Good morning. I am glad to be here because this conference is exploring questions that are critical for software and the broader digital economy: What is the best policy framework for cloud and data services in Europe? How does that fit into the global marketplace? And how do we restore the confidence and trust that have been shaken by revelations about NSA surveillance programs?

In the software industry, we think it is critical to get the answers to those questions right — because we need to foster, not inhibit, the kinds of software-driven innovations that are transforming the world for the better.

I’d like to offer some specific thoughts on how to build trust and promote a policy framework that makes sense in a global economy. But first, I want to step back and spend a couple of minutes on how software innovations are reshaping the world. That context is important, because it represents an inflection point — and a major opportunity — for the global economy.

**Software Innovation**

Let me give just a few examples of how businesses in Europe — particularly small and medium-sized companies — are capitalizing on software innovations that involve cloud and data services.

One of our members is Siemens, which makes computer-aided design software. A small Italian firm called Biscontini is using it to design high-end sailing yachts for racing. This kind of job used to be done by individual designers working alone. Now, teams in different countries can collaborate over high-speed networks. They split up tasks. People sitting in different
places work on sails, masts, fluid dynamics and other aspects of the design.

With the elasticity and power of cloud computing, the teams can work together quickly and efficiently on the same data. It’s convenient, but also powerful: They are accessing servers that can do much more. The result is a faster design process and more extensive virtual testing — so they can make better, faster sailboats.

Another of our members, Autodesk, offers a different kind of cloud-based modeling software. A furniture manufacturer in the UK, called Ellis, is using it to customize designs for clients like universities. The software allows Ellis to develop prototypes of a particular piece of furniture and share the design with customers so they can ask for changes before it is manufactured. This lowers costs and adds value for Ellis and its customers.

It’s worth noting that while Ellis is headquartered in the UK, the cloud service is hosted outside the country. It wouldn’t be possible to do all of that without data flowing freely across borders. In the 21st century economy, we need to enable, not block these kinds of cross-border data flows — because customers everywhere should have access to the best products and services the world has to offer for their particular needs.

I’ll mention just one more example to illustrate these benefits. IBM — another BSA member company — has partnered with the energy company Vestas. They have used data analytics to find the best places to put wind turbines and then maximize their energy production.

That may sound like a pretty simple problem, but any sailor can tell you it’s very difficult to predict the wind. IBM’s software does it by analyzing weather data on an enormous scale. It factors in nearly 180 variables — like temperature, barometric pressure, humidity, precipitation, wind direction and velocity — along with extensive historical data. That allows Vestas to put its turbines in the best locations and then manage the electricity they send to the grid as efficiently as possible.
Vestas has built more than 43,000 turbines in nearly 70 countries on six continents. Together, they produce more than 90 million megawatt-hours of energy per year — which is enough to supply millions of households. It wouldn’t be possible to do all of that without real-time analytics enabled by the free flow of data across borders.

**Policy Challenges and Solutions**

The issue of cross-border data flows is obviously important to software. But it is just as important to the broader economy. There is no question that recent disclosures about international surveillance programs have raised important privacy and security questions. These are important issues. They deserve a serious, thoughtful debate. But it is also important not to conflate separate issues. National security concerns don’t have to undermine technology innovation and economic growth — and we shouldn’t allow them to.

BSA strongly supports reforming surveillance regimes to build trust and confidence in the technologies that drive the modern economy. That’s why we, along with Internet service providers and others, have urged US officials to increase transparency around government requests for data. We are encouraged that broader reform proposals are now being put forward by the Obama Administration and Congress. But surveillance reform is not just a US matter — so we believe there needs to be a robust international dialogue on surveillance norms.

There are a number of things that should be on the table as part of that dialogue: First, countries around the world all should take action to improve the transparency of their data-collection practices. Second, governments should work together to develop a “shared language” on transparency — so that when agencies disclose information about surveillance demands, people can understand it. Third, we should improve the system of mutual legal assistance treaties (“MLATs”) that law enforcement agencies rely on when they pursue investigations.
As a former trade negotiator, I know from first-hand experience how hard it can be to find agreement on complex issues like these. But that shouldn’t stop us from trying. In the absence of constructive discussions about national security considerations, there is a real risk that countries will adopt the wrong kinds of solutions.

Around the world, we are beginning to see a wave of commercial regulations that amount to a new form of digital protectionism.\(^1\) We are seeing a movement toward undue restrictions on the flow of information across borders. Some countries are requiring companies to put servers inside their borders to do business there. And others are adopting heavy-handed preferences for locally developed technologies, particularly in government procurement.

We have deep concerns about this trend — and we are seeing examples of it here in Europe. The policy discussion about how to promote cloud computing in Europe has been colored at times with protectionist rhetoric. The idea of a “Schengen area for data” has been discussed on the one hand as a way to enable the digital single market — but also as a way to shield EU firms from international competition. It has been alarming that some have even suggested creating a dedicated, EU-only cloud infrastructure.

As a practical matter, I would note that attempting to lock data inside national borders — and keeping competitors out — is self-defeating. It sends a validating signal to other, less transparent markets that it is okay for them to turn inward. It also limits the horizons of domestic companies when they want to export to foreign markets. At the end of the day, attempting to balkanize the Internet would be a perversion of what it does and what it stands for. It would subvert the architecture of the Internet and subvert the benefits it has brought the world.

Europe and the United States have an opportunity today to show the world there is a better way. We need to promote a globally integrated

marketplace that gives everyone the opportunity to capture maximum value from the cloud and digital services.

The goals of national security, data privacy and technology innovation cannot be held apart as mutually exclusive. We need to envision and drive towards a world of mutual trust, dynamic innovation and broadly beneficial growth.

BSA is dedicated to advancing those goals. I look forward to the rest of today’s discussions — and to working with all of you as the debates on these critical issues progress.