

likelihood that businesses will pursue important technologies that may not be pursued without this protection.

Costs and Benefits to Technology Development Firms

Since this rulemaking puts in place an additional voluntary option for technology developers, the expected direct net benefits to firms of this rulemaking will be positive; companies presumably will not choose to pursue the designation of "anti-terrorism technology" unless they believe it to be a profitable endeavor. The Department cannot predict with certainty the number of applicants for this program. An additional source of uncertainty is the reaction of the insurance market to this designation. As mentioned above, insurance markets appear to currently be adjusting their strategy for terrorism risk, so little market information exists that would inform this estimate. The Department invites comments on these issues.

If a firm chooses to invest effort in pursuing SAFETY Act liability protection, the direct costs to that firm will be the time and money required to submit the required paperwork and other information to the Department. Only companies that choose to request this protection will incur costs. In the preliminary Paperwork Reduction Act analysis, we estimate the reporting burden assuming that each applicant will spend at least 40 hours, and perhaps 200 hours, to prepare the information required by the Department for consideration. For the purposes of this analysis, we assume a loaded labor rate of the personnel preparing the information package of \$100 per hour. Consequently, the total cost of the application requirements is estimated to be at least \$4,000 per application for a relatively simple application. The Department does not yet have sufficient information to estimate the number of applicants annually. If we assume 1,000 applications annually, the total cost of the application requirement is estimated to range from \$4,000,000 to \$20,000,000 annually (1,000 applicants \times 40 to 200 hours \times \$100 per hour). The regulation further requires that firms conduct safety, effectiveness, utility, and hazard analyses and provide them to the Secretary in the course of applying for this designation. We do not have quantified estimates of the impact of this provision, but we expect that much of the safety, effectiveness, utility, and hazard analysis activity will already take place in the normal course of technology development, since those matters are fundamental characteristics of a product. The Department

acknowledges considerable uncertainty in these estimates, but even if the estimates were considerably higher, this does not represent a large investment by firms relative to overall development costs.

The direct benefits to firms include lower potential losses from liability for terrorist attacks, and as a consequence a lower burden from liability insurance for this type of technology. In this assessment, we were careful to only consider benefits and costs specifically due to the proposed rulemaking and not costs that would have been incurred by companies absent the proposed rulemaking. The SAFETY Act requires the sellers of the technology to obtain liability insurance "of such types and in such amounts" certified by the Secretary. The entire cost of insurance is not a cost specifically imposed by the proposed rulemaking, as companies in the course of good business practice routinely purchase insurance absent Federal requirements to do so. Any difference in the amount or price of insurance purchased as a result of the SAFETY Act would be a cost or benefit of this rule for firms.

The wording of the SAFETY Act clearly states that sellers are not required to obtain liability insurance beyond the maximum amount of liability insurance reasonably available from private liability sources on the world market at prices and terms that will not unreasonably distort the sales price of the seller's anti-terrorism technologies. We tentatively conclude, however, that this rulemaking will impact both the prices and terms of liability insurance relative to the amount of insurance coverage absent the SAFETY Act. The probable effect of this rule is to lower the quantity of liability coverage needed in order for a firm to protect itself from terrorism liability risks, which would be considered a benefit of this rule to firms. This change will most likely be a shift back in demand that leads to a movement along the supply curve for technology firms already in this market; they probably will buy less liability coverage. This will have the effect of lowering the price per unit of coverage in this market.

The Department also expects, however, that this rulemaking will lead to greater market entry, which will generate surplus for both technology firms and insurers. Again, this market is still in development, and the Department solicits comments on exactly how to predict the effect of this rulemaking on technology development.

Costs and Benefits to Insurers

The Department has little information on the future structure of the terrorism risk insurance market, and how this rulemaking will affect that structure. As stated above, this type of intervention could serve to lower the demand for insurance in the current market, thus the static effect on the profitability of insurers is negative. The benefits of the lower insurance burden to technology firms would be considered a cost to insurers; the static changes to insurance coverage would cause a transfer from insurers to technology firms. On the other hand, this type of intervention should serve to increase the surplus of insurers by making some types of insurance products possible that would have been prohibitive to customers or impossible for insurers to design in the absence of this rulemaking. The Department is interested in public comment on any possible negative or positive impacts to insurers caused by the SAFETY Act and this rulemaking, and whether these impacts would result in transfers within this market or an efficiency change not captured by another party. We encourage commenters to be as specific as possible.

Costs and Benefits to the Public

The benefits to the public of this proposed rulemaking are very difficult to put in dollar value terms since its ultimate objective is the development of new technologies that will help prevent or limit the damage from terrorist attacks. It is not possible to even determine whether these technologies could help prevent large or small scale attacks, as the SAFETY Act applies to a vast range of technologies, including products, services, software, and other forms of intellectual property that could have a widespread impact. In qualitative terms, the SAFETY Act removes a great deal of the risk and uncertainty associated with product liability and in the process creates a powerful incentive that will help fuel the development of critically needed anti-terrorism technologies. Additionally, we expect the SAFETY Act to reduce the research and development costs of these technologies.

The tradeoff, however, may be that a greater number of technologies may be developed and qualify for this program that have a lower average effectiveness against terrorist attacks than technologies currently on the market, or technologies that would be developed in the absence of this rulemaking. The reason for that tradeoff is that, in the absence of this rulemaking, potential