



# Everything You Need to Know about PCS

**A Full Guide to Catastrophe and Noncatastrophe Insurance Industry Loss Reporting**



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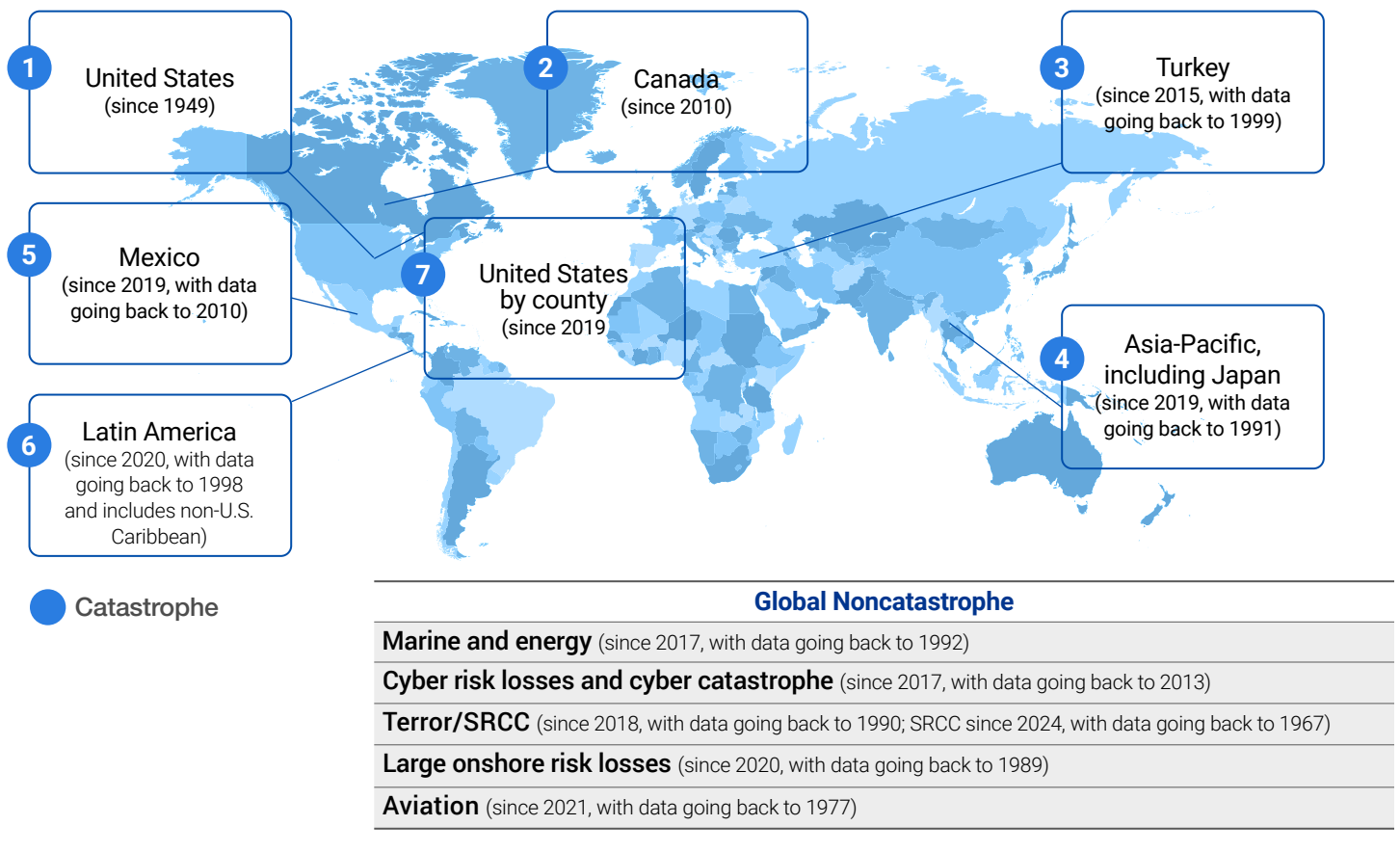
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## Introduction

Since 1949, the property/casualty insurance industry has relied on catastrophe loss estimates\* from Property Claim Services® (PCS®) and its predecessor organizations to set catastrophe reserves and optimize the deployment of adjusters. Today, the PCS team provides independent industry loss estimates for a wide range of catastrophe and noncatastrophe events. Our current reporting universe consists of:



\* PCS estimates for all products are not adjusted for inflation."

PCS continues to work on adding new regions and lines of business to our reporting universe for both catastrophe and non-catastrophe reporting platforms.

PCS is part of Verisk's claims organization, which houses the industry's all claims database and offers solutions across all areas of property/casualty claim management, including its leading suite of anti-fraud and estimating solutions. Verisk Analytics became the parent company of ISO and Xactware as part of the company's initial public offering in 2009. Throughout that transition, the PCS mission of identifying catastrophes and developing loss estimates remained unchanged. Our process has evolved over our nearly 70-year history thanks to industry and technology developments, but it remains essentially the same.

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# SECTION I:

## Catastrophe insured loss reporting

PCS® has a long and distinguished track record as the global insurance industry's leading source of independent catastrophe loss information. The service began as a reporting platform focused on insured losses from U.S. catastrophes, amassing a database of more than 2,000 catastrophe events covering all 50 states and U.S. territories of Puerto Rico and the U.S. Virgin Islands. Since 2016, PCS has grown aggressively, becoming the industry source of catastrophe information in Canada, Japan, Latin America, Mexico, Southeast Asia, and Turkey. Further expansion is in progress, with additional risk areas currently in development.



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# PCS in the United States, Canada, Mexico, and Turkey: The Full PCS Methodology

PCS provides industrywide insured loss estimates and estimated claim counts for the United States (including the U.S. Virgin Islands and Puerto Rico), Canada, Turkey, Japan, and Mexico. Reporting is based on information provided by the insurers affected by an event and other sources of both Verisk and external data used to inform our decision making and confirm the information provided by the market.

## PCS covers catastrophes resulting from a wide range of natural and man-made perils, including:

- hurricane
- freezing
- volcanic eruption
- tornado
- earthquake
- explosion
- winter storm
- hail
- civil disorder
- severe weather
- fire
- utility disruption

PCS includes flood losses in our catastrophe estimates when those losses fall under traditional insurance programs, such as auto comprehensive or commercial. However, we don't include flood losses in our core estimates that the National Flood Insurance Program (NFIP) covers or losses that fall under the NFIP's Write Your Own (WYO) Program. PCS maintains a separate database segmented from the core U.S. catastrophe loss data to report on incurred losses provided directly to us by FEMA.

The process by which PCS estimates catastrophe insured losses begins with the designation of a catastrophe event. When PCS believes that an event is likely to cause more than US\$25 million in damage in the United States and affect a significant number of policyholders and insurers, we assign a catastrophe number, and the event becomes a "PCS identified catastrophe." The threshold is C\$25 million in Canada, TRY30 million in Turkey, US\$2 billion in Japan, US \$2.5 billion for the remainder of the APAC region and MX\$300 million in Mexico.

PCS estimates include covered losses from personal property, vehicle, and commercial property policies. Those policies cover real property, contents, time-element losses (e.g., business interruption and additional living expenses), vehicles, boats, and property under certain inland marine and specialty policies. We also typically include losses insured by state wind pools, joint underwriting associations, and certain other residual market mechanisms.





## What happens when a catastrophe hits two adjacent countries?

This question often arises in discussions about risk transfer, including catastrophe bonds and industry loss warranties (ILWs). Take a hurricane that affects both the United States and Canada, such as Hurricane Dorian. The fact that it causes claims in both countries isn't enough. For it to be designated in both the United States and Canada, an event would have to meet the catastrophe reporting thresholds in both countries. Residual storm activity in Canada from a catastrophe in the United States that doesn't cause at least C\$25 million in insured losses would not result in a catastrophe designation in Canada.

When an event does meet the threshold on both sides of a border, PCS provides mutual referencing language in both catastrophe bulletins. There would be a note in the U.S. bulletin indicating that the event is also a catastrophe in Canada, and it would provide the PCS Canada catastrophe serial number. In the PCS Canada bulletin, the narrative would mention the U.S. event and provide the relevant catastrophe serial number.

Several events have occurred in both the United States and Canada, with Superstorm Sandy the most prominent example. Also, regarding U.S. and Mexico risk, we have Hurricane Delta from 2020 as the first PCS U.S. and PCS Mexico cross-border event. For historical events, PCS hasn't investigated mutual designation between the United States and Mexico. If we were to build our historical database further back—to include Hurricane Wilma, for example—we wouldn't disrupt closed events by adding mutual reference language.

For each catastrophe, PCS issues at least one catastrophe bulletin, which includes claim counts and catastrophe loss estimates for each category (i.e., personal property, vehicle, and commercial property) as well as total claim counts and insured loss estimates for the event. Additionally, the bulletins include an industrywide estimate for loss adjustment expenses\* (LAE), although we don't include that number in the loss estimates by line or overall. PCS calculates all loss estimates and LAE based on submissions from carriers affected by the catastrophe; those carriers report their actual losses and catastrophe reserves.

To arrive at the estimates, PCS receives insurers' data for coverage limits, coinsurance, deductible clauses, and other factors that could affect eligibility for insurance coverage. We don't include uninsured property damage of any kind (including publicly owned property and utilities), losses involving agriculture or aircraft, and certain specialty lines (such as ocean marine and offshore drilling/energy). As mentioned above, we count flood losses only in certain cases. Further, we don't include reinsurance, as it merely offsets covered cedent losses. That's also the case for collateralized reinsurance, industry loss warranties (ILWs), and catastrophe bonds.

\*Calculations for LAE are not included within PCS estimates.

## SECTION I: Catastrophe insured loss reporting

To gather the data necessary to determine a catastrophe loss estimate, PCS surveys primary insurers affected by the catastrophe. We contact carriers with business in affected states. We supplement that with information from other sources, including reinsurers, news reports, regulatory filings, brokers, agents, and other catastrophe insurance market stakeholders. We survey as many carriers as possible with U.S., Canadian, Mexican, Japanese, or Turkish exposure; that includes carriers outside North America. For each state, we talk to all Verisk companies — to gather insured loss data and claim counts for vehicle, personal property, and commercial property claims. This happens by province in Canada, state in Mexico, and CRESTA zone in Turkey. (PCS APAC losses follow a different methodology.)

**Based on the data we receive, we develop an industrywide estimate for each affected state. Factors that we consider include:**

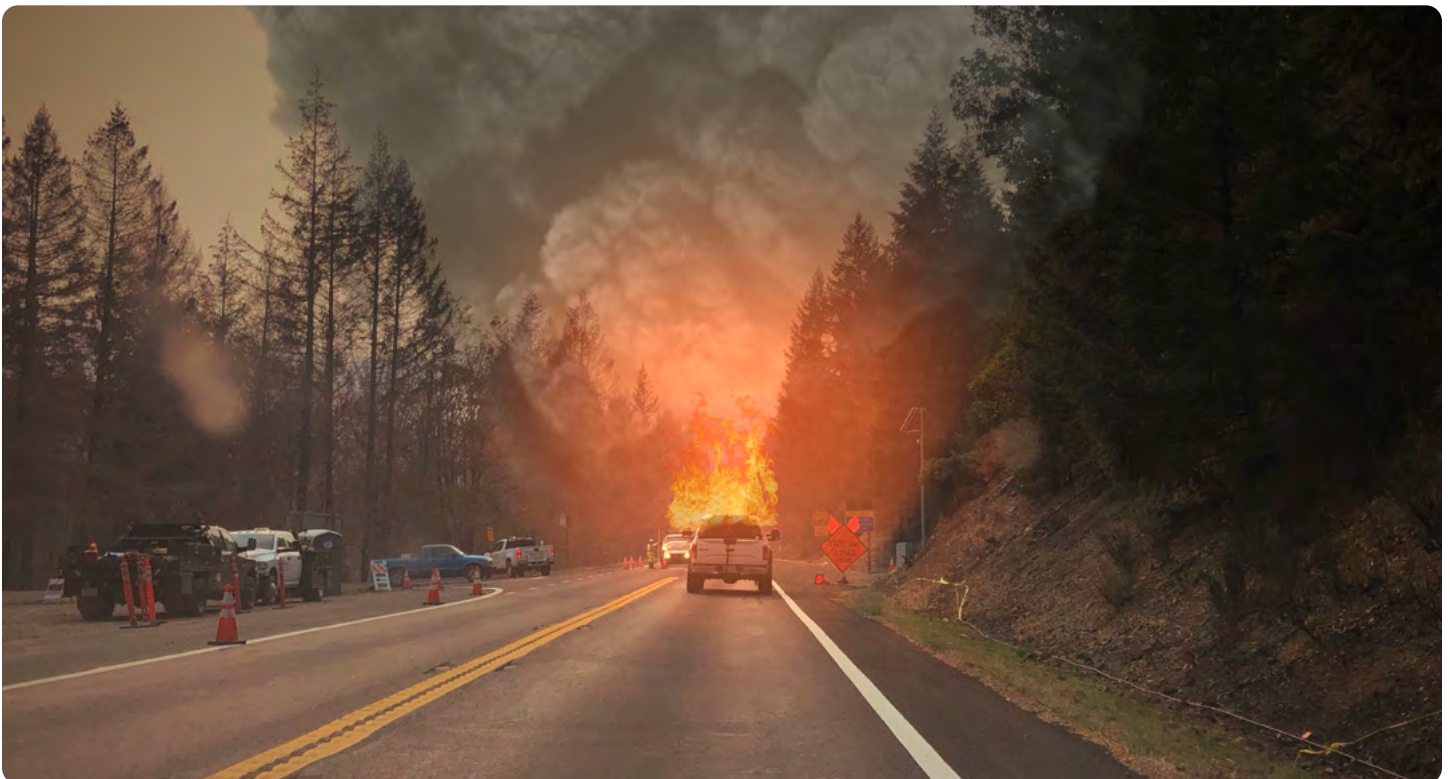
- actual losses that carriers report
- catastrophe reserves that carriers set
- carrier market share by state
- internal Verisk data sources
- information on insured losses from carrier announcements, news stories, regulatory filings, and conversations with industry stakeholders (e.g., brokers, agents, and reinsurers)

Our goal is to get data from at least 70 percent (by premium volume) of every state affected by a catastrophe event in calculating the loss for the entire market. Generally, PCS meets or exceeds that threshold. Further, PCS provides market share capture rates by class of business (auto, personal, and commercial) for U.S. catastrophe events of at least US\$1 billion. Market share capture rates are published in the PCS loss bulletins at the top of the page with the loss estimate data and are also available in the PCS FlatCat® files.

PCS County Level Estimates are available since 2019 as a separate product in addition to the underlying PCS US subscription for events great than US\$1 billion.

Using that information, along with the professional experience and judgment of the PCS team, we compile the results for personal property and vehicle lines and develop an estimate that reflects 100 percent of the market for each affected state (for both loss amount and claim count).

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## Hypothetical Industrywide Catastrophe Loss Estimates

Loss type	Reported losses (from various sources)	Number of claims reported	Market share reported to PCS	Estimate based on 100% of the industry
Personal property	\$1 billion	40,000	80%	\$1.25 billion
Vehicle	\$500 million	67,000	85%	\$588 million
Commercial property	\$1.3 billion	6,002	58%	\$1.6 billion
<b>Total industry</b>				<b>\$3.4 billion</b>

Based on the conclusions from the PCS team, we publish a preliminary estimate of the catastrophe through the subscription-based ISONet® platform. Although PCS estimates for the largest catastrophes do find their way into the public domain, it's important to remember that the estimates are the property of PCS and that PCS publishes them exclusively for the benefit of our customers, who invest their resources into the service to advance their own businesses. In general, we publish the preliminary estimate approximately 15 days after the event designation or after the last extension bulletin if the event is extended beyond the initial designation.. In some cases, however, the preliminary estimate may take longer, given carrier response to the catastrophe, the nature and complexity of the losses, and constraints on physical access to damaged property.

We publish a preliminary estimate for larger catastrophes to help carriers make any necessary changes to their catastrophe reserves and optimize the deployment of adjusters to serve their policyholders. For claims departments, catastrophe response represents an important opportunity to demonstrate a high level of service. And it can translate to future renewals and referrals, among other sales and marketing opportunities. As a result, PCS is committed to publishing a preliminary estimate for large events—even if it's still too early to ascertain the full effects of the catastrophe—to help the insurance industry respond to disasters in a way that supports long-term value creation as well as near-term customer service.



We recognize that larger events require more than one survey, particularly as affected carriers gain a clearer view of post-catastrophe claims activity. To address this, we have a resurvey process that helps the industry understand more fully, over time, the effects of large events, generally those with preliminary catastrophe loss estimates above US\$250 million in the United States, and MX\$950 in Mexico. We conduct resurveys every 60 days to refine the accuracy of our estimates. (In Canada and Turkey, PCS resurveys for all catastrophe events.)

The resurvey process gives insurers an opportunity to report additional findings as they spend more time in catastrophe-affected areas. Their ongoing evaluation of insured losses for catastrophe-reserving purposes can evolve as adjusters gain access to more property. As they refine their assumptions and estimates, PCS uses that information to revise estimates for the industry.

Additionally, the resurvey process captures more third-party information, which can provide further insight into large commercial losses. Since many of those losses require the involvement of accountants, attorneys, and other professional services providers to help understand the nature and scope of the loss, it takes more time to determine the effects. When that information becomes available, PCS adds it to the loss estimate.

## Why does adjuster access to a catastrophe site matter?

Access to damaged property can vary by catastrophe and affected region. During Superstorm Sandy, for example, claim adjusters were unable to reach heavily affected areas in New Jersey for several weeks following the storm. Local police departments prevented access, opening the areas as late as November 17, 2012 (three weeks after the storm) and only to residents. Adjusters had to wait another week (in some cases longer). We've seen similar situations with the Fort McMurray wildfire in Canada and the terror attacks on Sirnak and Nusaybin in Turkey.

In some parts of the United States, access tends to be easier. Following Hurricane Andrew, insurance adjusters were able to reach the worst-hit areas just a few days after the storm because law enforcement gave them access at the same time as residents.

But access is not always a function of law enforcement activity. In many cases, infrastructure may be damaged, preventing access to affected areas until sufficient repairs are complete, making access safe for adjusters and residents.



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Catastrophes vary in the amount of time they take to estimate, based on a variety of circumstances.

When two consecutive resurveys generate the same estimate for insured losses, PCS generally closes the estimate. In what becomes the final resurvey, we ask the carriers supplying data if they're receiving more claims or if they're comfortable with the numbers they've provided. When carriers indicate they're no longer receiving claims and their loss reports to PCS are effectively unchanged, it signals that all relevant available information has been absorbed into the process. Because of this approach, there's no set duration for the process. PCS continues to resurvey until we've received all available information.

Catastrophes vary in the amount of time they take to estimate, based on a variety of circumstances. Hurricane Irene, for example, was a significant hurricane causing more than US\$4 billion in insured losses. The size of the loss was due largely to the high insured values in the northeastern United States, where it caused the most damage. However, the extent of the damage, aside from the financial effects, didn't prevent adjusters from getting to damaged areas and evaluating losses. As a result, it took only four months to reach a final estimate. Hurricane Katrina, on the other hand, required approximately 24 months, because the damage was substantial and it took more time for adjusters to reach some damage sites. Further, we left the estimate open longer than usual to allow for the potential results of class action litigation pending at the time.

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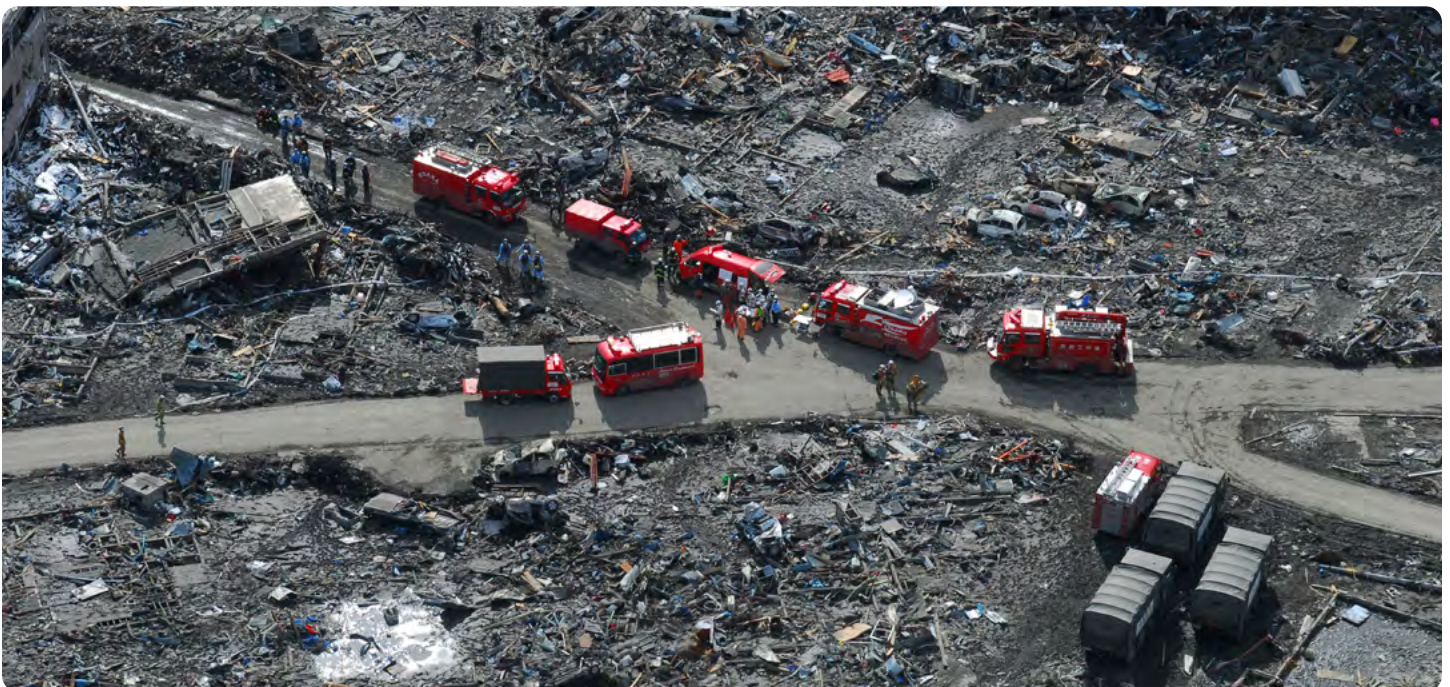


## New Catastrophe Markets: A Streamlined Approach

Shortly after Typhoon Jebi made landfall in Japan, PCS clients around the world came to us for a solution. Informal sources of industry loss estimates were insufficient for their needs, and the lack of a reliable, independent, and robust loss-reporting agency meant that reinsurers and insurance-linked securities (ILS) funds faced a wide range of problems, including trapped collateral, complications in reserving, and in some cases, dispute resolution. A similar situation occurred following the Chilean riots of 2019.

To meet the needs of our clients, PCS developed a streamlined approach to catastrophe loss reporting that would not require the significant time, effort, and commitment of the primary insurance market, while still delivering accurate and useful insured loss estimates in a timely manner. The approach used for Japan and the Asia-Pacific region, as well as Latin America, is based on what PCS implemented for PCS Global Terror, which is itself a catastrophe variant in the specialty lines space. The PCS Global Terror methodology is based on PCS Global Marine and Energy, which subsequently became the template for all PCS specialty lines loss-reporting solutions.

PCS maintains a streamlined catastrophe reporting approach for PCS APAC (for the Asia-Pacific region), PCS Global Terror, PCS LatAm, PCS Global Aviation, and cyber catastrophe events covered under PCS Global Cyber. There are slight differences in reporting based on the nature of the specific risks covered by each. However, PCS aims to provide an ultimate projected loss for each individual event reported.



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## PCS APAC

PCS APAC covers all natural and man-made catastrophe events in Japan (excluding marine) that are likely to cause industrywide insured losses of at least US\$2 billion. Outside Japan, losses occurring in Australia, New Zealand, Brunei, Burma, Myanmar, Cambodia, Timor-Leste, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam must reach a threshold of US\$2.5 billion. Common events include winter storm, flood, and typhoon. PCS APAC has industry loss estimates for more than 15 historical events going back to 1991. PCS plans to add more countries to the Asia-Pacific region in the near future and is currently exploring ways to lower the reporting threshold.

The PCS APAC loss estimate process begins with the designation of a catastrophe event. When PCS believes that an event is likely to cause at least US\$2 billion in industrywide insured losses in Japan (or US\$2.5 billion in the rest of the region) and affect a significant number of policyholders and insurers, we assign a catastrophe number, and the event becomes a “PCS identified catastrophe.”

PCS estimates include covered losses from personal property, vehicle, and commercial property policies. For each catastrophe covered by PCS APAC, we issue a preliminary bulletin that provides the dates and regions affected as well as a preliminary industry loss estimate. Unlike our other regional property-catastrophe solutions, PCS APAC is streamlined and offers no additional data. We aim to release our first estimate within 90 days of designation. Subsequent resurvey estimates are then published approximately on a quarterly basis until the PCS team believes the loss estimate is stable. At that point, PCS APAC publishes a final bulletin.

To arrive at the estimates, PCS polls a global panel of insurers, reinsurers, intermediaries, and ILS funds, asking each for (a) their view of the projected industry loss and (b) any underlying information or perspective that may be relevant in helping the PCS team arrive at a neutral and accurate industry loss estimate for the catastrophe. We then use an “expert judgment” process to identify the industry loss estimate to be published. This is a subjective process. PCS may also use additional information, including news reports and company financial statements.

We generally aim to have at least 15 to 20 companies report on each event for every survey in the process, and our historical events reflect our ability to reach this threshold. PCS invests continually in growing this panel and estimates that we’ve received tangible support from around 30 companies since inception.

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**Note:** It’s easy to look at past events and focus on them for the future. That said, it’s important to be aware of the risks that haven’t been relevant historically. We’ve seen in other markets that the next event might be new to the insurance industry in the affected region. Our first three events in Turkey were from terror and hail, while our historical loss events consisted only of earthquake and flood. As we plan further expansion, we’re keeping an eye on the riots in South Africa, which may be responsible for insured losses of more than US\$3 billion.



## PCS LatAm

PCS LatAm covers all natural and man-made catastrophe events in Latin America (excluding marine) that are likely to cause industrywide insured losses of at least US\$500 million. PCS LatAm has historical catastrophes in Argentina, Chile, Ecuador, Honduras, and Peru—with losses going back to 1998. Additionally, PCS LatAm includes non-U.S. Caribbean losses of at least US\$2 billion, with losses going back to 2017. The loss reporting solution covers all countries in the Americas south of Mexico. Common events include earthquake, flood, and strike, riot, and civil commotion (SRCC).

## PCS Global Terror/SRCC

The existing global terror/SRCC (Strike, Riot, Civil Commotion) (re) insurance market is small, but there's almost universal agreement that it will grow significantly over the next decade, particularly as we've seen insureds' exposures growing rapidly over the past couple of years. However, some structural changes are needed to facilitate the development of the global terror/SRCC market. One important development will be the further entry of capital market capacity to provide both reinsurance and retrocessional protection for companies assuming terror insurance risk.





## PCS Global Terror catastrophe event definition

**A terrorist attack is a premeditated violent act or series of related acts:**

- planned and executed in a clandestine or secretive manner;
- committed by an individual or group not acting in a capacity as state actor, whether acting alone or on behalf of or in connection with any organization(s),
- in pursuit of (an) ideological, religious and/or political objective(s);
- causing injury to, or seriously impairing the movement of, civilian or noncivilian personnel;
- and/or causing damage to property, physical or otherwise;
- with the aim of persuading an actor to carry out, alter, or withhold from performing an action, or actions, or pursuing a course of action



## PCS SRCC event definition

**Strikes, riots, and civil commotion is an impromptu politically motivated committed action by a group of people to disturb the public peace with the objective of advancing an agenda or affecting an outcome. Perils covered under the PCS SRCC index:**

- **Strike:** an organized body of individuals refusing to work as a form of protest, generally to gain concessions from their employer.
- **Riot:** disturbance of public peace by three or more civilians, as opposed to armed groups, or militias or state-sponsored actors, acting together in a disruptive manner in carrying out their private purposes against authority, property, or people. Riots typically involve the destruction of public or private property
- **Civil commotion:** a revolt or riot by a large number of people that occurs in a public space resulting in property damage and business interruption. Some participants seek to harm others or create other mayhem.



The methodology and time frames for PCS Global Terror/SRCC follow the framework detailed above. Some of the participating data providers are different, as one would expect. Additionally, PCS uses different thresholds for each particular index: US\$25 million for terror and US\$100 million for SRCC. We aim to designate within 30 days and release our first estimate in 90 days, as is the case with PCS APAC and all specialty lines.

Global terror events are infrequent, with PCS recording only 14 going back to 1992. Only three exceeded US\$1 billion. We evaluated two events since going live and did not designate them, because they didn't reach our reporting threshold. In January 2018, a pipeline in Turkey was attacked in a manner consistent with the PCS terror definition. However, the insured loss wasn't going to reach US\$25 million. We came to the same conclusion about the 2019 attacks in Sri Lanka.

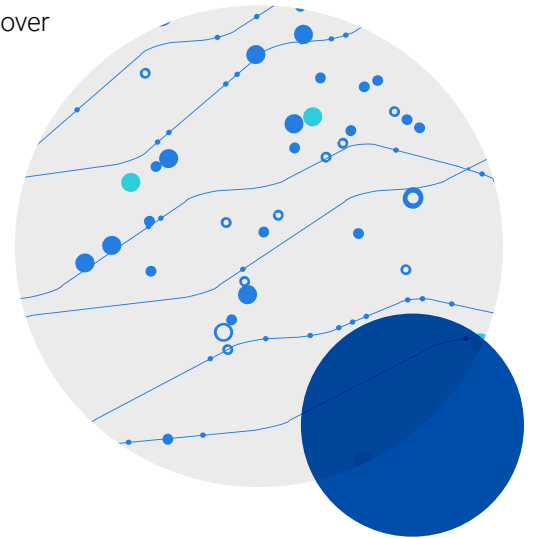
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## SECTION II: Global large insured loss reporting

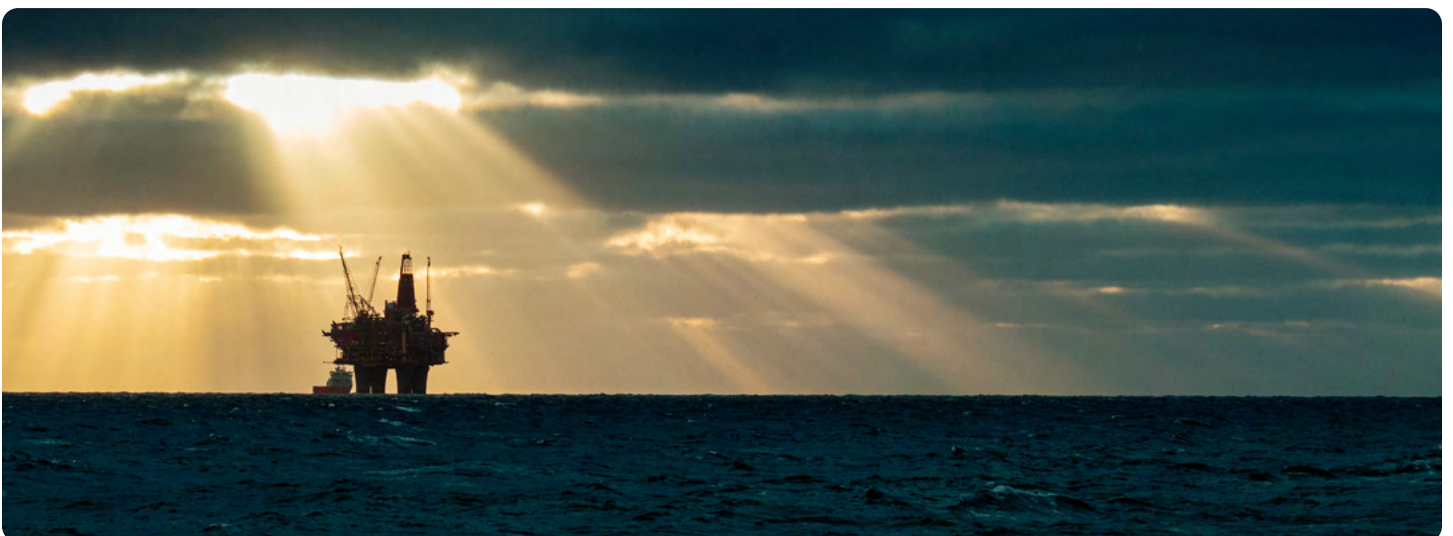
Within the work completed to deliver the SRCC enhancement, PCS has identified over \$10 billion in industry wide SRCC losses across 20 events dating back to 2010, compared to less than a billion on the terror side. The work done to complete the enhancement also revealed some older reference events prior to 2010, which PCS has included in the database. The SRCC enhancement captures physical damage and business interruption associated with designated events and also provides the victim count courtesy of Verisk Maplecroft.

The SRCC enhancement can help benefit insurers, reinsurers, and other stakeholders in gaining additional capacity from capital sources. By highlighting regions where the demand for their products is increasing, stakeholders can tailor offerings more effectively. Additionally, tracking changes in the index over time can enable various markets to identify trends in civil unrest events.



# SECTION II: Global large insured loss reporting

PCS began reporting industry losses for specialty lines classes of business in 2017, with the launch of both PCS Global Marine and Energy and PCS Global Cyber. Since then, PCS has added worldwide coverage for large onshore risk losses, beginning in 2020 and Global Aviation in November 2021. Through these platforms, PCS has accumulated insured loss data on over 450 events, including those above and below the threshold, on or near almost every continent.



## PCS Global Marine and Energy

In 2017, PCS added a loss aggregation service for global ocean marine and offshore energy loss events. PCS Global Marine and Energy marked our first foray outside property catastrophe events. The service provides industry loss estimates on large, nonelemental risk losses for use in a wide range of internal functions as well as reinsurance and alternative risk transfer, such as industry loss warranties (ILWs).



**PCS Global Marine and Energy provides industrywide insured loss estimates by line of business (physical damage, business interruption, liability, and cargo\*) for nonelemental ocean marine and offshore risk losses resulting from a wide range of causes, including:**

- PD
- LOPI
- P&I
- COW/OEE/ICOW
- SRCC/terror/war on land
- Other man-made events
- Collision (ATL/CTL)
- Hull & machinery (ATL/CTL)
- Cargo/containers
- Fire/explosion
- SRCC/terror/war on land
- Piracy/war
- Salvage
- Other man-made events

The PCS Global Marine and Energy loss estimate process begins with the designation of a marine and energy loss event. When PCS believes that an event is likely to cause more than US\$100 million in insured losses, we assign a four-digit serial number (with the first two digits being the year of the event), and the event becomes a “PCS identified Marine and Energy Event.”

For each loss event, we issue an event designation bulletin, indicating that we believe the loss is likely to exceed US\$100 million. The bulletin also includes information about the event, such as location, likely cause of loss, type of event, and other anecdotal information (as available). At the end of the second quarter following the loss event, we issue a bulletin with our preliminary loss estimate. (For example, the first estimate for a March 15 event would be released in July.) We then publish quarterly updates until we believe the loss estimate is stable, based on feedback from companies providing underlying loss data to PCS.

\*PCS began reporting line-of-business granularity for events after November 1, 2019, in addition to the following historical events: Jubilee, White Rose, and Lürssen. PCS may provide line-of-business granularity for other historical events based on the availability of relevant data and client demand.



To obtain the data necessary to determine a catastrophe loss estimate, PCS surveys reinsurers, ILS funds, and reinsurance intermediaries affected by the event. We supplement that with information from other sources, including news reports, regulatory filings, financial statements, and information from other market stakeholders. For each event, we talk to all affected Verisk companies.

**Based on the data we receive, we develop an industrywide estimate for each event. Factors that we consider include:**

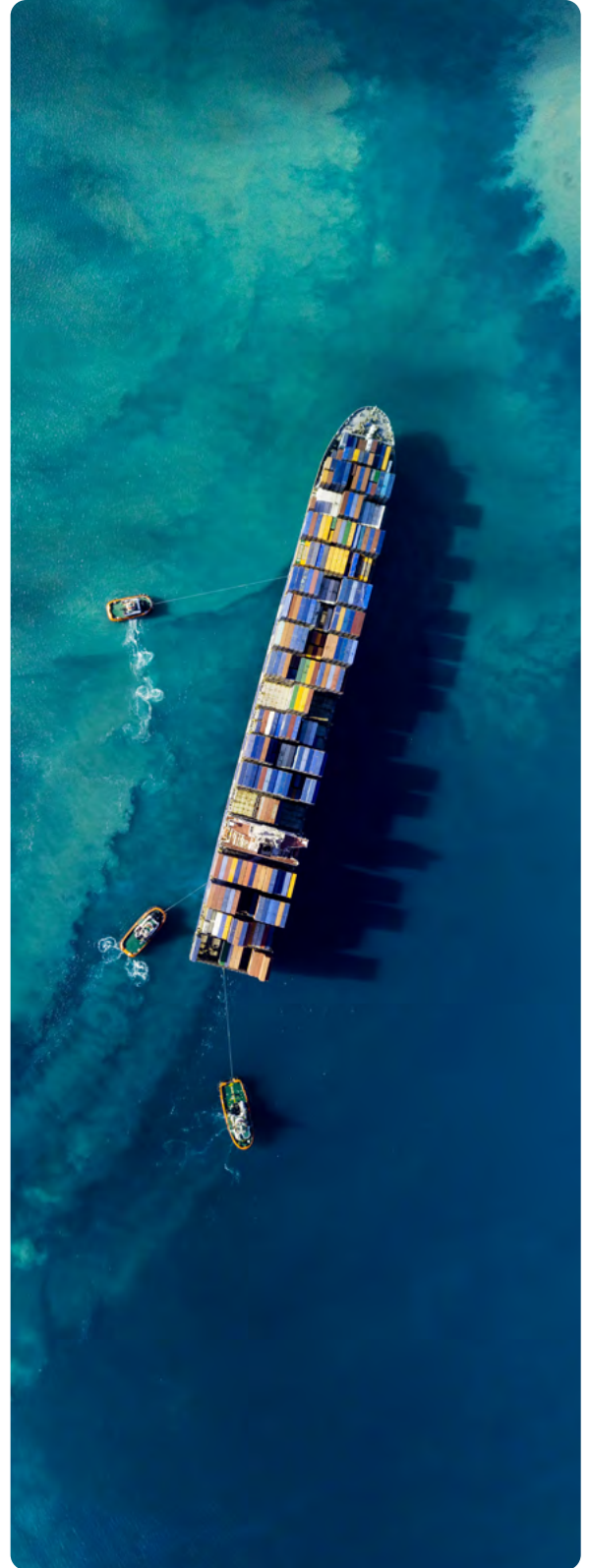
- actual losses reported
- reserves that are set
- information on insured losses from announcements, news stories, regulatory filings, and conversations with industry stakeholders

Using that information, along with the professional experience and judgment of the PCS team, we compile the results for personal property and vehicle lines and develop an estimate that reflects 100 percent of the market. Based on the conclusions from the PCS team, we publish a preliminary estimate consisting of physical damage, business interruption, liability, and cargo for the event through the subscription-based ISONet® platform.

All PCS Global Marine and Energy events are subject to a resurvey process. We conduct resurveys quarterly to arrive at the most accurate number possible. The resurvey process gives the industry an opportunity to report additional findings as it learns more about the event. As affected companies refine their assumptions and estimates, PCS uses that information to revise estimates for the industry.

Additionally, the resurvey process captures more third-party information, which can provide further insight. Since many of those losses require involvement of accountants, attorneys, and other professional services providers to help understand the nature and scope of the loss, it takes more time to determine the effects. When that information becomes available, PCS adds it to the loss estimate.

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## PCS Global Cyber

In 2017, PCS added a loss aggregation service for global affirmative cyber risk loss events. PCS Global Cyber extended our specialty lines market commitment and provides industry loss estimates for risk losses caused by cyber and covered affirmatively—either in a standalone cyber program or as part of a blended program that explicitly includes cyber. PCS Global Cyber industry loss estimates can be used in a wide range of internal functions as well as reinsurance and alternative risk transfer, such as industry loss warranties (ILWs).



The PCS Global Cyber loss estimate process begins with the designation of a cyber loss event. When PCS believes that an event is likely to cause more than US\$20 million in insured losses,<sup>1</sup> we assign a four-digit serial number (with the first two digits being the year of the event), and the event becomes a “PCS identified cyber event.”

For each loss event, we issue an event designation bulletin. The bulletin also includes information about the event, such as location, likely cause of loss, type of event, and other anecdotal information (as available). At the end of the second quarter following the loss event, we issue a bulletin with our preliminary loss estimate. (For example, the first estimate for a March 15 event would be released in July.)

We then publish quarterly updates until we believe the loss estimate is stable, based on feedback from companies providing underlying loss data to PCS.

To obtain the data necessary to determine a catastrophe loss estimate, PCS surveys reinsurers, ILS funds, and reinsurance intermediaries affected by the event. We supplement that with information from other sources, including news reports, regulatory filings, financial statements, and information from other market stakeholders. For each event, we talk to all affected Verisk companies.

**Based on the data we receive, we develop an industrywide estimate for each event. Factors that we consider include:**

- actual losses reported
- reserves that are set
- information on insured losses from announcements, news stories, regulatory filings, and conversations with industry stakeholders

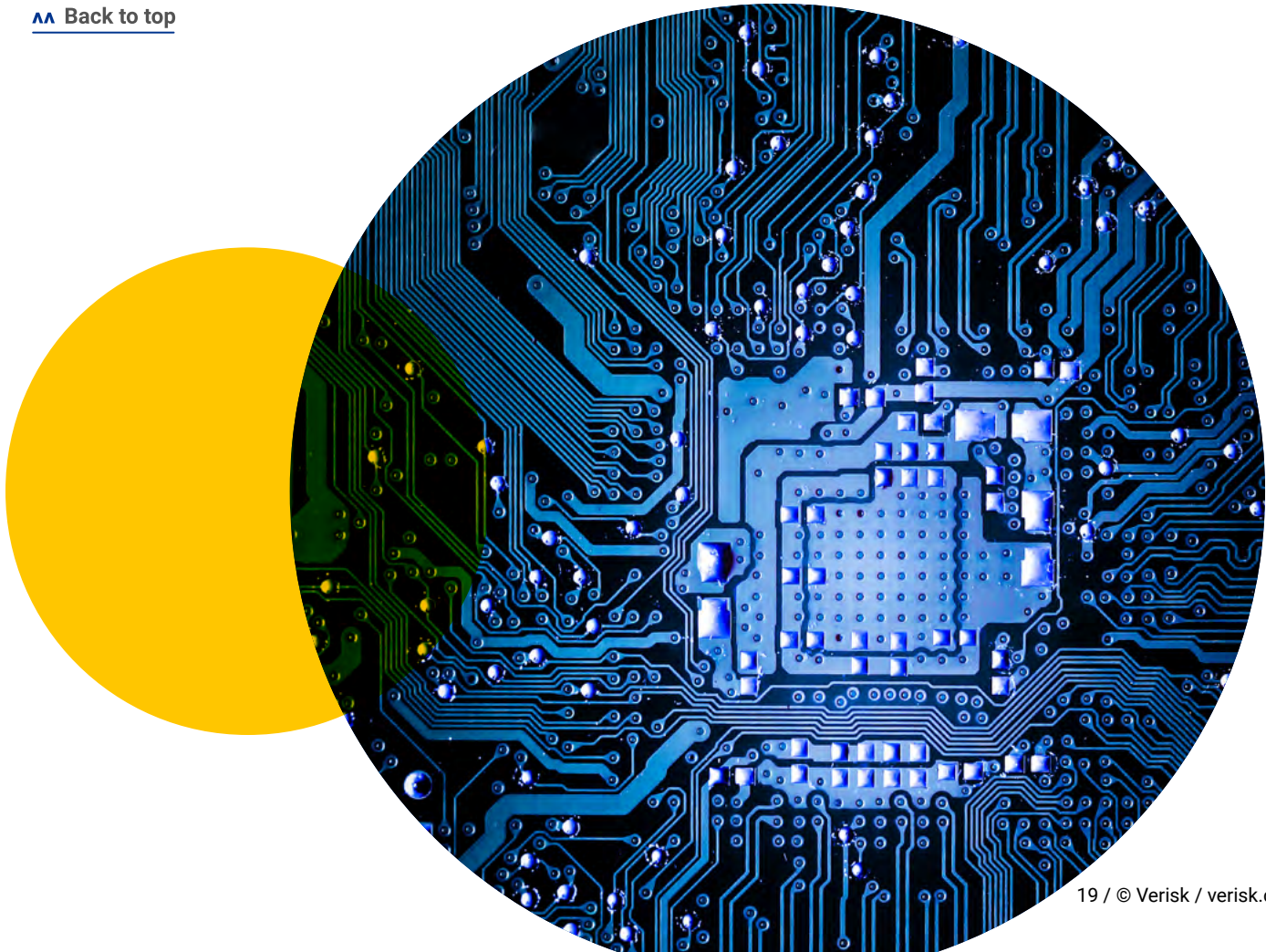
Using that information, along with the professional experience and judgment of the PCS team, we compile the results for personal property and vehicle lines and develop an estimate that reflects 100 percent of the market. Based on the conclusions from the PCS team, we publish a preliminary estimate consisting of physical damage, business interruption, liability, and cargo for the event through the subscription-based ISOnet platform.

All PCS Global Cyber events are subject to a resurvey process. We conduct resurveys quarterly to arrive at the most accurate number possible. The resurvey process gives the industry an opportunity to report additional findings as it learns more about the event. As affected companies refine their assumptions and estimates, PCS uses that information to revise estimates for the industry.

Additionally, the resurvey process captures more third-party information, which can provide further insight. Since many of those losses require involvement of accountants, attorneys, and other professional services providers to help understand the nature and scope of the loss, it takes more time to determine the effects. When that information becomes available, PCS adds it to the loss estimate.

**FEATURE:** Beginning the first quarter of 2020, PCS Global Cyber estimates include the limits at risk for each loss listed to include most historical events going back to 2013. Where such information is not available, PCS will indicate the absence of exposure information.

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## PCS Global Cyber

PCS Global Cyber covers both risk losses and catastrophe losses. For cyber catastrophes, the PCS Global Cyber methodology resembles how we approach PCS APAC and PCS Global Terror. When PCS believes an individual loss has occurred that will cause an insurance industry loss of at least US\$250 million, PCS will designate it a “PCS Cyber Catastrophe Loss Event” and initiate loss aggregation and estimation procedures.

### **PCS Global Cyber catastrophe loss estimates consist of both affirmative and nonaffirmative cyber categories.**

**Affirmative cyber:** To develop an industrywide affirmative cyber loss estimate, PCS develops insured loss estimates for large cyber risk losses of at least US\$20 million (more on this process below). In addition to those losses, PCS polls affected risk bearers to ascertain the industry loss estimate for smaller insureds. The total of all those losses is the affirmative cyber loss estimate portion of the catastrophe.

**Nonaffirmative cyber:** PCS goes through a similar process for nonaffirmative cyber losses from a catastrophe event (such as property or D&O). We identify the large risks associated with a cyber catastrophe and use our specialty lines methodology to develop industry loss estimates for each. Additionally, we work with affected risk bearers to ascertain the industry loss estimate for smaller insureds. The total of all those losses is the nonaffirmative cyber loss estimate portion of the catastrophe.

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### **PCS Global Cyber catastrophe event definition**

PCS designates a global cyber catastrophe event when it expects an industrywide, estimated insured loss of at least US\$250 million from an unauthorized or malicious act or a series of related unauthorized or malicious acts or other accidental or unintended consequences involving a computer system that is covered by insurance and results in insured loss based on the sole judgment of PCS. Such event would be regardless of time and place, or the threat or hoax thereof and would have a direct affect prompted from access, processing, use or operation of any computer system or any data by any person or group(s) of persons. Any such act/acts must be connected by a common source, cause, scenario, or mechanism—and must affect more than one insurer and more than one insured.

**Note:** To arrive at a PCS Global Cyber catastrophe loss estimate, PCS generally sums up individual risk losses based on data sources and then uses the streamlined catastrophe methodology (PCS APAC, PCS Global Terror) to account for any remaining insured loss.





## PCS Global Large Loss

PCS added a loss aggregation service for global large onshore risk loss events in 2020. PCS Global Large Loss further extends our specialty lines market commitment and provides industry loss estimates for large onshore risk losses that arise from property events but may include business interruption and other time-element losses as well as any attendant liability. PCS Global Large Loss insured loss estimates can be used in a wide range of internal functions as well as reinsurance and alternative risk transfer, such as industry loss warranties (ILWs).

The PCS Global Large Loss estimate process begins with the designation of a large onshore risk loss event. When PCS believes that an event is likely to cause more than US\$250 million in insured losses, we assign a four-digit serial number (with the first two digits being the year of the event), and the event becomes a “PCS identified Large Loss Event.”

For each loss event, we issue an event designation bulletin, indicating that we believe the loss is likely to exceed US\$250 million. The bulletin also includes information about the event, such as location, likely cause of loss, type of event, and other anecdotal information (as available). At the end of the second quarter following the loss event, we issue a bulletin with our preliminary loss estimate. (For example, the first estimate for a March 15 event would be released in July.) We then publish quarterly updates until we believe the loss estimate is stable, based on feedback from companies providing underlying loss data to PCS.

To obtain the data necessary to determine a catastrophe loss estimate, PCS surveys reinsurers, ILS funds, and reinsurance intermediaries affected by the event. We supplement that with information from other sources, including news reports, regulatory filings, financial statements, and information from other market stakeholders. For each event, we talk to all affected Verisk companies.

**Based on the data we receive, we develop an industrywide estimate for each event. Factors that we consider include:**

- actual losses reported
- reserves that are set
- information on insured losses from announcements, news stories, regulatory filings, and conversations with industry stakeholders

Using that information, along with the professional experience and judgment of the PCS team, we compile the results for personal property and vehicle lines and develop an estimate that reflects 100 percent of the market. Based on the conclusions from the PCS team, we publish a preliminary estimate consisting of physical damage, business interruption, liability, and cargo for the event through the subscription-based ISONet platform.

All PCS Global Large Loss events are subject to a resurvey process. We conduct resurveys quarterly to arrive at the most accurate number possible. The resurvey process gives the industry an opportunity to report additional findings as it learns more about the event. As affected companies refine their assumptions and estimates, PCS uses that information to revise estimates for the industry.

Additionally, the resurvey process captures more third-party information, which can provide further insight. Since many of those losses require involvement of accountants, attorneys, and other professional services providers to help understand the nature and scope of the loss, it takes more time to determine the effects. When that information becomes available, PCS adds it to the loss estimate.

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**FEATURE:**

*Beginning the second quarter of 2020, PCS Global Large Loss estimates may include the limits at risk for each loss listed to include some historical events, particularly those still open for resurvey. Where such information is not available, PCS will indicate the absence of exposure information.*

## PCS Global Aviation

PCS further expanded worldwide specialty lines coverage in 2021 with the launch of PCS Global Aviation. The new service, which focuses on large single-risk losses for aviation events, follows PCS's solutions for other specialty lines risk losses. With PCS Global Aviation, the re/insurance industry gains access to large aviation risk loss estimates for use in a wide range of internal functions as well as reinsurance and alternative risk transfer, such as industry loss warranties (ILWs).

PCS Global Aviation provides industrywide insured loss estimates by line of business: hull and liability, with additional breakdowns within liability where available from market sources. PCS Global Aviation focuses on airline events, but we do capture losses to airports, manufacturers, and other general aviation events where possible.

The PCS Global Aviation estimate process begins with the designation of a loss event. When PCS believes that an event is likely to cause more than US\$50 million in insured losses on an industrywide basis, we assign a four-digit serial number with the first two digits being the year of the event, and the event becomes a "PCS identified Global Aviation Event."

For each loss event, PCS issues an event designation bulletin that includes information about the event, such as location, date of event, type of event, and other anecdotal information (as available). At the end of the second quarter following the loss event, we issue a bulletin with our preliminary loss estimate (for example, the first estimate for a March 15 event would be released in July). We then publish quarterly updates until we believe the loss estimate is stable, based on feedback from companies providing underlying loss data to PCS.

To obtain the data necessary to determine a catastrophe loss estimate, PCS surveys reinsurers, ILS funds, and reinsurance intermediaries affected by the event.

We supplement that with information from other sources, including news reports, regulatory filings, financial statements, and information from other market stakeholders. For each event, we talk to all affected Verisk companies.

### **Based on the data we receive, we develop an industrywide estimate for each event. Factors that we consider include:**

- actual losses reported
- reserves that are set
- information on insured losses from announcements, news stories, regulatory filings, and conversations with industry stakeholders

Using that information, along with the professional experience and judgment of the PCS team, we develop an estimate that reflects 100 percent of the market. Based on the conclusions from the PCS team, we publish a preliminary estimate consisting of hull and liability and additional breakdown of lines of business where available for the event through the subscription-based ISONet® platform. Although PCS estimates for the largest events may find their way into the public domain, it's important to remember that they're the property of PCS and that PCS publishes estimates exclusively for the benefit of our customers, who invest their resources into the service to advance their own businesses.

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## Get started with PCS


To learn more about PCS catastrophe loss estimates and activate your subscription, contact:

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