



CII Must Have ICT Policy That Recognizes Its Needs

Critical infrastructure industries ("CII") are large-scale users of information and communications technology ("ICT"). They make huge investments in telecommunications networks, including wireless voice and data systems, microwave links, some of the largest fiber networks in the United States and more traditional wireline circuits. What is not known to many is that most of these networks are *internal*: they are built, maintained and operated by CII entities themselves. Such investment is necessary because the critical infrastructures operated by these entities rely heavily on supporting ICT networks: these systems protect the lives of workers in the field, monitor and control electric, gas, water and other infrastructures, and allow more rapid restoration of services following an emergency. Federal policy must permit, and even encourage, future deployments by the same means.

CII entities are heavily regulated to maintain and improve their reliability; therefore, networks supporting their services also must be ultra-reliable. Private communications networks can be built to exacting standards, covering rural areas and operating during long-term power outages: by contrast, commercial networks generally are not built or operated in this way. However, federal policymakers have in recent years focused on new commercial services to the detriment of privately operated systems; for example, no radio spectrum has been granted for non-Public Safety private wireless use in more than twenty years. ***The long-term cost of this neglect will be a decline in the quality of critical public needs such as electric, gas and water services.***

CII entities are already deploying new technologies, including IP-enabled communications, both wired and wireless; new uses for optical fiber; mesh networks; WiMAX and others. And new regulations, coupled with the need for improved reliability, are driving a massive investment in next-generation utility infrastructure designed to enable two-way communications among CII entities and their assets, their workforces and their customers. Only ICT networks – mostly internally built and operated – can enable the next generation of infrastructure that has been demanded of our industries. ***CII entities must have favorable FCC and congressional policy to enable these improvements.*** UTC's advocacy work strives to ensure that our members have what they need to deploy new technologies to meet CII goals and regulatory requirements, including a favorable overall policy climate as well as specific measures such as a spectrum allocation.