Reinsurance Credit STEC Instructions FY23

From	**P&C Internal Model Team**
Entity	**Group Risk Management**
To	**All P&C/Life Entities in the scope of the Internal Model**
Date	**21 November 2023 (V1)**

1. EXECUTIVE SUMMARY

This document aims to provide information on the STEC Process for FY23 **specific to Reinsurance Credit Risk**. This document is divided into several parts: 1) timeline, 2) governance, 4) IFC, 5) Expected changes, 6) Documentation and tools and, 7) contact list.

2. TIMELINE FOR THE FY2023

The table below details the draft timeline of this year's process including the expected submission/delivery from the team-in-charge.

Deadline	Title	Responsibility	Delivieries
13/10/2023	AXA XL Upload for Facultatives data (23Q2)	Julia HOLE [AXA XL]	AXA XL Confirmation to Group
13/10/2023	Launch UW Facultatives Exposure generation	Adrien BENCHAOUINE [AXA SA]	Group Level
19/10/2023	Kick-off Mail / P&C Steering Committee	Grégoire GALLOT [GRM]	Group mail to entities
25/10/2023	Group Extraction of Facultative reporting	Adrien BENCHAOUINE [AXA SA]	Group Level
31/10/2023	Transition Matrix for FY23	Alexandra MANNIG [RMR]	Group Level
07/11/2023	Reinsurance STEC FY23 Process Kick-off Call	Grégoire GALLOT [GRM]	Group to entities
06/11/2023	FY23 CPR Pack (RA Doc, Template, Clearance Deck, …)	Grégoire GALLOT [GRM]	Group mail to entities
17/11/2023	Delivery of facultatives information used for STEC with exposure report	Adrien BENCHAOUINE [AXA SA]	Delivery of reports by AXA SA to entities
From 15/11/2023 to 29/11/2023	Testing FY23 version of CPR R Shiny App	Entities	Validation Mail to Group
01/12/2023	Validation mail in regards of the facultatives data to be used for STEC	Entities	Validation mail from entities to Group
6/12/2023	CPR UW Facultatives exposure	Adrien BENCHAOUINE [AXA SA]	Delivery of UW Fac by AXA SA to entities
13/12/2023	First version of the CPR Risk Assessment	Entities	Delivery of CPR RA to Group
12/12/2023	Internal Treaty Exposure & Local treaty exposure	Adrien BENCHAOUINE [AXA SA]	Delivery of UW Treaty (partial) by AXA SA to entities

30/11/2023	Validation of list of AXA Entities	Thierry DUBOCAGE [AXA SA]	Group Level
18/12/2023	Dry Run of AXA XL Treaty Exposure based on eDeclare and ACTOR available info	Adrien BENCHAOUINE	Delivery from AXA SA to AXA XL
From 18/12/2023 to 05/01/2023	Reinsurance Credit Committee – Call with AXA XL	Grégoire GALLOT [GRM] – Olga LOJKO [AXA XL]	Call AXA XL / GRM
From 18/12/2023 to 05/01/2023	AXA XL ReMetrica Treaties Exposure based on PCFY23	Olga LOJKO [AXA XL]	Delivery from AXA XL to Group
05/01/2024	Financial shocks	Inès KOUFFANY [GIA]	Group Level
05/01/2024	Reinsurance market composition	Ying BARET [AXA SA]	Group Level
08/01/2024	Fixing of captives Ratings	Grégoire GALLOT [GRM] (AFV + AXL)	Delivery ratings to entities
10/01/2024	CAT scenarios	Louis ALDEBERT [GRM CAT]	Group Level
10/01/2024	**Fixing all reinsurers rating & communication to entities**	**Grégoire GALLOT [GRM]**	**Validation mail from entities to Group**
12/01/2024	Delivery of Default Probability, AXA ID, Captives ID and New Rating Matrix	Grégoire GALLOT [GRM]	Group Delivery to entities
26/01/2024	Updates all complex reinsurance exposure modelling	Entities	Entities delivery to Group
23/01/2024	Delivery Final UW Exposure + Average UW Exposure per entity	Adrien BENCHAOUINE [AXA SA]	Group Delivery to entities
End Jan 2024	Life Technical Meeting & P&C Clearance Committee	Group	Slides for validation
02/02/2024	**Validation of local CPR figures (solo / conso)**	**Group**	**Mail to Group from entities**
10/02/2024	**Update of Risk Assessment Doc**	**Entities**	**Mail to Group from entities**

3. COMMITTEES AND VALIDATION

To ensure a smooth process in term of delivery and in term of validation, GRM requires the following:

- Reinsurance Credit STEC Committees - [by mail for all entities except AXA XL]

  - Present the exposure mouvements (solo & conso), the exposure reconciliation to the B/S
  - Discuss / confirm all reinsurers ratings
  - Present the Payment Pattern modelling
  - Validate the Facultatives data
  - [Only for AXA XL] Present all overcollaterized SPV to be considered, validate what treaties recoveries to extract based on the PCFY, analyze the first CPR Dry Run
  - Risk Assessment First Submission

- CPR STEC validation [by mail]

  - Delivery of the updated CPR Risk Assessment
  - AoC results for only AXA XL, AXA France Vie / IARD, AXA SA

- Validation
  - All Inputs and outputs used for the STEC Calculation must be saved within the entities local space in the CPR STEC Sharepoint.

4. INTERNAL FINANCIAL CONTROL

Internal Financial Control Framework has been updated this year either at Group level and at local Level. Please contact your IFC correspondents for more information:

4.1. LOCAL CONTROLS

Several changes have been done to local control. Precisions are therefore disclosed to better understand the control.

Control: STEC-PC-Non CAT-C02

Evidence 1: Reconciliation between IRIS SHINE Reinsurance Data Collection and Magnitude on Local Reinsurance reserves based on HY exposures - Sign off over the reconciliation

Check the completeness of Magnitude data used to perform the reconciliation, the accuracy of reconciliation between IRIS SHINE Reinsurance and Magnitude and where there is any material unreconciled item, ensure that a corrective action has been undertaken or else that entities local RM are able to provide a coherent explanation within the sign off of reconciliation file (S2P3 reconciliation template to be sent are validated by GRM P&C)

GRM Explanation: This control aims at ensuring the consistency of the data with the balance-sheet (solo and conso). It is therefore required hat entities provide evidence of the reconciliation. GRM will create a template to perform the reconciliation. In case of delay, the entities are requested to provide their own evidence and explanation over the data submission.

Evidence 2 - Comparison file (Excel) sent by local entities to GRM and GRM validation of exposures through email.

Check that entities have generated the comparison file has been generated and to validate the information in Iris SHINE and have presented explanations to GRM for validation.

GRM Explanation: In order to analyze the STEC results, the entity must be able to explain the STEC movements and therefore the exposure movements. Entities can use their own template to perform the exercise but must explain the ceded provisions and collateral movements for both internal and external reinsurers.

Evidence 3 - Local reinsurance sign-off

Ensure that the data in J1 data extraction report (calculation of facultative exposure) in e-declare has been reviewed and validated by email by the local reinsurance team and sent to GRM

GRM Explanation: As data used for the STEC is not the one validated for the QRT submission in March / April, entities must provide an internal validation over the data used for the Facultatives UW Exposure generation. (Review of parameters used in the UW calculation + reinsurers name).

Evidence 4 - CPR input and parameter file extracted from the tool

Ensure that the correct input and parameters are used in the run-off and the underwriting application R-Shiny.

GRM Explanation: Provide the CPR Report for both RO and UW run.

Evidence 4' - Comparaison file

Reconciliate average underwriting exposure on local view with report provided by AXA SA.

GRM Explanation: AXA SA after their delivery will share the average exposure UW exposure for each entity. After the CPR STEC calculation, entities need to reconcile the average exposure after the STEC calculation and the inputted exposure by AXA SA.

Evidence 5 - eFrame print screen with the CPR files (run-off and underwriting) validated by GRM team

Collect the eFrame print screen with the CPR files (run-off and underwriting) validated by GRM team

Evidence 6 - Reinsurance AoC

Check the appropriateness of the Reinsurance STEC based on the AoC generated locally

GRM Explanation: Ensure the AoC run and provide the results with reconciled FY N-1 and FY N results.

Evidence 7 - Minutes of the Reinsurance Committee

Obtain the minutes of the Reinsurance Committee and ensure that for every outstanding issue an action plan is defined and check that GRM P&C and local RM agreed on the assumptions.

4.2. GROUP CONTROLS

Evidence 1 - Reconciliation Probabilities of Default (PoD) file
Replicating tool on PoD used in the model should be provided.

Evidence 2 – Rating validation
Reconcile the Internal model rating (reported in the Table Other) with what have been validated within Group Security Committee (with supported minutes) and, provide the rating communication for the entities.
Table Willis: Mail ensuring accuracy of data to be sent by Group Security Committee Support to GRM P&C (following the ADM Control Procedure) from AXA SA Risk management team

Evidence 3 – Validation of UW Exposure
Ensure that report on UW exposure is sent by AXA SA before GRM P&C sent the data (UW exposure) to Local RM.
Ensure that entities reconciled the disclosed underwriting exposure figures.

Exposure per entity sent to GRM and Entities by ASA. Any discrepancy must be explained in CPR validation report and per mail.

Evidence 4 - Review of the reinsurance CPR STEC Figures

Ensure that CPR AoC has been disclosed by the material entities (AXA XL, AXA SA, AXA France IARD)

Reconciliation of entities STEC figures between data loaded by the entities in the P&C IM sharepoint and eFrame

Reconciliation between Group CPR STEC from eFrame and Manual Aggregation

Ensure GRM have validated figures within P&C STEC Clearances & clearance figures are in line with figures sent by the entity
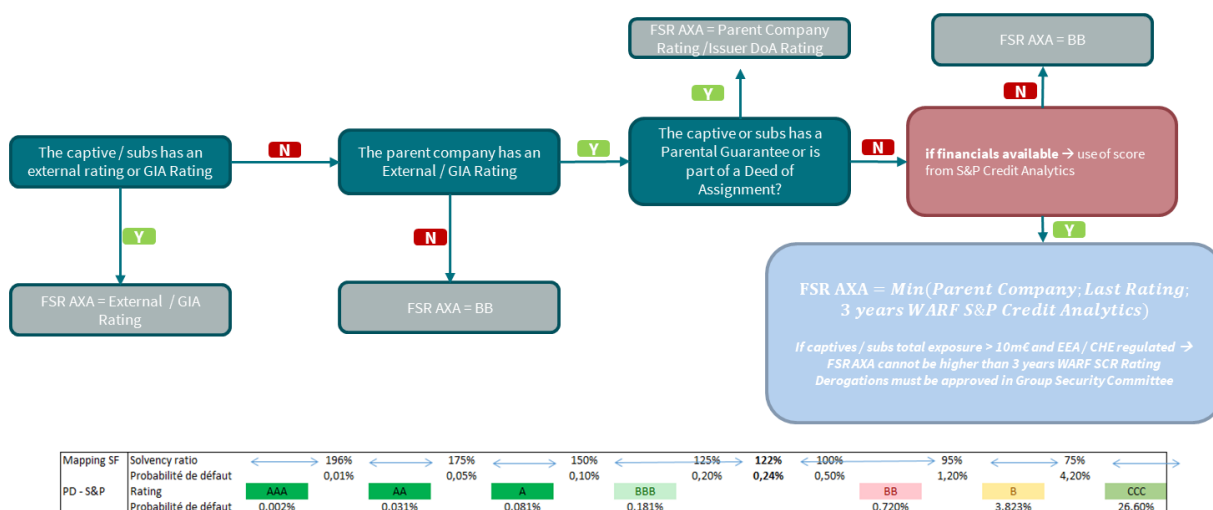
5. EXPECTED CHANGES

5.1. MODEL CHANGE

Model Change: Enhancement of the captive and unrated subsidiaries rating methodology using a weighted average instead of a one-year historic with the extension to non-EEA counterparties with the introduction of an external tool.

Impacted entities: AXA XL and AXA France Vie

This model change is scheduled to be presented to the STEC Working Group in November and to the Solvency II Committee in December.

Mapping SF	Solvency ratio	← 196% →	175% →	150% →	125% → 122%	100% →	95% →	75% ←	
	Probabilité de défaut	0,01%	0,05%	0,10%	0,20% 0,24%	0,50%	1,20%	4,20%	
PD - S&P	Rating	AAA	AA	A	BBB		BB	B	CCC
	Probabilité de défaut	0,002%	0,031%	0,081%	0,181%		0,720%	3,823%	26,60%

5.2. PROCESS CHANGES

IFRS17 Impact

IFRS17 has been introduced since January 2023, ie, Group consolidation is now under this new accounting framework. One of the main impacts is that now all P&C provisions are discounted. For

the Credit STEC calculation, exposure should enter the model undiscounted. Hence, Group Risk Management requires that all entities in the Internal Model scope extract the IFRS17 discount effect to have undiscounted exposure. A dedicated template will be shared by GRM.

Risk Assessment Template

FY23 Risk Assessment Template has been updated and can be seen here: [P&C Internal Model - R Shiny Application and Templates - All Documents (sharepoint.com)](#)

6. DOCUMENTATION AND TOOLS

6.1. CPR STEC SHAREPOINT

For this year's process, the Internal Model SharePoint remains the main drive for the STEC Process.: [CPR Process > Process > FY 23](#). Entities are encouraged to save all files related to the process (inputs, outputs, validation mail, minutes, …) under their entity working space: [CPR Process > Process > FY 23 > Entities Workspace](#).

Access to the P&C Internal model Sharepoint are reviewed each year, based on the Roles and responsibilities filled by the entities. It is up to all GRM P&C Correspondents to update their user lists. For Life entities, all access are maintained by the CPR Process Owner.

All inputs must be in local currency.

6.2. CPR STEC DOCUMENTATION

All documentations related to the reinsurance credit risk are available under this directory: [CPR Process > Process > FY 23 > Technical Documentations](#).

Title of the Document	FY23 Status	Contact Person
P_GMS_S7_M_Reinsurance Counterparty Risk Q4 2023	FY23 Updates (to be sent on 30/11)	Grégoire GALLOT
AGRe – Current Year Exposure	No Change	Adrien BENCHAOUINE
Current Year Exposure	No Change	Adrien BENCHAOUINE
S_31_01_CPRreporting_guidelines_Q22023	HY23 Updates	Grégoire GALLOT
CPR R Shiny User Guide FY23	FY23 Updates (to be sent on 30/11)	Grégoire GALLOT

6.3. CPR RELATED TOOLS

6.3.1. eDeclare (Facultatives & Treaties current-year data)

eDeclare is the Group tool used by entities to report current-year cessions for both Facultatives and Treaties. Declaration within the tool is must be done 3 month after the inception of the contract based on the AXA Solvency II Policies. The system is used for the Group to retrieved the following data for the UW exposure generation:

- Reinsurer Name and GRM ID
- Inception/expiry
- Premium
- Ceded capacity
- Ceded share
- Axa share

All facultatives information are used for the UW exposure, whereas only not in ACTOR treaties are used.

eDeclare can be accessed via this link: eDeclare

6.3.2. ACTOR

ACTOR is the Group tool to place treaties during the renewal. Early January an extraction of the base is done by Group to model the in-force treaties placed via Group Ceded Re team/ AXA XL.

6.3.3. SHINE

SHINE is the new system used to report ceded exposure, replacing IRIS. Queries can be done using an excel file, or by taking the J3 Manual Data Entry Form. Entities MDEF are stored under this directoy: S2P3 Sharepoint > Entities Workspace

6.3.4. ADM

AXA Data Management (ADM) is a Group database gathering all financial data (credit, investment, consolidation, …). A specific table is dedicated to Reinsurance. It ensures the adequacy of the reinsurers inforamtion reported within all group system (eDeclare, ACTOR, SHINE, …). All reinsurers used in the STEC modelling shall be legally active and an internal rating should be issued. It is up to the entity to ensure that all their reinsurers have the right external and internal rating.

ADM can be access through this link: ADM

Access can be requested bny sending a mail to: adm@axa.com

6.3.5. R SHINY App

A new version of the CPR R Shiny Application has been developped. It features several reporting changes explained in the new User Guide documentation. It will be downloadable on the testing date under this directory: P&C Internal Model - CPR R Shiny - All Documents (sharepoint.com)

Please make sure to test the new version during the testing phase. Redeliveries are possible following the results of the testing phase.

Moreover, runtime has been largely enhanced.

Group Risk Management recommends entities to use the 3.5.2 version of R, in order to avoid discrepencies between the expected calculation and what observed.

R Librairies have been versionnized and can be found under this directory: R Librairies - CPR FY23

6.3.6. eFrame

Once STEC figures validated, all entities must submit in due time their solo (and solo-like figures for non EEA entities) and conso figures. eFrame template can be downloaded within the eFrame website. Please, report RO, UW and "Others" strips separately into each dedicated columns with the RO exposure and the associated BEL0.

7. CONTACT LIST

Please in all CPR mail related, please put in copy the CPR STEC Process owner.

Process	Contact Person
CPR STEC Process	Grégoire GALLOT
UW Exposure Modelling	Adrien BENCHAOUINE / David BILLOD
Reinsurance Data Collect (J3)	Grégoire GALLOT
Reinsurance Data Collect (IT)	Jérôme PIAN
eDeclare Data	Yao ZHANG / Ying BARET
ADM	Ying BARET / Yao ZHANG / Folco GALIANO / Grégoire GALLOT
CAT Risk	Talel HAMMAMI / Louis ALDEBERT
Financial Risk	Inès KOUFANY
Group Security Support Team	Ying BARET / Thierry DUBOCAGE
RMR - Credit STEC Process	Béatrice BOUTIER / Jann STOZ