

# Update

December 2002

**O**n November 26, the President signed into law the Terrorism Risk Insurance Act (TRIA) of 2002. Effective immediately, TRIA created a federal reinsurance program for property and casualty losses arising from certified terrorist acts through the end of 2005. It is expected to provide temporary relief to the insurance industry in order to promote development of a robust private market during that time.

However, TRIA also creates several issues around pricing and managing terrorism risk that insurers must address quickly, in some cases within 90 days. This *Update* summarizes the major provisions of TRIA, its expected financial impact on the insurance industry and the issues it raises for individual insurers.

By passing TRIA, Congress hopes to provide a transition period for the development of a stable market for commercial terrorism insurance. Since the events of 9/11/01, the market for terrorism coverage has dried up because, where allowed by state law, most insurers began to exclude terrorism coverage in their property and casualty lines. Congress recognized that insurers have been in

uncharted waters and have therefore been unable to reliably price and manage terrorism risk. However, it also recognized that a robust private market for property and casualty insurance is critical to economic growth and stability. By requiring insurers to provide terrorism coverage for certified losses and also providing them relief through federal reinsurance, Congress expects to remedy the crisis and allow the insurance industry to build capacity and develop a stable market for terrorism insurance over the next three years.

***THIS ISSUE EXAMINES THE TERRORISM RISK  
INSURANCE ACT OF 2002***

***Focus on the Terrorism Act***

## MAJOR PROVISIONS OF TRIA

The reinsurance program created by TRIA is restricted as to:

- i. Types of terrorist acts covered
- ii. The lines of coverage included
- iii. The insurance companies that must participate.

### **Which Terrorist Acts Are Covered?**

Only terrorist acts certified by the Secretary of the Treasury, in concurrence with the Secretary of State and the Attorney General of the United States, are covered by the program. These “certified acts” are defined as:

- Violent endangerment of people, property and infrastructure
- Damage within U.S. and its territories or to U.S. air carriers and vessels or U.S. missions
- Perpetrated on behalf of foreign interests or foreign persons to influence U.S. policy
- Not part of a declared war, except for workers’ compensation
- Involving insured property and casualty losses over \$5 million.

Since TRIA only covers attacks by foreign interests, the Oklahoma City bombing, for example, would not have been covered. It also

**TRIA only covers attacks by foreign interests.**

will not cover the increasingly violent acts being perpetrated by some U.S. environmentalists and animal rights activists.

### **Which Lines of Insurance Are Covered?**

Generally, all commercial property and casualty lines are included. Note that workers’ compensation insurance is already mandated by state law. Interim guidance issued by the Department of the Treasury clarifies that the commercial premiums included in the following lines from the NAIC Exhibit of Premiums and Losses (Statutory page 14) are included in the program (for both determination of the deductible and coverage of losses):

<b>Line 1</b>	Fire
<b>Line 2.1</b>	Allied Lines
<b>Line 3</b>	Farmowners Multiple Peril
<b>Lines 5.1, 5.2</b>	Commercial Multiple Peril
<b>Line 8</b>	Ocean Marine
<b>Line 9</b>	Inland Marine
<b>Line 16</b>	Workers’ Compensation
<b>Line 17</b>	Other Liability
<b>Line 18</b>	Products Liability
<b>Line 19.3</b>	Commercial Auto No-Fault (personal injury protection)
<b>Line 19.4</b>	Other Commercial Auto Liability
<b>Line 21.2</b>	Commercial Auto Physical Damage
<b>Line 22</b>	Aircraft (all perils)
<b>Line 24</b>	Surety
<b>Line 26</b>	Burglary and Theft
<b>Line 27</b>	Boiler and Machinery

It explicitly excludes:

- Federal crop and flood insurance
- Private mortgage or title insurance
- Mono-line financial guaranty insurance
- Medical malpractice
- Health or life insurance, including group life.

The Secretary of the Treasury is required to study and determine, on an expedited basis, whether group life insurance should be covered under TRIA. The Department of the Treasury, which will administer the program, is gathering industry input to assess whether there is adequate and affordable reinsurance for terrorist acts available to group life insurers. Also, within nine months, the Secretary must report to Congress on the results of a study on the availability of life insurance and other lines of coverage, including personal lines.

### **Which Insurers Must Participate?**

The following insurers are required to participate in the federal reinsurance program:

- Insurers licensed or admitted to engage in primary or excess insurance in the U.S. or its territories
- Surplus lines insurers on the NAIC Alien Insurers Listing

- Insurers approved by a federal agency in connection with maritime, energy or aviation
- State residual market entities (not pools) and workers' compensation funds.

The Secretary of the Treasury can extend the terms of TRIA, in this case with regard to inclusion of captives, municipal self-insurance programs and other self-insured entities. It isn't clear whether captives and other self-insurers will lobby to participate in the program.

### **How Does the Reinsurance Coverage Work?**

The federal government will reimburse each insurer for 90% of its annual aggregate loss from "certified acts" once the insurer has met the annual aggregate deductible. However, there is an annual limit of covered losses of \$100 billion, at which point TRIA directs Congress to determine how to pay for losses in excess of that amount.

The annual deductible for each insurer is expressed as a percentage of its commercial lines direct earned premium (net premium for residual market pools) for the prior year.

<b>Year</b>	<b>% of Prior Year Earned Premium</b>
Balance of 2002	1%
2003	7%
2004	10%
2005	15%

**The Secretary of the Treasury is required to determine whether group life insurance should be covered.**

**Figure 1 PROJECTED TERRORISM DEDUCTIBLE FOR INSURERS OF VARIOUS SIZE**

In \$ millions

Commercial Market Share Rank	Company	Estimated 2002 Commercial Lines Premium	Estimated Terrorism Deductible		
			2003	2004	2005
1	AIG	12,751	893	1,403	2,209
3	Travelers	7,965	558	876	1,380
5	Liberty Mutual	5,948	416	654	1,030
7	Hartford Financial	4,936	345	543	855
12	California State WC Fund	4,071	285	448	705
21	Cincinnati Insurance	2,148	150	236	372
33	Allstate	1,018	71	112	176
50	Utica National	642	45	71	111

Note: Earned Premiums are assumed to grow by 10% in 2003 and 5% in 2004

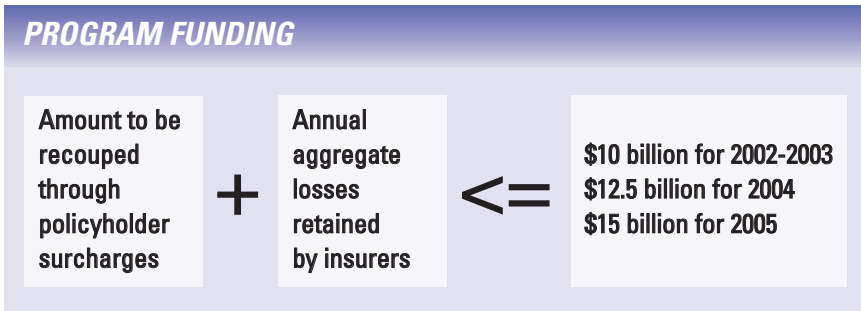
We looked at how this provision would impact insurers of various sizes (see *Figure 1*). We selected several insurers of varying size, and for each, we estimated the deductible during each year of the program by projecting its actual direct earned premium for 2001. We first estimated the commercial-personal split for lines that are a mixture (e.g., inland and ocean marine) and assumed an annual premium growth rate. It's apparent from this exercise that the larger commercial insurers will have substantial deductibles under the

program, leaving plenty of room for a private reinsurance market.

Federal reimbursement for losses is on a direct basis. However, for insurers participating in a residual market pool that shares its profits and losses, direct earned premium and insured losses include the quota share allocation.

**How Will the Federal Program Be Funded?**

There will be no pre-funding of liabilities under the program. Payments will come from general tax revenues. However, partial recovery is allowed via policyholder surcharge. The program must recoup federal payments made for a given year as long as the amount of the mandatory recovery plus total losses retained by insurers for the same year are limited (see exhibit, left).



The deductible and recovery provisions are meant to ensure that federal funding is used only for large losses (i.e., those exceeding the amounts in the exhibit above). Otherwise, the marketplace (insurers and policyholders) is expected to retain the bulk of the losses. In fact, the Secretary has the right to recoup even greater amounts than the mandatory levels specified above by assessing whether the market can sustain a higher retention level.

The surcharges operate like a temporary federal premium tax, lasting as long as is necessary to recoup the specified amounts. The Secretary has the discretion to vary the surcharge across product lines, geography and so forth to reflect differences in risk and economic circumstances. However, the annual policyholder surcharge is capped at 3% of the premium for the policy (not the premium for terrorism coverage).

Insurers are required to collect the surcharges and remit them to the Treasury. However, insurers are not at risk, as they would have been if the program had levied assessments against them directly and they had been expected to pass assessment costs to policyholders via higher premiums.

### ***What Is the Quid Pro Quo of Free Federal Reinsurance?***

In return for receiving federal reinsurance, all insurers providing commercial property and casualty lines, as described above, must make coverage for certified terrorist acts available in these lines as of November 26, 2002. TRIA voided any exclusions for terrorism coverage that is reinsured by the federal

program. Furthermore, the terrorism coverage must not be materially different in terms, amounts and other limitations as for other perils in the policy.

Interim guidance issued by the Treasury explains that “the ‘make available’ requirement does not mean must make available coverage for all types of risk. For example, if an insurer does not cover all types of risks, either because the insurer is outside of direct State regulatory oversight or a State permits exclusions for certain types of losses (e.g., nuclear, biological or chemical events) an insurer would not be required to make such coverage available.”

It goes on to say that Congress’s intent was “to ensure widespread availability of terrorism risk insurance coverage while preserving state insurance regulations.” So the terms, amounts and limits can vary if permitted by state insurance regulation.

Insurers must charge separately for terrorism coverage. For all inforce policies, insurers must notify policyholders of the premium for terrorism coverage within 90 days of November 26, 2002:

■ If terrorism coverage was excluded before, then the insured has the right to refuse coverage (or to lose coverage by not paying the premium) within 30 days.

■ If terrorism coverage was not excluded before, then the notification serves as information for the insured about the portion of the premium that went toward terrorism coverage.

***The deductible and recovery provisions are meant to ensure that federal funding is used only for large losses.***

For renewals and new policies written after November 26, 2002, the notification of the separate premium charge for terrorism coverage must be provided at time of renewal, offer or purchase.

To provide some relief from the stringent notification deadlines, TRIA waives state prior approval of terrorism rates until the end of 2003 (i.e., “use and file”). This provides an important window of opportunity for insurers to freely develop a private market. However, states retain the right to subsequently invalidate the rate based on usual “excessive, inadequate or unfairly discriminatory” provisions.

## EXPECTED FINANCIAL IMPACT ON INSURANCE INDUSTRY

As part of our analysis of the various legislative proposals for the American Insurance Association (AIA), we developed an industry terrorism pricing model. The following illustrations of the industry impact under various scenarios were drawn from the outputs of the model. (See our earlier report, *Estimating the Budgetary Impacts of the Proposed Federal Terrorism Risk Insurance Program: HR 3210 and S 2600*.)

Figure 2 illustrates the calculation of the policyholder surcharge under various scenarios of aggregate insured losses in 2003.

**Figure 2 ILLUSTRATION OF RECOUPMENT VIA POLICYHOLDER SURCHARGE**

In \$ billions

Insured Terrorism Losses for 2003	Losses Retained by Industry	Losses Reimbursed by Federal Government	Formula Amount	Recovered via Surcharges
(1)	(2)	(3)	(4)	(5)
5.0	3.9	1.1	10.0	1.1
7.5	5.1	2.4	10.0	2.4
10.0	6.0	4.0	10.0	4.0
15.0	7.2	7.8	10.0	2.8
20.0	7.9	12.1	10.0	2.1
30.0	9.0	21.0	10.0	1.0
40.0	11.1	28.9	10.0	0.0

(1) Assumption

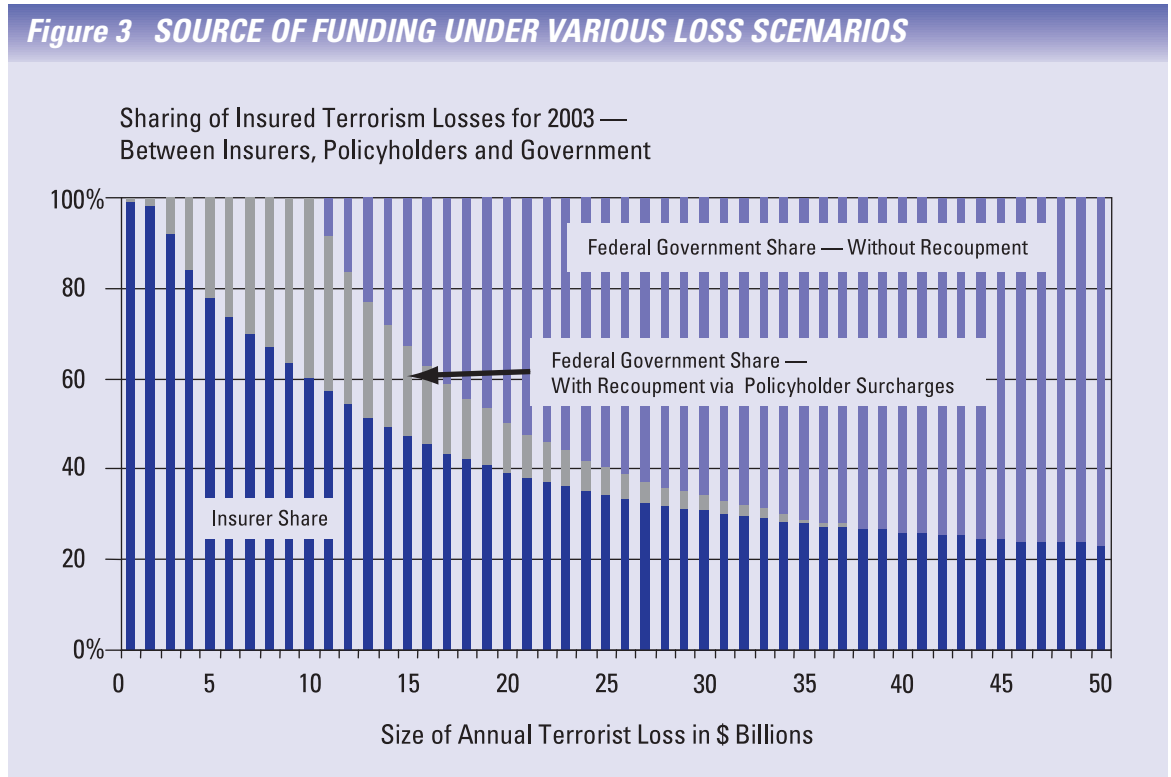
(2) Result from Tillinghast Industry Terrorism Pricing Model

(3) = (1) – (2)

(4) From Terrorism Legislation

(5) = [Minimum of (1) or (4)] – (2), but not less than zero

**Figure 3 SOURCE OF FUNDING UNDER VARIOUS LOSS SCENARIOS**



*The reinsurance program is designed to let the insurance market retain the majority of smaller losses and tap federal funding for mega-events.*

Recoupment via policyholder surcharge matches federal payments dollar for dollar until total covered losses reach \$10 billion, then declines to zero when covered losses exceed \$40 billion. At this point, the losses retained by the industry exceed \$10 billion, so there is no mandatory recoupment from policyholders.

We repeated this analysis for all possible scenarios of aggregate insured losses in 2003, ranging from \$1 billion to \$50 billion, using \$1 billion increments (see *Figure 3*). The figure shows how the prominence of private market funding, in the form of policyholder surcharge and insurer retention, diminishes

as the size of loss increases and how federal funding takes over. For example, for a \$10 billion insured loss in 2003, the split in the funding would be 60% for insurers, 40% for policyholders and 0% for the federal program. If the loss in 2003 is \$25 billion, the same split would be 35%/5%/60%. The reinsurance program is designed to let the insurance market (insurer plus policyholder) retain the majority of smaller losses and tap federal funding for mega-events.

As *Figure 4* shows, the majority of expected terrorism losses would still be borne by the insurance industry. The results shown in this exhibit are based on a weighted average of the scenarios in *Figure 3*, where the weights reflect the relative probability of occurrence of the scenario. The probabilities implicitly reflect the Congressional Budget Office (CBO) analysis of expected annual losses. The CBO extrapolated the experience of U.K.'s Pool Re program and concluded that the expected value of annual terrorism losses of \$4.5 billion is reasonable. Most of our analysis has focused on the relative rather than the absolute results shown in the figure. Thus the percentages are probably more relevant than the dollar amounts.

**Figure 4 EXPECTED LOSSES AND ALLOCATION OF COSTS**

In \$ millions	2003	2004	2005
<b>Expected Annual Insured Terrorism Losses</b>	<b>4.500</b>	<b>4.500</b>	<b>4.500</b>
Expected Losses Retained by Insurers	2.655	2.977	3.323
	59%	66%	74%
Expected Losses Reimbursed by Federal Government	1.845	1.523	1.177
	41%	34%	26%
Expected Recoupment via Policyholder Surcharges	623	521	357

All amounts are based on averages across 1,000 scenarios reflecting the relative likelihood of occurrence of losses of various sizes.

## ISSUES FOR INSURERS

TRIA raises several issues that insurers must address quickly.

1. First and foremost, insurers will need to determine rates for terrorism for all covered lines in all jurisdictions. This will require some creative effort since there is little relevant experience in terrorism loss modeling. Each of the major catastrophe modelers has a stochastic terrorism model based on a combination of expert input and engineering science. NCCI and ISO intend to develop advisory loss costs for their members based on these terrorism stochastic models. Some insurers may rely on these models to set rates; however, many may prefer to develop rates based on scenario testing or on costs of reinsurance. Whether insurers rely on models or scenario tests, they will need to convert loss costs to rates that reflect the risk factors.

The NAIC Model Bulletin proposes that each state waive requirements for documentation supporting the rates if:

- i. The rates are expressed as a uniform percentage of premium (without reflecting risk factors)
- ii. They are below a threshold level specified by the state.

**Insurers that develop premiums as a function of risk factors will have an advantage over those who do not.**

Some insurers may use this approach for its administrative ease. However, if Congress's expectations for development of a robust market are realized, there will be competition among insurers. Insurers that develop premiums as a function of risk factors such as proximity to landmarks, population density and building type, for example, will have an advantage over those who do not. Insurers may also find it advantageous to set their rates based on capacity considerations — charging higher rates where they currently have concentrations of exposures and lower rates where they do not — to encourage a greater spread of risk.

2. Once insurers have developed rates, they will need to notify inforce policyholders by February 23, 2003. Renewals and new offers must be notified at time of renewal or offer. It is going to be difficult for insurers to comply with these deadlines, particularly those for renewals and new offers. Technically, any renewal or new offer made since November 26, 2002 should have included a “clear and conspicuous disclosure” of the premium charged for terrorism coverage. (Noncompliance with TRIA carries a minimum penalty of \$1 million!)

Interim guidance provided by the Treasury allows insurers to use NAIC's model disclosures as a safe harbor in complying with the notification requirements of TRIA.

3. TRIA does not provide any explicit coordination with reinsurance, other than to ensure that the amount of private reinsurance payments plus the federal reinsurance payments cannot exceed the total losses of the insured. Insurers that have purchased terrorism reinsurance in the private market that is now reinsured through the federal program will be paying for coverage they can get for free. This includes insurers that were operating in jurisdictions that did not allow a terrorism exclusion and insurers offering workers' compensation coverage that was reinsured in layers above their deductible. The difference in the definition of terrorism under TRIA (i.e., foreign) versus the policy definition (i.e., domestic and foreign) will require reinsurers covering terrorism to carve out the U.S. terrorism risk from global terrorism risk and price it separately. Insurers may also consider purchasing greater protection in 2003 given their window of opportunity to pass costs through in rates to policyholders.
4. Insurers will need to estimate their deductible and develop a strategy to minimize it. For policies written on a global basis, the premium associated with covered U.S. exposures will have to be carved out. Insurers will also have to separate personal and commercial for some products and add their participation in residual market pools. They may also want to look at their product offerings, considering whether

they should emphasize self-insured retentions as a way to minimize the premium dollars flowing through their large account programs. In general, insurers will have less incentive to write coverage for layers of risk they do not expect to retain.

5. Most insurers will evaluate their underwriting by analyzing exposure concentration. Geography is one of the most important factors in analyzing terrorism risk. In order to study exposure concentration in a meaningful way, insurers will need to gather detailed geographical exposure data for covered lives much as they do for property exposure. Ideally, street addresses and, at a minimum, ZIP codes for covered lives will be needed. Some insurers are well along this path, but most are just starting.

TRIA has given insurers a window of opportunity to develop a market for terrorism insurance. Insurers have the freedom to set

rate levels and structures without prior state approval and with the benefit of a federal backstop. But the pricing must be done quickly. Insurers must gather the necessary exposure data, perform exposure concentration analysis or other loss-cost modeling, identify risk factors, develop rates that reflect key risk factors and notify policyholders. Congress will be monitoring the premiums set by insurers to evaluate whether its objectives for a robust and stable market are being realized.

We will continue to monitor new regulations promulgated by the Department of the Treasury on this topic and the market response. To get the latest information on TRIA-related issues, please visit our Web sites at [www.tillinghast.com](http://www.tillinghast.com) and [www.tpre.com](http://www.tpre.com). If you would like to discuss any of these issues, please call Samir Shah at (703) 351-4875 or e-mail to [samir.shah@tillinghast.com](mailto:samir.shah@tillinghast.com).

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