAV}] - [\text{Risk Absorption NAV}]$ for Net and Gross And for the accounts which have Mitigation and Gross columns (e.g. catastrophe risks) : $\text{Capital Requirement} = \text{Gross} - \text{Mitigation}$

Rule Name in UserDefined1	Explanation
MAX1	<p>Calculates Initial Capital Requirement</p> <p>Default is: <i>Init Cap Requirement</i> = <i>Max(Cap Requirement)</i> in all its children</p> <p>Exception: if a particular child is tagged with the <i>Use Method</i> (e.g. Upward, Downward) then that account is taken, instead of the Max.</p> <p>If marked with UserDefined2=BASE then, in addition, for all children: <i>Init Capital Requirement</i> (children) = <i>Init_NAV</i> (parent account) minus <i>Risk_Absorption</i> Plus <i>Simplification</i></p>
SUBMAX	<p>Calculates <i>Init Cap Requirement</i> (parent) = <i>Init NAV</i> – <i>Max(Capital Requirement)</i> in children</p>
SUB2	<p>Takes a list of 2 accounts in UserDefined2</p> <p>Calculates Init Cap Requirement = <i>Risk_Absorption NAV</i> (from 1st account) Minus <i>Init Cap Requirement</i> (from 2nd account)</p>
MAX2	<p>Takes a list of 2 accounts in UserDefined2</p> <p>Calculates Init Cap Requirement = MAX of <i>Init_Cap_req</i> from 1st account and <i>Init_Cap_req</i> from 2nd account</p>
MAX3	<p>Takes 4 parameters from UserDefined2, these are a list of 4 accounts, as used in the calculation below</p> <p>Calculates <i>Init Cap requirement</i> (Gross) = <i>Risk Absorption</i> (1st account) – <i>Risk Absorption</i> (3rd account) and <i>Init Cap requirement</i> (Net) = <i>Risk Absorption</i> (2nd account) – <i>Risk Absorption</i> (4th account)</p> <p>The reason for 4 accounts is to handle rollups in the SCR sheet where the Net and Gross risks are calculated in separate blocks (rows) and then combined together into a single HFM account with the Net/Gross split in the custom1 dimension.</p>
SPEC1	<p>Takes a list of 3 accounts from UserDefined2, in the account metadata. Calculates $\text{Min}((1^{\text{st}} \text{ account} - 2^{\text{nd}} \text{ account}), 3^{\text{rd}} \text{ account}) * -1$ Then populates Capital Requirement as the result.</p>

Rule Name in UserDefined1	Explanation
SPEC2	<p>Takes a list of 6 parameters from UserDefined2, in the account metadata, as defined below</p> <p>1st parameter: Account1 (must be a valid account label) 2nd parameter: multiplier1 (must be a number/constant) 3rd parameter: Account2 4th parameter: multiplier2 5th parameter: Account3 6th parameter: multiplier3</p> <p>Calculates Capital Requirement (Gross & Net) = MIN (Account1 * Multiplier1 , Account2 * Multiplier2) + Account3 * Multiplier3</p>
MUL	<p>Takes a list of 2 parameters in UserDefined2</p> <p>1st parameter: Account1 2nd parameter: Multiplier (must be a constant number)</p> <p>Calculates Capital Requirement (Net and Gross) = <i>Account1 * Multiplier</i></p>
MUL2	<p>Like MUL1, except it multiples 2 accounts rather than using a constant as a multiplier. Takes a list of 2 parameters in UserDefined2</p> <p>1st parameter: Account1 2nd parameter: Account2</p> <p>Then calculates Capital Requirement (Gross) = <i>Account1 (Gross) * Account2 (Gross)</i></p> <p>And Capital Requirement (Net) = <i>Account1 (Net) * Account2 (Net)</i></p>
SPEC3	<p>Takes a set of 6 parameters in UserDefined2</p> <p>1: Account 'EarnLife' (referred to in QIS5 xls as 'EarnLife') 2: Account 'EarnLife_UL' 3: Account 'EarnNL' 4: Account pEarnLife 5: Account pEarnLife_UL 6: Account pEarnNL</p> <p>Calculates Capital Requirement (Net and Gross) = 0.04 * (EarnLife - EarnLife_UL) + 0.03 * EarnNL + Max (0, 0.04 * (EarnLife-1.1*pEarnLife -(EarnLife_UL-1.1*pEarnLife_UL))) + Max(0, 0.03 * (EarnNL-1.1*pEarnNL))</p>
SPEC4	<p>Takes 3 parameters in UserDefined2</p> <p>1: Account TPLife 2: Account TPLife_UL 3: Account TPNL</p> <p>Calculates Capital Requirement (Net and Gross) = 0.0045 * Max(0, TPLife - TPLife_UL) + 0.03 * Max(0, TPNL)</p>
SPEC5	<p>Takes a single account in UserDefined2</p> <p>Calculates Capital Requirement = EXP(2.58 * SQRT(Log(Amt*Amt +1)))/SQRT(Amt*Amt +1)-1</p>

Rule Name in UserDefined1	Explanation
SPEC6	<p>Takes a single account (Account1) in UserDefined2. Calculates Capital Requirement = Account1.Gross Capital Requirement - Account1.Net Capital Requirement (i.e. difference between Gross and Net in the specified account)</p>
SPEC7	<p>Takes a list 2 accounts in UserDefined2 Calculates Capital Requirement = MIN ((Account1.Gross Capital Req - Account1.Net Capital Req), Account2.Gross Capital Requirement)</p>
IF	<p>Takes a list of 2 accounts in UserDefined2. Take Capital Requirement from the following:</p> <ul style="list-style-type: none"> • If the 1st account is non-zero & not blank, then use that • Otherwise, take the value from the 2nd account
SUB2	<p>Takes a single account (Account1) in UserDefined2</p> <p>Calculates Capital Requirement (Gross) = Account1.[Initial NAV] - <this account>. [Gross Risk Absorption NAV] + <this account>. [Gross Risk Absorption Simplification] and Capital Requirement (Net) = Account1.[Initial NAV] - <this account>. [Net Risk Absorption NAV] + <this account>. [Net Risk Absorption Simplification]</p>
SQRT	<p>Looks at the Matrix account, defined in UserDefined2 for this account. Then look at all accounts that are defined in Custom1/Custom2 for the matrix account. Then perform a matrix-multiplication of all factors in the matrix against each corresponding account referred to by the columns/rows in the matrix. Put the sum of the weighted amounts into the Custom1 members: Gross Risk Absorption (weighted) Net Risk Absorption (weighted)</p> <p>AccountX - TopCustom1=M_1234 (matrix account)</p> <p>M_1234 has rows/columns as defined in the Custom1/Custom2 Acc1,Acc2,Acc3,... AccountN</p> <p>Go through each custom1 (row) for the matrix and accumulate $\sum [M_1234.Custom1] * Account(n)$</p> <p>Remember:</p> <ul style="list-style-type: none"> • The system knows which matrix to use, from the account's UserDefined2 attribute. • The system knows which accounts to cross-multiply, from the descendants of TopCustom1 for the Matrix account. • The factors (amounts held in the Matrix account, are by custom1 (rows) and custom2 (columns)). • The factors in the matrix account are stored at Entity=[None] because the factors are not supposed to change per entity.

Rule Name in UserDefined1	Explanation
DIF	<p>Takes a list of 2 accounts in UserDefined2. Simply calculates the difference between the two.</p> <p>Init Gross Capital Req=Account1.Init_NCR – Account2.Init_NCR Init Net Capital Req=Account1.Init_NCR – Account2.Init_NCR</p>
SUM	<p>Aggregates the child accounts, as defined in the Custom2 hierachy. The account label is mentioned in the Custom2 hierarchy. No parameters are supplied in UserDefined2</p>
SUM2	<p>Aggregates a specified list of accounts as specified in UserDefined2. This is used where there is no hierarchical rollup in Custom2, and you want to add a specific list of accounts.</p>
SORTSUM	<p>Calculates square root of the squares of all the children. The children are defined in the Custom2 rollup which mentions this account.</p> <p>Capital Requirement = SORT (Acc1² + Acc2² + Acc3² + ... Acc(n)²)</p>
SUMMIN	<p>Calculates Sum of children as defined in Custom2 rollup, Then applies Max(0, [Sum]) to ensure the result is not negative.</p> <p>Capital Requirement = Max (0, Σ[cap req in children])</p>
SUMNRA_A	<p>Calculates sum of Net Risk Absorption [Assets], from the list of accounts as defined in the Custom2 hierarchy with this account as the parent.</p> <p>Parent account.[Net Risk Absorption – Assets] = Σ child accunts[Net Risk Absorbtion – Assets]</p> <p>Then for the parent account, re-calculate Net Risk Absorbtion[NAV] = Net Risk Absorption [Assets – Liab]</p>

Tip Refer to HFM admin guide, chapter 10: Managing Rules.
Also refer to *Technical Information* on page 65 of this manual for further explanation.

Note We support both internal, standard and partial internal models.

By uploading or entering data for diversification on NONE (see SCR matrices forms), all percentages are used for all entities across the application. However, we offer the possibility to enter and maintain custom diversification values for each entity separately. When you enter a value in the SCR matrices this value will override the existing generic value for the Group.

Note We offer two types of Group aggregations:

- Default setting of the application will consolidate SCR to a group number.
- You can recalculate the group SCR by copying the consolidated values into a dummy entity outside the group hierarchy. This dummy entity will contain the consolidated numbers from all underlying entities. By applying the diversification matrix values for the group or for the dummy entity a group SCR will be calculated. Other methods of capital aggregations are not supported by this model.

VALIDATION RULES

The following validation rules have been created in the rule file (see *Rules* on page 63):

- V_0001 – Valuation of the QIS 1 to Qis2 reconciliation process
- V_0002 – Check that the balance sheet difference = 0
- V_0003 – Check Premiums (Net Written) with Geo Div sheet
- V_0004 – SCR flag check (each flag group can only have $\text{abs}(\text{Total}) = 1$)
- Validations – account for lock and potentially the total of all individual checks

Tip Refer to HFM admin guide, chapter 10: Setup Validation Account, page 324.

The QMR application contains all the main world currencies used to date.

Tip Refer to HFM admin guide, chapter 4: Defining Currencies

You can upload the standard EIOPA rates by uploading the file Fx_EIOPA from the data directory.

RATES/CURRENCY

The QRM application contains all the main world currencies used to date.

Note The QIS5 main currencies are listed at the top, and the rest of the World currencies appear after these.

Tip Refer to HFM admin guide, chapter 4: Defining Currencies

DIMENSION SET-UP

Dimensions describe an organisation's data and usually contain groups of related members. Each dimension consists of members. The members are arranged in hierarchies. Upper-level members are called parent members, and a member immediately below a parent member is referred to as the child of a parent member. All members below a parent are referred to as descendants. The bottom-level members of the hierarchy are called base-level members.

During the analysis of the QIS5 requirements, logical data elements (breakdowns) have been identified. On translating these logical data elements to the available dimensions in HFM, the following general starting points have been applied:

- In deciding whether breakdowns that are not covered by a system-defined dimension should either be included in a custom dimension or in the [Account] dimension, the following general principles apply:
 - a. In those cases where a certain breakdown is valid for more than one account or if it is expected that the number of accounts that will be used in

combination with the breakdown is expanded, this breakdown ideally should be included in a custom dimension.

- b.** In those cases where a breakdown is used only for one account then this split has been included in the account dimension itself, instead of adding it to a custom dimension, unless it is expected that in future this breakdown will be used in combination with other accounts.
- The QIS5 spreadsheet contains worksheets with matrices of data rolling up into a total. Mostly in a worksheet, the breakdowns are repeated.
- In HFM the main design solution is:
 - Item that is reported on: Account
 - Rows: Custom1
 - Columns: Custom2
 or
 - Item that is reported on: Account
 - Rows: Custom2
 - Columns: Custom1

ACCOUNTS STRUCTURE

Account Groupings

- L_0000 Participant information / Contract information
- L_0257 Coverage of the group submission
- L_9900 Balance sheet from Valuation sheet
- L_9000 Disclosures: other sheets
- L_0845_T Other paid in capital instruments
- Validation - Validation accounts
- Rates - Currency rates

User Defined Attributes (UDAs)

Rationale We have used the account structure for most of the data elements found in the row of columns B, C or D. The information stored in columns E to Z are mostly reflected in a combination of Custom 1 and/or Custom 2.

In the QIS5 application, User Defined Attributes (UDAs) are used to greatly reduce the maintenance on HFM rules.

In the most general sense, UDAs are used to direct the HFM rules to perform certain actions on specific account, or to tag certain accounts which share a common functional property.

The areas in the QIS5 HFM application that use UDAs are

- SCR sheet (see *SCR Rules* on page 18), including noinp on the SCR accounts
- MCR sheet

Reversals on the valuation sheet: In this case the account has UserDefined1=REV. This instructs HFM, for these accounts only, to calculate a volume decrease based on the Solvency I amount, i.e. [Value Decrease] = [SI] * -1

Custom 1 Structure

Account breakdown

Tip Refer to HFM admin guide, chapter 4: Defining Custom Members

Rationale Rationale: Most Excel grids in the QIS5 template have been translated into a Account, custom1 combination.
Exceptions to this rule are reflected in the appendix.

Custom 2 Structure

Accounting principles

The main columns of the Valuation sheet (Current accounting principle/SI/QIS5+) movements have been built into the Custom2 dimension. Here also alternative rollup can be created if a client want to fill the QIS5 column with delta's (SI + movement = QIS5). See *Specific Application Settings: QIS1 to QIS2 Reconciliation Process* on page 13.

Product structures

Total

- Total Non-life (excluding health)
 - Motor vehicle liability insurance
 - Other motor insurance
 - Marine, aviation and transport insurance
 - Fire and other damage to property insurance
 - General liability insurance
 - Credit and suretyship insurance
 - Legal expenses insurance
 - Assistance

- Miscellaneous financial loss
 - Non-proportional property reinsurance
 - Non-proportional casualty reinsurance
 - Non-prop. marine, aviation and transport reinsurance
- Total health (similar to non-life)
 - Medical expense insurance
 - Income protection insurance
 - Workers' compensation insurance
 - Non-proportional health reinsurance
- Total Health (similar to life)
 - Insurance with profit participation
 - Index-linked and unit-linked insurance
 - Other life insurance
 - Annuities stemming from non-life insurance contracts
 - Accepted Reinsurance
- Total Life (excluding health)
 - Insurance with profit participation
 - Life insurance with profit participation (Death)
 - Life insurance with profit participation (Survival)
 - Life insurance with profit participation (Disability/morbidity)
 - Life insurance with profit participation (Saving)
 - Index-linked and unit-linked insurance
 - Index-linked and unit-linked life insurance (Death)
 - Index-linked and unit-linked life insurance (Survival)
 - Index-linked and unit-linked life insurance (Disability/morbidity)
 - Index-linked and unit-linked life insurance (Saving)
 - Other life insurance
 - Other life insurance (Death)
 - Other life insurance (Survival)
 - Other life insurance (Disability/morbidity)
 - Other life insurance (Saving)
 - Accepted Reinsurance

- Accepted reinsurance (Death)
- Accepted reinsurance (Survival)
- Accepted reinsurance (Disability/morbidity)
- Accepted reinsurance (Saving)
- Annuities stemming from non-life insurance contracts

SCR Hierarchies in Custom2

In the SCR sheet in the Excel-based QIS5 workbook, there are many 'total' rows whose values are calculated by a series of special calculations, not simply aggregating the children. Such examples are weighted sums, and the use of Max functions.

In HFM, it is not possible to write calculated amounts (from rules) into Parent accounts. Therefore, all SCR accounts are in a flat structure in the hierarchy, to enable them all to be writable by the rules.

However this creates an additional problem: The rules have no idea of the structure (i.e. parent-child relationships) that are implied in the Excel version of the SCR sheet.

So to get around this limitation, a duplicate set of members are listed in the Custom2 dimension, which *is* structured to represent the parent-child relationship in the SCR sheet. That way, the HFM rules can become aware of the hierarchies in the SCR sheet, and also be able to write to the 'parent' accounts because they are not really parent accounts in the HFM Account dimension.

You could think of this technique as a sort of virtual hierarchy.

By moving SCR accounts around in the Custom2 SCR hierarchy, this will affect the outcome of all calculations that involve a form of aggregation to a parent row.

This technique, in addition to the use of functions in the User-Defined Attributes (UDAs) on the account metadata, ensures that future changes can be implemented as the QIS5 standards evolve, with little or no changes required to the HFM rules.

Note Refer to HFM admin guide, chapter 4: Defining Custom Members

Rationale Some Excel QIS5 grids require a further analysis and or breakdown. We are using custom2 to support these grids.

Custom 3 Structure

adjustment process - This dimension separates original input with adjustment and is attached to the balance sheet accounts (L_9900)

Note Refer HFM admin guide, chapter 4: Defining Custom Members

We have created a default correction level to post corporate or divisional corrections.

Use of Custom3 for entering adjustments

Most web data-entry forms enable you to select a Custom3 member. Most data is held with Custom3=[None]. However, another Custom3 member has been created for adjustments, so that any adjustments are stored separately from the original data.

	IFRS	SI	SII	Reclass	Increase	Decrease
Goodwill						
Other intangible assets						

There two base level members:

- None (for most data)
- Adjust (roll-up into a parent called Total)

If you want to see the combined effect of the base data and adjustments, then select Custom3=Total from the list.

Member Selector

POV: Actual 2008 Jan <Scenario View> [None] <Entity Currency>
 [None] [ICP None] [None] [None] ▶[None]◀ [None]

Selected Custom3 Value

[None]

Note When viewing data with Custom3=Total (to see combined numbers including adjustments) you will see everything as read-only. If you want to write to the cells, then you must select either Custom3=[None] (for original data), or Custom3=Adjust if you want to enter adjustments.

Rationale We have decided to use a custom3 to support correction from a higher level in the reporting hierarchy. In case you would decide to use, for example, entity structure to support adjustments please set up structures accordingly.

SCENARIOS

Adding scenarios

For an Admin user, this should be clear:

- Application supports actual reporting for monthly actual QIS5 reporting from 2010 onwards.
- Admin can add scenarios, for example, for forecasting.

Tip Refer to HFM admin guide, chapter 4: Defining Custom Members

ETL

- Interfacing with existing applications (data) -> is client-specific and in our opinion not part of the application. Client is advised to use this feature when IFRS/Current accounting standard data is already available; also to populate S1 reporting data. If these data are uploaded and the customer does not want the users to change the data, the data form can be changed for this: the relevant column can be set on Read-only in the Column property sheet of the data form.

Tip Refer to HFM admin guide, chapter: Data Form

- Exchanging metadata between applications in order to transfer data between your internal applications and QIS5, you need to set up a data conversion using Excel or FDM.
- Interfacing with other data sources: In case you are using a non-Oracle product for consolidation and reporting we advise clients to export data in a so-called csv or tab format. Loading data can be done using Excel, or FDM.

UPLOAD AND DOWNLOAD QIS5 TEMPLATE

Complete the template

Tip Refer to EIOPA instructions regarding Excel templates.

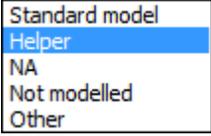
In addition to these instructions, users of this application will find the following changes/ modifications to the spreadsheet:

1. SCR sheet – We have rearranged the SCR sheet slightly in order to make it easier to enter data.

Tip Refer to appropriate section in this manual

- Drop down selections in Excel have all been replaced by 1, empty (0) flag.

Example: How to select method Helper from Excel and HFM compared

Excel											
HFM	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Standard model</td> <td style="text-align: center; padding: 2px;"><input type="text" value="Empty"/></td> </tr> <tr> <td style="padding: 2px;">Helper</td> <td style="text-align: center; padding: 2px;"><input type="text" value="1"/></td> </tr> <tr> <td style="padding: 2px;">NA</td> <td style="text-align: center; padding: 2px;"><input type="text" value="Empty"/></td> </tr> <tr> <td style="padding: 2px;">not modeled</td> <td style="text-align: center; padding: 2px;"><input type="text" value="Empty"/></td> </tr> <tr> <td style="padding: 2px;">Other</td> <td style="text-align: center; padding: 2px;"><input type="text" value="Empty"/></td> </tr> </table>	Standard model	<input type="text" value="Empty"/>	Helper	<input type="text" value="1"/>	NA	<input type="text" value="Empty"/>	not modeled	<input type="text" value="Empty"/>	Other	<input type="text" value="Empty"/>
Standard model	<input type="text" value="Empty"/>										
Helper	<input type="text" value="1"/>										
NA	<input type="text" value="Empty"/>										
not modeled	<input type="text" value="Empty"/>										
Other	<input type="text" value="Empty"/>										

Tip Refer to the Smart View manual

Download data from HFM to QIS5 template

The QIS5 HFM application comes with an Excel-based converter tool, that reads the DataSet sheet from an existing QIS5 Excel workbook. This tool is called QIS5_DataSetMapping.xls.

- You must enable macros to run this converter utility.
- Press the button **Convert a QIS5 workbook**. It will write an HFM .dat file with the equivalent data.

The tool works on one file at a time. It will prompt you to select the original QIS5 workbook with the data you want to convert, then it will produce a .dat file with the same name (with a .dat extension).

- After this is created, login to the HFM application, and under **Tasks->Load Tasks->Load data**, select the .dat file that was created from the conversion tool.
- Ensure you run Calculate from within HFM after loading data for any particular entity.

Rationale Uploading a spreadsheet into HFM for multiple entities can best be supported by a single upload spreadsheet that runs through submitted QIS5 templates and uploads data from the submitted sheets into the HFM database.

FORMS AND REPORTS

WORKSPACE NAVIGATION: FILLING OUT FORMS

Tip Refer to *Forms and Tables* on page 39

The links between the worksheets in the Excel template and the data forms has been stated below:

- Some tabs have been subdivided into more individual sub forms (sequence number 02, 03 etc. The tabs O and G have been incorporated as report.

Participant	0101	0102									
Group coverage	0301	0302									
Valuation	0201	0202	0203	0204	0205	0206	0207	0207 IC	0208Liab	0208 IC	
Assets	0401	0402	0403	0404	0405	0406	0407	0408	0409		
Participations	0501										
Own Funds items details	0601										
Current situation	0701	0702									
Premiums	0801	0802	0803								
Geographical	1001										
QIS Insurance	0901	0902	0903	0904	0905	0906					
SCR	SCREquiv	SCRMain	SCR	Switches							
RFF											
MCR	1301	1302	1303	1304	1305						
I.SCR Adjusted	SCREquiv	SCRMain									
G_Group OFS											
G_Group NCP											
IM Internal Model Results	1701	1702	1703	1704	1705	1706	1707				
IM Internal Model Parameters	no data form required										
IM "blank" sheet results	1901	1902	1903								
IM "blank" sheet parameters	no data form required										
O Overview	no data form required										
G_Group overview	no data form required										
G_Group details on aggregation	no data form required										

RUNNING REPORTS

Oracle's Hyperion Financial Reporting is an automated, web-enabled reporting solution for analytic applications that transforms data into meaningful business information and empowers users to make critical time-sensitive business decisions. Users can quickly create reports without IT assistance and deliver them immediately or schedule them for later delivery through a variety of channels.

The following reports are included. These are run from Explorer within Hyperion Workspace.

- Valuation own Funds
- Valuation by period
- Current Situation
- Geographical
- Geographical by business
- Own Funds
- Participations
- Valuation
- Valuation by Entity

Report Title	Report Description
Geographical	This shows the totals by geographical areas
Geographical_business	This shows the totals by geographical areas
Own Funds	This shows summary information from the Own Funds sheet. It totals the detailed amounts that are input into the <i>Detailed List of Capital Elements</i> , at the bottom of the QIS5 Excel sheet.
Participation	Overview of the participations
Participations	Overview of Valuation sheet assets and liabilities per accounting principle
Valuation	Overview of Valuation sheet assets and liabilities per accounting principle
Valuation_entity	Overview of Valuation sheet assets and liabilities per entity (dynamical)
Valuation_own Funds	Overview of Valuation sheet own funds
Valuation_period	Overview of Valuation sheet assets and liabilities per period

MAKING CORRECTIONS TO DATA

Once data has been submitted to head office and data cannot be resubmitted on time, we advise to use one of the below mentioned correction methods

1. Post a journal – on custom3 None and entity level
2. Post a journal on custom3 – member corporate correction
3. Data entry on custom3 – member corporate correction
4. Data entry or journal on corporate entity (if the entity structure contains an adjustment entity)

RUNNING A CONSOLIDATION (GROUP SCR CALCULATION)

Consolidations are performed using the standard consolidation features of HFM (client or web version).

A standard consolidation grid is part of the application.

Tip Refer to HFM admin guide: chapter 6

SECURITY, USERS AND PROCESSES

Note Security policies are client-specific.

QMR BASELINE SECURITY AND ROLES

- Standard roles
- Standard security settings
- Standard sign off processes

Tip Refer to the security admin guide

1. Data entry – access to forms, submit data
2. Local sign off – read access to all and approval
3. Corp – consolidate, unlock, lock, sign off, reject, consolidate, enter corp corrections, upload Excel, download Excel template
4. Corp admin – modify reports, forms etc.
5. System admin - all

MULTI-LANGUAGE

The QIS5 application can be used with the 6 language packs from CEIOPS. In order to be able to use the additional languages, these languages have to be added in the Application profile.

Important We will only translate what we have from the language packs – some information is not translated yet but the majority of the accounts are.

Tip Refer to HFM admin guide, chapter 2: selection of preferred language

WORKING INSTRUCTIONS FOR CORPORATE USERS QUICK REFERENCE GUIDE

A generic way to describe the actions required to complete a QIS5 reporting cycle is as follows:

1. Load exchange rates (predefined by EIPOA load data file).
2. Load standard EIOPA corrections matrix file.
3. Load data from QIS5 upload templates (template to be issued to field).
4. Reporting entities to enter data into workspace (Forms).
5. Force rules.
6. Validate local sets and correct.
7. Lock down local sets.
8. Consolidate.
9. Verify results.
10. Lock down consolidated set.

11. Final report and download to QIS5 template (issue to regulator).

WORKING INSTRUCTIONS FOR DATA ENTRY QUICK REFERENCE GUIDE

A generic way to describe the actions required to perform data entry is as follows:

1. Enter data in the grid.

Tip Refer to HRM User Guide, chapter 7: using data forms

2. Calculate data grids .

Tip Refer to HRM User Guide

3. Print reports.

Tip Refer to HRM User Guide, chapter 9

4. Sign off local QIS5 forms to Corporate (or next level).

Tip Refer to HRM User Guide, chapter 12: Promoting and Submitting

Appendix A

Glossary

GENERAL TERMS

Term	Description
EIOPA	European Insurance and Occupational Pensions Authority (EIOPA): EIOPA is the new European authority expected to replace CEIOPS. The proposals over EIOPA's powers are being debated, but in general EIOPA will be given more power to enforce prudential standards through the development of Binding Technical Standards (BTS). They will also play a more active role over The new authority is likely to be formed during 2011.
MCR	Minimum Capital Requirement (MCR): Key quantitative capital requirement defined in the Solvency II Directive. The MCR is the lower of the two capital levels required in Solvency II and provides an approximate 1 in 6 year level of protection.
QIS5	Quantitative Impact Studies (QIS): The QIS exercises test the financial impact and suitability of proposed Solvency II requirements on firms. The fifth and final QIS before implementation will be taking place this year.
QRT	Report to Supervisors (RSR): A report submitted solely to the supervisor and contains the information considered necessary for the purposes of supervision.
SCR	Solvency Capital Requirement (SCR): Key quantitative capital requirement defined in the Solvency II Directive. The SCR is the higher of the two capital levels required in Solvency II and provides an approximate 1 in 200 year level of protection.
SFCR	Solvency and Financial Condition Report (SFCR): This is the public disclosure report which is required to be published annually by all undertakings and will contain detailed quantitative and qualitative elements

TECHNICAL TERMS

Term	Description
Best estimate	The probability-weighted average also referred to the mean. The estimation process is unbiased and based on all currently available information including information of currently observable trends, but excluding effects from events not yet occurred.
Best estimate liability	The expected or mean value (probability weighted average) of the present value of future cash flows for current obligations, projected over the contract's run-off period, taking into account all up-to-date financial market and actuarial information.
Business risk	Unexpected changes to the legal conditions to which insurers are subject, changes in the economic and social environment, as well as changes in business profile and the general business cycle.

Term	Description
Catastrophe risk	The risk that a single event, or series of events, of major magnitude, usually over a short period (often 72 hours), leads to a significant deviation in actual claims from the total expected claims.
Claims risk	An underwriting risk. A change in value caused by ultimate costs for full contractual obligations (claims without administration costs) varying from those assumed when these obligations were estimated.
Compliance risk	The risk of legal or regulatory sanctions resulting in a financial loss, or loss of reputation as a result of an insurer's failure to comply with laws, regulations, rules, related self-regulatory organisation standards, and codes of conduct
Concentration risk	The exposure to increased losses associated with inadequately diversified portfolios of assets and/or obligations
Cost of capital approach	An approximation through which a risk margin is determined based on the present value of the cost of capital charge for all future capital requirements until run-off.
Credit risk	The risk of a change in value due to actual credit losses deviating from expected credit losses due to the failure to meet contractual debt obligations.
Default risk	The risk of a change in value caused by the fact that actual default rates deviate from expected default rates with respect to non-payment of interest or principle.
Diversification	Reduction in risks among assets and/or obligations of an institution by accumulating risks that are not fully correlated in an aggregated risk position, for example, the aggregated amount of risks within a product portfolio or at a company level is smaller compared to the simple addition of the individual risks.
Economic balance sheet	Balance sheet statement based on one of those accounting approaches using market-consistent values for all current assets and current obligations relating to in-force business, including off-balance sheet items.
Economic balance sheet	Balance sheet statement based on one of those accounting approaches using market-consistent values for all current assets and current obligations relating to in-force business, including off-balance sheet items.
Equity risk	The risk of a change in value caused by deviations of the actual market values of equities and/or income from equities from their expected values.
European embedded value	A method for calculating the embedded value according the principles and guidelines set by the CFO Forum.
Financial group	A group of undertakings deploying financial activities, which consists of a parent undertaking, its subsidiaries, and the entities in which the parent undertaking or its subsidiaries hold a significant participation. Or, undertakings linked to each other by a relationship subject to conditions defined in EU law.
Financial group	A group of undertakings deploying financial activities, which consists of a parent undertaking, its subsidiaries, and the entities in which the parent undertaking or its subsidiaries hold a significant participation. Or, undertakings linked to each other by a relationship subject to conditions defined in EU law
Foreign exchange risk	The risk of a change in value caused by the fact that actual foreign currency exchange rates differ from those expected.
Fungible capital	That part of the capital of a group which can be transferred between different legal entities of the group.

Term	Description
Health insurance	Generic term applying to all types of insurance indemnifying or reimbursing for losses (e.g., loss of income) caused by illness or disability, or for expenses of medical treatment necessitated by illness or disability.
Hedgeable risk	A risk associated with an asset or an obligation that can be effectively neutralised by buying or selling a market instrument (or engaging in a contract with a third party in an arm's length transaction under normal business conditions), whose value is expected to change in such a way as to offset the change in value of the asset or liability caused by the presence of the risk.
Inflation risk	The risk of a change in value caused by a deviation of the actual market-consistent value of assets and/or liabilities from their expected value, due to inflation, for example, price inflation, wage inflation, etc., leading to an unanticipated change in insurance cost and/or impact of an insurance contract, for example, with respect to contract limits.
Internal model	Risk management system of an insurer for the analysis of the overall risk situation of the insurance undertaking, to quantify risks and/or to determine the capital requirement on the basis of the company specific risk profile.
Liquidity risk	The risk stemming from the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimize a loss
Longevity risk	Type of biometric risk. A change in value caused by the actual mortality rate being lower than the one expected.
Market risk	The risk of changes in values caused by market prices or volatilities of market prices differing from their expected values.
Market-consistent valuation	The practise of valuing assets and liabilities on market values where observable with a given quality (mark-to-market), where not, on market-consistent valuation techniques (mark-to-model).
Mark-to-market valuation	The practice of valuing insurance rights and obligations, or more broadly security and financial instruments, using current market prices.
Morbidity risk	Type of biometric risk. A change of value caused by the actual disability and illness rates of the persons insured deviating from the ones expected.
Mortality risk	Type of biometric risk. A change in value caused by the actual mortality rate being higher than the one expected.
Non-SLT	Health type business which is not treated as life business.
Operational risk	Risk of a change in value caused by the fact that actual losses, incurred for inadequate or failed internal processes, people and systems, or from external events (including legal risk), differ from the expected losses.
Performance linked benefit (with-profit contracts)	A contractual benefit sharing the policyholder in the performance of the insurer, i.e. the surplus under a group of contracts or the surplus of the entire entity; achieved after providing the guaranteed benefits, after making the related internal expenses as a result of received guaranteed premiums, and taking into account the investment income.
Procyclicality	The cumulative pressure on a larger number of institutions to sell assets or raise capital at the same time, due to the 'Solvency Capital Requirements' and thereby potentially causing more extreme market movements than would otherwise be the case.
Provision	The amount needed under a certain measurement of a present obligation to meet that obligation adequately.

Term	Description
Required economic capital	The total of assets measured at market-consistent value, internally required by an insurer above the market consistent value of obligations, in order to reduce the risk of not meeting the obligations to a defined risk measure. (For example, VaR, TVaR, EPD), and within a defined time period (for example, one year).
Risk margin	A generic term, representing the value of the deviation risk of the actual outcome compared with the best estimate, expressed in terms of a defined risk measure.
Scenario analysis	Simulation of an alternative set of parameters within a model in order to establish the impact on the outcome. The following types of scenarios analysis can be distinguished: <ul style="list-style-type: none"> • Historical scenarios • Hypothetical scenarios • One-off events (for example, simulation of strategic decisions)
SLT	Similar to life which is P&C business which is treated as life business for Solvency Purposes.
Standard Formula	Standard Formula: a non-entity specific risk-based mathematical formula used by insurers to calculate their Solvency Capital Requirement under Solvency II.
Systemic risk	The risk of experiencing systemic events which may lead to the failure of institutions, markets or financial systems.
Tail-Value-at-Risk	A coherent risk measure. For a given confidence level 1- it measures the average losses over the defined threshold (typically set as the VaR for a given quantile), i.e. the conditioned mean value, given that the loss exceeds the 1- percentile.
Technical Provisions	Technical Provisions are the amount that an insurer needs to hold in order to meet its expected future obligations on insurance contracts.
Total balance sheet approach	Principle which states that the determination of an insurer's capital that is available and needed for solvency purposes should be based upon all assets and liabilities, as measured in the regulatory balance sheet of the insurer, and the way they interact
Underwriting risk	The risk of a change in value due to a deviation of the actual claims payments from the expected amount of claims payments (including expenses).

Appendix B

Forms and Tables

- a. Entry grids, by tab (QIS)
- b. Diversification grids, by type

Form ID	Form Description	Remarks
0101	Participant information	fill out data (text is supported in the cells)
0102	Contact information	fill out data (text is supported in the cells)
0201	Balance Sheet – Assets	Enter data for each column
0202	Balance sheet – Liabilities	Enter data for each column, e.g. IRFS, SII etc
0203	Basic own funds items	Enter by tier
0204	Own funds trans measure	Complete by Tier1, 2 and 3
0205	Adj basic own funds	Split by Tier 1, Tier 2 and Tier 3
0206	Valuation methods	Fill out Percentages - 20 = 20% error in space column must be moved to left; desc req instead of label
0207	Intra-group assets	Contains the Intercompany accounts with linked forms
0207	IC intra-group detail	Contains a pick list with all intercompany counterparties
0208	Intra-group liabilities	Contains the Intercompany accounts with linked forms
0208	Intra-group liabilities detail	Contains a pick list with all intercompany counterparties
0301	Group coverage	Enter the entities, sub- entities and countries; provide consolidated data for group and specific details of entities or countries that exceed 2% of revenues
0302	Group coverage	Part 2 of tab group coverage - please fill out by legal entity and country
0401	Borrowings by national government	Please fill out resort to original EIOPA countries and then other countries of the world
0402	Total Exposure	Total exposure per country
0403	Exposure ECB	Total exposure split by exposure in currency of issuer and other currencies
0404	Currency risk exposure	Complete by Nation/Currency Structures outlined by EIOPA
0405	Information on spreads	Complete by Instrument categories

Form ID	Form Description	Remarks
0406	Information on assets	Add Asset details by category and column - e.g. current accounting bases, SI, SII and Reconciliation
0407	Information on counterparties	Add the Sum (loss given at default) by instrument for Type 1 exposures
0408	Information on counterparties2	Add the Sum (loss given default) for Type 1 exposures
0409	Additional mortgage	Add mortgages details split Commercial/Residential
0501	Participations	Fill the participations + the code for the classification it belongs to (See section: Codes to be entered for participations)
0601	Own funds details	Add total and splits by Tier1, Tier 2 and Tier3
0701	Current solvency position	Input Solvency margin with associated split Life/Non-Life
0702	Detailed info technical provisions	Enter details of Technical provisions split Gross and Net by various product types highlighted in the columns
0801	Premiums1	Add premium detail by line of business (life, non-life, health) and by column - gross, seeded, net etc
0802	Premiums2	Add aggregate premium details to for Operational risk computation
0803	Premiums	
0901	Insurance Obligations1	Allocation of Health business to QIS5 segmentation - gross and net figures
0902	Insurance Obligations2	Add gross best estimates provisions and best estimate for recoverables for each line of business including reinsurance
0903	Insurance Obligations3	Add figures, by line if business for Risk Margin, Technical Provisions, Underwriting risks volume measures and expected profits in future premiums (EPIFP)
0904	Insurance Obligations4	Add Illiquidity premium figures - primarily in two columns: <ul style="list-style-type: none"> • Allocation of Technical Provisions in Buckets Illiquidity premium bucket • Value of Technical provisions in Illiquidity premium buckets
0905	Insurance Obligations5	Add other Information required for the calculation of the MCR and SCR by product type e.g. contracts with participation clauses
0906	Insurance Obligations6	
1001	Geographic Diversification	Add aggregate premiums via EIOPA regional grouping and provide breakdown data for each region - e.g. North America and Oceania
1301	MCR Top Level Life	MCR top-level calculation for aggregate life business for both standard and internal models
1302	MCR Top Level non-Life	MCR top-level calculation for aggregate non-life/composite business for both standard and internal models
1303	MCR Detailed calculation	Detailed MCR for non-life/composite undertaking breakdown by EIOPA product types
1304	MCR Detailed calculation	Detailed MCR for non-life/composite undertaking breakdown by EIOPA product type - non-life/life hybrid products
1305	MCR Detailed calculation	Detailed MCR for life/ undertaking breakdown by EIOPA prodct type - life products

Form ID	Form Description	Remarks
1701	IM Results1	Final aggregate SCR
1702	IM Results2	Optional table to be completed if SLT health underwriting risk is not calculated in accordance with the standard formula
1703	IM Results3	BSCR final calculation
1704	IM Results4	Enter details of the categories of risk in the BSCR - e.g. market, Default etc
1705	IM Results5	Optional table to be completed if market risk is not calculated in accordance with the standard formula
1706	IM Results6	Optional table to be completed if underwriting risk is not calculated in accordance with the standard formula
1707	IM Results	Optional table to be completed if health underwriting risk is not calculated in accordance with the standard formula
1901	IM Blank	SCR Calculation
1902	IM Blank	SCR risk factors by business unit
1903	IM Blank	Risk Margins
mcr1		
mcr2_1		
mcr2_2		
mcr2_3		
mcr2_4		
SCR_Switches		Refer to <i>SCR</i> on page 47.
SCREquiv		Refer to <i>SCR</i> on page 47.
SCRMain		Refer to <i>SCR</i> on page 47.
SCR available		Refer to <i>SCR</i> on page 47.

Appendix C

Correlation Tables

CORRELATION TABLES

Form ID	Form Description	Remarks
	SCR_xx	Overall SCR diversification sheet
	SCR-X	Interest dividend sheet
scr1_29	MX_CorrCATHealth	Cat risk health
scr5_2	MX_CorrDef	Default risk
scr5_42	MX_CorrHealth	Health underwriting risk
scr6_11	MX_CorrIndex	Equity risk
scr7_1	MX_CorrLife	Life underwriting risk
scr8_12	MX_CorrLob	
scr8_56	MX_CorrMkt	Market risk correlation matrix
scr8_6	MX_CorrNL	Non life correlation
scr8_9	MX_CorrNLCat	Non life cat risk 1
scr8_92	MX_CorrNLCat1	Non life cat risk 2
scr9_32	MX_CorrNLperils	Perils
scr9_49	MX_CorrNSLHealth	Health underwriting similar to life
scr9_51	MX_CorrSCR	Overall correlation matrix
scr9_52	MX_CorrSLHealth	

CODES TO BE ENTERED FOR PARTICIPATIONS

Description of participations	Code	Holdings in participations valuation	Market value from quoted active markets	Adjusted equity method	Marked to model
All participations		0	0	0	0
<name participation>					
<name participation>					
<name participation>					
<name participation>					
<name participation>					
<name participation>					
<name participation>					

Codes to be entered

- FCEC
- FCHC
- FCEO
- FCHO
- EX
- INSG
- INSO
- ING
- INO
- RUS
- RUG
- RUO

Description of item	Code	Tier classification		Amount
		Without transitional measures	With transitional measure	

Type of activities

- PSD
- PSC
- PSU
- SLD
- SLC
- SLU
- LC
- G

Type of activity	S	Name of group of entities (e.g. name of banking sub-group) or name of single entities	Number of entities included in the sub-group

Group NCP: Type of participations

- reinsurance entity
- SPV

	Type	Name

Appendix D

SCR

Ref	Description	Explanation
Init_GCR	Gross Capital Requirement	Initial value - refers to initial value or base value or a certain shock Gross cap requirement refers to the gross amount
Init_NCR	NetCapitalRequirement	
Init_Ass	InitialAssets	Initial value - refers to initial value or base value or a certain shock for assets
Init_Liab	InitialLiabilities	Initial value - refers to initial value or base value or a certain shock for liabilities
Init_NAV	InitialNAV	Initial value - refers to initial value or base value or a certain shock for NAV (calculated)
GRA_Ass	Gross Risk Absorp - Assets	Gross value of assets
GRA_Liab	Gross Risk Absorp - Liabilities	Gross value of liab
GRA_NAV	GrossRiskAbsorp-NAV	Gross value of net asset value (calculated)
GRA_Simpl	Gross Risk Absorp - Simplification	Simplification flag (1 = Yes; empty is NO
GRA_Weight	Gross Risk Absorp - Weighting	Weight factors
GRA_Div	Gross Risk Absorp - Div Factor	Diversification factor
NRA_Ass	NetRiskAbsorp-Assets	Net value of assets
NRA_Liab	Net Risk Absorp - Liabilities	Net assets of liabilities
NRA_NAV	NetRiskAbsorp-NAV	Net value of net asset value
NRA_Simpl	Net Risk Absorp - Simplification	Simplification flag for the net value

Ref	Description	Explanation
NRA_Weight	Net Risk Absorp - Weighting	Net weighting factor
NRA_Div	Net Risk Absorp - Div Factor	Net diversification factor
NL_Mit	Mitigation value	Mitigation value
NL_Gross	Gross value	Gross value
NEW Risk_appl	Risk applicable flag	Risk applicable flag (yes =1)

INSTRUCTION ON FILLING OUT THE SCR MAIN SHEET

Initial value

- Initial value assets
- Initial value liability
- Initial value NAV

Gross Value

- Asset
- Liability
- Net

Net value

- Asset
- Liability
- Net

Mitigation/Gross

How to enter the flag overrides in the SCR sheet

- Available flag
- Calculated flag (input)
- Forced shock flag
- Risk applicable flag
- Simplification flag

- Special flags/indicators

Calculated fields

Eq scenarios

Equivalent scenario – These can be found in the data form SCQ_Equiv

QIS5 SCR SHEET

SCR	QIS5 standard formula components	Available?	Calculated?
1.	1. SCR and BSCR	TRUE	Standard model
1.24	SCR	TRUE	Standard model
1.28	BSCR	TRUE	Standard model
2.	2. Loss absorbing capacity of technical provisions and deferred taxes	FALSE	Standard model
2.12	Technical provisions - under equivalent scenario	FALSE	Standard model
2.14	Deferred taxes - under equivalent scenario	FALSE	Standard model

Notes:

- Please refer to the QIS5 SCR sheet, and in HFM, the form SCRMain
- Available is automatically calculated based on input
- Calculated must be selected in form by entering 1 in the appropriate column

SCENARIO SELECTION (GROUPS OR RING FENCED FUNDS)

Scenario selection (groups or ring fenced funds)	Calculated	Link	Forced	Used
Market risk >> Interest rate risk	Downward	Link		Downward
Market risk >> Spread risk >> structured	Direct	Link		Direct
Market risk >> Spread risk >> credit derivatives	Downward	Link		Downward
Life underwriting risk >> Lapse risk	Increase	Link		Increase

Health underwriting risk >> Disability/Morbidity >> Medical expense	Downward	Link		Downward
Health underwriting risk >> Lapse risk	0.0	Link		0

CAPITAL REQUIREMENT AND BASIC SOLVENCY CAPITAL REQUIREMENT UNDER THE STANDARD FORMULA

1. Solvency Capital Requirement and Basic Solvency Capital Requirement under the standard formula		Back to top	
Solvency Capital Requirement	0.0	Adjustment based on:	None
Basic Solvency Capital Requirement	0.0		
Diversified risk	0.00		
<i>Diversification effects</i>	0.00		
<i>Sum of risk components</i>	0.00		
Market risk	0.0	Risk Applicable ?	Equivalent scenario (gross)
Counterparty default risk	0.0	TRUE	Weighting Diversif. Factor
Life Underwriting risks	0.0	TRUE	0.00 100.0%
Health underwriting risk	0.0	TRUE	0.00 100.0%
Non-Life underwriting risk	0.0	TRUE	0.00 100.0%

Notes

- Risk appl = 1 for true
- Weighting and div factor are calculated

Initial net asset value	0.0
Net asset value after upward shock (gross)	0.0
Net asset value after downward shock (gross)	0.0
Net asset value after upward shock (net)	0.0
Net asset value after downward shock (net)	0.0

Assets			Liabilities

- Please refer to form SCR MAiN
- Please enter asset data in column
- Please enter liabilities

- Please enter initial value in

Mortality risk (gross)		0.0		Simplification ?	FALSE		
Mortality risk (net)		0.0		Simplification ?	FALSE		
Initial net asset value		0	<u>Simplification</u>	Assets			Liabilities
Net asset value after shock (gross)		0.0		Assets			Liabilities
Net asset value after shock (net)		0.0		Assets			Liabilities

Please enter for simplification 1 in form representing true or nothing/empty for False

Capital requirement for Health CAT risk		0.0			
<i>Diversification effects</i>		0.00			
<i>Sum of risk components</i>		0.00			
Arena disaster, net of mitigation		0.0			
Concentration scenario, net of mitigation		0.0			
Pandemic scenario, net of risk mitigation		0.0			

Weighting	Mitigation	Gross
0.00		
0.00		
0.00		

- Enter data in mitigation and gross

<i>Determination of the equivalent scenario parameters (gross)</i>				Diversification reduction factor (gross)			
<i>Parameters</i>		To use	Standard	Overall	Level 1	Level 2	Level 3
Market risk					#####		
Participation in financial and credit institutions		0.00%	0%	100.0%	100.0%		
Participation in related undertakings		100.00%	100%	100.0%	100.0%		
Market risk for other assets and liabilities							
	Interest rate risk, factor to apply to standard stresses	100%*standard	SCR.5.21	100.0%	100.0%	100.0%	
	Equity risk						
Equity risk related to point (i) paragraph 1 Art 304		22.00%	22%	100.0%	100.0%	100.0%	
Equity risk for strategic participations (global category)		22.00%	22%	100.0%	100.0%	100.0%	100.0%

Strategic participations (other equity category)		22.00%	22%	100.0%	100.0%	100.0%	100.0%
Global equity bucket		30.00%	30%	100.0%	100.0%	100.0%	100.0%
Other equity bucket		40.00%	40%	100.0%	100.0%	100.0%	100.0%
	Property risk, instantaneous decrease of	25.00%	25%	100.0%	100.0%	100.0%	
	Currency risk						
Standard currency shock		25.00%	25.0%	100.0%	100.0%	100.0%	
Danish krone		2.25%	2.25%	100.0%	100.0%	100.0%	
Estonian kroon against Lithuanian litas		0.00%	0.00%	100.0%	100.0%	100.0%	
latvian lats		1.00%	1.00%	100.0%	100.0%	100.0%	
latvian lats against danish krone		3.50%	3.50%	100.0%	100.0%	100.0%	
	Spread risk			100.0%	100.0%	100.0%	
widening of credit spreads for bonds							
rated AAA		0.900%	0.9%	100.0%	100.0%	100.0%	
rated AA		1.100%	1.1%	100.0%	100.0%	100.0%	

Appendix E

Functions of SCR

EXAMPLES OF USER-DEFINED ATTRIBUTES IN SCR CALCULATIONS

Account	Desc	UDF1	UDF2	Excel	Expl
L_1052_1	Diversificationeffects	Dif	L_1051,L_1053_1	nSCRmkt-F295	Difference between sum of risks and diversified risk
L_1075	Adj for loss absorbing effect of technical provisions and deftax	if	L_1076,L_1077	IF(ISBLANK(F85),0,-MIN(F61-F85,F86))	
L_0361	Interestraterisk	max1	base	(G311="Upward",MAX(MKTint_up,0),MAX(MKTint_down,0))	
L_1112	Basic operational risk charge	max2	L_1474,L_1484	MAX(Oppremiums,Opprovisions)	
L_1453	Global	Max3	L_9340,L_9340,L_1341,L_1342	MAX(F\$344-F353,0)	
L_1011	Intangibleassetrisk	Mul	L_1591,0.8	80%*IA	
L_1035_2	Premium and reserve risk	Mul2	L_1593_2,L_1205_2	F707*F709	
L_1079	Adj for TP - equivalent scenario	Spec1	L_1050,L_1080,L_1081		For Spec1-Spec7, Refer to detailed section on SCR functions, earlier in this document
L_1529	SCRoperationalrisk	Spec2	L_1050,0.3,L_1112,1,L_1580,0.25		
L_1474	Premium based risk component	Spec3	L_1171_2,L_1175_2,L_1173_2,L_1172,L_1176,L_1174		
L_1484	Provisions based risk component	Spec4	L_1263,L_1264,L_1439		
L_1205	Function of the standard deviation	Spec5	L_1560		

Account	Desc	UDF1	UDF2	Excel	Expl
L_1205_2	Function of the standard deviation	Spec5	L_1560_2		
L_1099	Adj for deferred taxes - modular	Spec6	L_1401_2		
L_1100	AdjforTP-modular	Spec7	L_1050,L_1081		
L_0663	Healthunderwritingrisk	Sqrt	MX_CorrHealth	SQRT(MMULT(TRANSP OSE(1*F286:F292),J286:J 292))	
L_1080	nBSCR under equivalentscenario	Sum2	L_1050,L_1100		

Appendix F

Examples

Figure 1: Web forms - Navigate forms

The screenshot displays the Oracle Enterprise Performance Management System Workspace interface. At the top, five labels with red arrows point to specific elements: 'Navigation' points to the left-hand menu; 'Reporting Year' points to the 'Year:2008' field; 'Reporting Quarter' points to the 'Period:Jan' field; 'Reporting Entity' points to the 'Entity:East_Europe.LE1' field; and 'Enter Text' points to the 'Participant name' input field in the form. The form itself is titled '0101 Participant information - Participant information' and includes a table with the heading '1. Participant information'. The table contains various fields for participant details, such as 'Participant name', 'Participant shortname', 'Legal form of the participant', 'Date of submission', 'Reporting basis', 'Type of reported insurance data', 'Asset include investment in participations or related entities?', 'Non-life or health business is pursued in more than one geo area', 'Reporting includes ring fenced funds components?', 'Reporting includes internal model information?', 'Reporting reference year', 'Year end used (adjust if not december 31 of 2009)', 'Reporting currency used', 'Reporting unit used', 'Country', 'First level EEA Supervisor', 'Local registration number', 'Participant is part of a group?', 'If yes: group name', and 'If yes: group's proportional share'. A red box highlights the 'Participant name' field. At the bottom left, a label 'Forms Selection' with a red arrow points to the '0301 Group coverage' item in the left-hand menu.

Figure 2:

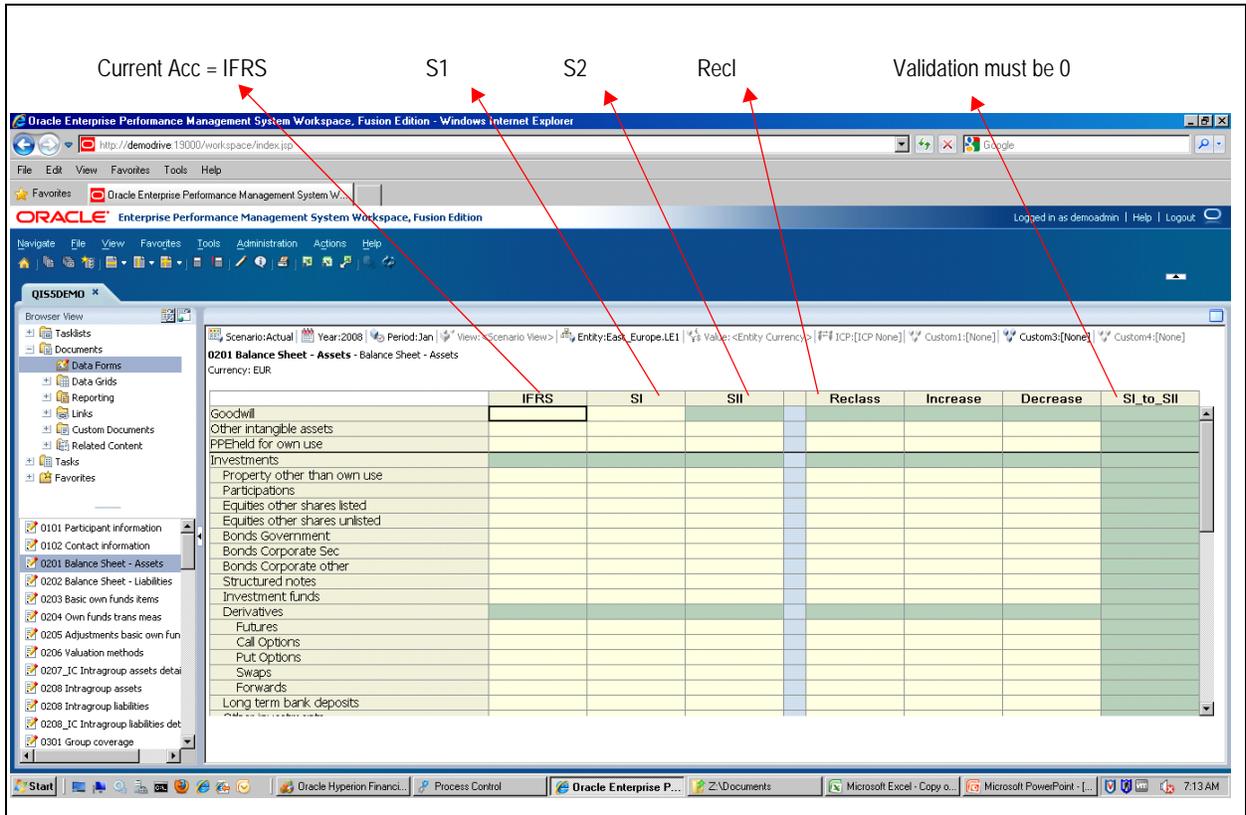


Figure 3:

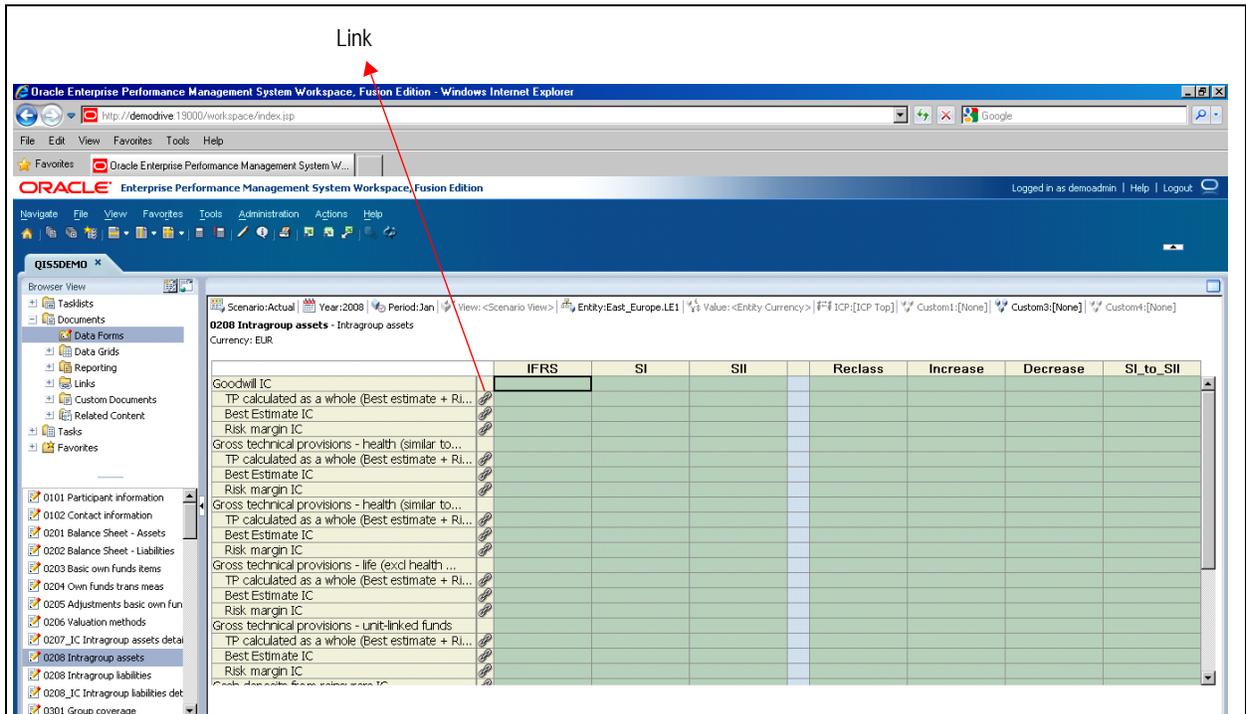


Figure 4:

Input Mitigation

Account	Capital requirement		Initial Value			Gross Asset Value			Flag	Gross factors			Net Asset Value			Flag	Net factors		
	Gross Capital Requirement	Net Capital Requirement	Initial Assets	Initial Liabilities	Initial NAV	Gross Risk Absorp - Assets	Gross Risk Absorp - Liabilities	Gross Risk Absorp - NAV		Gross Risk Absorp - Simplification	Gross Risk Absorp - Weighting	Gross Risk Absorp - Div Factor	Net Risk Absorp - Assets	Net Risk Absorp - Liabilities	Net Risk Absorp - NAV		Net Risk Absorp - Simplification	Net Risk Absorp - Weighting	Net Risk Absorp - Div Factor
_1051 - Diversified risk																			
_1052 - Diversification effects																			
_1053 - Sumofrisk components																			
_1057 - Market risk																			
_1290 - Market risk for related undertakings excluded from group supervision (net)																			
_1165 - Diversified market risk components																			
_1052 - Diversification effects																			
_1053 - Sumofrisk components																			
0360 - Interest rate risk																			
_1351 - Value after upward shock																			
_1355 - Value after downward shock																			
_1177 - Equity risk																			
_1184 - Equity risk related to point (i) paragraph 3 Art 395																			
_1182 - Equity risk non related to point (i) paragraph 3 Art 394																			
_1144 - Diversified gross equity risk (global and other buckets)																			
_1052 - Diversification effects																			
_1571 - Sumofrisks																			
1463 - Global																			
9340 - Initial Net Asset Value																			
1464 - Other																			
1463 - Participations in financial and credit institutions																			
_1565 - Strategic participations (global category)																			
_1547 - Strategic participations (other equity category)																			
_1299 - Global equity bucket																			
_1456 - Other equity bucket																			
_1341 - Value after a shock on global_gross of TP mitigation																			
_1565 - Strategic participations (global category)																			
_1299 - Global equity bucket																			
_1342 - Value after a shock on Global_net of TP mitigation																			

Figure 5:

Input Flag Gross Simplification

Account	Capital requirement		Initial Value			Gross Asset Value			Flag	Gross factors			Net Asset Value			Flag	Net factors		
	Gross Capital Requirement	Net Capital Requirement	Initial Assets	Initial Liabilities	Initial NAV	Gross Risk Absorp - Assets	Gross Risk Absorp - Liabilities	Gross Risk Absorp - NAV		Gross Risk Absorp - Simplification	Gross Risk Absorp - Weighting	Gross Risk Absorp - Div Factor	Net Risk Absorp - Assets	Net Risk Absorp - Liabilities	Net Risk Absorp - NAV		Net Risk Absorp - Simplification	Net Risk Absorp - Weighting	Net Risk Absorp - Div Factor
_1022 - Mortality risk																			
1023 - Longevity risk																			
_1150 - Disability risk																			
1025 - Lapse risk																			
1492 - Relevant scenario																			
_1350 - Value after an increase shock																			
_1328 - Value after a decrease shock																			
_1334 - Value after a mass shock on non-retail																			
_1331 - Value after a mass in shock on other																			
1192 - Expenses risk																			
1027 - Revision risk																			
1504 - Revision shock used																			
1260 - Life CAT risk																			
0663 - Health underwriting risk																			
_1052 - Diversification effects																			
_1053 - Sumofrisk components																			
_1531 - ST Health (similar to life technical) underwriting risk																			
_1052 - Diversification effects																			
_1053 - Sumofrisk components																			
1305 - Mortality risk																			
1269 - Longevity risk																			
1155 - Disability-morbidity risk																			
1160 - Disability-morbidity risk for medical expense																			
9992 - Healthmedical Up > Healthmedical Down ?																			
_1393 - Value after upward shock																			
_1357 - Value after downward shock																			
_1158 - Disability-morbidity risk for income protection																			
1025 - Lapse risk																			
1526 - Scenario used																			

Figure 6:

Account	Capital requirement		Initial Value			Gross Asset Value			Flag	Gross factors			Net Asset Value			Flag	Net factors			Mitigation	
	Gross Capital Requirement	Net Capital Requirement	Initial Assets	Initial Liabilities	Initial NAV	Gross Risk Absorp - Assets	Gross Risk Absorp - Liabilities	Gross Risk Absorp - NAV		Gross Risk Absorp - Simplification	Gross Risk Absorp - Weighting	Gross Risk Absorp - Div Factor	Net Risk Absorp - Assets	Net Risk Absorp - Liabilities	Net Risk Absorp - NAV		Net Risk Absorp - Weighting	Net Risk Absorp - Div Factor	Net Risk Absorp - NAV	Net Risk Absorp - Weighting	Net Risk Absorp - Div Factor
1328 - Value of a decrease risk																					
1330 - Value of a risk shock																					
1334 - IFRS17 CAT																					
1059 - 11 - Sum of risk components																					
1100 - Assessment, net of mitigation																					
1136 - Concentration scenario, net of mitigation																					
1461 - Parabolic scenario, net of mitigation																					
1134 - Non-IFRS17 scenario																					
1059 - 12 - Sum of risk components																					
1034 - 4 - Premium and charge risk																					
1105 - Reaction of the standard factor																					
1160 - Standard factor																					
1100 - 1 - Value requirement																					
1137 - Non-IFRS17 risk																					
1176 - Concentration																					

Input Mitigation

Figure 7: SCR

Account	Capital requirement		Initial Value			Gross Asset Value			Flag	Gross factors			Net Asset Value		
	Gross Capital Requirement	Net Capital Requirement	Initial Assets	Initial Liabilities	Initial NAV	Gross Risk Absorp - Assets	Gross Risk Absorp - Liabilities	Gross Risk Absorp - NAV		Gross Risk Absorp - Simplification	Gross Risk Absorp - Weighting	Gross Risk Absorp - Div Factor	Net Risk Absorp - Assets	Net Risk Absorp - Liabilities	Net Risk Absorp - NAV
1049 - Solvency Capital Requirement															
1075 - Adj for less absorbing effect of technical provisions and def tax															
1076 - Adjustment (based on equivalent scenario)															
1079 - Adj for TP - equivalent scenario															
1080 - MASCH under equivalent scenario															
1081 - Future discretionary benefits															
1082 - Approach used for equivalent scenario (gross or net)															
1102 - Adjustment for effect of deferred taxes - equivalent scenario															
1234 - Instantaneous loss amount assumption used															
1401 - Net deferred taxes liabilities after shock															
1077 - Adjustment (based on modular approach)															
1100 - Adj for TP - modular															
1099 - Adj for deferred taxes - modular															
1234_2 - Instantaneous loss amount assumption used															
1402 - Net deferred taxes liabilities after shock															
1129 - SCR operational risk															
1112 - Basic operational risk															
1174 - Premium based risk component															
1171_2 - Eamed life gross premiums															
1175_2 - Eamed unit-linked life gross premiums															
1173_2 - Eamed non-life gross premiums															
1172 - Eamed life gross premiums (previous 12 months)															
1176 - Eamed unit-linked life gross premiums (previous 12 months)															
1174 - Eamed non-life gross premiums (previous 12 months)															
1184 - Provisions based risk component															
1263 - Life obligations technical provisions - unit linked															
1189 - Non-life obligations technical provisions															

Input

Input Oper Risk

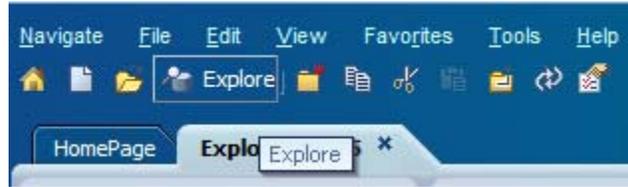
Input Net

Appendix G

Reports

LIST OF REPORTS

Some of the sections of the original QIS5 workbook are better implemented as a report, as opposed to a data-entry form. Reports are available under the Explorer menu.



Why use Hyperion Financial Reporting instead of Forms?

This is particularly the case when the QIS5 Excel section is an aggregation of another section. There are many areas on the QIS5 spreadsheet where tables are shown, which are just higher level totals (aggregations) of data from other tables.

Within HFM data forms, you cannot perform aggregations that are not in the application structure. With Financial Reporting, you can perform such aggregation. The following list shows the reports that fulfill certain sections in the QIS5 spreadsheet. These reports are the alternative to web-data entry forms (WDEFs), so you will not find the equivalent in WDEFs.

Scenario: Actual Year: 2009 Period: Dec Entity: [None] Value: <Entity Currency>								
Actual 2009 Dec [None]								
View: <Scenario View> [CP: [TCP Top] Custom3: TotalCustom3 Custom4: [None]								
	Total		Life		Health		Non-Life	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Unit linked	-	-	-	-	-	-	-	-
Provision for unearned premium	-	-	-	-	-	-	-	-
Life assurance provision	-	-	-	-	-	-	-	-
Claims outstanding provisions	-	-	-	-	-	-	-	-
Provision for bonuses and rebates	-	-	-	-	-	-	-	-
Equalisation provision	-	-	-	-	-	-	-	-
Other technical provisions	-	-	-	-	-	-	-	-
thereof: provisions for unexpired risk	-	-	-	-	-	-	-	-
Technical provisions	-	-	-	-	-	-	-	-

Report	Description
Current Situation	This is equivalent to Section 2 of the Current Situation sheet: <i>Provisions valuated according to current accounting bases – totals</i> It is a sum of the data that is presented in the table for detailed information on technical provisions, also on the <i>Current Situation</i> sheet.
Geographical	This shows the totals by geographical areas, as done in the sheet Geographical Diversification

Report	Description
Geographical_Business	This shows the totals by lines of business, as done in the sheet Geographical Diversification
Own Funds*	This shows summary information from the Own Funds sheet. It totals the detailed amounts that are input into the <i>Detailed List of Capital Elements</i> , at the bottom of the QIS5 Excel sheet.
Participations	This report aggregates the individual participations (see the QIS5 sheet <i>I.Participations</i>) into the totals that are shown at the top of the Excel sheet. The rollups are by participation code. Since the HFM metadata does not rollup by participation code, this has to be done in <i>Financial Reporting</i> .
Valuation*	This report is similar to the Valuation sheet. This is also available as web-data-entry forms.
Valuation Entity	This shows the valuation sheet, but with Entities in the columns. This is useful to see a consolidated view showing also the entities that contribute.
Valuation Own Funds*	This shows the information on own funds, as seen in the Valuation sheet. This is also available as web forms.
Valuation Period	This shows the main valuation accounts, by period. The periods are shown in the columns.

*Own Funds Report

Scenario: Actual	Year: 2009	Period: Dec	Entity: [None]	Value: <Entity Currency>								
Actual 2009 Dec [None]					View: <Scenario View> [CP: [TCP Top] Custom2: TotalCustom2 Custom3: TotalCustom3 Custom4: [None]]							
					Total With	Tier 1	Tier 2	Tier 3	Total Without	Tier 1	Tier 2	Tier 3
Dated (PSD)					-	-	-	-	-	-	-	-
Undated with call option (PSC)					-	-	-	-	-	-	-	-
Undated with no contractual opportunity to redeem (PSU)					-	-	-	-	-	-	-	-
Total preference shares					-	-	-	-	-	-	-	-
Dated (SLD)					-	-	-	-	-	-	-	-
Undated with call option (SLC)					-	-	-	-	-	-	-	-
Undated with no contractual opportunity to redeem (SLU)					-	-	-	-	-	-	-	-
Total subordinated liabilities					-	-	-	-	-	-	-	-
Letter of Credit (LC)					-	-	-	-	-	-	-	-
Guarantees (G)					-	-	-	-	-	-	-	-

*Valuation Report

/QISS/Valuation							
Scenario: Actual	Year: 2009	Period: Dec	Entity: [None]	Value: <Entity Currency>			
Actual 2009Dec [None]							
View: <Scenario View> ICP: [ICP Top] Custom1: TotalCustom1 Custom3: TotalCustom3 Custom4: [None]							
	IFRS	Solvency 1	Solvency II	Reclassification	Value increase	Value decrease	
Goodwill TOT	-	-	-	-	-	-	-
Other intangible assets TOT	-	-	-	-	-	-	-
PPEheld for own use	-	-	-	-	-	-	-
Investments	-	-	-	-	-	-	-
Property other than own use	-	-	-	-	-	-	-
Participations TOT	-	-	-	-	-	-	-
Equities/other shares (other than participations) - listed TOT	-	-	-	-	-	-	-
Equities/other shares (other than participations) - unlisted TOT	-	-	-	-	-	-	-
Bonds Government	-	-	-	-	-	-	-
Bonds - Corporate (asset backed securities) TOT	-	-	-	-	-	-	-

*Valuation Own Funds Report

Scenario: Actual							
Year: 2009	Period: Dec	Entity: GS100091.GS100012	Value: <Entity Currency>				
Actual 2009 Dec NN Non-Life							
View: <Scenario View> ICP: [ICP Top] Custom3: TotalCustom3 Custom4: [None]							
	IFRS	SI	SII	Tier 1	Tier 2	Tier 3	
Paid up	-	-	-	-	-	-	-
Called up	-	-	-	-	-	-	-
Ordinary share capital (net of own share)	-	-	-	-	-	-	-
Paid up	-	-	-	-	-	-	-
Called up	-	-	-	-	-	-	-
Callable	-	-	-	-	-	-	-
The initial fund less item of the same	-	-	-	-	-	-	-
Share premium account	-	-	-	-	-	-	-
Retained earnings including profits from	-	-	-	-	-	-	-
Other reserves from accounting balance s	-	-	-	-	-	-	-
Adjustments to assets	-	-	-	-	-	-	-
Adjustments to technical provisions	-	-	-	-	-	-	-

Appendix H

Rules

Brief Description of use and purpose of each section in the rule file

Section	Purpose
Sub Dynamic() –	This is not currently used. This is a standard HFM routine, which is used for accounts that are dynamically calculated at view-time. The limitation is that dynamic accounts cannot be fed from other dynamic accounts, and for this reason they cannot be used in the QIS5 implementation.
Sub Translate()	This is a standard HFM routine which is called when a user performs a consolidation (which involve currency conversion on entity to its parent), or if the user presses Translate in a data form or data grid. It relies on the HFM Entities being tagged with the correct currency, and the correct rates to be loaded for each scenario/year/period.
Sub Calculate()	This is the main calculate routine, that is called by HFM for each data unit (meaning each combination of Entity/Period/Year/Value). Note that most of the calculations are only performed when Value=<Entity Currency> The Calculate() routine calls the following sheet-specific calculations:
-Sub InsObligations ()	
-Sub Premiums ()	
-Sub ReverseSI ()	
-Sub ValuationSheet ()	
-Sub CurrentSituation ()	Calc for current situation tab
-Sub Geographical()	Geo
-Sub MCRSheet()	Calc for MCR tab
-Sub SCRSheet ()	Calc for SCR tab
-Sub SCR_VolMeasures()	Calc for volume measure tab SCR
-Sub Validations ()	This calculates the validation accounts. The resulting validation account controls whether a user can submit the data or not, in process management.

No-input Rules

Section	Purpose
Sub NoInput()	This is used to block input on certain cells. By default, any total lines are automatically read-only. However there are some cells which, for some rows, are inputable, but certain columns are not inputable. The NoInput routine blocks input on such cells, where they are calculated by other means and you do not want the user to overwrite the number. The NoInput routine calls the following sheet-specific routines:
-Sub InsOb_NoInput	NOINP for insurance obligations tab
-sub CurrSitu_NoInput ()	NOINP for Current situation tab

Section	Purpose
-Sub SCR_NoInput	NOINP for the SCR sheet
-Sub MCR_NoInput	NOINP for the MCR sheet
Sub Input()	This is not used in the QIS5 application. It is used to override a cell to force it to become inputable (subject to the user's security setup), where normally it would be a read-only cell.
Sub Consolidate()	This is the consolidation routine with equity elimination and minority interest calculations.
SubEliminate(strAccount,strICP)	IC elimination section

Pullthrough Accounts

Pullthrough means pulling through an amount from another cell/sheet. In other words, the cell is calculated from another cell or combination of other cells. In HFM, these pullthroughs are performed within the sheet-specific routine (for example, ValuationSheet performs all pullthroughs to the Valuation Sheet).

Appendix I

Technical Information

This section relates to the underlying technology that the QRM application runs on – Oracle Hyperion Financial Management (HFM). All the information in this section is based on standard HFM information.

Topics in this appendix:

- *Operating Systems* on page 66
- *Database Technology* on page 68
- *Application Support* on page 71
- *Remote Access Solution – Citrix, etc.* on page 73
- *Application content* on page 74

OPERATING SYSTEMS

Oracle's Hyperion Financial Management module and Foundation Services can currently run on the following platforms:

- Windows 2003 SP1
- Windows 2000 Server SP4

The only components in a Financial Management implementation that are supported on a UNIX operating system are the RDBMS, and Foundation Services. All other components, including Financial Reporting, must reside in a Windows environment. Oracle's Hyperion Foundation Services can currently run on the above platforms plus:

- HP-UX 11.23
- IBM AIX 5.3 ML3
- IBM AIX 5.2 ML7
- SUN Solaris 10
- SUN Solaris 9
- Red Hat Linux AS 4.0 Update 2 with glibc-2.3.4-2.13 or later
- Red Hat Linux EL 4.0

Minimum and Preferred Server and Network Specifications

As a minimum, Hyperion EPM servers require machines equivalent to Dual Pentium 4, 2 GHz with 4GB RAM and 10 GB disk but the recommended size is Dual Pentium 4, 2.8 GHz with 4GB RAM and 32 GB disk. Although it is possible to install all of the solution on a single server, Single server environments (all components on a single server) are not a recommended configuration unless we are implementing a single HFM application with less than 10 total users. The network connection between these servers should be a minimum of 100 Mbps.

Test and Production environments

When implementing Financial Management, it is best to create multiple environments. At a minimum, there should be a development and production environment utilizing separate hardware. The best scenario is to have 3 environments (development, test and production) with the test and production utilizing identical hardware and software configurations. Single server environments (all components on a single server) are not a recommended configuration unless we are implementing a single HFM application with less than 10 total users.

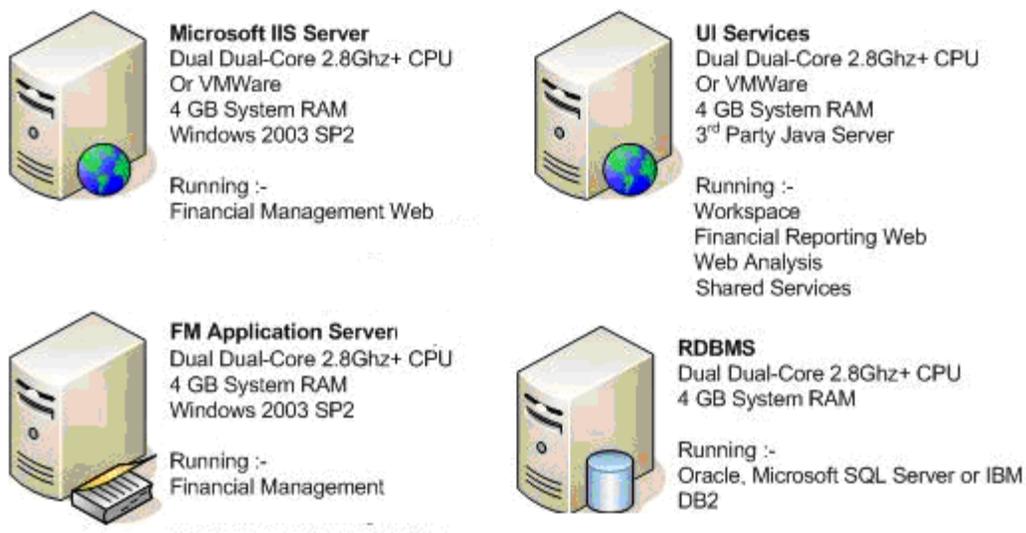
Consider creating a HFM Cluster when one or more of the following conditions arise:

- Large number of concurrent users
- 24x7 operations

- High availability requirement

The choices for development and test hardware vary from organisation to organisation depending upon the approach taken to the development lifecycle and the number of test procedures that it wishes to adopt. The diagram below shows the recommended development and test hardware configurations to be used by the development and testing teams to test all aspects of the system with the exception of remote access.

The design of the optimal production environment will require an infrastructure review by our consultants with your project team. The diagram below provides an indication of the type of production environment that might be proposed once such a review has taken place.



DATABASE TECHNOLOGY

Oracle's Hyperion Financial Management requires one of the popular RDBMS to store application data. Some of the other modules that underpin Hyperion Financial Management such as Foundation Services also require an RDBMS to store data. A guide has been supplied with this response that details the RDBMS requirements for each module. In order to provide a response here, a select amount of information is provided below giving the salient points.

The supported RDBMS Oracle's Hyperion Financial Management is:

- Oracle 11g
- Oracle 10g Release 2 (10.2.0.2)
- Oracle 10g (10.1.0.5)
- Oracle 9i (9.2.0.5)
- IBM DB2 9.1
- IBM DB2 8.2
- Microsoft SQL Server 2005 SP1
- Microsoft SQL Server 2000 SP3a

Deployment Options

Hyperion Financial Management provides complete user Web functionality including reporting and analysis, process management and data entry. Hyperion Financial Management deploys a Web-centric interface so companies can easily roll out the application to large, distributed organisations without having to install software on client machines. All software resides on the server. Built using a high-performance, scalable architecture, Hyperion Financial Management simplifies deployment to users who have access to the application anytime, anywhere.

Server Specifications

Oracle's Hyperion Financial Management module can currently run on the following platforms:

- Windows 2003 SP1
- Windows 2000 Server SP4

Other components of Oracle's Hyperion System 9 platform can be deployed on open platforms such as Red Hat Linux. A comprehensive supported platforms guide has been supplied.

Client Specifications

Hyperion Financial Management provides complete user Web functionality but can also be accessed using Microsoft Excel. This means that the following operating systems are supported for Oracle's Hyperion client software:

- Red Hat Linux AS 4.0 Update 2 with glibc-2.3.4-2.13 or later
- Red Hat Linux EL 4.0
- Windows Vista
- Windows XP Professional SP2
- Windows 2003 SP1
- Windows 2000 Professional SP4*
- Oracle's Hyperion products are optimized for a minimum screen resolution of 1024 x 768
- The minimum client hardware specification is Pentium 4, 1.6 GHz

The supported web browsers are:

- Microsoft Internet Explorer 7.0
- Microsoft Internet Explorer 6.0
- Firefox 2.0.0.3
- Firefox 1.5.0.3

One of the following versions of Microsoft Office is required to access Hyperion using Excel:

- Microsoft Office 2007
- Microsoft Office 2003
- Microsoft Office XP (2002)
- Microsoft Office 2000

Middleware and Data Integration / Export Import

Organisations today have a desire to move away from the need for users to manually key in data and is looking to move towards a more automated method of data capture into the new system. Organisations require a integration systems that will enable them to map and load data from multiple sources around its business.

Security General

Oracle's Hyperion EPM System provides a common infrastructure for user provisioning and management of all Hyperion users.

User management enables centralized management of user access rights and accessibility to applications created under various projects using different Hyperion products. The user management process allows the administrator or delegated administrator to associate users and groups to projects and give them specific roles in that application.

User IDs and groups may exist in various authentication systems and also within products in an existing installation. Also, you can create new users and groups and roles at the native level. Every product has product-specific roles defined at the product level.

Oracle's Hyperion platform flexibly maintains authorizations using group- and role-based security filters while eliminating the need for users to repeatedly enter security information with single sign-on capabilities. Oracle's Hyperion supports Single Sign-On capability for integration with products such as Oracle Identity Management through token-based authentication, which allows users to connect to multiple applications without having to present credentials every time. When a user logs into the first Hyperion application, an encrypted token of credentials is generated by the security platform and passed back to the calling application. When the user launches secondary module or application from within the first application, no further authentication is required.

Support for external authentication security mechanisms such as LDAP, ADS, NTLM, as well as Netegrity SiteMinder reduce the costs involved in keeping passwords and Ids synchronized.

The solution supports connectivity with the following Directory Services:

- IBM Tivoli Directory Server 6.2
- Lightweight Directory Access Protocol (LDAP)
- Sun Java System Directory Service version 6.3
- Novell eDirectory 8.8
- SAP R/3 Enterprise 5.0
- Microsoft Active Directory 2003
- Microsoft Active Directory 2008
- Netegrity SiteMinder 6
- Oracle Identity Management (OIM) 11.1.1.2+ including these components:
- Oracle Internet Directory 11.1.1.2+
- Oracle Virtual Directory 11.1.1.2+

APPLICATION SUPPORT

Oracle's Hyperion EPM System is designed to be maintained by your finance professionals.

Once the application environment has been fully implemented, there will be several key areas that will require staffing in order to operate and maintain the system:

- a. **Basic System Administration:** This function involves updating structures, business rules, valid elements (accounts, products, responsibilities, etc...) as they are changed in the normal course of business. Depending on the level of change required, it is typical that this task takes approximately 20-30% of one person from Finance / Business resource's time.
- b. **User Administration:** This includes maintaining valid user lists, system security and network security. For the purposes of this estimate, it is assumed that network security would already be established and not be incrementally affected by the application. To maintain valid users and system security, depending on the amount of personnel turnover, is typically part of the system administration function and takes approximately 5% of a Finance / Business resource.
- c. **Data Processing:** This involves monitoring the data submission process and being responsible for all current and historical data within the application. This is typically the most involved aspect of administration, as it generally also includes a degree of reporting and analysis in addition to pure data movement. Typically, this process takes approximately 50-100% of one person from Finance / Business resource's time, depending on the nature and frequency of the data flows into and out of the system.
- d. **Server and Infrastructure Support:** The solution's server and infrastructure requirements typically are in line with corporate standards and generally do not generate much if any incremental server or infrastructure administration that would not already be taking place (back-ups, communication monitoring, etc...).

Oracle Support has over 300 support analysts in the UK and over 6,000 people worldwide, providing both standard product support and advanced specialist support services. With both telephone and web-based support services through the support web site (Oracle Metalink), the 'Follow The Sun' support model is provided by Global Support Centres in UK, USA and Australia giving advice to customers in English 24 hours a day, 365 days per year. The Update Subscription Service is a prerequisite for all other Oracle Support Services offerings, and provides customers with rights to Oracle product upgrades, maintenance releases, patches, documentation and access to Oracle's knowledge base of at Oracle Metalink.

There are several support options:

- Standard Product Support provides you with around the clock technical assistance for all Oracle products via telephone or online at Oracle Metalink.
- Advanced Support options include:
 - Assisted Services - Customized assistance for support, enhancements, and improving processes

-
- Technical Assessments - Configuration and performance analysis with focused service delivery reviews
 - Business Critical Assistance - Additional services for personalized support and proactive recommendations
 - Solution Support Centre - A combination of reactive and proactive support services.

Details of Oracle Support are available online at www.oracle.com/support.

REMOTE ACCESS SOLUTION – CITRIX, ETC.

Oracle's Hyperion EPM System has been architected as a Web-based solution making it easy to deploy and manage. Some organisations however may wish to deploy Hyperion using Citrix to overcome the challenges of the IT landscape that they have. Oracle will support Hyperion products on Citrix, consistent with compatibility assertions provided by Citrix.

Some Oracle Hyperion customers use Citrix terminal server software (now called Citrix Presentation Server; previously known as Citrix MetaFrame XP). This software allows end users to run their consolidation application remotely on a central server while simply displaying it on their personal computers. From an end user's perspective, the applications respond just as quickly as if the user was directly connected to the corporate local area network (LAN). From an IT management perspective, the application can be rolled out in a distributed manner with all the benefits of a web application. Oracle's Hyperion EPM System does not require Citrix for a successful deployment. Some organisations, especially those with complex or constrained distributed network environments choose to use Citrix to deploy System. Those organisations that are heavily dependent upon Smart View across the enterprise may also decide to use Citrix to deploy their Oracle Hyperion Applications, especially if retrieving large spreadsheets full of data.

Oracle will support customers who run Oracle's Hyperion products on the platform software specified in the Platform Software Support Matrix. Oracle will support Oracle's Hyperion products on Citrix, consistent with compatibility assertions provided by Citrix.

While Oracle's Hyperion products are expected to perform properly in a Citrix environment, each situation is unique and may impact performance, invalidating Oracle's typical sizing requirements and recommendations. Proper analysis should be performed when using Oracle products in a Citrix environment to minimize resource contention and other aspects which may significantly impact overall performance. Please be aware, however, that while these assertions are made in good faith, certain incompatibilities may exist. If an incompatibility is identified, Oracle may experience a delay in reproducing and fixing the resultant issues for the affected versions. In the event that the issue cannot be reproduced in a native environment, the customer will be required to demonstrate that the issue could be reproduced in a supported, non-Citrix environment, or refer their issues to Citrix. Citrix-specific problems will be handled by the customer and Citrix.

APPLICATION CONTENT

Currencies	all currencies of the world
Entities	all geo areas
	Life and non-life
	legal hierarchy
	management hierarchy
Accounts	(see <i>Accounts</i> on page 75)
	Custom1
Countries	Correlation
	SCR
	Ratings
	SCR codes explain
Tiers	Tier measures
	Property types
Custom 2	Countries
	Tier 1 to 2 recons
	SCR hierarchy
Custom 3	Adjustments

Accounts

Custom 1

AllocHealth	Insurance obligations detail
CorrDef	Correlation matrix
CorrHealth	Correlation matrix
CorrIndex	Correlation matrix
CorrLife	Correlation matrix
CorrLob	Correlation matrix
CorrMkt	Correlation matrix
CorrNature	Correlation matrix
CorrNL	Correlation matrix
CorrNLCat	Correlation matrix
CorrNLCat1	Correlation matrix
Exposure	Assets detail
ExposureCategory	Assets detail
ExposureCcyType	Assets detail
ExposureECB	Assets detail
Holds	Participations
IC_Risk	Assets
IC_Risk_Other	Assets
IC_Risk_Spec	Assets
IC_RiskReclnterm	Assets
IMspec	internal model
InsuranceObligBE	Insurance obligation
InsuranceObligTotal	Insurance obligation
MCR_calc	MCR
MCR_Top_calc	MCR
MX_CorrCATHealth	Div matrix
MX_CorrDef	Div matrix
MX_CorrHealth	Div matrix

MX_CorrIndex	Div matrix
MX_CorrLife	Div matrix
MX_CorrLob	Div matrix
MX_CorrMkt	Div matrix
MX_CorrNL	Div matrix
MX_CorrNLCat	Div matrix
MX_CorrNLCat1	Div matrix
MX_CorrNLperils	Div matrix
MX_CorrNSLHealth	Div matrix
MX_CorrSCR	Div matrix
MX_CorrSLHealth	Div matrix
PremDiversification	Geo div
PropertyTypes	Assets
Rating	Assets
Rating_AAA	Assets
RingFencedFunds	RFF
SCR_Div_levels	Div matrix
SCR_MX_Equity	Div matrix
SCR_MX_Market	Div matrix
SCR_VolMeasure	Div matrix
SCR1	Tech SCR account
SCRCols02	Tech SCR account
SCRCols03	Tech SCR account
SCRCols04	Tech SCR account
SCRCols05	Tech SCR account
SCRCols06	Tech SCR account
SCRCols07	Tech SCR account
SCRCols08	Tech SCR account
SCRCols10	Tech SCR account
SCRCols11	Tech SCR account

SCRCols12	Tech SCR account
SCRCols13	Tech SCR account
SCRCols14	Tech SCR account
SCRCols15	Tech SCR account
SCRCols16	Tech SCR account
SCRCols17	Tech SCR account
SCRCols19	Tech SCR account
SCRCols22	Tech SCR account
SCRCols23	Tech SCR account
SCRCols24	Tech SCR account
SCRCols25	Tech SCR account
SCRCols26	Tech SCR account
SCRCols27	Tech SCR account
SCREquiv000100	Tech SCR account
SCREquiv000110	Tech SCR account
SCREquiv001100	Tech SCR account
SCREquiv001110	Tech SCR account
SCREquiv001111	Tech SCR account
SCREquiv101100	Tech SCR account
SCREquiv101110	Tech SCR account
SCREquiv111100	Tech SCR account
SCREquiv111110	Tech SCR account
SCREquiv111111	Tech SCR account
TechProvisions	Current situation
Tiers	Valuation
TiersMeasure	Valuation
TotalCustom1	Total of custom 1
ValMethods	Valuation

Custom 2

CorrNature	
IMspec	Internal model
MCR	MCR
MCR_InsObligations	MCR
MX_CorrCATHealth	Matrix
MX_CorrDef	Matrix
MX_CorrHealth	Matrix
MX_CorrIndex	Matrix
MX_CorrLife	Matrix
MX_CorrLob	Matrix
MX_CorrMkt	Matrix
MX_CorrNL	Matrix
MX_CorrNLCat	Matrix
MX_CorrNLCat1	Matrix
MX_CorrNLperils	Matrix
MX_CorrNSLTHHealth	Matrix
MX_CorrSCR	Matrix
MX_CorrSLTHHealth	Matrix
OwnFundsSource	
Pr_Non_Prop_Tot	Prod roll up
Pr_TOP	Prod roll up
Pr_Tot_Life	Prod roll up
Pr_Tot_NonLifeInCH	Prod roll up
Pr_TotHealthNonLife	Product roll up
ProvisionRollup	current position
SCR_MX_Equity	Matrix
SCR_MX_Market	Matrix
SI_to_SII	S1 to S2 reconciliation
Spread_Agg	Assets
TotalCustom2	Total custom 2

WorldCurrencies	World currencies
-----------------	------------------

Instruction on Excel

Own funds	G_01	Guarantees (G)	TiersMeasure	TotalCustom3	
current situation	L_0058	Unit linked	TechProvisions	ProvisionRollup	
current situation	L_0089	Technicalprovisions	TechProvisions	ProvisionRollup	
premiums	L_0131	Premiums breakdown (including proportional acceptations)	PremDiversification	Pr_TOP	
geo div	L_0166	WorldWideTotal	PremDiversification	Pr_Tot_NonLifeInch	
ins obl	L_0195	Allocation of health (current basis) to the QIS5 segmentation	AllocHealth	Pr_TotHealthNonLife	
ins obl	L_0214	Non-LifeInsuranceobligations	InsuranceObligBE	Pr_Tot_NonLifeInch	
MCR	L_0252	C.2.1 technical provisions for contracts without guarantees	MCR_calc	MCR_InsObligations	
RFF	L_0342	RingFencedFunds	RingFencedFunds		
Assets	L_0377	Borrowings by or demonstrably guaranteed by a national government	ExposureCcyType		
Assets	L_0433	Exposure to the european Cental bank	ExposureECB		
Assets	L_0434	Information on currency risk exposures (in the currency)	Exposure	WorldCurrencies	
Assets	L_0469	Information on spreads - aggregates	Rating	Spread_Agg	
Assets	L_0478	Information on the concentration of assets used for market risk	ExposureCategory		
Assets	L_0492	Information on counterparty default risk for type 2 exposures	IC_Risk		
Assets	L_0501	Additional information on mortgage loans	PropertyTypes		
IM	L_0510	SCR	IMspec	IMspec	
SCR	L_0710	CorrLob	CorrLob		
valuation	L_0819	Total Basic own funds before adjustments	Tiers	SI_to_SII	Total
own funds items detail	L_0845	Other paid in capital instruments	Tiers	SI_to_SII	Total

own funds items detail	L_0846	Preference shares	Tiers	SI_to_SII	Total
valuation	L_0859	Basic Own Fund Items under the transitio	Tiers	SI_to_SII	
valuation	L_0863	Adjustments to basic own funds - Deduction	Tiers		
valuation	L_0884	Valuation methods applied for assets	ValMethods		
valuation	L_0895	Valuation methods applied for liability	ValMethods		
participations	L_0919	Financial and credit institutions subject to CRD	Holds		
participations	L_0933	Description of participations	Holds		
participations	L_0933_01	participation 1	Holds		
own funds	L_0939	Own Funds detail	TiersMeasure	OwnFundsSource	
SCR	L_1128	CAt	CorrNature	TotalCustom2	
	L_9942	Total preference shares	TiersMeasure		
assets	LC_01	Letter of Credit (LC)	TiersMeasure		
	MCRAbsFloor	MCRAbsFloor	TotalCustom1	TotalCustom2	
	MCRCap	MCRCap	TotalCustom1	TotalCustom2	
	MCRFloor	MCRFloor	TotalCustom1	TotalCustom2	
Corr matrix	MX_CorrCATHealth	MX_CorrCATHealth	MX_CorrCATHealth	MX_CorrCATHealth	
	MX_CorrDef	MX_CorrDef	MX_CorrDef	MX_CorrDef	
	MX_CorrHealth	MX_CorrHealth	MX_CorrHealth	MX_CorrHealth	
	MX_CorrIndex	MX_CorrIndex	MX_CorrIndex	MX_CorrIndex	
	MX_CorrLife	MX_CorrLife	MX_CorrLife	MX_CorrLife	
	MX_CorrLob	MX_CorrLob	MX_CorrLob	MX_CorrLob	
	MX_CorrMkt	MX_CorrMkt	MX_CorrMkt	MX_CorrMkt	
	MX_CorrNL	MX_CorrNL	MX_CorrNL	MX_CorrNL	
	MX_CorrNLCat	MX_CorrNLCat	MX_CorrNLCat	MX_CorrNLCat	
	MX_CorrNLCat1	MX_CorrNLCat1	MX_CorrNLCat1	MX_CorrNLCat1	
	MX_CorrNLperils	MX_CorrNLperils	MX_CorrNLperils	MX_CorrNLperils	
	MX_CorrNSLHealth	MX_CorrNSLHealth	MX_CorrNSLHealth	MX_CorrNSLHealth	
	MX_CorrSCR	MX_CorrSCR	MX_CorrSCR	MX_CorrSCR	

	MX_CorrSLTHealth	MX_CorrSLTHealth	MX_CorrSLTHealth	MX_CorrSLTHealth	
	MX_Eq	SCREquityMatrix	SCR_MX_Equity	SCR_MX_Equity	
	MX_Mark	SCRMarketMatrix	SCR_MX_Market	SCR_MX_Market	
valuation	PSC_01	Undatedwithcalloption(PSC)	TiersMeasure		
valuation	PSD_01	Dated(PSD)	TiersMeasure		
valuation	SLC_01	Undatedwithcalloption(SLC)	TiersMeasure		

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