



Highlights of [GAO-12-767T](#), a testimony before the Subcommittee on Space and Aeronautics, Committee on Science, Space and Technology, House of Representatives

## Why GAO Did This Study

A catastrophic commercial launch accident could result in injuries or property damage to the uninvolved public, or “third parties.” In anticipation of such an event, a launch company must purchase a fixed amount of insurance for each launch, per calculation by FAA; the federal government is potentially liable for claims above that amount up to an additional \$1.5 billion, adjusted for inflation, subject to congressional appropriations. As of 2012, the inflation-adjusted amount is about \$2.7 billion. CSLA provides for this payment, called indemnification. The indemnification provision, unless reauthorized, expires this year.

This testimony provides preliminary information on, among other things, (1) a comparison of the U.S. government’s indemnification policy to policies of other countries, (2) the federal government’s potential costs for indemnification, (3) the ability and willingness of the insurance market to provide additional coverage, and (4) the effects of ending indemnification on the competitiveness of U.S. launch companies. This testimony is based on ongoing work that includes a review of FAA data and documents and relevant literature and interviews with officials from FAA, National Aeronautics and Space Administration, insurers, brokers, launch companies, launch customers, risk modelers, and experts.

## What GAO Recommends

GAO is making no recommendations in this statement but anticipates doing so in its final report.

View [GAO-12-767T](#). For more information, contact Alicia Puente Cackley at (202) 512-8678 or [cackleya@gao.gov](mailto:cackleya@gao.gov).

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# COMMERCIAL SPACE LAUNCH ACT

## Preliminary Information on Issues to Consider for Reauthorization

### What GAO Found

GAO’s work to date indicates that the United States provides less indemnification for third party losses than China, France, and Russia, according to studies. These countries put no limit on the amount of government indemnification coverage currently available through the Commercial Space Launch Act Amendments of 1988 (CSLA) which is about \$2.7 billion per launch. These commitments to pay have never been tested because there has never been a third party claim that exceeded the launch company’s insurance and thus reached the level of government indemnification.

The potential cost to the federal government of indemnification for third party losses is currently unclear. This is because it depends in part on the method used by the Federal Aviation Administration (FAA) to calculate the amount of insurance that launch companies must purchase, which may not be sound. FAA has used the same method since 1988 and has not updated crucial components, such as the cost of a casualty. Estimating probable losses from a rare catastrophic event is difficult, and insurance industry officials and risk modeling experts said that FAA’s method is outdated. FAA, however, has not had outside experts or risk modelers review its appropriateness. An inaccurate calculation that understates the amount of insurance a launch provider must obtain would increase the likelihood of costs to the federal government, whereas a calculation that overstates the amount of insurance would decrease the likelihood of federal costs. FAA officials said that their method was reasonable and conservative, but they agreed that a review could be beneficial and that involvement of outside experts might be helpful for improving their methodology. Overall, they said use of more sophisticated methodologies would have to be balanced with the additional costs to both FAA and the launch companies that would result from requiring and analyzing additional data.

The insurance market is generally willing and able to provide up to \$500 million per launch as coverage for third party liability, according to industry representatives GAO contacted. Because the amount of insurance FAA requires launch providers to obtain averages about \$99 million per launch, and coverage available through CSLA is about \$2.7 billion above that, insurers could provide some of the coverage currently available through CSLA. However, the amount and price of insurance that could be provided could change quickly if a large loss were to occur, according to insurance industry representatives.

The actual effects on competition of eliminating CSLA indemnification are currently unknown. However, launch companies and customers GAO contacted believe that ending federal indemnification could lead to higher launch prices for U.S. launch companies, making them less competitive than foreign launch companies. Although the cost of third party liability insurance coverage for launch companies has been about 1 percent the dollar amount of coverage they purchased, how much this cost might increase in the absence of federal coverage is not clear. Launch customers said that price and vehicle reliability were key factors in their choice of a launch company. Launch companies reported that additional costs would be passed along to customers, but whether this increase alone would be sufficient reason for a launch customer to choose a foreign launch company over a U.S. company is also not clear.