Policy Recommendations

The United States is the top global destination for developing and bringing to market innovative technologies and processes because of its market-based economy and culture of entrepreneurship and risk-taking. Unfortunately, outdated regulation threatens U.S. competitiveness. Regulation must be agile and light touch as well as clear, precise and enforceable to accommodate a rapidly changing technology landscape. At the same time, regulation must be predictable to avoid creating uncertainty and undermining the investment environment.

The United States needs to create a regulatory environment that encourages and enables innovation. The United States should consistently attain a top ranking for its regulatory transparency and flexibility, preserving its status as the top global destination for innovation.

**RECOMMENDATION 1**

**Undertake a thorough review process of the regulatory system.** Congress should direct federal agencies to review regulatory processes and procedures and pursue reforms to improve the clarity, speed and agility of regulation. Reforms should ensure that regulations are risk based and facilitate the commercialization of innovative technologies. The review should solicit robust input from industry and research universities.

**RECOMMENDATION 2**

**Consider the impact of new and existing regulations on innovation.** Congress should require regulatory agencies, including independent agencies, to analyze the costs, benefits and impact on innovation of new major regulations and tailor new rules to minimize unnecessary burdens on the economy before the rules are enacted.

**RECOMMENDATION 3**

**Prioritize risk-based, light-touch approaches to regulation wherever possible.** Congress should direct federal agencies to prioritize risk-based approaches to regulation, requiring them to assess real-life risks under a variety of scenarios and transparently communicate the results. Innovation is not possible without taking informed risk. In many cases, performance standards or voluntary best practices may be sufficient to achieve regulatory objectives.

- **a.** Determine whether some technologies require national standards. Policymakers should work with regulatory agencies to identify certain emerging technologies — for example, autonomous vehicles, fintech or drones — that may benefit from national standards to promote innovation, investment and commercialization and to ensure an even playing field. In these select cases, federal regulatory agencies should develop and implement carefully scoped enabling regulations.
RECOMMENDATION 4

**Avoid conflicting regulations.** Congress and the Administration should harmonize the patchwork of regulations governing innovation by identifying and eliminating conflicts in federal law and pre-empting state laws governing emerging technologies such as autonomous vehicles and artificial intelligence so innovators face stable and predictable requirements.

a. Establish a national privacy law. Congress should pass a national privacy law that fosters innovation and economic competitiveness, includes robust protections for personal data, harmonizes regulatory approaches to consumer privacy, and achieves global interoperability between U.S. and foreign privacy regimes. These objectives can be achieved only through a national privacy law that avoids a state-by-state approach to regulating consumer privacy.

b. Align cybersecurity requirements. Congress and the Administration should seek to align federal, state and international cybersecurity requirements for a more efficient, effective and consistent approach to cybersecurity. The Administration should promote the alignment of cybersecurity regulations and frameworks in ongoing and upcoming trade negotiations to reduce regulatory fragmentation.

RECOMMENDATION 5

**Create test-beds and regulatory sandboxes.** Federal and state governments should balance the need for experimentation and testing with the safety imperative by creating technology test-beds (e.g., those established for unmanned aerial vehicles) for testing and deployment of emerging technologies, such as autonomous vehicles, blockchain, artificial intelligence, internet of things, smart cities and smart buildings. Federal and state governments should structure test-beds as regulatory sandboxes to allow businesses to test products, services and business models without excessive legal risk.

RECOMMENDATION 6

**Grow technical capacity at regulatory agencies.** Policymakers should grow technical expertise at federal and state regulatory agencies by establishing an exchange program that leverages industry and academic subject-matter expertise to support and modernize the regulatory process, in the same way that the Presidential Innovation Fellows program uses private-sector professionals to help modernize federal technology and processes.

RECOMMENDATION 7

**Promote innovation in government.** The federal government should be an early adopter of new technologies, such as artificial intelligence, blockchain, internet of things, autonomous vehicles, smart buildings and next-generation broadband internet. The government should apply new technologies to solve real-world public policy challenges, such as strengthening open data initiatives and modernizing citizen-centric services.