



INSURANCE OPEN PROTOCOL

MANUAL

Revised

July 2025

Original version: June 2017

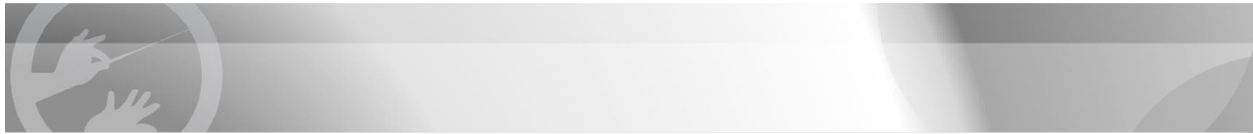
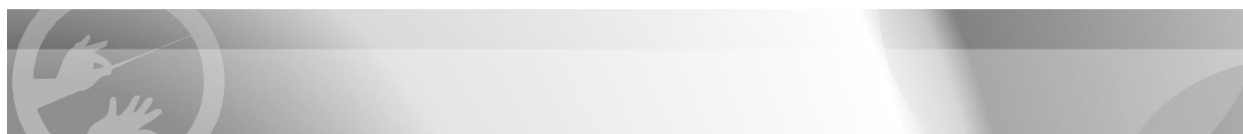
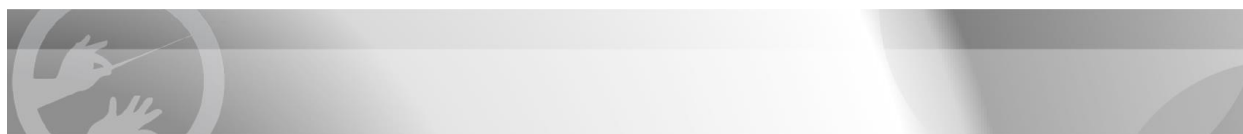


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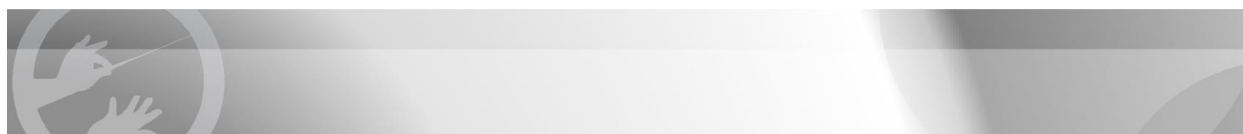
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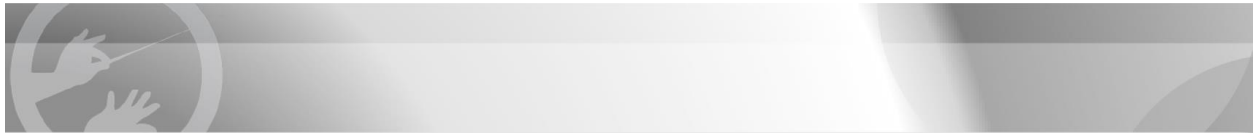
Disclaimer for Documents Supporting Open Protocol for Insurance

Updated versions of the spreadsheets for reporting on Insurance Risk, which have been included as Tabs 15-25 in the Open Protocol Template, were previously published in October 2023 by the members of the SBAI Insurance Working Group (together and individually, the “Insurance Working Group”). The latest version of the Open Protocol Template is dated April 2024 and this document is a separate Insurance Open Protocol Manual of the same date which updates a description of how these Tabs are to be filled out. This Disclaimer applies to the Template and Manuals as they stood on 6 October 2023 and to every future edition, draft or final, issued by the SBAI (Standards Board for Alternative Investments) Open Protocol Working Groups or its successors and to any use of the material comprised in the Template or Manual. It also applies to any material (“Website Materials”) from time to time on the SBAI website <https://www.sbai.org/> (the “Website”).

The latest Template and Manuals are extensions of the Open Protocol Enabling Risk Aggregation (“OP”) documents that were first launched in 2011 and which are available on the SBAI website at <https://www.sbai.org/>. An updated version on OP was released in 2016 following the addition of Real Estate to Global Industry Classification Standard (GICS), and 2018 following GICS changing Telecommunication to Communication Services. A further update to include reporting on Digital Asset Exposures and ESG was published in October 2021. A stand-alone version of the Insurance OP Template and Manual were first released in June 2017 but the tabs of the Template are now included in the Combined Open Protocol Template, dated April 2024. However, this Insurance Open Protocol Manual has been kept separate and focusses on the Tabs in the Combined Open Protocol Template relating to reporting on Property Catastrophe Insurance funds.

The Insurance Working Group comprises a number of participants in the alternative investments sector of the financial services industry who were involved in the development of the Insurance Tabs in the Combined Template and the Insurance Open Protocol Manual. The Insurance Working Group has no official standing and neither it nor its work or publications are endorsed by any governmental or regulatory authority. Any interested person (a “User”) may consult or use the Templates and Manuals or access the Website but, by doing so, acknowledges and agrees to the following –

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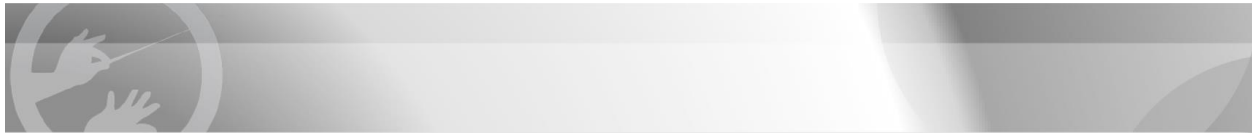


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Comments on the Templates and the Website Materials will be welcomed. Please address them to: Gaurav Amin (g.amin@albourne.com). All such comments may be published on the Website.



Introduction

Additional tabs that relate to Insurance Risk (the Insurance Open Protocol (“IOP”) Tabs) have been included into the Combined Open Protocol (“OP”) Template and are to be filled out by funds that have a significant exposure to property catastrophe Insurance risk. These additional tabs have been developed because there are several features of property catastrophe exposure that differ significantly from most other exposures of hedge funds. These include terminology, sources of leverage and the wide-spread use of side-pockets and are discussed further below.

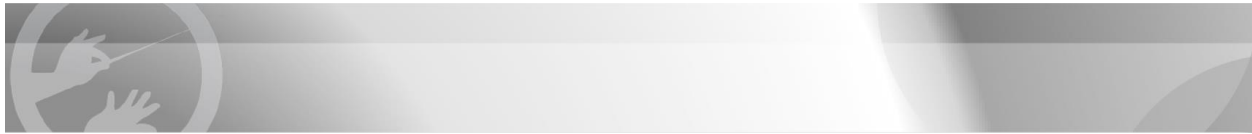
Tab 1 of the Combined OP Template should be filled out by all funds as information reported therein is required to enable integration into a portfolio view of risk. If Insurance exposure is the only significant exposure taken by the fund, tabs 2-14 of the Combined OP Template will not be filled out. If there are other significant non-Insurance exposures taken by the fund, they are to be reported in Tabs 2-14 of the Template. The focus of tabs 15-25 is Property Catastrophe risk because this is the main type of Insurance risk currently written by Insurance-linked funds. However, an increasing number of funds are writing a broader range of Insurance risks, and the Combined OP Template is likely to need expansion to cover such exposures in the future.

The main objective of the combined Protocols (OP and IOP) is to provide standardized procedures for the calculation, conveyance, collection, and collation of financial risk information. The protocols serve a dual role of providing more detailed explanation of various exposures in a fund and to enable consistent aggregation of exposures across funds. Where possible we have followed the principles listed below:

- **Objective:** Protocols avoid subjective areas where possible and provide enough details on methodology to ensure objective calculations.
- **Simple:** Protocols are easy to implement and do not require expensive risk systems to generate.
- **Flexible:** Protocols are flexible, in order to incorporate potential innovations in financial markets.
- **Compatible:** Protocols have incorporated existing standards where available.
- **Comprehensive:** Protocols contain multiple risk analytics to ensure that both investors and regulators are satisfactorily covered.
- **Applicable:** The OP is designed to be applicable to different types of funds, including mutual funds, venture and private funds, separate accounts, and hedge funds, while the IOP is designed to be applicable mainly to Insurance Funds that take Property Catastrophe risk.

The combined OP/IOP materials can be broken down into three parts:

The Combined Template: The Template now contains an additional 11 tabs that cover additional metrics that managers are requested to produce on Insurance exposure. As before, the Template can be provided in two reporting formats; one is an Excel template that is reader friendly, and the other is an XML format that is computer friendly.



The new tabs in the OP/IOP Template are:

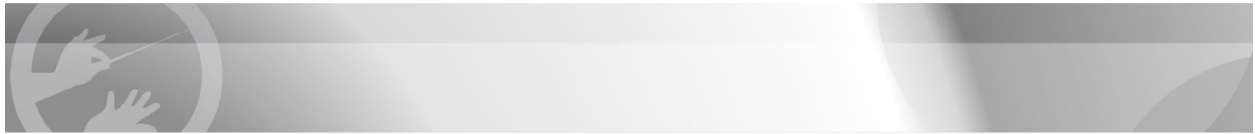
Tab 15: Manager Level Data. Some manager-level information is already collected in Tab 1, but Tab 15 asks for additional information that is relevant to Insurance risk, such as AUM by Insurance fund type, investment of Insurance AUM by market, and the percentages of cat bond issues owned in aggregate by the manager rather than the fund.

Tab 16: Fund Level Data. Most of the data on the risk exposures of the fund is collected in this tab. Here we consider all the assets and liabilities of the fund before they are divided up notionally into share classes (except for assets and liabilities that arise from the currency hedging activities associated with non-USD share classes). These assets and liabilities will include those notionally allocated to side-pockets and other share classes closed to new investment. The reporting of these fund assets and liabilities are broken down into sections as follows: the value of the On Risk portfolio (i.e., the total value and/or limits of all contracts that are currently exposed to new events, see [IGP 5\(a\)](#)); the liquidity of the fund's cat bond portfolio; the amount of cash or leverage used in the fund; the distribution of Rate-on-Line and Expected Loss of the contracts written by or on behalf of the fund; the value of On Risk contracts between the fund and fronting parties and the value and/or limit of On Risk contracts directly with cedants; contingent liabilities of the fund and investors; currency exposures (other than incurred in the creation of currency share classes); breakdown of the fund's On Risk contracts by market, by loss trigger type, and by contribution to Expected Loss, CVaR 95 and CVaR 98 by peril/region; sourcing of business; breakdown of cedants by type; renewal information; breakdown of AUM by investor type and geographic location; and breakdown of fund loss reserves by the events that caused loss.

Tab 17: Share Class Level Data. A typical investment fund can have two types of share classes: share classes that are open to new investment and share classes that are closed (e.g., side-pockets or run-off share classes). For IOP reporting in Tab 17 we aggregate all open share classes together into one "Main" share class (see [IGP 2\(d\)](#) below) and ask for reporting on the Main share class and each closed share class separately. We collect AUM on each of these share class, together with a reconciliation of AUM changes from period to period that includes subscriptions and redemptions in the Main share class and flows between side-pockets and the Main share class or directly with investors in the period. We also collect information on the levels of Trapped Collateral (see [IGP 5\(i\)](#) below) and which share classes it is associated with, and a breakdown of the elements of income and expenses for the Main share class and each side-pocket.

We cannot know how many share classes there will be in an Insurance fund in advance, so we ask that Tab 17 is filled out for the Main share class and each side-pocket share class separately (see [IGP 6](#) below). Data entered in Tabs 15, 16 and 18-25 can remain constant in these additional reports.

Tab 18: AEP Curves. This tab contains risk data produced by the manager from applying their proprietary models to the fund's portfolio. Not all Managers make the same assumptions in calculating these AEP Curves, so we ask for detail on certain assumptions that have been made. The data collected includes an Aggregate Exceedance Probability Curve – a form of cumulative probability distribution of possible returns for the fund based on its On Risk portfolio – and various statistics derived from the probability distribution of the portfolio returns.

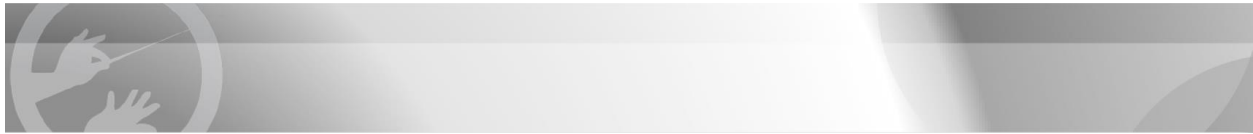


Tabs 19-25 Historic Stress Years and Events. These tabs ask for the modelled outcomes for a range of stress tests on the Insurance portfolio. These stress tests involve estimating the losses of specified historic events to the current fund.

Please do not add, delete, or change any rows, columns, tabs, or headings in the Template, as this will disrupt the input of the contents into databases.

Grades: While the original OP Template includes the option to supply data at several levels of granularity, the IOP tabs ask for data at just one level of granularity, except in Table 1.7 and Table 1.8 of Tab 1 where there is an option to report at different grade levels. For Insurance fund reporting we ask for Grade 2 reporting in these Tabs.

Manual (this document): The existing OP Manual sets out the general principles and structure of the related protocols and detailed explanations and formulae for every metric and cell identified in the first 14 tabs in the Template. The IOP Manual performs the same function for tabs 1 and 15-25 of the Template and follows the same approach to references. Further clarification on the use of the Template and Manuals is available in the FAQs section on the SBAI website (<https://www.sbai.org/toolbox/open-protocol.html>).



Insurance General Points (“IGPs”)

The following General Points provide background to matters that are related to the Insurance focus of Tab 1 and Tabs 15-25 in the Combined Template and matters which may arise in multiple Tabs. To differentiate them from the General Points in the Manual for the more general Open Protocol we call these the Insurance General Points (“IGP”).

IGP 1. Reporting of Insurance exposures

a. Reporting by Insurance Funds

If Insurance is the main strategy of a fund, the focus of reporting will be Tabs 1 and 15-25 in the Combined Open Protocol Template.

Tab 1 reports data that is common to all Open Protocol reporting for non-Insurance funds as well as Insurance Funds and serves as the tab that integrates reporting on Insurance Funds into the broader Open Protocol fund database.

Tab 15 reports data about the manager of an Insurance fund and its broader Insurance activities that may be relevant to an assessment of the fund, such as other participation in Insurance markets by the manager.

Tab 16 reports data on the fund itself, across all share classes. It asks for various breakdowns of the fund’s activities, to the extent possible in quantities not wholly based on the manager’s risk modelling.

We ask that Tab 17 be filled out separately for the “Main” share class (see definition in [IGP 2\(d\)](#)) and each closed share class. This will result in multiple versions of the Template for each fund, each with data on a different share class, but any other tab in these versions that is not being updated can contain the prior month’s data.

b. Reporting by Multi-Strategy Funds that Have Significant Insurance Exposures

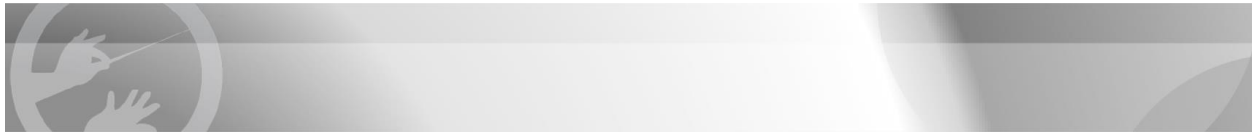
We ask that multi-strategy funds with significant Insurance exposures complete both the OP and the IOP Tabs.

c. Reporting Dates, Reporting Periods and Reporting Frequency

A **Reporting Date** is the first day of a calendar month. A **Reporting Period** is the time over which aggregate flows are reported or at the end of which a breakdown is reported, and in turn determines the **Reporting Frequency** of these quantities.

The following are the Reporting Frequencies and Reporting Dates for Insurance fund information in the various Tabs:

Tab	Reporting Frequency	Reporting Dates
1	Quarterly	Jan 1 st , April 1 st , July 1 st , Oct 1 st



15	Quarterly	Jan 1 st , April 1 st , July 1 st , Oct 1 st
16	Quarterly	Jan 1 st , April 1 st , July 1 st , Oct 1 st
17	Monthly	Jan 1 st , Feb 1 st , Mar 1 st , Apr 1 st , May 1 st , June 1 st , etc.
18-25	Semi-annual	Jan 1 st , July 1 st

Tab 17 is the only Insurance tab we ask to be completed **each month** for the “Main” share class ([IGP 2\(d\)](#)) and separately for each individual closed share class. We request information in Tab 17 on flows in and out of these share classes and a breakdown of returns and reserving to coincide with monthly performance reporting. Any other tab that is not being updated should present the most recent relevant Reporting Date’s data.

Tabs 15 and 16 are breakdowns of exposures on a **quarterly** basis since this mostly coincides with the ends of important (lumpy) renewal periods for collateralized reinsurance (e.g., 1st January, 1st April, 1st June and 1st July, and 1st October).

Tabs 18-25 data produced by modelling information from AEP curves and Stress Tests are collected **semi-annually** after the end of the largest renewals on 1st January and 1st July, with the latter date being just after the start of the annual hurricane season.

d. Other Reporting Matters

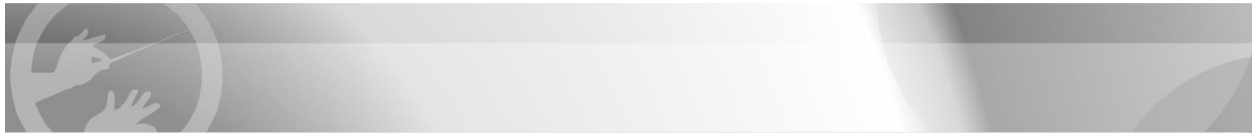
Input cells: Input cells are formatted in pink. Please do not add any text or data to any other cells.

Comments: These are opportunities for you to identify where definitions could result in a number you may consider misleading. In this case, please use the Comments cells to set out your concerns. You can also use these cells for any other footnotes or explanations. Please enter the table or cell number that the comment is referring to under the “Number” column and then enter the comment in the “Comment” cell. If the comment is general and not specific to any cell, leave the “Number” column blank.

Memo Items: These are usually requests for further information or detail relating to some part of a table or background information.

Reporting Numbers and Rounding: Please round half up. The Template requires various types of values to be entered and the following is a rough guide:

- All % values should be reported with a percentage sign or as a decimal (here a maximum of 3 decimal places). For example, a 9.355% holding should be reported as 9.4% or 0.094 but not 9.4.
- Numerical cells should not contain text – i.e., do not put dashes or ‘n/a’ in any cells. If a cell is not applicable just leave it blank.
- All AUM numbers should be reported to the nearest integer. Report the actual amount in USD and do not use any text like “m” or “million” in these fields.
- Dates should be formatted DD/MM/YYYY, e.g., 08/08/2021, not 8/8/2021.



Manager Disclaimer: The Template contains a tab called “Manager Disclaimer” and is left blank. Managers can use this tab to insert their own disclaimer if they wish and use this tab for any other comments. Note that the disclaimer and additional comments should be entered in the cells and not in a textbox.

IGP 2. Reporting about Insurance Exposures

The following are terms and concepts that are used throughout the Insurance Tabs in the Combined Template:

a. Long and Short Positions

Risk positions are designated as “**Long**” if they increase the exposure of the reporting entity to Insurance risk, and “**Short**” if they decrease exposure to Insurance risk. Funds can go short Insurance risk if they purchase protection by paying a premium for cover. All **Short exposures** in the template should be captured as **negative** numbers.

b. Cedants

Throughout this Manual we refer to a fund’s counterparties in Long Insurance contracts, either directly through transformers or indirectly through Fronts as “**Cedants**”. This group also includes beneficiaries of cover provided by catastrophe bonds owned by the fund.

c. Current AUM and Insurance AUM

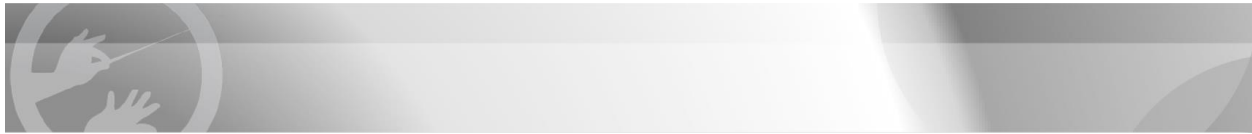
For Insurance funds, we use a measure of AUM at the start of a calendar month (“**Current AUM**”) so that we capture redemptions at the end of the previous month and new subscriptions at the start of the current month. This provides a basis for measuring returns on AUM in the next period, as well as a snapshot of the breakdown of the fund AUM at the Reporting Date after putting new and existing capital to work in renewals/non-renewals and new contracts.

For Funds with some Insurance exposure, we ask for the contribution of that exposure to the fund AUM (the “**Insurance AUM**”).

d. Structure of an Insurance fund

Property Catastrophe Insurance funds can be thought of as having two main components:

- **A pool of assets and liabilities** that includes investments in special purpose insurance companies (transformers) which convert an insurance contract into a financial instrument that a fund can invest in, as well as direct investments in catastrophe bonds, cash and other securities, currency futures and forwards, and receivables and payables, hedges or short positions, and in some cases borrowings.
- **A set of share classes** that are typically not separate legal entities but have defined relationships to subsets of the fund pool of assets and liabilities, and varying fee structures and liquidity provisions. They may also be denominated in currencies other than USD, where this exposure is achieved through what we refer to as “**Targeted Currency Hedging**” programs. The assets and liabilities of these



Targeted Currency Hedging programs are included in the fund's pool of assets and liabilities, but the economic outcomes of the hedging activities are only associated with the related currency share class.

The share classes are either open or closed to new investment:

Share classes open to new investment: These share classes can differ in fee structures, liquidity provisions and currency, but are all associated with the same subset of the fund pool of assets and liabilities, and they have the same gross return on AUM (that is, before taking into account fees and Targeted Currency Hedging programs).

“Main” share class: All share classes open for new investment (or Funds that are closed from inception) that have the same performance at the gross return level should be consolidated into what we call the “Main” share class for the purpose of breakdown of gross returns in Tab 17. The Main share class will thus include the assets and liabilities of open non-USD share classes but not the outcomes of the Targeted Currency Hedging programs associated with these share classes. Reporting on the breakdown of returns for the Main share class and each closed share class is requested in Tab 17.

Share classes closed to new investment: These are either funds closed from inception, such as one-year funds, or side-pockets and related run-off structures called “slow pay” share classes (see below), that can be owned by differing subsets of investors, and each is associated with its own subset of the fund's pool of assets and liabilities. Side-pockets and “slow pay” share classes usually are formed when significant valuation uncertainty exists and there is the possibility that a redemption or subscription may lead to unintended transfers of value between investors.

“Slow Pay” share classes: Some managers use a “Slow Pay” share class in relation to redemptions even when there are no new subscriptions but valuation uncertainty or illiquidity still exists. In such a situation, the manager puts the redeeming shareholders' share of the Main share class portfolio into a new share class, and this is liquidated as the valuation uncertainty is resolved. For reporting purposes in Tab 17 we treat a slow pay share class in the same way as a side-pocket as it is also closed for new investment.

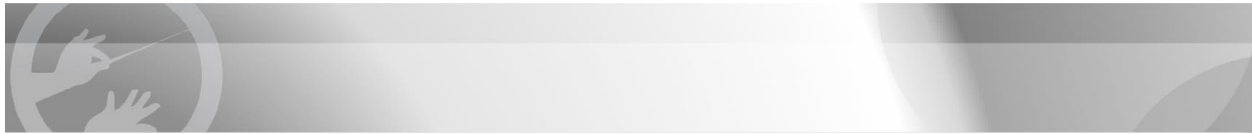
IGP 3. Filling in Tab 1 – Fund and Investor Details.

As mentioned in [IGP 1](#), Tab 1 is to be filled in to provide common information with other Funds reporting through the Combined Open Protocol Template. For this purpose, several data entries use drop down menus.

For Insurance Funds, we ask that the data entered in the Reporting Share Class section of Tab 1 be the same as is provided in shareholder letters. This may not be the same as the data supplied in Tab 17 for each share class.

IGP 4. Filling in Tab 15 – IOP Manager Data.

The reporting at the manager level uses several measures of Insurance fund exposure that we introduce here and are also used extensively in Tab 16.



a. Value vs Current Limits vs Initial Limits

The amount of fund AUM at risk from a Long collateralized insurance contract written directly by the fund is the **Value** of that contract.

- **Value:** The initial collateral put up by the fund plus premium recognized to date less paid and reserved losses to date.
- **Initial Limit:** The contract limit at inception.
- **Current Limit:** The Initial Limit less paid and reserved losses to date.

Since the initial collateral put up will in most cases be the Initial Limit of the contract less the premium, the Value will be less than the Initial Limit at any time until its expiry and less than the Current Limit. These exposure measures do not include any unused reinstatement limit (see [IGP 5\(b\)](#) below).

If the fund writes a hedge (goes short an insurance contract), the fund pays out a premium rather than putting up collateral, but the premium gives only indirect information about the amount of downside protection the hedge provides.

We have therefore chosen to use Current Limit as a measure of both Long and Short positions for insurance contracts, and value for catastrophe bonds (for catastrophe bonds, there are broker price indications that can be used to value these holdings directly). The one exception is for reporting of information in relation to Rate-on-line or Expected Loss (discussed further in [IGP 5\(f\)](#)), when we ask for information at inception of the position (Initial Limit).

b. “Fund” versus “Cedant” level reporting

“Fund” level reporting uses the exposures of the fund that are collateralized, which includes exposures to any Fronts ([IGP 5\(c\)](#)), and any direct holdings of catastrophe bonds.

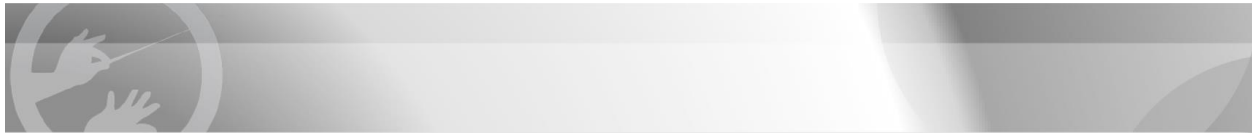
For “Cedant” level reporting, we “look through” a Fronted portfolio to the contracts between the Front and the cedants. The Current Limits at the Cedant level will be larger than or equal to the Current Limits at the Fund Level, offering a perspective on the fund’s Leverage ([IGP 5\(e\)](#)). For many breakdowns of exposures, we want the breakdowns at the Cedant level, as this provides additional information on the fund’s strategy.

IGP 5. Filling in Tab 16 – IOP Fund Data.

a. “On Risk” and “Off Risk” Contracts

For quarterly fund risk exposure reporting we use the concept of “On Risk” and “Off Risk” contracts. Insurance contracts and catastrophe bonds have finite exposure periods, defined by the contract’s inception and expiry dates, between which they are “On Risk”. and they are “Off Risk” either before the exposure period starts or after it ends.

“On Risk” exposures are most likely to be associated with the Main share class ([IGP 2\(d\)](#)) but may also be in



side-pockets if a position had a loss and is placed in a side-pocket despite ongoing exposures, and “Off Risk” structures can be in both types of share class. The IOP seeks to report on various measures of risk exposure on Reporting Dates for all “On Risk” contracts in a fund, and also to capture investment in “Off Risk” contracts.

b. Reinstatements

About two-thirds of all reinsurance contracts contain one or more obligatory reinstatements. That is, the reinsurer requires the cedant to reinstate the limit of cover back to its initial level after a loss by paying a pro-rata amount of the original premium. However, funds that collateralize their obligations may not wish to write such contracts directly with cedants as they are likely to require too much collateral for the possibility of earning just one premium. However, as we describe below, Funds access this large market by using Fronts and Tail Hedges.

In almost all reporting in Tab16 we ask for Current Limits excluding any (unused) reinstatements. The one exception is in 16.4 where we ask for a measure of Leverage that includes reinstatements.

c. Fronts and Fronting

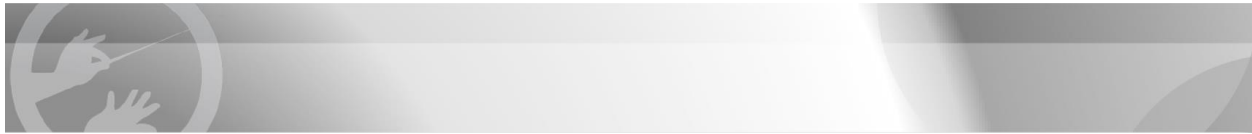
Many Insurance managers now use one or more rated balance sheets belonging to third parties (which may be affiliated entities) that write insurance contracts on their behalf and to pass on some or all the exposure to a fund. This is called “**Fronting**” and the rated balance sheet is called a “**Front**”. Fronts are used to get access to a broader range of counterparties, either through licenses to write business that the Front may hold or those who would prefer rated paper to collateralized paper. The resulting portfolios are referred to as “**Fronted**”.

d. Tail Hedges

A Fronting arrangement may also include a retention by the Front of losses beyond an aggregate limit. This is called a “**Tail Hedge**” and results in the fund’s required collateral posted with the Front being capped at that limit. This arrangement effectively creates a form of no-recourse leverage for the fund. The Front typically charges a fee for the Fronting services and the Tail Hedge, while the fund gets to keep the total premium from the Fronted portfolio less these fees. Since the amount of collateral required from the fund is reduced, in most cases the result is a noticeable increase in the expected return on collateral. When contracts with reinstatements are included in the fronted portfolio, the aggregate limit payable by the fund under the Tail hedge is typically changes by a lot less than the additional reinstatement limits included in the Fronted portfolio, making such business more attractive.

With a Tail Hedge in place, the return on collateral profile of the fund can be quite different from that of the portfolio of risks written by the Front. For example, a high yielding portfolio can be constructed from a Fronted portfolio of low yielding, high attachment and diversified contracts when a Tail Hedge is in place. The lowering of the collateral required should lead to higher expected return on collateral for the fund, at the expense of an increased probability of a large tail loss to the posted collateral.

e. Leverage



As mentioned above, the use of a Front and a Tail Hedge can serve as a source of non-recourse leverage to the fund. We gauge the amount of leverage obtained by using three quantities expressed as percentages of Current AUM:

- Current Limits (without reinstatements) and Value of Cat Bonds at Fund Level.
- Current Limits (without reinstatements) and Value of Cat bonds at Cedant Level.
- Current Limits with all reinstatements and Value of cat bonds at Cedant Level.

f. Profiles of Exposures by Rates-on-Line and Expected Loss

Although some contracts may have associated reinstatements, we only take the initial premium in relation to the first limit into account for calculating **Rate-on-Line** ("ROL"). For contracts of less than twelve months, the annualized ROL is calculated as the actual ROL divided by the proportion of the annual risk exposure contained within the contract period. Thus, for example, the annualized ROL for a contract exposed to Atlantic Hurricane from June to December would be the same as the contract's actual ROL, since all the annual risk occurs during the contract's six months.

Similarly, the Expected Loss of an Exposure is calculated without reference to any possible reinstatements.

For profiles of Rate-on-Line and Expected Loss, we request the use of these quantities as at the date the contract was written, or the instrument purchased.

g. Contingent Liabilities

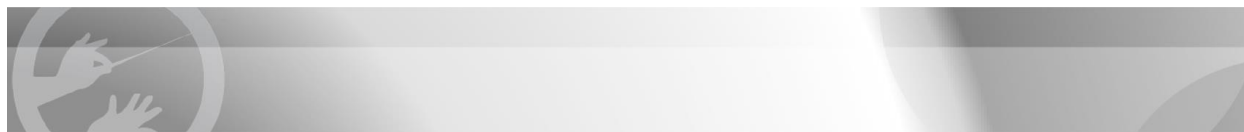
There are two sources of contingent liability for investors we seek to capture.

The first arises from expired contracts at the Cedant level that have not been commuted and further possible claims are not wholly covered by collateral in trust. This is most likely to occur in Fronting arrangements where the contracts with cedants are unsecured and typically without commutation clauses. The collateral relationship between the fund and the Front may have some component to cover future claims under such contracts, but unless the Front agrees to take this risk, current and future fund investors have this contingent liability. Equally, any contract written by the fund that has not been commuted is a source of a contingent liability for investors, although this may depend on whether the contract has been side-pocketed and how much collateral has been retained. Technically such contracts might be included in the "Off Risk" category, but we exclude them from the reporting of Off Risk contracts in Tab 16.2.

The second can arise if investors who have redeemed remain contingently liable to pay additional loss amounts if contracts have not been commuted.

h. Currency Exposures

Reporting Currency. All information should be reported in USD. Non-USD exposure should be converted to USD using the exchange rate as of the last trading day of the month.



Targeted Currency Hedging programs. There are currency hedging programs designed to produce non- USD share classes. For IOP reporting, we do not consider a fund’s Targeted Currency Hedging activities as related to its strategy, and so in breakdowns of assets and liabilities or of returns we omit the effects of this activity. However, the outcome of any Targeted Currency Hedging programs is required to reconcile the change in fund or share class AUM over time reported in Tab 17.

Other Net Currency Exposures. The pool of assets and liabilities of the fund can have currency exposures (for example, from writing insurance contracts in yen or euros), and the manager may seek to manage these. The IOP Template tracks the fund’s resulting net currency exposures over time, converted to USD at the spot rate on the Reporting Date ([IGP 1\(c\)](#)).

i. Trapped Collateral

Many collateralized contracts between a cedant and a fund contain agreements that specify how much collateral will be released from trust at the expiry of the contract’s exposure period. Any excess collateral over amounts corresponding to estimated loss reserves that remains in the trust after the end of the exposure period of the related contracts is referred to as **Trapped Collateral**. Such collateral is **typically** not available for collateralizing new business.

Assets associated with side-pockets are also not generally available to write new business. In most circumstances the amount of assets in side-pockets will exceed the amounts of Trapped Collateral. However, side-pockets and Trapped Collateral result from different considerations, as Trapped Collateral arises from agreements between the manager and cedants, whereas side-pockets are arrangements between the manager and investors. While the two are not always linked (see the SBAI Toolkit paper on side-pockets), there may be Trapped Collateral associated with a share class. We ask for reporting on Trapped Collateral in Tab 17.

j. History of Reserving by Event

In Table 16.17 we also ask for a breakdown of current loss reserves at the fund level by event, which allows us to track the sources of large losses to the fund and the evolution of these loss reserves over time.

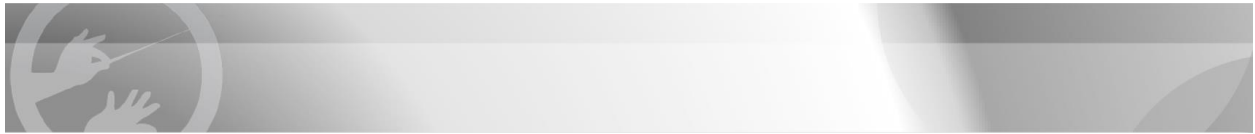
However, if an event impacts an aggregate cover, the individual events that aggregate to the loss may not have individual loss estimates. In such cases we ask that the aggregate contract be treated as an event and the aggregate reserving for the contract be reported over time.

IGP 6. Filling in Tab 17 – IOP Share Class Data.

Breakdown of Monthly Returns

We ask for a detailed breakdown of monthly returns in Tab 17 for the Main share class and each closed-ended share class (either a side-pocket, a “slow pay” share class, or a closed-ended fund). This breakdown identifies valuation changes from identifiable events, the pattern of income recognition and the extent to which the funds earn trading income from their catastrophe bond holdings.

AUM-weighted Average of the net returns of all share classes



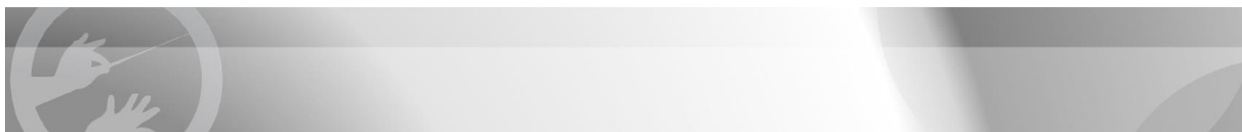
We ask for the AUM-weighted average of the net returns of all share classes, including closed share classes. While this is unlikely to be the return experienced by any investor, we consider it to be the most comparable measure between funds over time, given that much of the future evolution of loss reserves for past events will take place in closed-ended share classes. We ask for it to be reported in each of the versions of Tab 17 that are provided.

IGP 7. Filling in Tabs 18-25 – IOP Risk Modelling, AEP Curves and Historical Events

In Tab 18 we ask for risk modelling using the proprietary models used by most managers. Managers calculate the range of possible return outcomes for a fund and the related probabilities using a combination of third-party and internal models. In most cases, this modelling involves modifications that result in a “house” view of risk, with each manager adjusting exposure inputs and risk outputs (often by adding risk loadings) and often using proprietary event sets for certain types of events. This may make it more difficult to compare modelled risk data provided by different funds, or to consolidate fund risk information into a portfolio view. However, most managers’ “view-on-risk” is more conservative than the results from using third-party models without adjustments.

Nevertheless, we ask for the modelled risk profile of a fund in the form of an Aggregate Exceedance Probability (“EP”) curve that maps, for example, a level of return against the probability of having returns exceeding that level over a given period (usually one year). These curves require a set of assumptions which we specify in Tab 18.

We also ask managers to run their models for a set of historical events (“Stress Tests”) set out in Tabs 19-25 to provide a set of loss outcomes over a common event set that can be used to create a partial picture of possible downsides at a portfolio level.



The following entries describe in more detail what is asked for in the Insurance Tabs of the OP/IOP Template.

Tab 1. Fund and Investor details

This tab is to be filled out for all types of funds and the data collected in this tab can be aggregated up into a portfolio view for more than one fund.

1.1 Fund Name, Base Currency and Date

Report the name of the fund, its base currency and the Reporting Date ([IGP 1\(c\)](#)) to which the report corresponds.

1.1.1 Fund Name

1.1.2 Base Currency

1.1.3 Reporting Date

1.2 Manager Details

This section should be used to provide information about the investment management company (Advisory Firm) which is responsible for running the fund.

1.2.1 Investment Manager Name

1.2.2 Total Firm Assets Under Management: Total Assets under management for the investment manager, including deferred fees in USD. Please provide total assets under various fund structures:

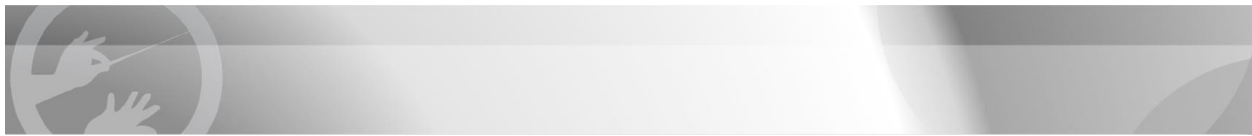
1.2.2.1 Private Funds (performance fees): Private funds which charge performance fees under normal circumstances.

1.2.2.2 Private Funds (no performance fees): Private funds which do not charge performance fees. Mutual funds would be included in this section.

1.2.2.3 Non-Private Funds: Non-Private funds (Mutual funds, etc.) should be included here.

1.2.2.4 UCITS Funds (performance fees): A UCITS fund is, as defined in the FSA Questionnaire, “a collective investment scheme/undertaking which requires authorization pursuant to the UCITS Directive.” This section is applicable for UCITS funds that charge performance fees under normal circumstances.

1.2.2.5 UCITS Funds (no performance fees): A UCITS fund is, as defined in the FSA Questionnaire, “a collective investment scheme/undertaking which requires authorization pursuant to the UCITS Directive.” This section is applicable for UCITS funds that do not charge performance fees.



1.2.2.6 Managed Accounts: Segregated portfolios or funds which generally replicate a private fund as much as possible for the benefit of a specific investor or investors.

1.2.2.7 Real Estate Fund: Private funds that primarily invest in real estate and/or real estate related assets.

1.2.2.8 Private Equity Fund: Closed end private fund which invests in non-publicly traded assets and where the investor has no discretionary redemption rights.

1.2.2.9 Liquidity Fund: Liquidity funds are, as defined by SEC, any private fund that seek to generate income by investing in a portfolio of short-term obligations in order to maintain a stable net asset value per unit or minimize principal volatility for investors.

1.2.2.10 Other: Any assets under management in the firm not included in sections 1.2.2.1 to 1.2.2.9 above.

1.3 Strategy AUM Details

This section is used to provide information about the strategy of the fund under consideration.

1.3.1 Total Strategy Assets Under Management: (see note [IGP 3](#)) Total assets under management in the entire fund and all other structures following the same investment strategy, including deferred fees, in USD. Please note the entries until 1.3.2 should reconcile with this point.

1.3.2 Method Used to calculate AUM: (See note [IGP 3](#)) To be consistent with AUM numbers provided elsewhere in the IOP Template, the method for AUM calculation should be Forward Looking. Choose from the drop-down box one of three options: GAAP, Backward Looking, and Forward Looking.

1.3.2.1 Redemption (End of current month): Redemptions effective as of the last day of the Reporting Period ([IGP 1\(c\)](#)) from all entities within the strategy.

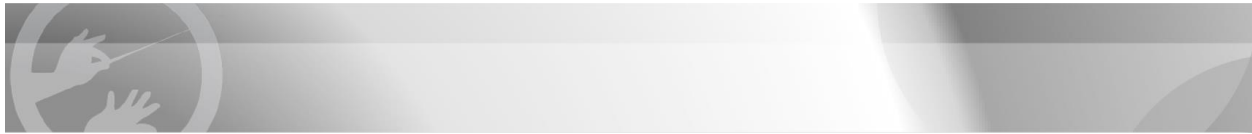
1.3.2.2 Subscription (Start of next month): Subscriptions effective as of the Reporting Date ([IGP 1\(c\)](#)) in all entities within the strategy.

1.3.2.3 Funds: Total strategy assets under management in funds rather than Managed Accounts. Include all share classes. Consider any redemption effective during the Reporting Period and any subscriptions effective on the Reporting Date.

1.3.2.4 Managed Accounts: Total assets under management in all managed accounts following the same or similar strategy as the reported fund.

1.3.2.5 Other: Any assets under management in the fund being reported which are not included in sections 1.3.2.3 and 1.3.2.4 above. Other also includes advisory business and portfolio management for portfolios run similarly to the fund being reported.

1.4 Primary Investment Strategy



This section should be used to describe the primary investment strategy followed by the fund from the drop-down lists provided. We indicate the selection for a fund whose primary strategy is Property Catastrophe Insurance in each sub-sector below.

1.4.1 Investment Strategies: For an Insurance fund, please select “Other” from the drop-down list.

1.4.2 Asset Class: For an Insurance fund, please select “Insurance” from the drop-down list.

1.4.3 Instruments: For an Insurance fund, please select “Securities and Derivatives” from the drop-down list.

1.4.4 Investment Style: For an Insurance fund, please select “Not Applicable” from the drop-down list.

1.4.5 Trading Strategy: For an Insurance fund, please select “Not Applicable” from the drop-down list.

1.4.6 Market Exposure: For an Insurance fund, please select “Long Bias” from the drop-down list.

1.4.7 Average Holding Period: For an Insurance fund, please select “Multiple” from the drop-down list.

1.5 Reporting Share Class (RSC)

For an Insurance fund, the Reporting Share Class refers to the (possibly hypothetical) share class that is the manager uses as a basis for reporting to investors (and possibly to databases).

1.5.1 Total Investment in RSC: Total assets under management in the reporting share class, including deferred fees in USD.

1.5.2 % of total fund AUM in RSC: Percentage of total fund AUM in the share class on which the information in the report is based.

1.5.3 Currency: If the official currency of the RSC is not USD, please fill in the official currency here. All AUM and exposure information should be reported in USD.

1.5.4 Inception date of the RSC: Inception date for reporting share class.

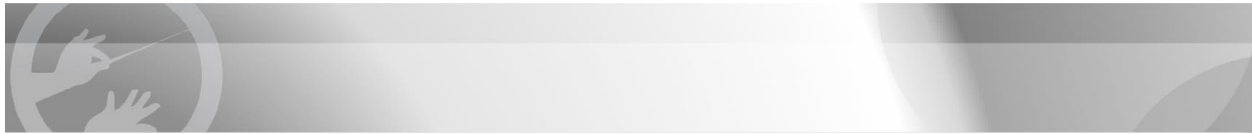
1.5.5 Management Fee of RSC: Percentage management fee charged on reporting share class. Use as many decimal places as required.

1.5.6 Performance Fee to RSC: Percentage performance fees charged on reporting share class. Use as many decimal places as required.

Please include a Comment in 1.13 that describes the nature of the Reporting Share Class.

1.6 Performance

If completed, this section 1.6 should contain the best available estimate if the performance is not finalized.



Gross Performance

Performance gross of management and performance fees and other expenses. Performance should be rounded to two decimal places (round half up).

1.6.1 Month: Gross performance for the month (non-annualized)

1.6.2 QTD: Gross performance for the quarter to date, the quarters being January to March, April to June, July to September and October to December (non-annualized)

1.6.3 YTD: Gross performance for the calendar year to date (non-annualized)

1.6.4 ITD (annualized): Gross performance from the fund/RSC since inception to date (non-annualized if inception is less than 12 months ago, annualized if inception was more than 12 months ago)

Net Performance

Performance net of management and performance fees and other expenses. Performance should be rounded to two decimal places (round half up).

1.6.5 Month: Net performance for the month (non-annualized)

1.6.6 QTD: Net performance for the quarter to date, the quarters being January to March, April to June, July to September and October to December (non-annualized)

1.6.7 YTD: Net performance for the calendar year to date (non-annualized)

1.6.8 ITD (annualized): Net performance from the fund/RSC since inception to date (non-annualized if inception is less than 12 months ago, annualized if inception was more than 12 months ago)

High water mark

1.6.9 Is majority of fund above the HWM: Is the majority of the fund or reporting share class above the HWM in the reporting month.

1.7 Investor Breakdown

Report the values as a percentage of total AUM and actual USD amount. AUM should exclude undrawn commitments.

1.7.1 Top 5 Largest Investors: Percentage of total fund AUM held by the 5 largest investors. Note that investments by individual employees should be included in “Top 5 Largest Investors” if applicable and would be classified as “Individuals”. This section may be reported following the same guidance provided in form PF. For example:



Investor	% of AUM
ABC Pension Fund	15.0%
XYZ Pension Fund	10.0%
AZ Bank	15.0%
Employee A	12.5%
Employee B	5.0%
HNW A	15.0%
HNW B	12.5%

If HNW A controls AZ Bank, these would be grouped together. That would result in a total of 80% for top 5:

1. HNW A + AZ Bank:	30.0%
2. ABC Pension Fund:	15.0%
3. Employee A:	12.5%
4. HNW B:	12.5%
5. XYZ Pension Fund:	10.0%

1.7.1.1 Largest Investor: Percentage of total fund AUM held by the largest investor.

Investor Type (by % and Dollar Amount)

This should be the breakdown of fund AUM by investor type as defined by the investors themselves or deemed most appropriate by the manager.

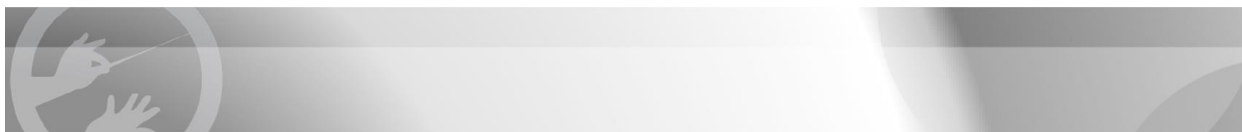
1.7.2 Individuals: Total AUM held by individuals like Partners, Employees and High Net Worth Individuals.

1.7.2.1 Partners & Employees: As the FSA Questionnaire states in note 17, “include all types of staff of the investment manager and/or sub-managers. Do not include investments by related corporate entities including financial institutions. Include investments through the pension plans/funds of the staff.” Also, include here any deferred fees if still invested in the fund.

1.7.2.2 High Net Worth Individuals: As the FSA Questionnaire states in note 17, “do not include any investments by (Partners and Employees). Include HNW that invest into the fund via platforms and intermediaries where known.”

1.7.2.3 Family Office: Include both single and multi-family offices in this section.

1.7.2.4 Retail investors: Include any investments from individuals which do not qualify for



“High Net Worth Individuals” status.

1.7.3 Institutional: Total AUM held by institutions like Government entities, Pension Plans, and Endowments/Foundations.

1.7.3.1 Government entities: As the FSA Questionnaire states in note 17, “include any state pension plans/funds in this category.”

1.7.3.2 Pension plans/funds: As the FSA Questionnaire states in note 17, “do not include state or government pension plans/funds, and do not include pension plans/funds by Partners and Employees.”

1.7.3.3 Endowments/foundations and other charitable organisation: As the FSA Questionnaire states in note 17, “include investments by endowments, foundations and charitable organizations”.

1.7.3.4 Sovereign Wealth Funds: Include investments by state-owned investment funds capitalized by governments.

1.7.4 Intermediaries: Total AUM held by financial intermediaries like Banks, Funds of Funds, and Private Banks.

1.7.4.1 Banks & Insurance companies: As the FSA Questionnaire states in note 17, “refers to balance sheet exposures by these entities to the fund”.

1.7.4.2 Other Investment Funds: As the FSA Questionnaire states in note 17, “Include investments by fund of funds and other investment funds”.

1.7.4.3 Private Banks: Where possible, allocate exposures that are organized through private banks to the underlying source (e.g., to HNW if applicable). Only report investments here if it is not possible to allocate or identify the underlying source.

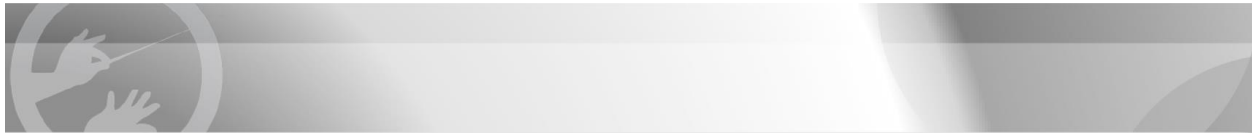
1.7.5 Other/Unknown: Include any source not covered above or if the source is unknown or unidentifiable.

1.8 Investor Liquidity

This section in the OP allows a manager to report at various grade levels (see [Introduction](#)). However, for an Insurance fund we ask that the information be reported at Grade 2.

The breakdown of the AUM by liquidity of the investor should be based on when an investor would be able to redeem (cease having exposure in the fund), both with and without penalty, within different periods.

Consider, for example, an investor, who is invested 10% of the total fund AUM, is hard locked for three months, and then has a soft lock for a further three months. Since the investor would be able to pay a penalty and redeem at the end of three months and be able to redeem without a penalty at the end of 6 months,



report:

Within next	Without Penalty	Additional With Penalty
Grade 1Grade 2		
Less than or equal to 3 Months		10%
Less than or equal to One Week		
Less than or equal to One Month		
Less than or equal to Three months		10%
Less than or equal to 12 Months	10%	
Less than or equal to 6 Months	10%	
Less than or equal to 9 Months		

“Additional with Penalty” column would be empty if the fund does not have any investors with early redemption penalties.

For this section assume notice periods and gates are imposed where applicable. The Without Penalty column, including Side Pockets, should add to 100%, but the With Penalty column need not sum to 100%. For each reporting date, assume that 100% of the investor base has requested liquidity.

1.8.1 Less than or equal to 3 Months

1.8.1.1 Less than or equal to One Week

1.8.1.2 Less than or equal to One Month

1.8.1.3 Less than or equal to Three months

1.8.2 Less than or equal to 12 Months

1.8.2.1 Less than or equal to 6 Months

1.8.2.2 Less than or equal to 9 Months

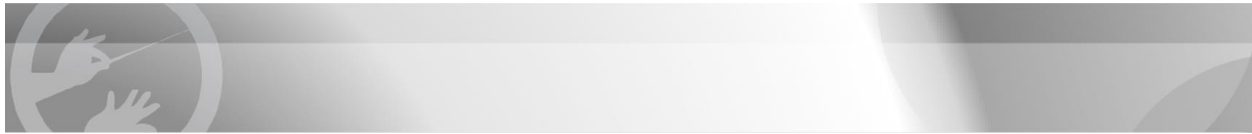
1.8.2.3 Less than or equal to 12 Months

1.8.3 Less than or equal to 36 Months

1.8.3.1 Less than or equal to 18 Months

1.8.3.2 Less than or equal to 24 Months

1.8.3.3 Less than or equal to 36 Months



1.8.4 More than 36 Months

1.8.5 Side-Pockets: Assume all assets held under side pockets to be “without penalty” and Investments under side-pockets should be fairly valued.

1.9 Unencumbered Cash

1.9.1 Unencumbered Cash: Report percentage of total AUM held in unencumbered cash. Note that unencumbered investments in money market funds should be included. The PF form definition of unencumbered and the Financial Conduct Authority (FCA) handbook definition of near cash can be used as guidelines.

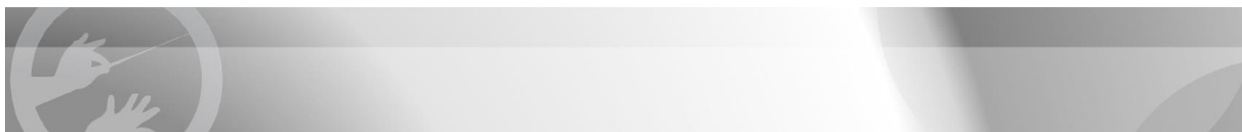
PF form: The fund’s cash and cash equivalents plus the value of overnight repos used for liquidity management where the assets purchased are U.S. treasury securities or agency securities minus the sum of the following (without duplication):

- a. cash and cash equivalents transferred to a collateral taker pursuant to a title transfer arrangement; and
- b. cash and cash equivalents subject to a security interest, lien or other encumbrance (this could include cash and cash equivalents in an account subject to a control agreement).

FCA: money, deposits or investments which, in each case, fall within any of the following:

- a. money which is deposited with an eligible institution or an approved bank in:
 - i. a current account; or
 - ii. a deposit account, if the money can be withdrawn immediately and without payment of a penalty exceeding seven days’ interest calculated at ordinary commercial rates;
- b. certificates of deposit issued by an eligible institution or an approved bank if immediately redeemable at the option of the holder;
- c. government and public securities, if redeemable at the option of the holder or bound to be redeemed within two years;
- d. bills of exchange which are government and public securities;
- e. deposits with a local authority of a kind which fall within paragraph 9 of Part II of the First Schedule to the Trustee Investments Act 1961, and equivalent deposits with any local authority in another EEA State, if the money can be withdrawn immediately and without payment of a penalty as described in (a)

1.10 Investment in External Funds



If the fund has made investments in external funds (include funds run by the same manager), and exposure of those funds is not included in this report, then report percentage of total AUM in external funds broken down by the main motivation in this section.

1.10.1 For cash management: For cash management purposes (e.g., money market funds). Note that if the money market fund is run internally, the securities should be reported on Tab 3 or 4 according to the types of securities held, and NOT reported here.

1.10.2 Non-cash management: For non-cash management (i.e., investment) purposes.

1.11 Report Generated By

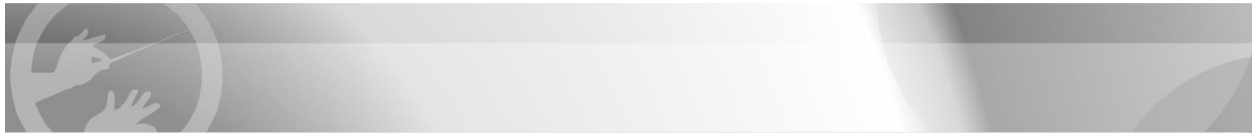
1.11.1 Name: Name of the entity (manager, administrator, risk systems etc.) that generated the report.

1.12 Report Generation Date

1.12.1 Date: Date (DD-MMM-YY) when the report was generated.

1.13 Comments

Please provide any necessary comments with reference to the table or Manual number, including a description of the nature of the Reporting Share Class.



Tab 15. IOP Manager Data

15.1 Manager Insurance AUM by Fund Type

Further to the information on Manager AUM in Table 1.2, we ask for the manager-level **Insurance** AUM and the number of funds by certain fund types to get a measure of the extent of the manager's Insurance activities.

15.1.1 Commingled open-ended funds

15.1.2 Interval funds: Funds registered on a US exchange under the interval fund regulations that repurchase shares from investors at prescribed intervals.

15.1.3 1-year closed-ended funds: Closed-ended non-listed one-year funds, including sidecars written annually or semi-annually, with annual re-subscription and no discretionary redemption rights.

15.1.4 Other closed-ended funds: Any other closed end non-listed fund with a fixed multi-year maturity for all investors.

15.1.5 Single investor vehicles: Any vehicles managed on behalf of or for the benefit of a single or closed group of investors.

15.1.6 Other

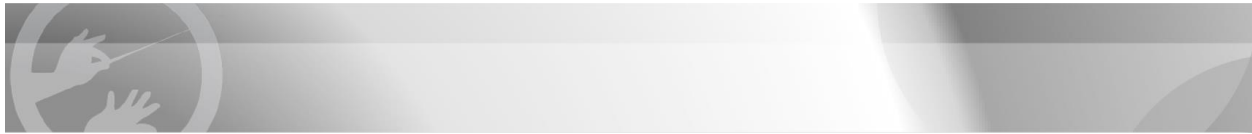
15.2 Manager Total Insurance Exposure by Market

We ask for information on the manager's total activity in the various insurance and reinsurance markets. This allows us to understand a manager's overall presence in a given market, which may be under-represented by the fund's presence alone. Additionally, different risk markets within Insurance have differing price dynamics as the suppliers of capital are not homogeneous across these markets. This information allows us to understand how the main markets in which the fund is active change over time.

We measure the activity in markets other than catastrophe bonds as the total Current Limits of insurance contracts excluding reinstatements, and in the catastrophe bond market by the Current Value of bonds. For each market, we ask for total Short as well as Long. We ask for this information on a Fund Level and a Cedant Level basis (see [IGP 4\(b\)](#)). Quota share agreements that are not Fronted or part of a Fronting arrangement are classified as either reinsurance or retrocession depending on whether the counterparty is an insurance or reinsurance company.

Other than for catastrophe bonds, Short positions are where cover has been purchased. If the cover is provided by a reinsurer or a fund, it should be classified as reinsurance, if it is provided by a retrocessionaire, it should be classified as retrocession.

We also ask for the total Current Limits excluding reinstatements of contracts and values or catastrophe



bonds with occurrence triggers only.

15.2.1 Primary Insurance: Business accessed directly, via an MGA or other delegated authority (but not via quota share).

15.2.2 Reinsurance Excess of Loss: Long Current Limits include Excess of Loss contracts that are written with insurers, while Short Current Limits includes contracts written by reinsurers.

15.2.3 Reinsurance Quota Share: Long Current Limit includes quota shares of primary insurance books while Short Current Limits includes contracts written with reinsurers.

15.2.4 Retrocession Excess of Loss: Long Current Limits includes Excess of Loss contracts that are written with reinsurers while Short Current Limits includes contracts written with retrocessionaires.

15.2.5 Retrocession Quota Share or Sidecar: Long Current Limits includes quota shares or sidecars of reinsurers, while Short Current Limits includes contracts written by retrocessionaires.

15.2.6 Industry Loss Warranties: Contracts whose main trigger is an index of Industry Loss. Please also include any pure parametric contracts.

15.2.7 Rule 144A Catastrophe Bonds: Cat bonds that accord with Rule 144A and thus can have a secondary market.

15.2.8 Private Catastrophe Bonds: Cat bonds that do not accord with Rule 144A and do not have a secondary market.

15.2.9 Hybrid/Enterprise Covers: Long value includes contracts written by the fund that cover risks in more than one of the insurance, reinsurance or retrocession markets.

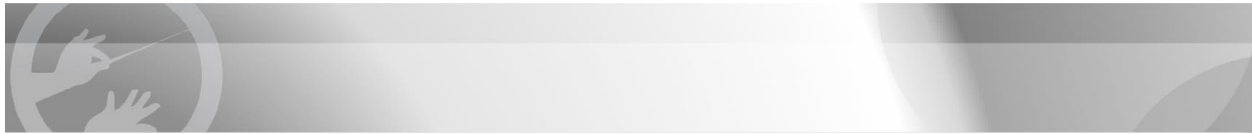
15.2.10 Memo: Contracts with occurrence triggers only

15.3 Rule 144a Catastrophe Bonds: Amount Owned by Manager by Percentage of Issue Size (Face Value)

We ask for the value of the manager's holdings of 144a cat bonds in each of the following buckets, which are defined by the percentage that the manager's holdings of a given bond represent of the outstanding issuance of that bond.

15.4 Comment

Please provide any necessary comments with reference to the table or Manual number.



Tab 16. IOP Fund Data

16.1 Report Information

16.1.1 Fund inception date: The date the fund started trading.

16.1.2 Total Insurance AUM

16.2 Size of On Risk and Off Risk Contracts

See [IGP 5\(a\)](#) for the definition of On Risk contracts. In [IGP5\(g\)](#) we discuss Off Risk contracts whose term has expired but have not yet been commuted, and we exclude any such contracts that do not have any associated collateral in trust from the calculation of Off Risk contracts below.

Please complete this section on a Cedant Level basis ([IGP 4\(b\)](#)) for the whole fund and the Main share class ([IGP 2\(d\)](#)) using the Value for cat bonds and the Current Limits excluding reinstatements for other exposures

16.2.1 Long On Risk contracts: To be reported for both the whole fund and the Main share class excluding reinstatements.

16.2.2 Short On Risk contracts: To be reported for both the fund and the Main share class, excluding reinstatements.

16.2.3 Long Off Risk contracts: To be reported for both the whole fund and the Main share class, excluding reinstatements

16.2.4 Short Off Risk contracts: To be reported for both the fund and the Main share class, excluding reinstatement.

16.3 Rule 144a Catastrophe Bonds: Amount Owned Directly or Indirectly by Fund by Percentage of Issue Size (Face Value)

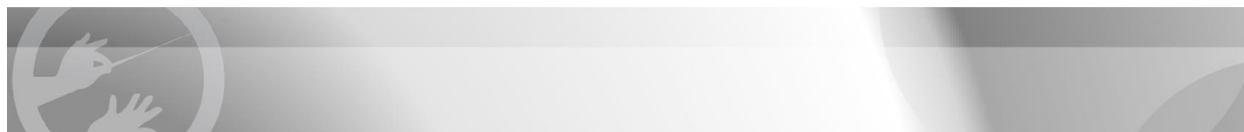
We wish to determine how much of a fund's investment in catastrophe bonds is in issues where the fund's holding represents a significant part of the total amount of that bond's outstanding issue size, as this is likely to influence the liquidity of these positions.

We ask for the face values of the fund's holdings of catastrophe bonds divided into the following "buckets" for Long and for Short positions:

16.3.1 Less than 5% of outstanding issuance

16.3.2 5% to 10% of outstanding issuance

16.3.3 10% to 20% of outstanding issuance



16.3.4 20% to 50% of outstanding issuance

16.3.5 50%+ of outstanding issuance

16.4 Elements of Leverage - Cash and Borrowing Lines Available to Fund

Restricted cash consists of cash in trusts and in side-pockets. We ask for the amount of unrestricted cash in the Main share class ([IGP 2\(d\)](#)). Catastrophe bonds without losses whose exposure period has expired but which have not yet been redeemed are also considered a form of cash investment.

We also ask for the amount of committed and uncommitted recourse borrowing limits available to the fund, whether currently used or not. For committed lines, please report the weighted average maturity of drawn commitments in days. Please also report the number of independent providers of borrowing facilities.

16.4.1 Unrestricted cash balances in Main share class (USD)

16.4.2 Committed borrowing facilities (USD): These are “with recourse” borrowing facilities.

16.4.3 Weighted average maturity of outstandings (days)

16.4.4 Non-committed borrowing facilities (USD): These are also “with recourse”.

16.4.5 Number of independent providers of borrowing facilities (#)

There are several ways of measuring leverage. We ask for the following three ways:

16.4.6 Leverage 1: Current Limits without reinstatements plus Value of Cat Bonds at Fund Level % Current AUM

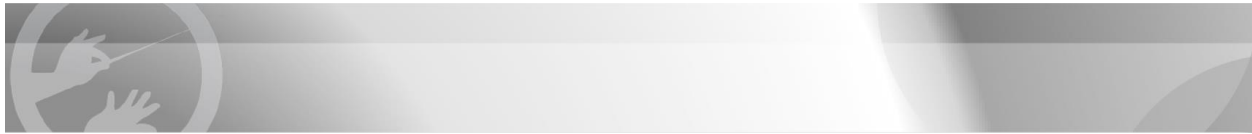
16.4.7 Leverage 2: Current Limits without reinstatements plus Value of Cat Bonds at Cedant Level % Current AUM

16.4.8 Leverage 3: Current Limits plus reinstatements plus Value of Cat Bonds at Cedant Level % Current AUM

16.5 Current Limits of On Risk Contracts by Initial Rate-on-Line

Rates-on-Line (ROL) reflect the degree of risk in a contract. Also, as premiums can be used as collateral, they provide a form of non-recourse leverage, and higher rates-on line provide higher amounts of this type of leverage. The calculation of Initial Rate-on-Line is set out in [IGP5\(f\)](#).

We ask for information on the distribution of the fund’s On Risk contracts including catastrophe bonds by annualized ROL ([IGP 5\(f\)](#)) at the date of inception for both Long and Short positions ([IGP 2\(a\)](#)) existing as of the Reporting Date. The total values are to be reported both on a Fund Level basis and a Cedant Level basis ([IGP 4\(b\)](#)).



The top end of each band is inclusive.

16.6 Current Limits (excluding reinstatements) of On Risk Contracts by Initial Expected Loss

Contract ROL and Expected Loss are related, but the comparison between ROL and Expected Loss provides an indication of pricing levels in the market. We ask for the values of contracts in various buckets of Expected Loss at the date of inception for both Long and Short positions ([IGP 2\(a\)](#)) existing as of the Reporting Date. The total Current Limits are to be reported both on a Fund Level basis and a Cedant Level basis ([IGP 4\(b\)](#)) and exclude reinstatements.

The top end of each band is inclusive.

16.7 Fronting

We wish to measure the extent to which the fund uses a Front ([IGP 5\(c\)](#)), and which of these arrangements include a stop-loss or Tail Hedge from the Front to provide another form of non-recourse leverage.

We ask for the total Long and Short values of cat bonds and Long and Short Current Limits of contracts (excluding reinstatements) in the underlying Fronted portfolios, the total value of collateral in trust supporting the Fronted portfolios, and the number of such Fronted portfolios. We also ask for the corresponding value of all collateral provided in trust to the Front's companies under the Fronting arrangements.

16.8 Ongoing and Contingent Liabilities

Contracts with less than full collateralization can represent a source of contingent liability to the fund. Also, in some cases, investors who have fully redeemed may have contingent liabilities to make further payments to the fund.

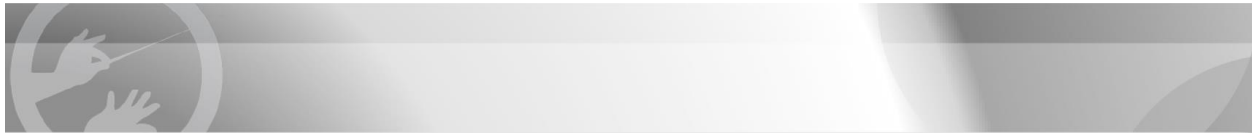
16.8.1 Total Current Limits excluding reinstatements of Long Off Risk but uncommuted contracts net of associated collateral: Please report the difference between the sum of Current Limits excluding reinstatements of uncommuted Long contracts and the total of associated collateral. We are assuming that the value if any of an uncommuted Off Risk contract will be its associated collateral, so this is equivalent to reporting the Current Limits of uncommuted Long Off Risk contracts that do not form part of the fund NAV.

16.8.2 Do redeemed investors have a contingent liability to the fund? (Y/N)

16.9 Currency Exposure

Insurance-linked funds have both actual and contingent currency exposures. The actual currency exposures are those of the assets and liabilities on the balance sheet, while the contingent exposures are those that may arise if an event occurs.

As an example, a fund with a base currency in US dollars writes a contract where the limit is in NZ dollars



and is required to post collateral for the limit in that currency. If the manager does not hedge this collateral and there is no loss, the fund will be exposed to changes in the value of the collateral. The manager may judge the probability of a loss to be low, and so hedge all or most of the collateral exposure back into USD, so in the event of no loss the fund is hedged against currency movements. If an event occurs, any gain or loss from currency in the loss amount – and possibly unwinding the hedge for the loss amount – would be recognized as an adjustment to the loss amount in USD.

We ask for information on net balance sheet currency exposures, taking into account currency hedges in place (other than those used to create share classes in currencies other than the base currency).

Using spot exchange rates and omitting any assets or liabilities arising from FX hedging related to non-USD share classes, we ask for the net exposures of the fund to various currencies.

16.10 On Risk Exposure by Market

We ask for information on the fund's level of activity in the various insurance and reinsurance markets. Different risk markets within Insurance have differing price dynamics as the suppliers of capital are not homogeneous across these markets. This information allows us to understand how the main markets in which the fund is active change over time.

We measure the activity in each market by the Long and Short values of Catastrophe Bonds and the Long and Short Current Limits (excluding reinstatements) of other types of Insurance contracts at the Cedant Level in each type of market. We ask for the total values or Current Limits of all On Risk contracts from different markets for both Long and Short positions on a Cedant Level basis ([IGP 4\(b\)](#)) in USD.

Quota share agreements that are either not fronted or part of a fronting arrangement are classified as either reinsurance or retrocession depending on whether the counterparty is an insurance or reinsurance company.

We also ask for the total value or Current Limits excluding reinstatements of contracts written with only an occurrence trigger.

The markets are as follows.

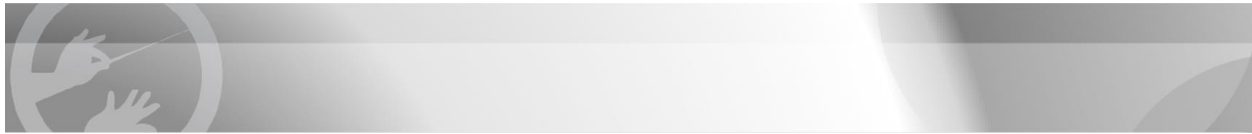
16.10.1 Primary Insurance: Business accessed directly, via an MGA or other delegated authority.

16.10.2 Reinsurance Excess of Loss: Long value includes Excess of Loss contracts that are written with insurers, while Short value includes contracts written by reinsurers.

16.10.3 Reinsurance Quota Share: Long value Includes quota shares of primary insurance books while Short value includes contracts written with reinsurers.

16.10.4 Retrocession Excess of Loss: Long value includes Excess of Loss contracts that are written with reinsurers while Short value includes contracts written with retrocessionaires.

16.10.5 Retrocession Quota Share or Sidecar: Long value includes quota shares or sidecars of reinsurers, while Short value includes contracts written by retrocessionaires.



16.10.6 Industry Loss Warranties

16.10.7 Rule 144A Catastrophe Bonds: Cat bonds that accord with Rule 144A and thus can have a secondary market.

16.10.8 Private Catastrophe Bonds: Cat bonds that do not accord with Rule 144A and do not have a secondary market.

16.10.9 Hybrid/Enterprise Covers: Long value includes contracts written by the fund that cover risks in more than one of the insurance, reinsurance, or retrocession markets.

16.10.10 Other

16.10.11 Memo: Contracts with only an occurrence trigger

16.11 Breakdown of On Risk Contracts by Type of Loss Trigger

We also wish to see the breakdown of On Risk ([IGP 5\(a\)](#)) contracts by trigger, irrespective of market.

We ask for the total value of all On Risk ([IGP 5\(a\)](#)) contracts with different types of triggers for both Long and Short ([IGP 2\(a\)](#)) positions on a Fund Level and on a Cedant Level basis ([IGP 4\(b\)](#)), in all cases in USD. For Catastrophe Bonds we ask for value while for collateralized contracts we ask for Current Limits without reinstatements.

16.11.1 Indemnity: Losses determined by cedant experience.

16.11.2 Parametric: Losses determined by reference to one or more measured parameters of an event.

16.11.3 Modeled: Losses determined by the output of a model.

16.11.4 Index: Losses determined by the value of an index.

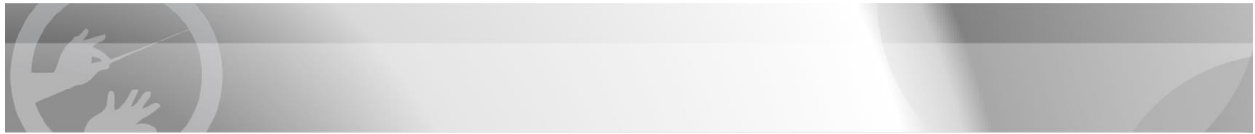
16.11.5 Multiple types of trigger: Uses more than one type of trigger in the contract.

16.12 Contributions to Annual Expected and Conditional Loss from On Risk Positions

We ask for contributions to Annual Expected Loss, CVaR 95 and CVaR 98 from combinations of peril/region at the Fund Level ([IGP 4\(b\)](#)). The CVaR measures are for the loss distribution of the Main fund that is used as an input to the calculation of its AEP curve in Tab 17. The purpose of collecting the CVaR information is to understand the type of peril/region events that make up the tail of the fund losses.

For the contribution to expected loss calculation, we ask for the percentage that each peril/region makes up of the total modelled losses of the portfolio on an aggregate basis.

For the contribution to CVAR calculations, we ask that the subset of events giving rise to losses greater than the



related VaR of the loss distribution is used as a basis for the CVaR breakdown. Each peril/region's contribution should be calculated as the probability-weighted sum of losses to that peril/region from these events.

Finally, the percentage that each peril/region total loss makes up of the fund total loss is reported in Table 16.12. Each set of contributions should add up to 100%.

16.13 Sourcing of Business Other Than Catastrophe Bonds

We ask for a measure of the concentration of the current business excluding cat bonds if it has been sourced through brokers. We ask for the aggregate Initial Limit (without reinstatements) of both Long and Short On Risk positions (added together rather than netted) sourced from a single broker, the value of contracts sourced from the 3 largest contributors, and the value of contracts sourced by the fund without a broker. Reporting should be done on a Cedant Level basis ([IGP 4\(b\)](#)).

16.13.1 Largest amount from a single broker

16.13.2 Total amount from top 3 brokers

16.13.3 Total amount written without broker

16.14 Breakdown of Current Limits and Values of On Risk Long Contracts at Cedant Level By Cedant Type

In this section we wish to understand how much business the fund writes for different types of cedant. We ask for the value for all Long On Risk cat bonds and Current Limits (excluding reinstatements) of all other Long contracts ([IGP 2\(a\)](#)) on a Cedant Level basis ([IGP 4\(b\)](#)) as of the Reporting Date.

We also ask for a best estimate of the percentage of total value of cat bonds and Current limits (excluding reinstatements) represented by exposure to residential property.

16.14.1 Corporate or individual policyholder

16.14.2 Government, NGO, IGO or other public entity

16.14.3 Regional insurer/reinsurer (including single state insurers/reinsurers)

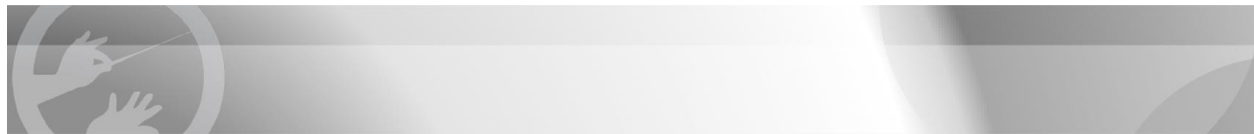
16.14.4 Nationwide insurer/reinsurer

16.14.5 Global insurer/reinsurer: Contracts written with an insurer with a global presence.

16.14.6 Lloyd's syndicate: Contracts written with syndicates at Lloyd's.

16.14.7 ILS Fund: Contracts written with an ILS fund.

16.14.8 Other insurer/reinsurer



16.14.9 Best estimate of the percentage of Total Value and Current Limits of On Risk Long Contracts covering Residential Exposures

16.15 Relationships with Cedants

We wish to understand the “stickiness” of the Long On Risk contracts in the fund at the Reporting Date ([IGP 1\(c\)](#)) on a Cedant Level basis.

16.15.1 Number of distinct/independent cedants with renewed contracts (Cedant Level basis): A renewed contract with a cedant is one where the fund had an underwriting relationship immediately prior to entering into that contract. Please provide the number of cedants with renewed contracts as of the Reporting Date.

16.15.2 Total number of distinct/independent cedants to the fund (Cedant Level basis): Two cedants are independent if the decision to enter into contracts are made by groups within each cedant that are independent from each other.

16.15.3 Renewed business (total Long Initial Limit excluding reinstatements): Please provide the total Initial Limit excluding reinstatements of Long contracts which were renewals as of the Reporting Date.

16.15.4 Percentage by Initial Limit excluding reinstatements of Long contracts that are syndicated transactions: The total amount of Long contracts that are part of syndicated transactions with concurrent terms as a percentage of the total Long On Risk portfolio at the Reporting Date on a Cedant Level basis.

16.15.5 Current Limit excluding reinstatements of Largest cedant as a percentage of AUM

16.15.6 Current limit excluding reinstatements of 3 largest cedants as a percentage of AUM

16.15.7 Current Limits excluding reinstatements of 5 largest cedants as a percentage of AUM

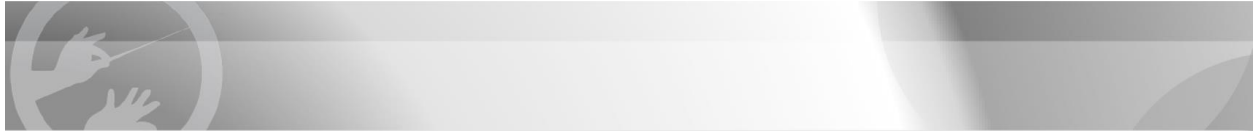
16.16 Breakdown of Fund AUM by Location of Beneficiary

We seek to obtain the breakdown of where investors in the fund are located to understand regional concentrations.

16.17 Breakdown of Loss Reserves by Event and related IBNR (Both Net and Gross of Loss Payments)

We are seeking a breakdown of current reserves by material events and/or aggregate contracts with reporting by material event or contract.

For reserves related to per-event covers, events are described by Date, Name (e.g., a named storm, if applicable) and Region/ Peril. The choice of Region/Peril is as set out in Table 16.12. For aggregate contracts, where it may be difficult to attribute reserves by event, we ask for reserves to be reported for each aggregate



cover, subject to the materiality conditions described further below.

We define a reserve as material if the outstanding fair value net reserve estimate for an event across all contracts or for an aggregate contract represents more than 2% of Fund AUM. Smaller levels of reserves are aggregated together and reported as one line in table 16.17 under “Remainder”. We ask for the amount of paid losses, case reserves, IBNR, and risk margin to form a complete view of the reserving levels.

16.18 Comment

Please provide any necessary comments with reference to the table or Manual number.



Tab 17. IOP – Share Class Data

In this sheet we ask for a breakdown of the returns for various share classes (the Main share class and the side-pockets as described in [IGP 2\(d\)](#)) during the Reporting Period ([IGP 1\(c\)](#)) which is over the last month up to the Reporting Date ([IGP 1\(c\)](#)). Expenses (including the cost of hedging) should be reported as negative numbers. All entries should be as percentages of the AUM at the start of the Reporting Period.

For the purposes of this sheet, only the breakdown of returns of USD share classes should be reported in Table 17.4. However, for the reconciliation of changes in AUM over a reporting period (Table 17.2), any impact associated with a Targeted Currency Hedging program ([IGP 5\(h\)](#)) to create non-USD share classes from the USD share class should also be included.

17.1 Information on Share Class Being Reported

Here we ask for the details of the share class being reported on. Each share class should be reported in its own IOP Template.

17.1.1 Share class name: This should be “Main” for the Main share class ([IGP 2\(d\)](#)) and the names given by the manager for each share class that is closed to new investment.

17.1.2 Open or closed to new investment?: The Main share class will be open and side-pockets and Slow Pay share classes will be closed to new investment. The data reported should be Open or Closed

17.2 AUM and Capital Flows during the Reporting Period for the Share Class

The flows here are to be reported in USD. We expect the Reporting Period for this information to be a calendar month but have worded the requirements to accommodate longer periods if necessary.

17.2.1 AUM at start of the Reporting Period: This amount is to include any inflows/subscriptions that occurred at the start of the Reporting Period.

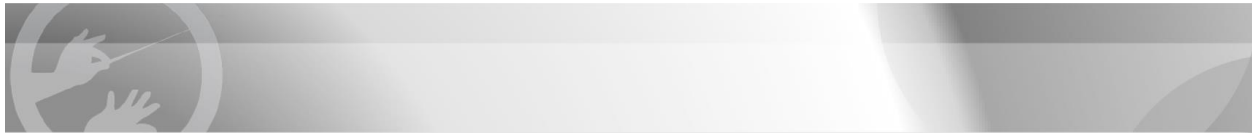
17.2.2 Net Earnings recognized during the Reporting Period in the share class: Net earnings does not include the impact of any Target Currency Hedging Program that may be used to create non- USD share classes.

17.2.3 Financial impact of Targeted Currency Hedging Program (for non-USD share classes): This is included as a separate item to enable reconciliation of AUM over the Reporting Period.

17.2.4 Amounts transferred to another share class during the Reporting Period: These are reported as negative amounts.

17.2.5 Amounts returned to investors during the Reporting Period: These are reported as negative amounts.

17.2.6 Amounts subscribed by investors during the Reporting Period: These are reported as positive



amounts. Amounts subscribed during the Reporting Period do not include amounts subscribed to the share class at the beginning of the Reporting Period, which are already included in the NAV at the start of the Reporting period. However, the amounts do include any subscriptions at the end of the Reporting Period or at the Reporting Date.

17.2.7 Current AUM at end of Reporting Period: This should be the same as the sum of the quantities in 17.2.1 to 17.2.6.

17.3 Trapped Collateral Associated with the Share Class at the Reporting Date

This reporting will tell us which side-pocket share classes have Trapped Collateral associated with them (see [IGP 5\(i\)](#)). All reporting should be in USD.

17.3.1 Trapped Collateral associated with share class at end of Reporting Period: The sum of all these quantities over all share classes should add up to the total Trapped Collateral of the fund.

17.4 Breakdown of Returns for the Share Class for the Reporting Period

Please report the contribution to the returns of the Share Class from each of the sources below during the Reporting Period. Note that expenses (including the cost of hedging) should be reported as negative numbers. All entries should be as percentages of AUM at the start of the Reporting Period.

Collateralized Contracts

17.4.1 Gross premiums recognized (Long positions): Premiums earned on Long, non-cat bond positions, per seasonal curve.

17.4.2 Premiums paid (Short positions): Premiums paid for risk hedging in non-cat bond structures.

17.4.3 Earnings on collateral and changes in the market value of collateral while in trust (at end- of-month spot rate if in currency other than USD): This does not include any amounts relating to posting of new collateral or release of collateral from trusts.

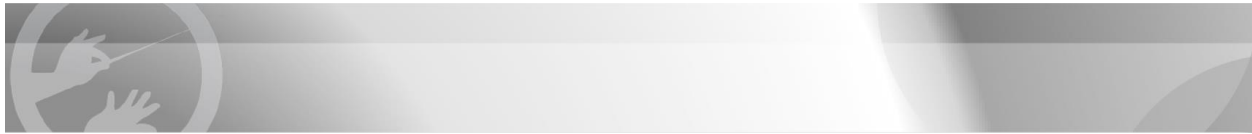
17.4.4 Increase (decrease) in valuation of contracts from changes in market rates or erosion of deductibles: This amount should be equal to the residual return after all other income and expense amounts during the Reporting Period as reported elsewhere in Section 17.4 have been taken into account.

Catastrophe Bonds

17.4.5 Coupons received (Long positions): Please report coupons received on Long cat bond positions.

17.4.6 Coupons paid (Short positions): Please report coupons paid on cat bonds that have been shorted or issued.

17.4.7 Realized trading income from catastrophe bonds (net): Please report all realized trading income



from catastrophe bond positions during the Reporting Period.

17.4.8 Valuation changes in catastrophe bond positions (net): Please report any unrealized valuation changes arising out of all holdings of catastrophe bonds, both Long and Short, in the portfolio during the Reporting Period.

Changes in Reserves

17.4.9 Impacts from decreases (increases) in total reserves relating to new events in the Reporting Period on Long positions

17.4.10 Impacts from increases (decreases) in total reserves relating to new events the Reporting Period on Short positions

17.4.11 Impacts from decreases (increases) in total reserves relating to losses occurring in prior Reporting Periods on Long positions

17.4.12 Impacts from increases (decreases) in total reserves relating to losses occurring in prior Reporting periods on Short positions

Other

17.4.13 Other earnings on assets including cash not held in trusts

17.4.14 Increase (decrease) in value of FX hedges of collateral or catastrophe bonds (other than Targeted Currency Hedging programs for non-USD share classes)

17.4.15 Increase (decrease) in value of any other assets/liabilities

17.4.16 Income/(expense) from operation of “swing pricing” adjustments for subscriptions and redemptions (if any such adjustments are made).

Operating Expenses

17.4.17 Direct borrowing costs: Interest on with-recourse loans outstanding during the Reporting Period.

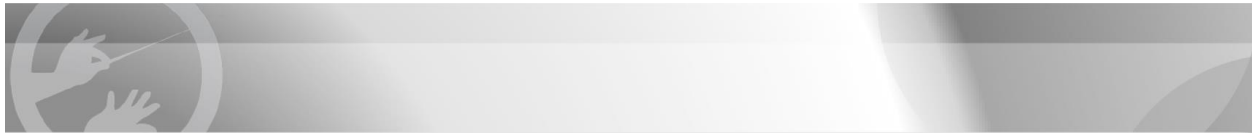
17.4.18 Brokerage costs recognized on Long contracts during the Reporting Period

17.4.19 Brokerage costs recognized on Short positions during the Reporting Period

17.4.20 Ceding commissions and profit commissions incurred on quota shares during the Reporting Period

17.4.21 Fronting fees and stop-loss/Tail Hedge expenses incurred during the Reporting Period

17.4.22 Transformer expenses incurred during the Reporting Period



17.4.23 Other transaction expenses incurred during the Reporting Period

17.4.24 Other operating expenses incurred during the Reporting Period

Gross Return

17.4.25 Gross Return: Net outcome of the above sources of income and expenditure **during the Reporting Period.**

Fees and Allocated Share Class Expenses

17.4.26 Total management fees accrued/charged by the manager in the Reporting Period: For the Main share class ([IGP 2\(d\)](#)), this is the AUM-weighted average management fee (for all open share classes making up the Main share class). For a closed share class, this is simply the management fee charged to the share class. In either case, this should be expressed as a percentage of the share class's AUM.

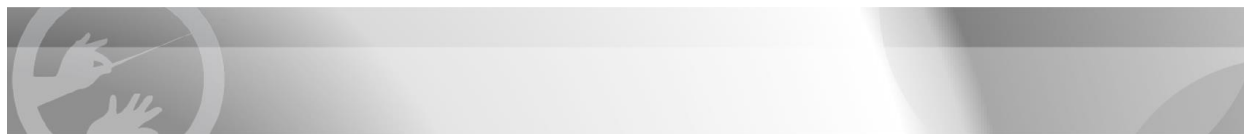
17.4.27 Total performance fees accrued/charged by the manager in the Reporting Period: For the Main share class ([IGP 2\(d\)](#)), this is the AUM-weighted average performance fee (for all open share classes making up the Main share class). For a closed share class, this is simply the performance fee charged to the share class. In either case, this should be expressed as a percentage of the share class's AUM.

17.4.28 Non-operating expenses allocated to the share class during the Reporting Period: For the Main share class ([IGP 2\(d\)](#)), the AUM-weighted average non-operating expenses, each expressed as a percentage of AUM, for all open share classes.

Memo: Is the share class the Main share class ([IGP 2\(d\)](#))

17.6 Comment

Please provide any necessary comments with reference to the table or Manual number.



Tab 18. AEP Curve

We ask for information on the Aggregate Exceedance Probability (“AEP”) curve of a fund twice a year – as of January 1st and again as of July 1st. In each case we ask for the calculation to include any new business and renewals written effective as of those dates.

An AEP curves shows the shape of the cumulative distribution of returns for a fund ([IGP 7](#)). The “aggregate” refers to the fact that the calculations of the curves take into account that there may be multiple events causing loss in the calculation period.

An AEP curve does not provide a third-party view of the fund’s loss or return distribution for the coming year because the models used by managers to produce them typically reflect each manager’s own “view- of-risk”, as well as assumptions about exposures and modeling that may vary. However, such curves are the best source of risk metrics for a fund, as they combine fund exposures with modelling of event impacts and assign probabilities to the outcomes. Detailed reporting of the curve by event may enable aggregation of outcomes across multiple funds to create an approximate view of portfolio risk. Although the modelling of each fund reflects each manager’s “view on risk”, we believe that aggregating into a portfolio view should alert the owner of the portfolio to aggregations of risk occurring because of multiple shareholdings. Below we set out assumptions to be used by a manager in calculating AEP curves to increase the degree of compatibility of reporting.

We note that the information requested in Sheets 19-26 will also provide other views on possible accumulations of exposures by event.

An investor that has an existing investment in the Main share class may also have shareholdings in related share classes formed as a result of large losses that have given rise to uncertainty of value (side-pockets). However, the risk associated with many side-pockets are for the most part different to the risk associated with the Main share class, as the event in question has occurred and so most of the side-pocket risks relate to the degree of loss and not its occurrence.

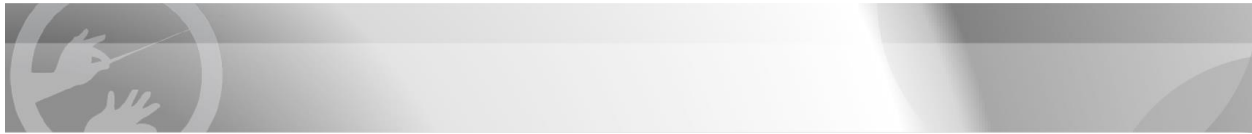
Some side-pockets may also have On Risk contracts in them depending on when they were formed. Different shareholders in the fund may own differing amounts of side-pocket shares, depending on when they invested and when side-pockets were formed. On balance, we have decided to ask for the risk profile of a new investor in the fund. This means we ask for the AEP curve of the Main USD fund only, as we do not wish to include any currency hedging activity related to creating non-USD share classes.

The AEP curve we ask for shows the distribution of net returns on AUM for the fund. Often AEP curves are provided for just losses associated with a fund, but we regard the level of premium income, other income, fund expenses and fees as important aspects of a fund’s overall risk profile.

18.1 AEP Curve Reporting

18.1.1 AEP Curve as at date: This should be either 1st January or 1st July of the current year.

Calculation Checklist (Desired Value is TRUE)



To maximize the comparability between AEP curves, we ask managers to use all the following assumptions in constructing the AEP curves and to let us know of any they do not make. The answer sought to all the following statements is TRUE.

The Following are the Assumptions we ask managers to make in the calculation of the AEP Curve:

18.1.2 Reported returns are returns on the Main fund USD AUM. This will include the USD-equivalent of any non-USD share classes, but as set out below, the returns should not include any contribution from currency hedging used to create these non-USD share classes.

18.1.3 Assumes a forward -looking 12-month view.

18.1.4 Contains all On Risk contracts and contracts that will become On Risk in the Main fund during this 12-month period.

18.1.5 Exposures/remaining limits are adjusted for any losses in previous periods.

18.1.6 The returns are calculated based on aggregate losses during the 12-month period.

18.1.7 Assumes each contract renews at same price/risk/terms at end of its risk-period, as opposed to "run-off" view.

18.1.8 If primary insurance attritional risks are taken, these risks are included in the modelling.

18.1.9 Includes a loss adjustment for unmodelled perils. An unmodelled peril is defined as not having a vendor/manager produced stochastic event-set based model, but such an exposure may still have a manager-produced loading for estimating the impacts of the peril.

18.1.10 Returns are net of fees.

18.1.11 Returns are net of fund level expenses.

18.1.12 Return includes interest income on unencumbered cash (i.e., not in trusts) and on non-Insurance investments.

18.1.13 Return includes interest on assets in trust in relation to collateralized contracts.

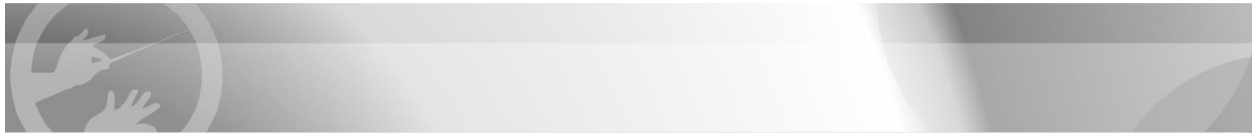
18.1.14 Return includes the floating rate portion of coupons on catastrophe bonds.

18.1.15 Fund is assumed to be above any high-water mark. To reflect a new investor's experience.

18.1.16 Returns exclude any FX hedging costs relating to creating non-USD share classes.

18.1.17 Please specify the underlying event-set source (AIR/RMS/Mixture/Other). This does not require a True/False answer, but the answer should be provided in the Comment cells.

18.1.18 Software Version. Again, please provide this in the Comment cell.



Data on Other Quantities (USDm)

18.1.19 AUM of Main fund being modeled (used as denominator of returns).

18.1.20 Value of Portfolio being modeled.

18.1.21 Total interest income included in projected returns. From unencumbered cash, non-Insurance investments, assets in trusts and floating rate portion of cat bond coupons.

18.1.22 Amount of unencumbered cash and non-Insurance investments in modeled fund.

18.1.23 Amount of assets held in trust for collateralized reinsurance contracts.

18.1.24 Total face value of cat bonds.

Percentages (Annualized %)

Please report interest rates that would be assumed even if interest income is not included in returns.

18.1.25 Interest rate assumed to be earned on cash and non-Insurance investments.

18.1.26 Interest rate assumed to be earned on assets in trust for collateralized contracts.

18.1.27 Interest rate assumed on floating rate portion of catastrophe bond coupons.

18.1.28 Level of management fee charged or applicable.

18.1.29 Level of performance fee assumed (without any high-water mark) or applicable.

18.1.30 Hurdle rate for performance fee (%) Other Costs (% of AUM)

18.1.31 Assumed fund expenses (i.e., other than underwriting, operating, and FX hedging expenses and not including expenses for the creation of non-USD share classes): Please refer to [IGP 2](#).

18.2AEP Curve Output for Fund (fund return % AUM)

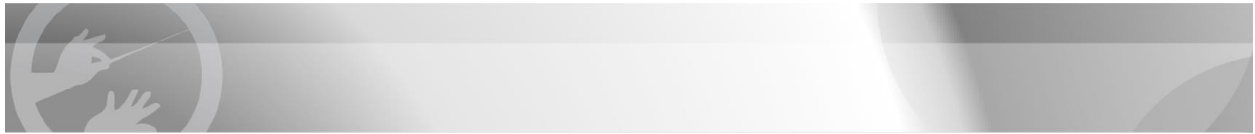
These are the modelled returns of the fund at various percentile levels.

Statistics of the Distribution of Returns on AUM

Some of these statistics can be approximately read off the AEP Curve, but others require calculation from the whole distribution.

Ratio

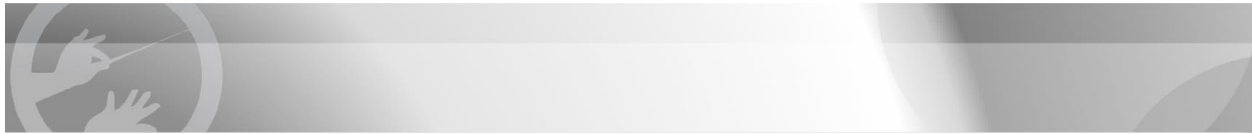
18.2.26 Omega ratio: A risk return performance measure that is defined as the ratio of the probability



weighted gains vs probability weighted losses in relation to a threshold return target. Use interest rate assumed in 18.1.26 as the threshold return target or, if interest income is not included in returns, use 0%.

18.3 Comment

Please provide any comments with reference to the table or Manual number.



Tab 19. Historic Stress Years

19.1 Modelled Fund Returns in Historic Stress Years

This tab collects information on how a portfolio performs in a year with multiple events, especially those with different types of events.

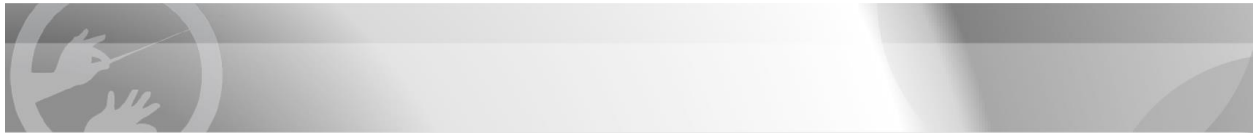
We ask for the loss and the net return to the current On Risk portfolio (including contracts with On Risk exposure in side-pockets) in selected years. The below table outlines which events should be included in each historic stress year to ensure consistency across reports. We have chosen to include only wind, earthquake, and wildfire events, as these are the most commonly modelled perils. The exception is 2021, where we have included Winter Storm Uri due to the interaction with Hurricane Ida. In the future, we intend to include severe convective storm and flood events.

We note that losses and returns are based on each manager's modeling and its selection of representative events for each year, but we nevertheless can use the losses and returns by such annual events across a portfolio of funds to get an impression of the likely behavior of the portfolio. All modelled losses should be presented in USD.

Please use the assumptions from Tab 18. IOP – AEP Curve.

Please provide any necessary comments in the "Comment" column.

Year	Events
2005	HU Katrina, Rita, Wilma
2011	Christchurch and Tohoku EQs HU Irene
2017	HU Harvey, Irma, Maria California wildfires (Tubbs)
2018	California wildfires (Camp and Woolsey) HU Michael and Florence Typhoon Jebi
2019	TY Hagibis and Faxai HU Dorian
2020	HU Laura, Isaias, Sally California wildfires (August Complex, CZU Lightning Complex, LNU Lightning Complex, North Complex, Glass)
2021	HU Ida Winter storm Uri
2022	HU Ian Fukushima earthquake



Tabs 20 through 25

We ask for the loss (but not the return) to the current On Risk portfolio, including contracts with On Risk exposure in side-pockets from each of the given large events were to occur on the reporting date. In this case, the outcome is for a single event. As before, these results can be used to give an impression of the likely behavior of the loss to a portfolio of funds. All modeled losses should be presented in USD.

Each tab includes a space for comments. Please provide any necessary comments with reference to the table or Manual number.