Mr. Chairman and Members of the Committee:


My views are based on my twenty-six years as an admiralty attorney working with U.S. telecommunications and shipping companies with respect to submarine cables and marine operations around the world. I am confident that these views are consistent with those in the telecom industry who work with submarine cables on a daily basis. In particular, I have been authorized and requested to present this testimony on behalf of the North American Submarine Cable Association, or “NASCA”. NASCA is a non-profit association of submarine cable owners, submarine cable maintenance authorities, and prime contractors for submarine cable systems. NASCA and its members have a strong interest in being able to maintain and protect their cables that link the United States to the rest of the world.

These reliable and secure cables absorb the exponentially increasing international communication growth relentlessly fueled by the Internet. There are about thirty international cables landing in this country in ten coastal states. Two new Pacific Ocean systems, each costing about half a billion dollars, are planned to enter service in 2008 to better connect the United States to Asia.
Over 70% of our country's international telecom traffic, which includes voice, data, and video, is carried on these cables, each of which is only about the diameter of a garden hose. Not counting Canada and Mexico, over 90% of the country's international voice, video, Internet, and data communications are carried on these cables. The disproportionate importance of these cables to the nation's communication infrastructure can be seen by the fact that if all of these cables were suddenly cut, only 7% of the United States traffic could be restored using every single satellite in the sky. Modern fiber optic cables are the lifeblood of the world's economy, carrying almost 100% of global Internet communication. This underscores the revolutionary capacity of modern fiber optic submarine cables. By any standard, they constitute critical infrastructure to the United States, and indeed the world.

This critical infrastructure, by its very nature, depends upon international cooperation and law. The promise of continued advances in international communications hinges on international legal standards providing a compass whereby nations and private companies may steer a course that efficiently allows international communications networks to be seamlessly planned, built, maintained, and operated.

The 1982 Convention provides this modern legal compass. In ten specific articles, the Convention provides a comprehensive international legal regime for submarine cables and pipelines in territorial seas, archipelagic waters, the Exclusive Economic Zones ("EEZ"), upon the continental shelves, and on the high seas.

Critics of the 1982 Convention argue that existing customary international law should suffice. For cables this is simply not the case for several reasons. Foremost among these reasons is that the Convention explicitly goes beyond preexisting international law in crucial areas of submarine cable installation, maintenance, and operations and provides binding dispute resolution to ensure proper enforcement of these new obligations, but only for countries that are parties to the Convention.
At present for the United States, the operative international treaties for international cables are the 1884 International Conventions for Protection of Submarine Cables and the 1958 Geneva Convention on the High Seas, which largely incorporates the earlier treaty in general terms. While these treaties deal with the laying and repair of cables on the high seas, they do not provide for the freedom of cable owners to exercise in the new zone of the EEZ and upon the continental shelf the full range of uses and operations desirable and required to build and maintain modern fiber optic systems.

This express language in the 1982 Convention reflects the effort of dedicated visionaries in the telecommunication industry who urged Ambassador Richardson and the U.S. Delegation negotiating the Convention to include language that would (1) include within the freedom to lay and repair cables the operational requirements for modern fiber optic systems, including marine route surveys, burial, and maintenance, and (2) at the same time prevent coastal nations in their EEZ or upon their continental shelf from restricting these vital activities.

Directly stated, U.S. telecom companies are hurt and their leadership in this vital sector is diminished without the Convention. The Convention is the key to the global international telecommunication policy and legal system; it unlocks the door for the fullest participation and makes leadership possible by U.S. telecom companies; it protects existing investments and fosters additional investments.

But if the United States is not a party these valuable, carefully negotiated rights can be diluted or even removed through amendments or encroachment by nations that wish to expand their jurisdiction over cables in the EEZ and upon the continental shelf. Having the United States a party allows it to fully protect the existing rights from nations seeking to restrict these vital freedoms of the sea.

The U.S. telecom industry is deeply concerned about the attempts emerging by nations attempting to create new protectionist trends in customary international law. Having the United
States as a party is the optimum protection against changes to the 1982 Convention, whether by future amendment attempts or by novel new arguments based on the unpredictable shifting sands of customary international law.

The urgency with which U.S. telecommunication companies need the Convention's specific protections for cables increases with each passing year. The Russian Federation since 1995 is claiming the right to delineate cable routes on its continental shelf in the Arctic. These actions are violations of the Convention which does not allow a coastal nation to delineate or require permits for the routes of international cables or cable repairs outside territorial seas within the EEZ or upon the continental shelf. Without the United States being a party, U.S. telecommunication companies are on weaker grounds to question these actions, because the United States itself is held back from being able to enforce the Convention's freedoms to lay, maintain, and repair cables in the EEZ and upon the continental shelf.

Under the 1884 treaty, nations are required to provide criminal and civil sanctions for negligent or intentional actions by third parties which damage a cable. But under the 1884 treaty, the cable owner must wait until the damage is done before these sanctions are triggered. In welcome contrast, under the 1982 Convention, third party conduct which is likely to result in damage is sanctioned in addition to actual damage cases. So the cable owner has a remedy to prevent the injury to critical infrastructure in the first place. When one considers the average $1M plus cost repair a single cable and the disruption a cable break can cause to essential economic and strategic interests, it is easy to see why U.S. telecommunications companies need the United States to accede to the Convention.

Another more recent event underscores how U.S. telecommunication companies suffer because the United States is not a party. On March 27, 2007, two active international cable systems were heavily damaged on the high seas and taken out of service for about three months as a result of piratical depredations for private ends by commercial vessels from Vietnam; they
stole a total of over 106 miles of cable, including optical amplifiers from these active systems. Repair costs are estimated in excess of $7.2M with the national economic costs of the disruptions still being ascertained. The cable systems are owned by consortiums, common in the industry, and the ownership and landing points involve eleven countries. United States co-owners who sustained losses and had their networks disrupted were AT&T, Verizon, and Sprint. With the exception of the United States, all of the nations impacted have tangible preventative and compensatory options as well as obligations to protect their nationals under the 1982 Convention.

The Convention expressly proscribes depredations against property on the high seas and the EEZ's and classifies them as piracy with recourse to all of the Convention's robust remedies to put pirates out of action. Expressly classifying depredations against property such as cables is an example of how the Convention protects cables from new emerging threats.

With the security which arises from the knowledge that their own government is a party, United States telecom companies will make more confident business investments when protected by reliable and discernable international law. The Convention instills credence that their government can defend against future amendments and customary law encroachments.

Besides telecommunication cables, power cables are protected under the Convention. The Juan de Fuca cable, an international electrical cable that will bring power from Canada to Washington State in 2007, is an example of this international submarine cable use, and there are plans for a power cable from Canada to Boston and New York.

The scientific Neptune cable system, funded by the National Science Foundation, is another example of a cable use recognized by the Convention. When completed in 2011, along with a joint system now being laid by Canada, this scientific research cable system will form the world's most advanced undersea network of scientific observatories with hundreds of 24/7 monitoring sites off the west coasts of Canada and the United States. These cables will bring the
global Internet to the ocean depths and yield new insights into the environment ranging from forecasting volcanic and seismic events to maximizing living marine resource benefits and environmental protection.

Military cables with sensors vital to national defense and homeland security depend on the Convention to allow their placement. Coastal nation encroachment or amendments to restrict this cable use can be best opposed when the United States is an active party.

The BP Gulf of Mexico system, a domestic submarine cable system, will connect in 2008 seven of that company's off-shore production platforms, and possibly others in the future, and will enable energy companies to monitor and operate these platforms continuously from remote control centers ashore, impervious to hurricanes. This cable provides greater energy reliability and environmental safeguards.

Cables for all of these uses benefit from the Convention. Fundamentally, the ability to carry out marine surveys, to lay, maintain, and repair cables outside of territorial seas on an international basis rests on the Convention's protections. In a world where the competition for use of the oceans is accelerating, disputes by competing coastal nations and seabed users will occur with increasing frequency. By providing express protections to cables over other non-specified uses in the EEZ, the Convention assures that the critical importance of international cable infrastructure is given the priority protection it requires to serve our country.16

Arguments that the United States already obtains sufficient benefits from the Convention itself as customary international law fail to recognize that the Convention is a practical, but powerful tool to overcome unreasonable coastal nation encroachments on the freedom to lay and maintain cables and to prevent these rights from being taken away in the future. If the United States is a party, then U.S. telecom and power companies, the U.S. Navy, and scientists can seek the assistance of the U.S. government to enforce the rights of cable owners to lay, repair, and
maintain cables outside of territorial seas and to prevent these rights from being diminished without United States involvement.

If asked, virtually all telecommunication companies that own or operate international cables would confirm that the Convention is essential for their growth and success. They can ill afford to be left in a situation in the future whereby their rights can be lost because the United States is not a party. Strong support exists in the industry for action by the Senate this year for an up or down vote on the Convention.

Thank your for your consideration.

2 NASCA’s members include: Alaska United Fiber System Partnership; Alcatel-Lucent Submarine Networks; Apollo Submarine Cable System Ltd.; AT&T Corp.; Brasil Telecom of America, Inc. / GlobeNet; Global Crossing Ltd.; Columbia Ventures Corporation; Columbus Networks, Inc.; Global Marine Systems Ltd.; Hibernia Atlantic, Level (3) Communications, LLC; New World Network, USA, Inc.; Southern Cross Cable Network; Sprint Nextel Corp.; Tyco Telecommunications (US) Inc; Verizon Communications, Inc.; and VSNL International, Inc.

3 Rhode Island, Massachusetts, New York, New Jersey, Florida, California, Oregon, Alaska, Washington, and Hawaii. Eleven cables land in the Northeast, eleven in Florida or Puerto Rico, and eight on the West coast.

4 The 10,800 mile Transpacific Express cable system ("TPE") will connect the United States from Oregon to China, Korea, and Taiwan. The 12,000 mile Asia-America Gateway cable system ("AAG") from California, Hawaii, and Guam will connect the United States with Guam, Hong Kong, Malaysia, Thailand, Singapore, Vietnam, the Philippines, and Brunei.

5 In 1958, Transatlantic Telephone ("TAT") 1, the first transoceanic undersea telephone cable, had 32 circuits. In 1979, TAT-7, the last analogue cable, had 4200 circuits. TPE, a fiber optic undersea cable described supra, at n.4 has capacity equivalent to 62,000,000 circuits or simultaneous telephone conversations.


7 Marine surveys, usually conducted by side scan sonar and sampling, are used to determine, prior to laying the cable, the best route for a cable system which minimizes conflicts between the cable and other seabed users and undersea geological features.

8 In order to avoid injury by bottom trawling or dredging, where the seabed and regulations allow, the beer bottle cap diameter fiber optic cables are buried up to one meter in heavily trafficked areas of the continental shelf. Otherwise, cables are simply laid along the seabed surface with a benign environmental footprint. Information on this process and cables in the environment exists in the video "About Submarine Cables," at www.iscpc.com.


10 Article 113.

11 M. Green, D. Burnett, "Security of International Submarine Cable Infrastructure-Time to Rethink?, Ocean Conference on Legal Challenges in Maritime Security-Heidelberg, Germany, May 2007. (Mr. Mick Green is the Chairman of the International Cable Protection Committee.)

12 For example, AT&T owns interests in over 80 international submarine cable systems covering more than 457,000 fiber route miles, and Verizon has ownership interests in more than 65 international submarine cable systems covering more than 446,000 fiber route miles.

13 Article 101(a)(ii) and (c)

14 http://www.jdfcable.com/


16 The preamble of the 1982 Convention states, in part: "Recognizing the desirability of establishing through this Convention, with due regard to the sovereignty of all States, a legal order for the seas and oceans which will facilitate international communications..." (Emphasis added.) Nowhere is this statement truer with respect to international communication carried by modern fiber optic cables