

# Cuba Internet Task Force: Final Report

REPORT

BUREAU OF WESTERN HEMISPHERE AFFAIRS

JUNE 16, 2019

The June 16, 2017, National Security Presidential Memorandum-5 “*Strengthening the Policy of the United States toward Cuba*,” (NSPM-5) directed the Secretary of State to convene a task force to examine the technological challenges and opportunities for expanding Internet access in Cuba, including through federal government support of programs and activities that encourage freedom of expression through independent media and Internet freedom so that the Cuban people can enjoy the free and unregulated flow of information. The Cuba Internet Task Force (CITF) is a Presidential Advisory Committee under the Federal Advisory Committee Act and comprises officials from the Department of State, the U.S. Agency for International Development, the Office of Cuba Broadcasting, Federal Communications Commission, and the Department of Commerce’s National Telecommunications and Information Administration. Non-governmental members include the Information Technology Industry Council (ITI) and Freedom House (FH).

The Task Force is an advisory board, not a policy-making body, established to provide the U.S. government with independent advice and information gleaned from experts and stakeholders in the field. The CITF will terminate on June 16, 2019, pursuant to its charter.

The CITF hosted public meetings on February 7, 2018, and December 6, 2018. During the February 7 meeting, the CITF agreed to form two subcommittees, one to explore the role of media and freedom of information in Cuba, and the other to

explore technological challenges and opportunities for expanding Internet access in Cuba. The CITF's non-governmental members chaired the subcommittees and solicited membership from the public. Within six months of the inaugural meeting, the subcommittees provided their preliminary reports, based on input from relevant experts and stakeholders, to the CITF for its consideration. The December 6 meeting provided an opportunity to discuss the subcommittees' reports in an open, public forum.

The CITF considered the recommendations presented by the two subcommittees and comments submitted by the public, including from civil society, academia, the private sector, and the technical community in the United States when preparing this report. The CITF identified four key challenges to accessing the Internet in Cuba, including (1) limited infrastructure, high prices, low speed, and government-regulated access; (2) the highly authoritarian Cuban government; (3) digital literacy; and (4) challenges to U.S. market entry. For each challenge identified, the report offers recommendations for expanding effective Internet access and the free and unregulated flow of information in Cuba.

## **I. LIMITED INFRASTRUCTURE, HIGH PRICES, LOW SPEED, AND GOVERNMENT-REGULATED ACCESS**

Cuba's Internet penetration rates and speed lag behind regional averages, and access is extremely restricted due to limited infrastructure, high prices, low speed, and Cuban-government regulated access points. Cuba connects to the Internet both via satellite and via the sole fiber optic cable ALBA-1 from Venezuela and Jamaica (with limited capacity at 160 gigabits per second).

Only about two percent of homes in Cuba benefit from dial-up Internet connection. While a greater number of Cubans are able to connect to the Internet through their mobile devices, a service that only became available in December 2018, the mobile network uses outdated 2G and 3G technology and lacks sufficient bandwidth, resulting in very slow speeds and a nearly unusable Internet. Only 47% of the population has 3G coverage

Mobile data plans through Cuba's *Empresa de Telecomunicaciones de Cuba* (ETECSA) and WiFi access prices are cost-prohibitive for Cubans whose average monthly salaries are US\$30. Mobile plans have fees that range from US\$7 for 600 MB of data to \$US30 for 4 GB. Meanwhile, one hour of public Wi-Fi access costs US\$1 and the most affordable home connection package is US\$15 for 30 hours of use per month.

ETECSA, Cuba's state-owned, monopolistic Internet and telecommunications service provider, has the capability and the legal mandate to open or restrict Internet connectivity at will. While it is unclear who ultimately manages and determines ETECSA's policies, a 2011 "Official Gazette" of Cuba's Ministry of Justice reported RAFIN and Banco Financiero Internacional, financial institutions controlled by Cuba's military, owned 27 and 6.2 percent of its shares, respectively. Foreign information and communications technology (ICT) firms are forced to partner with ETECSA to provide services in Cuba. In addition, the Cuban government restricts the types of ICT products and services it will allow to be imported. The Cuban government's excessive regulation of the sale and distribution of technology products inhibits market access.

## **Recommendations**

- **Construction of a new submarine cable:** Support efforts to enable construction of new submarine cables, as appropriate. An additional undersea cable could cut latency time and reduce the load on the Cuban Internet infrastructure, which in turn would enable ETECSA to expand Internet access at higher speeds and lower cost to the Cuban public. Prospective investors in this sector should consider the potential security implications of partnering with ETECSA.
- **Support organic network growth:** Some entrepreneurial Cubans have built local-area networks to connect devices at home and in their neighborhoods. These local networks have the potential to support economic growth in the emerging private sector. Increased exportation of U.S. networking tools to private consumers in Cuba could support the organic growth of local networks.
- **U.S. exchange programs:** Promote exchange programs that permit Cuban students and faculty, who specialize in technology and computer science, to learn from top U.S. scholars and practitioners about network developments and technology.

## **II. HIGHLY AUTHORITARIAN GOVERNMENT, CENSORSHIP, AND SURVEILLANCE**

Cuba's one-party communist state severely restricts freedoms of the press, assembly, speech, and association, and initiatives to promote Internet freedom and increase Internet access on the island are viewed with suspicion. In fact, following the creation of the CITF, the Cuban government referred to it as a subversive affront to its sovereignty. The Cuban government uses a

combination of website blocking, pressure on website operators, arrests, intimidation, imprisonment, and extralegal surveillance to censor information critical to the regime and to silence its critics.

The Open Observatory of Network Interference (OONI) tested 1,485 websites, from multiple locations in Cuba between May and June 2017, and documented 41 blocked sites. The government often censors text messages that it perceives as subversive. A series of tests conducted by *14ymedio*, an independent digital media outlet in Cuba, confirmed that Cubacel (ETECSA's cell phone provider) had been censoring specific words such as *democracia* (democracy), *dictadura* (dictatorship), and *derechos humanos* (human rights). The Cuban Government also blocks voice ports used by the Session Initiation Protocol (SIP), one of the most common protocols used in voice, video, and messaging applications, and any webpage that the Cuban government considers contrary to its interests. Public reports have revealed that the Cuban government uses the Ávila Link program to route connections to a proxy server, allowing the government to monitor citizens' Internet use and retaliate against essential voices.

The Cuban government has tightened surveillance and persecution of Cubans who acquire their own satellite Internet stations or create their own networks to expand Internet service with imported technology. Surveillance of ICT in Cuba is widespread, and dissident bloggers are subject to punishments ranging from fines to confiscation of equipment and detentions. Anonymity and encryption technologies are strictly prohibited, and web access points, such as Wi-Fi hotspots, cybercafés, and access centers are closely monitored. There are concerns that as Cuba acquires sophisticated technologies and increases Internet access, its surveillance and censorship tactics could potentially improve.

## Recommendations

- **Digital safety education:** All Cubans would benefit from educational initiatives that inform them how to keep their online activity and data secure. Support for educational and public awareness campaigns that introduce basic concepts on digital safety could help Cubans more effectively protect themselves from security threats online.
- **Support Cubans' unfettered access to the Internet:** Support for initiatives that promote the free flow of information to, from, and within the island could make online media and private communication more readily available to the Cuban people amid government censorship of specific content.

## III. UNLEASH THE POWER OF THE INTERNET: DIGITAL LITERACY

According to a June 2018 survey conducted by Freedom House, 80 percent of the 1,700 Cubans surveyed said they use the Internet mostly to communicate with friends and relatives and for entertainment. Very few said they used the Internet to exchange views on social and political issues, read about news and other developments, consume educational content, or to learn about topics of general interest (e.g. health, law, etc.). Increasing digital literacy in Cuba could transform the Internet in Cuba from a simple communication tool to a means through which Cubans can express social, economic, and political beliefs. Given the highly authoritarian political context, it is difficult to separate Internet freedom in Cuba from the broader quest for freedom of expression and human rights. Full access to free and unregulated

information online will occur only if the Cuban government relaxes its tightly controlled grip on society and communications.

## Recommendations

- **ICT literacy:** Collaborative educational initiatives hosted by academic institutions, foreign governments, and multilateral bodies could help expand ICT literacy in Cuba. The focus of such programs should be on using the Internet for education, civic engagement, community building, economic activity, and the free exchange of opinions.
- **Promote freedom of expression:** Support for independent stakeholders could help advance rights for all Cubans. That support could include the development of projects that train Internet users to produce compelling online content that encourages diverse perspectives on society, politics, and culture.

## IV. U.S. MARKET ENTRY

China dominates Cuba's telecommunication sector and provides a challenge to U.S. firms looking to enter the sector. China played a major role in financing and constructing Cuba's ALBA-1 undersea cable and Huawei Technologies, a Chinese telecommunications company, was involved in developing Cuba's backbone network as well as installing Wi-Fi hotspots across the island. Two other Chinese companies, ZTE and TP Link, provide DSL modems for network users. China, whose relationship with Cuba rests primarily on ideology and geopolitical interests, is able to offer robust financing packages to support its exports to Cuba – something the U.S. government is prohibited from doing and which presents a major obstacle for U.S. companies wishing to

invest in ICT in Cuba. Chinese dominance in Cuba's ICT sector is worth challenging given concerns that the Cuban government potentially obtains its censorship equipment from Chinese Internet infrastructure providers.

Expanding Cuba's wireless network and Internet infrastructure will require large-scale investments from foreign telecommunications firms. U.S. companies informed the subcommittees they are often deterred from entering the market due to uncertainty caused by frequent changes to U.S. regulations concerning Cuba. Other companies have chosen not to offer key products and services, citing reasons ranging from regulatory ambiguity to banks' reluctance to process payments originating in Cuba due to the U.S. embargo. As a result, most Cubans are unable to download popular applications on their mobile devices or benefit from civic tech initiatives, such as Project Shield (Google's effort to protect the human rights community against cyberattacks) because the applications are not offered in Cuba. While massmarket, consumer-oriented communications equipment, such as home Wi-Fi access points, do not require export licenses, National Security-controlled encryption items do.

## Recommendations

- **Facilitate exports and services:** Consider expediting the review of National Security-controlled encryption items, provided such treatment would be consistent with U.S. foreign policy and national security interests. In addition, review banking and financial regulations related to Cuba to ensure that Cubans can access paid applications and cloud-based technology.
- **Engage with U.S. private sector:** The U.S. Government could continue discussions with the U.S. private

sector to clarify current regulations and seek feedback on how the regulations affect their ability to invest in ICT in Cuba.

Fuente: <https://www.state.gov/cuba-internet-task-force-final-report/>