

# TRANSLATING NORMS TO THE DIGITAL AGE

## Technology and the Free Flow of Information under U.S. Sanctions

BY DANIELLE KEHL, TIM MAURER, AND SONIA PHENE

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Increasingly, the free flow of information and the ability to communicate is considered a human right that needs to be protected online as well as offline, especially in the most repressive countries in the world. The 2009 Green Movement in Iran and the Arab Spring were powerful examples of the new technological reality we live in. However, comprehensive U.S. sanctions that ban the export of goods and services to Iran, Syria, Sudan, Cuba, and North Korea remain largely outdated in recognizing how communications technology can benefit both the civilian population and serve broader American foreign policy goals. Instead, these restrictions have negative consequences on the population, inadvertently aiding the repressive regimes that seek to control access to information within their borders.

In this paper, we offer a comprehensive analysis of how exceptions and authorizations for information and personal communication technology have been integrated into various country-specific sanctions regimes, especially since 2009. We argue that the recent evolution mirrors the 1990s “smart sanctions” reform process and the provisions allowing the export of humanitarian goods like food and medical supplies to sanctioned countries in an attempt to minimize harm to ordinary individuals. Drawing on existing precedents, we offer a series of recommendations aimed at harmonizing and streamlining the patchwork of current provisions authorizing the export of critical communications technology. The goal is to update sanctions in order to translate existing norms to the digital age and to make it easier and less costly for both government and private companies to act.

*About the authors: Danielle Kehl is a policy program associate at the New America Foundation's Open Technology Institute (OTI). Tim Maurer is a policy analyst at OTI. Sonia Phene studies computer science and applied mathematics at Brown University and interned at OTI during the summer of 2013.*

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## EXECUTIVE SUMMARY

The role of communications technology in enabling access to information, free expression, and political dialogue has changed dramatically since most U.S. sanctions were first imposed. The 2009 Iranian Green Movement and the Arab Spring revolutions were powerful examples of this new technological reality. Yet U.S. sanctions remain outdated in recognizing these developments that enhance the free flow of information. Sanctions regulations in some cases effectively aid repressive regimes that seek to control access to information within their borders, with negative consequences on the civilian population. For example, after Google unblocked the Google Play store in August 2013 following legal clarification through a general license,<sup>1</sup> reports surfaced that the Iranian government had begun blocking access to the store inside Iran—an indication that U.S. sanctions may have inadvertently been doing the censorship work for the Iranian government until that point.<sup>2</sup>

Five countries are currently subject to comprehensive U.S. sanctions—Iran, Syria, Cuba, Sudan, and North Korea—and are the focus of this paper.<sup>3</sup> They are part of the broader sanctions system that the United States has put in place to advance its foreign policy goals, using trade restrictions as an instrument to exercise pressure on foreign governments.<sup>4</sup> Today, four of the five sanctions regimes include some language authorizing the export of technology that can be used for personal communication. However, the current patchwork of provisions limits the effectiveness of these exemptions.<sup>5</sup> In practice, lack of legal clarity and fear of political or economic repercussions often discourage American companies from attempting to export their products to sanctioned countries. Without the ability to use U.S. technologies, citizens in sanctioned countries often rely on alternative services that may be less protective of human rights and make them even more vulnerable to surveillance and censorship by the local government. This in turn

helps repressive governments to chill speech, rather than encouraging communication and access to information. In other words, sanctions may be doing the work for these regimes, weakening their overall effectiveness as an instrument of U.S. foreign policy.

We argue that the current situation resembles the “smart sanctions” debate (otherwise known as “targeted sanctions”) that took place in the late 1990s.<sup>6</sup> While the overarching goal of sanctions is to pressure leaders into changing policy or taking certain actions, they also significantly impact citizens’ lives. The smart sanctions debate emerged as a result of the increasing recognition that sanctions can cause excessive harm to the civilian population—the very people the sanctions are aiming to help.<sup>7</sup> In response to concerns “over the negative effects of economic sanctions on vulnerable populations and overall societies,”<sup>8</sup> a reform process was initiated, leading to the development of targeted sanctions that are geared to maximize costs to the target regime while minimizing the negative impact on the general population.<sup>9</sup> We have observed a similar trend with regard to personal communications technology in the past few years, and argue that these efforts need to be strengthened and institutionalized.

Since 2009, the U.S. administration and the U.S. Congress have taken a number of significant steps to update comprehensive sanctions regimes to reflect the realities of the digital age. These efforts have helped to make existing provisions more effective, including the First Amendment-type protection built into all economic sanctions implemented under the International Emergency Economic Powers Act (IEEPA) that extend to, for example, personal communications and the ability to travel.<sup>10</sup>

This report offers a thorough analysis of how sanctions regimes have become more targeted with regard to information and personal communication technology in recent years. In addition to the broader trend, we observe and analyze the spillover effects

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from modifications to individual sanctions regimes—particularly Iran and Cuba—to other countries.<sup>11</sup> We offer recommendations to harmonize these efforts in order to make communications tools available to citizens in all countries and further the foreign policy goals of the United States in the process. These reforms should also reduce the cost for private companies and government agencies that currently have to navigate similar but slightly different technology provisions in each sanctions regime, making it more expensive and time-consuming to implement the regulations. The paper is intended to inform decision and policy makers in Congress, the administration, and the broader interested public.

The paper is divided into three parts. The first part provides general background information on sanctions and the evolution of targeted sanctions. The next section outlines how exemptions and authorizations for personal communication technology have been integrated into the various country-specific sanctions in recent years, highlighting the spillover effects between them. The third part then attempts to summarize the trends, draw out the lessons learned, and provide specific recommendations to harmonize and streamline the patchwork of current provisions. The goal is to update sanctions in order to translate existing norms to the digital age, making it easier and less costly for government and for private companies to implement these provisions. Finally, the paper includes a brief section outlining further research questions and related issues.

## SUMMARY OF RECOMMENDATIONS

- Updating sanctions policy to reflect the need for access to personal communications technology can be best achieved through regulation. In order to promote the free flow of information in sanctioned countries, **the U.S. government should issue new General Licenses for Syria, Sudan,**

**and Cuba** based on the precedent established in General License D for Iran authorizing the export of personal communications tools. Model text for this General License is included in Supplement 1 of this paper. These principles should also apply to U.S. policy toward North Korea, but due to differences in both context and the structure of North Korean sanctions, the issue requires further study.

- As part of implementation and outreach, the Department of the Treasury and the Department of State **should issue answers to Frequently Asked Questions (FAQs)** as soon as possible after the licenses have been issued and **update these FAQs on at least an annual basis.**
- The Department of the Treasury, the Department of Commerce, and the Department of State should continue to engage in a **sustained and extensive outreach campaign** directed at multinational, smaller, and medium sized companies across the country to educate firms about the changes.
- **Companies should swiftly react** to these regulatory changes and make their personal communications technology products and services available in sanctioned countries in order to facilitate more secure communication and access to information.
- **Congress can help** ensure that sanctions legislation does not inhibit the transfer of vital information and communications technologies by clarifying that access to personal communications tools and the free flow of information is protected under current and future sanctions. Model language for how Congress should approach this, **by establishing a “policy of the United States” or a “sense of Congress”** enabling the free flow of information in sanctioned countries, is included in Supplement 2 of this paper. This language aims to create a high-level policy while giving the

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Treasury Department's Office of Foreign Assets Control (OFAC) sufficient flexibility to issue clear and actionable authorizations for personal communications tools.

- **Congress can further support** the goals outlined in this paper by **increasing technical expertise at the State Department and the Treasury Department**, which would help the government keep definitions of personal communications tools up-to-date to reflect new technological realities.
- Structures need to be put in place to update these regulations as needed. The **Treasury Department and Department of State should revisit the regulations** in a timely manner (every twelve months at a minimum) and make changes based on feedback received from outside stakeholders, including the companies themselves. This

feedback may be solicited through requests for public comment on forthcoming guidance.

- An **independent Technical Advisory Committee (TAC) focusing on sanctions and information technology** should bring together civil society and industry representatives to provide concrete recommendations to the Department of the Treasury, the Department of Commerce, and the Department of State aimed at strengthening and improving sanctions. The TAC's report would also feed into the annual updates of the FAQs for these licenses.
- **Civil society should be integrated** into this process to help the government and companies understand the situation on the ground in sanctioned countries and provide feedback on the technical definitions.

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## **PART I: BACKGROUND ON U.S. SANCTIONS, SMART SANCTIONS, AND PERSONAL COMMUNICATIONS TOOLS**

The United States has utilized economic sanctions repeatedly since World War II.<sup>12</sup> The President “enjoys broad authority under several statutes to impose sanctions in response to national security or foreign policy concerns,” while Congress has also “mandated or encouraged the imposition of economic sanctions in particular instances.”<sup>13</sup> Currently, the United States has comprehensive sanctions in place against five countries—as well as thematic sanctions programs that deal with a broader swath of countries and issues, such as narcotics trafficking—and Congress and the Executive sometimes add new penalties as political climates evolve. Each country is governed by separate—and at times, confusing—sanctions regimes that vary in their scope, processes, regulatory oversight, and legal authority. Moreover, since the early 1990s the number of sanctions imposed has significantly increased.<sup>14</sup>

Independent of the broader debate over the legitimacy of sanctions, the underlying assumptions for this paper are that (1) current sanctions will remain in place in the foreseeable future and (2) it is likely that new sanctions will continue to be imposed as long as political leaders consider them part of their policy arsenals.<sup>15</sup> Our research therefore focuses on maximizing sanctions’ effectiveness and minimizing negative consequences.<sup>16</sup> This approach mirrors the efforts in the late 1990s to make sanctions more targeted.

The unintended negative consequences of sanctions have been well documented, especially during the 1990s. Recognizing this reality, scholars and practitioners have concluded that “comprehensive sanctions are blunt instruments; their use is designed to coerce the leaders of the targeted regime to change policies, but their economic impact often

causes substantial collateral damage to the populace at large and sometimes neighboring countries.”<sup>17</sup> In addition to causing significant harm to civilian populations, the unintended consequences of sanctions have often been detrimental to the broader foreign policy goals of the sanctions regime. As former UN Secretary General Boutros Boutros-Ghali highlighted, sanctions “can also defeat their own purpose by provoking a patriotic response against the international community...by rallying the population behind the leaders whose behaviour the sanctions are intended to modify.”<sup>18</sup> Moreover, this effect explains how the impact of sanctions differs when imposed on democratic compared to non-democratic countries. Putting pressure on the population at large through sanctions only produces greater pressure on the leadership to modify its behavior if the leadership has an incentive to be sympathetic to the plight of its citizens. This is arguably more likely in a democratic system than under a non-democratic regime.<sup>19</sup>

Since sanctions are usually imposed by a democratic state against a non-democratic state, minimizing the negative consequences is crucial. In addition to reducing humanitarian harm, this helps avoid the effect described by Boutros-Ghali, which would render the sanctions less effective overall. That is why the notion of targeted sanctions has become so popular in recent years. The philosophy of targeted sanctions suggests that, “if more comprehensive sanctions cannot be ruled out, the inclusion of effective humanitarian exemption clauses only increased in importance. Generally speaking, humanitarian exemption clauses exclude certain categories of goods—typically, food and medical supplies—from the sanctions regime.”<sup>20</sup> In short, targeted sanctions either blacklist or whitelist specific actors and goods. For most U.S. sanctions regimes, these carve-outs cover commercial sales of food, medicine, and medical devices, as well as donations to sanctioned countries.



## Exemption vs. Authorization Under U.S. Sanctions

Although an exemption and an authorization generally have the same end goal—to enable the export of certain types of goods or services to sanctioned countries—they differ in practice. An exemption prevents U.S. agencies from regulating a particular issue. For example, the Berman Amendment created a carve-out in 50 U.S.C. 1702(b) which prevents the regulation of informational materials, stating specifically that the President’s jurisdiction “does not include the authority to regulate or prohibit, directly or indirectly” the export of materials such as publications, photographs, and films.<sup>21</sup> In practice, this exemption means that the Treasury Department’s Office of Foreign Assets Control has no jurisdiction over informational materials and cannot prevent any individual or organization from exporting those materials to sanctioned countries.

By contrast, under an authorization, OFAC maintains authority to regulate the export of goods by explicitly granting permission to export certain products that would otherwise be prohibited under sanctions. OFAC can therefore change the scope of the license, enact penalties against violators, and otherwise update the regulation as necessary. General License D is an example of an authorization that gives companies the ability to export software, services, and hardware incident to the exchange of personal communications to Iran. In this paper, we recommend that specific language governing the availability of personal communications continue to be enacted through authorizations, not exemptions, in order to allow maximum flexibility for interpreting and updating these authorizations.

Targeted sanctions are geared to maximize the cost against the regime in question while minimizing the negative effect on the general population.<sup>22</sup> “They do so either by (1) targeting specific actors and sectors of the economy ab initio, or (2) including humanitarian exemption clauses that make provisions for products essential to meeting humanitarian needs. Neither approach has significantly limited the effectiveness of the sanctions regime. To the contrary, practitioners and analysts agree that focused targeting and humanitarian exemption clauses have actually increased the effectiveness of various sanctions regimes. It is thus a misconception that comprehensive sanctions are necessarily the most effective ones.”<sup>23</sup>

The 1990s saw an increase in the number of authorizations allowing for the provision of humanitarian aid. According to one seminal report on the issue, “these sanctions are designed to [i] focus on groups of persons responsible for the breaches of the peace or the threats to international peace and security, while [ii] ideally leaving other parts

of the population and international trade relations unaffected.”<sup>24</sup> We argue that this concept is now being applied to personal information and communication technology as well. While there have been efforts to focus sanctions on restricting the export of “sensitive technology” that could be used for surveillance and censorship—corresponding with [i]—this paper focuses on [ii] and the provisions aimed at ensuring that sanctions restrictions do not affect personal communication technology used by the population.

The last few years have witnessed new legislation and regulations aimed at enabling the provision of technology to citizens in sanctioned countries. Although the technology in question is new, the shift aligns with earlier precedents established to make informational materials available. In the case of the sanctions imposed on Rhodesia in the 1960s, for example, publications and news material—i.e. information—were part of exemptions in UN sanctions.<sup>25</sup> Information and informational materials are also exempted from most U.S. economic sanctions programs under the Berman Amendment (for further

explanation, see the box on the “Informational Materials Exemption”).

Today, it is becoming increasingly clear just how essential information technology is to the lives of citizens in repressive countries, which underscores the need for policies to reflect it. A 2011 report by Richard Fontaine and Will Rogers at the Center for a New American Security states that “the government must also ensure that it does not prohibit the export of technology that could be used to promote online freedom.”<sup>26</sup> Moreover, the Green Movement in Iran in 2009 and the revolutions in the Arab world two years later showcased the catalytic role that personal communication technology can play at critical times in a nation’s history. And as we demonstrate in the next section, sanctions regimes are gradually evolving in response to the lessons learned. The precedents established in the 2010 General License for Iran, Sudan, and Cuba were followed by a similar policy

change for Syria in 2011; similarly, a General License issued by the Treasury Department for Iran in 2013 closely resembles definitions used in the Commerce Department’s Cuban Consumer Communications Devices exception of 2009. These spillover effects from sanctions imposed on one country to another reflect a trend of increased permitting the export of information and communications tools and materials. What began with enabling companies to apply for specific licenses for the export of personal communication technologies is now being extended to new general licenses for broader families of personal communications technology.

The main goals of these sanctions carve-outs are to give citizens the ability to access and share information and communicate with stronger protection against monitoring by local governments. The growing threat of government surveillance and censorship underscores their

### Informational Materials Exemption (The Berman Amendment)

*“The authority granted to the President by this section does not include... the authority to regulate or prohibit, directly or indirectly, the importation from any country, or the exportation to any country, whether commercial or otherwise, regardless of format or medium of transmission, of any information or informational materials, including but not limited to, publications, films, posters, phonograph records, photographs, microfilms, microfiche, tapes, compact disks, CD ROMs, artworks, and news wire feeds.”*

The “Berman Amendment” was originally enacted in Section 2502(a) of the 1988 Omnibus Trade and Competitiveness Act. It limits the President’s authority to regulate or prohibit the import or export of informational materials such as publications, films, and photographs. Passed in response to the United States’ border seizures of books and magazines from embargoed countries, the Berman Amendment created an informational materials exemption, declaring that the executive authority to regulate imports and exports under the Trading With the Enemy Act (TWEA) and the International Emergency Economic Powers Act (IEEPA) did not include the ability to regulate informational materials.

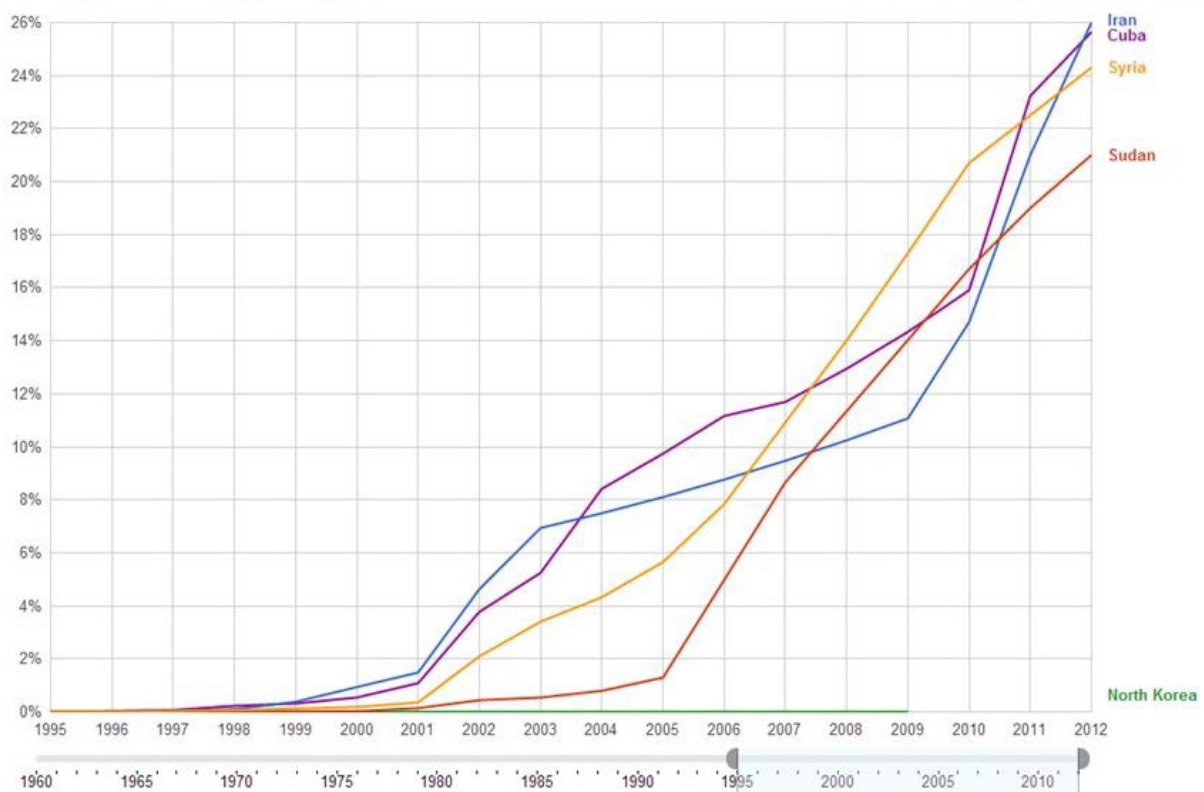
In 1994, Congress passed the Free Trade in Ideas Act (FTIA) to clarify the scope and to reaffirm the intention of the Berman Amendment. The FTIA expanded the Berman Amendment to apply “regardless of format or medium of transmission” and to “any information or informational materials,” adding examples of newer media to the list of exempted materials as well.<sup>27</sup>

Representative Howard Berman, who sponsored both the Berman Amendment and the Free Trade in Ideas Act, emphasized that their purpose was to “ensure that the President’s power to regulate economic relations with foreign countries is not used to inhibit communication with the people of those countries.”<sup>28</sup>

importance. For example, in 2012, researchers discovered that a version of anti-censorship software used by many Iranians to bypass government filters was circulating with a malicious backdoor.<sup>29</sup> Providing better technology can help to increase people's protection against censorship and surveillance by local governments. Making more technology—particularly more sophisticated technology—available in a country also increases the number of products and services a government has to monitor, raising the cost of such activity.

The United States has attempted to meet these goals by both imposing additional penalties on actors who have been known to censor free speech as well as allowing the export of free web services such as instant messaging and email to these countries. This paper examines these recent developments in greater depth. The following section outlines how carve-outs for personal communication technology have been integrated into the country-specific sanctions in recent years, highlighting the spillover effects between the various sanctions regimes of the countries subject to comprehensive U.S. sanctions.

*Figure 1. Percentage of Individuals Using the Internet in Sanctioned Countries*



Source: ITU Data Explorer, <http://www.itu.int/ITU-D/ict/statistics/explorer/index.html>



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## PART II: COUNTRY-SPECIFIC CASE STUDIES—U.S. SANCTIONS AND SPILLOVER EFFECTS

U.S. sanctions vary from country to country and are based on a complex system of both legislation passed by Congress and regulation imposed by federal agencies. However, these policies are not crafted in a vacuum. In recent years, a clear trend has emerged: changes to information and communications technology provisions for one country have often mirrored changes in another country's sanctions regime, suggesting significant spillover effects. Put another way, precedents established in the policy toward one country can lead to changes in the restrictions imposed on another. Broadly, this is a reflection of the fact that provisions relating to personal communication are becoming more common across sanctions regimes.

In March 2010, for example, OFAC issued a General License for Internet-based personal communications services (email, instant messaging, and other free and publicly available services) that applied to three sanctioned countries: Iran, Sudan, and Cuba.<sup>30</sup> Many of the key provisions of the license were originally proposed in an Iran sanctions bill intended to address the issues that came up during the 2009 presidential election and the protests that followed. Although the bill did not pass, the General License was adopted as a regulation a few months later, not only for the Iranian sanctions regime, but also for the Sudanese and Cuban controls. In August 2011, a similar license for Internet-based personal communications services was adopted for Syria. More recently, in May 2013, a broader authorization for personal communications hardware, software, and services was added to the Iranian sanctions regime. A number of the technologies included in the annex to Iranian "General License D" were categorized using language very similar to the

"Consumer Communications Devices" exception in the Cuban controls, although it is important to note that the Iranian license authorizes certain financial transactions whereas the Cuban regulations do not.

Considering technology adoption trends, it is critical to harmonize these efforts as soon as possible. Although the use of technology varies in the five countries, there is a steady trend of increasing usage of the Internet and mobile technology in Iran, Syria, Sudan, and Cuba (see Figure 1). The percentage of individuals using the Internet in each country in 2012 was at least 12 times what it had been in 2001, according to the World Bank.<sup>31</sup> There is no data available either from the World Bank or the International Telecommunications Union about Internet penetration in North Korea. This omission primarily reflects the technological reality in North Korea today, where few people outside of the government use mobile phones and even fewer have access to an Internet that is part of the worldwide network.<sup>32</sup>

In the following pages, we provide a country-by-country analysis of the evolution of targeted sanctions in Iran, Syria, Cuba, Sudan, and North Korea.

### IRAN SANCTIONS

*Iran has frequently served as the model for translating the concept of targeted sanctions to the digital age. The Green Movement highlighted the critical role that communications tools can play in enabling citizens to communicate, organize, and participate in civic discourse. Since 2009, both the Obama Administration and members of Congress have recognized that U.S. sanctions frequently inhibit rather than enable Iranians to access these very tools, from email services to secure messaging and antivirus software. In a country where the government operates a sophisticated censorship and surveillance regime,*

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*denying access to these services can stifle the free flow of information and force individuals to rely on less secure options to communicate. Thus, the U.S. government has attempted to minimize these unintended consequences by modifying Iranian sanctions several times to include authorizations for services that enable personal communications in the modern era, building on the general exemption already in existence for personal communication and information itself. The Administration has issued two general licenses—one in 2010 and another in 2013—covering personal communications products, as well as offering clarifying guidance and statements of specific licensing policy to explicitly make it clear to American companies what they can legally export already, or what they will likely be granted specific permission to do.*

Sanctions have been a cornerstone of U.S. foreign policy toward Iran since the 1979 Islamic Revolution. An initial stage focused on the fallout from the Revolution, and a second stage beginning in 1995 implemented a more comprehensive ban on imports and exports of goods, services, and technology.<sup>33</sup> The key piece of legislation, the Iran Sanctions Act, was enacted in 1996 and includes a wide range of energy-related restrictions.<sup>34</sup> Its provisions were designed to limit the Iranian government's ability to develop a nuclear weapons program. Recent significant additions to the Iran sanctions regime include the Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA), signed by President Barack Obama on July 1, 2010, and the Iran Threat Reduction and Syria Human Rights Act (ITRSHRA), which went into effect on August 10, 2012.<sup>35</sup>

Humanitarian concerns have resulted in a number of amendments to the Iranian sanctions regulations over the past decade. Food and medicine donations are exempt from the sanctions as long as they are intended to relieve human suffering.<sup>36</sup> Two general

licenses currently allow the export or reexport of food and medical supplies to Iran, including, in certain cases, financial transactions to support the export of these items. These exports were previously subject to a specific licensing program through the Trade Sanctions Reform and Export Enhancement Act (TSRA) of 2000.<sup>37</sup> The U.S. government has also issued temporary authorizations for disaster relief aid and has made it legal for U.S. employees of the United Nations, the World Bank, the International Monetary Fund, the International Atomic Energy Agency, the International Labor Organization and the World Health Organization to conduct their day-to-day work in Iran.<sup>38</sup>

More recently, the concept of targeted sanctions has also been applied to information and communications technology in the Iran sanctions regime. Communications technology appears to have been first mentioned in the 2003 Interpretive Guidance issued by OFAC on the provision of Internet connectivity services to civilian customers in Iran.<sup>39</sup> Under the policy, specific licenses could be granted on a case-by-case basis provided that “the main purpose is to benefit the people of Iran through increased access to information” and that no goods, technology, or software was exported either directly or indirectly from US persons to Iran.

The post-election protests in Iran in 2009, however, ushered in a much more significant policy shift. The popular uprising highlighted the critical role that communications tools could play in enabling ordinary individuals to organize and share information with each other and the outside world—and it prompted the Iranian government to crack down on dissent online as well as offline, developing a sophisticated censorship and surveillance apparatus that the state could use to spy on its citizens. In reaction to these developments, the U.S. government has implemented a number of changes in both legislation and regulation to promote Internet freedom.

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The “Victims of Iranian Censorship Act” (VOICE Act) was incorporated into the FY 2010 National Defense Authorization Act in October 2009 and was the first significant attempt to incorporate access to information and censorship circumvention tools into the Iran sanctions.<sup>40</sup> Under the VOICE Act, the Broadcasting Board of Governors was authorized to expand Farsi language broadcasting into Iran and offered monetary assistance for the development of technologies to counter jamming. In addition, the VOICE Act commissioned a report to identify companies “knowingly or negligently” selling technology to Iran that could be used for online censorship or surveillance of its citizens.<sup>41</sup> While the VOICE Act represented an important step toward a formal recognition of the importance of access to information, it did not specifically address the availability of tools or services offered by American companies, nor did it detail enforcement mechanisms for U.S. companies that were identified as providing censorship and surveillance equipment to the Iranian government or affiliated entities.

In March 2010, the Treasury Department issued a “General License Related to Personal Communications Services.”<sup>42</sup> It authorized the “exportation of certain services and software over the Internet” to Iran, as well as Cuba and Sudan. The list of authorized products included mass-market communications tools such as instant messaging, chat, email, and social network services that were free and publicly available. It incorporated a number of components of the “Iran Digital Empowerment Act” (H.R. 4301), a bill introduced by Representative Jim Moran of Virginia in December 2009.<sup>43</sup> Moran’s bill was written to “support the democratic aspirations of the Iranian people by enhancing their ability to access the Internet and communications services” and covered the export of software and services similar to those that were included in the General License.<sup>44</sup>

Not long after the General License was issued, President Obama signed the Comprehensive Iran

Sanctions, Accountability, and Divestment Act into law on July 1, 2010. In addition to imposing new financial restrictions, CISADA blacklisted “sensitive technology” which could be used for censorship and surveillance purposes.<sup>45</sup> It addressed the fact that dual-use technologies had become available in Iran through black market transactions. Under Section 106, “sensitive technology” was defined as “hardware, software, telecommunications equipment, or any other technology, that the President determines is to be used specifically— (A) to restrict the free flow of unbiased information in Iran; or, (B) to disrupt, monitor, or otherwise restrict speech of the people of Iran.”<sup>46</sup>

The Iran Threat Reduction and Syria Human Rights Act of 2012 (ITRSHRA) was intended to bolster existing sanctions and put further pressure on the Iranian regime to stop its nuclear program. ITRSHRA imposed additional sanctions on individuals providing equipment and technology that members of the Iranian and Syrian governments were using to commit human rights abuses and on Iranians engaging in censorship and repression.<sup>47</sup> It also codified Executive Order 13606, the “Grave Human Rights Abuses by the Governments of Iran and Syria via Information Technology” (GHRAVITY) Executive Order. The GHRAVITY E.O. enabled the U.S. government to sanction foreign individuals and entities operating or selling censorship and surveillance technology to the Iranian government.<sup>48</sup>

In his Nowruz remarks in March 2012, President Obama addressed the fact that the Iranian people have been continually denied access to information. “An electronic curtain has fallen around Iran,” he said, “a barrier that stops the free flow of information and ideas into the country, and denies the rest of the world the benefit of interacting with the Iranian people.”<sup>49</sup> The same day, OFAC issued interpretive guidance and a Statement of Licensing Policy on Internet Freedom in Iran that attempted to clarify which technologies that were covered under the 2010

General License and to encourage U.S. companies to make their products available to the Iranian people.<sup>50</sup> While the guidance enumerated specific free and publicly-available products covered by the General License, the new licensing policy established favorable conditions for companies seeking specific licenses to export other products—including those that cost money—to Iran, indicating that they would likely be approved if they met the right conditions.

On May 30, 2013, the Treasury Department authorized U.S. companies to export software, services, and hardware to Iran for personal communications purposes.<sup>51</sup> “General License D” expands upon carve-outs created by the previous General License and Interpretive Guidance to offer greater clarity about the provision of software and services, such as secure chat tools. It also allows the sale of software and hardware, including antivirus and anti-filtering programs, voice-over-IP tools, mobile phones, and laptops. On the same day, the State Department identified a number of additional individuals and entities to designate under the Specially Designated Nationals list for “contributing to serious human rights abuses

committed by the Iranian regime, including through the use of communications technology to silence and intimidate the Iranian people.”<sup>52</sup>

General License D has already led to some concrete changes, such as Google and Apple unblocking parts of their mobile app stores in Iran in August 2013. A number of implementation challenges remain, however, before the license can be fully implemented. We address these issues in Part III of this paper.

## SYRIA SANCTIONS

*The treatment of personal communications technology in the Syrian sanctions regime reflects similarities to the Iranian authorizations, although the policies and guidance are not nearly as comprehensive as those for Iran. Many of the new restrictions imposed in recent years have applied to both Iran and Syria, but underlying differences in the structure of the sanctions mean that authorizations and guidance must be issued separately for Syria. In 2011, the Administration granted a General License for*

### Communications Tools and the Iranian “Filternet”

Today, Iran has the highest proportion of Internet users of any country in the Middle East.<sup>53</sup> In 2009, when major protests swept across the country challenging the results of President Ahmadinejad’s reelection, videos posted by Iranian citizens on YouTube exposed the government’s crackdown against protesters to the world. Recognizing the threat posed by personal communications tools, the Iranian government has become much more tech savvy in recent years. The Ministry of Information and Communication Technology now operates an elaborate filtering scheme, and the government is pushing the development of a national network that would make it even easier to control citizens’ behavior.<sup>54</sup>

In May 2013, the *Wall Street Journal* reported that the Iranian government had created a new cyber unit for surveillance of social-networking sites prior to the June presidential election.<sup>55</sup> Later in the month, Under Secretary of State Wendy Sherman spoke of “a deliberate and unrelenting level of repression in the lead-up to these elections” during a hearing in front of the Senate Foreign Relations Committee.<sup>56</sup> Recent evidence also indicates that the government exerts another, subtler form of control over the network: deliberately slowing connection speeds, or throttling, in order to create additional barriers that prevent users from accessing critical communications tools—particularly during periods of protest or political unrest.<sup>57</sup> In June 2013, the Iranian Minister for Communications and Information Technology admitted that the government had reduced Internet speeds in the days prior to the 2013 election to “preserve calm.”<sup>58</sup>



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*Syria that was similar to the one applied to Iran in 2010. Since then, however, the Syrian regulations have not been modified at the same pace. As a result, authorizations for personal communications in Syria are not as mature as those for Iran.*

U.S. sanctions on Syria date back to 1979, when it was added to the State Department's State Sponsors of Terrorism List. Countries designated as State Sponsors of Terrorism are subject to general, but relatively limited, U.S. sanctions, including restrictions on receiving aid from the United States.<sup>59</sup> More recently, Congress passed legislation specifically targeting Syria with additional sanctions. The Syria Accountability and Lebanese Sovereignty Restoration Act (SALSA) became law during the Bush Administration, restricting the majority of U.S. exports to Syria from December 2003 onward, through regulations implemented by the Commerce Department.<sup>60</sup> The SALSA penalties apply until Syria ceases its support of international terrorist groups and blocks the export of military and dual use items.<sup>61</sup>

Many of the sanctions imposed on Syria in the past few years have been updated in parallel to the Iranian sanctions. The Iran Threat Reduction and Syria Human Rights Act of 2012 contains provisions regarding Syria in addition to Iran. The GHRAVITY Executive Order, which gives the U.S. government the ability to sanction individuals or entities facilitating human rights abuses via information technology, also applies. In other cases, however, changes that were first made to the Iranian sanctions regime have later been replicated in the Syrian sanctions controls.

The only U.S. exports exempted under the original SALSA ban were food and medicine, but a number of changes have since been made to facilitate access to information and communication between the Syrian people. In August 2011, the Treasury Department

issued General License No. 5 authorizing the export of "services incident to the exchange of personal communications over the Internet" including instant messaging, chat and email, and social networking—an extension of the 2010 General License for Iran, Sudan, and Cuba.<sup>62</sup> Like the Iranian carve-out, the General License applies only to free and publicly available online services and does not license the transfer of Internet connectivity, telecommunications infrastructure, or non-personal web-hosting and domain name services for commercial uses. Notably, General License No. 5 does not mention software, making it somewhat narrower than the 2010 license it otherwise mirrors.

Moreover, in contrast to Iran, the scope of U.S. policy toward personal communications in Syria has not been clarified in as much detail, although General License No. 11A and General License No. 14 cover some relevant issues. General License No. 11A authorizes non-governmental organizations to provide services for a number of activities which include supporting "humanitarian projects to meet basic human needs in Syria"; "democracy building in Syria"; and "education in Syria, including... increasing access to education."<sup>63</sup> General License No. 14 allows "transactions with respect to the receipt and transmission of telecommunications involving Syria" as long as they do not involve payment to the Syrian government or any sanctioned entities in Syria.<sup>64</sup>

In June 2013, two weeks after General License D was incorporated into Iranian sanctions, OFAC issued a Statement of Licensing Policy for Syria which established a favorable licensing policy regime—meaning that specific licenses may be granted on a case-by-case basis—for transactions related to telecommunications and agriculture in Syria. The statement outlines that "The purpose of this policy is to enable private persons in Syria to better and more securely access the Internet."<sup>65</sup>



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## CUBA SANCTIONS

*U.S. sanctions against Cuba constitute one of the most comprehensive unilateral sanctions programs in the world. The breadth and complexity of the legal restrictions related to Cuba create unique challenges compared to the other comprehensive sanctions regimes. The executive branch is generally more limited in its ability to publish new regulations or issue guidance for Cuba. At the same time, however, successful changes to the Cuban embargo have often had broader implications for other sanctions regimes. In April 2009, the Obama Administration requested changes to the Cuban Assets Control regulations and included provisions aiming to “increase the free flow of information to the Cuban people” by authorizing the creation of general licenses for a wide range of activities related to telecommunications services and personal communications. The emphasis on increasing the free flow of information was largely unprecedented at the time and soon bled over into other sanctions regimes. Following a 2009 License Exception Strategic Trade Authorization for “Consumer Communications Devices,” Cuba was also covered by the 2010 General License issued for Iran and Sudan.*

In 1960, the United States imposed a financial embargo on Cuba under the 1917 Trading with the Enemy Act. The embargo was eventually codified into a statute called the Cuban Democracy Act (CDA) in 1992.<sup>66</sup> Further sanctions were added during the Clinton Administration under the Cuban Liberty and Democratic Solidarity (LIBERTAD) Act of 1996, also known as the Helms-Burton Act.<sup>67</sup> In 2000, in response to concerns about the negative effect of sanctions, Congress passed the Trade Sanctions Reform and Export Enhancement Act, which relaxed the restrictions to allow the export of certain agricultural products and medicine.<sup>68</sup>

The Cuban Democracy Act of 1992 initially specified

that telecommunications services between the United States and Cuba were allowed and authorized telecommunications facilities necessary to provide these services.<sup>69</sup> Under the same section, “Support for the Cuban People,” food and medicine transports were also granted an exception. A decade later, several amendments made the Cuban Assets Control Regulations more targeted, increasing humanitarian exemptions.<sup>70</sup>

In more recent years, personal communications tools have also come into greater focus. In April 2009, President Barack Obama asked the State Department, the Department of the Treasury, and the Department of Commerce to update the Cuban Assets Control Regulations to enable greater telecommunications links between Cuba and the United States. He also supported the provision of licenses for telecommunications providers and satellite TV services to conduct business in Cuba.<sup>71</sup>

In response, OFAC amended the Cuban Assets Control Regulations, and Commerce’s Bureau of Industry and Security issued a License Exception strategy in September 2009.<sup>72</sup> The amendments to the regulations reiterated that mail and telecommunications are authorized between the United States and Cuba and allowed for the establishment of and transactions related to fiber-optic cables and satellite structures.<sup>73</sup> Moreover, the License Exception Strategic Trade Authorization, titled “Consumer Communications Devices,” listed and authorized the export of certain software and commodities, including printers, disk drives, modems, and mobile phones—although subject to a donation requirement because financial transactions are not authorized.<sup>74</sup> Implementation remains a challenge, however, as the authorization was interpreted narrowly to not include certain hardware required to make these activities feasible or appealing to companies.<sup>75</sup>

In March 2010, OFAC issued additional technology authorizations for Cuba, including it under the

General License Related to Personal Communications Services that applies to Iran and Sudan. Consistent with the donation requirement under the CCD exception, the General License only covers software that is publicly available at no cost and does not allow for the export of telecommunications infrastructure or other transmission facilities.

## SUDAN SANCTIONS

*The Sudanese sanctions are arguably the least mature of the countries in this report in terms of making personal communications technology available (with the exception of North Korea,*

*which is explained in further detail in the next subsection). Beyond the 2010 General License, there have been no subsequent attempts to issue clarifying guidance or extend additional authorizations to promote the free flow of information in Sudan. At the same time, like Iran and Syria, the U.S. does not want American technology ending up in the hands of the Sudanese government or sanctioned individuals. In this way, the Sudan sanctions regime is another example that tries to marry the two elements of targeted sanctions—whitelisting and blacklisting of specific goods and actions—albeit in a less evolved way than the Iranian or Syrian regulations.*

### Technology Sanctions and Sudan's "Green" Moment

*"The embargo has a particular effect on anyone trying to use technology for the social good."<sup>76</sup>*

There is a common perception that access to technology in Sudan is so minimal that U.S. sanctions have a very limited impact on the free flow of information in the country. However, in reality, Internet and technology penetration rates are significant, with 7.5 million Internet users out of a population of roughly 35 million, and many more acquiring Internet-enabled phones every day.<sup>77</sup> When U.S. tools and services are blocked in Sudan, it has negative consequences for individuals who rely on them to communicate and access information—including digital activists.<sup>78</sup> This has been particularly true since the beginning of the so-called "Sudan Revolts" from June 2012 onward, which were enabled by the use of digital communications tools.

Sudan is rated "Not Free" on the 2013 "Freedom on the Net" report published by Freedom House, falling in the bottom quarter of countries ranked on the index.<sup>79</sup> According to the report:

Increasingly affordable and reliable internet service has enabled Sudanese citizens to use digital media tools to share information, communicate with the international community, document news not covered in the heavily censored traditional media, and organize protest movements against government repression. This online engagement and activism, however, has led the Sudanese government under President Omar al-Bashir to increasingly crackdown against internet freedom through various tactics that include: growing censorship of opposition news outlets and forums online; the deployment of a Cyber Jihadist Unit to monitor social media websites and hack into activists' accounts; and the harassment and arrest of digital media activists and online journalists; among other tactics.<sup>80</sup>

In September 2013, the Internet was cut off across Sudan for a period of 24-hours, which many believed was a government response to protests and rioting across the country.<sup>81</sup> According to Renesys, it was the largest national blackout since Egypt was disconnected from the Internet in January 2011 at the height of the Arab Spring movement.<sup>82</sup> Although the government issued official statements denying responsibility for the shutdown, the analysis suggests that it was part of a coordinated effort to remove Sudan from the Internet<sup>83</sup> and, given the scale, likely a direct result of government action.<sup>84</sup> When the connections were eventually restored, they remained sluggish, and access to social networks like Facebook and YouTube was largely restricted because of slow connection speeds.

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U.S. sanctions against Sudan have been in place since 1997 in response to the country's ties to terror networks and human rights abuses committed by the government.<sup>85</sup> In 2010, along with Iran and Cuba, Sudan was included in the General License issued by the Treasury Department to allow the exportation of services for personal communication over the Internet. The license does not authorize direct or indirect export of any of these services or software to the Government of Sudan. Since then, there has been no indication from the U.S. government to clarify or expand the scope of this authorization, despite increasing Internet penetration and political developments in Sudan that underscore its importance. The most relevant development came in April 2013, when the Treasury Department issued General License No. 1 authorizing academic, research and professional exchanges in order to promote education and development.<sup>86</sup> This license, however, relates more generally to the free flow of information and ideas than to the specific potential of personal communications technology.

## NORTH KOREA SANCTIONS

*At the present time, there is no mention of personal communications technology in the North Korean sanctions regime. U.S. regulations administered by OFAC block exports to specially designated nationals, who are mostly high-level officials and those with close ties to the North Korean government. In addition, exports to North Korea are subject to the Department of Commerce's export licensing process with a general policy of denial in place for many items as well as a general policy of approval for humanitarian and related goods to benefit the North Korean people. While the North Korea sanctions can de facto be counted among the comprehensive sanctions regimes, some practitioners argue that it is different from the other four because of the specific structure of the provisions in place,*

*including the implementation of the regime.*

The United States first issued economic sanctions against North Korea in 1950 under the Trading With the Enemy Act. The application of this act to North Korea was terminated in 2008, one day after the United States issued an executive order that blocked the property and interests of North Korean nationals.<sup>87</sup> Recent sanctions center on North Korea's program to develop nuclear weapons. A 2010 executive order also blocks the property of specific people in North Korea (EO 13551), and a 2011 executive order prohibits imports of goods and services from North Korea to the United States. OFAC prohibits exports to specially designated nationals, while the remaining exports to North Korea are subject to the licensing process under the Export Administration Regulations administered by BIS with a general policy of denial in place for many items. At the same time, a general policy of approval is in place for humanitarian and related items "intended for the benefit of the North Korean people."<sup>88</sup>

There is currently no mention of personal communications technology in the North Korean sanctions program. The vast majority of North Koreans lack access to the technology or media outside of state-run services. There is no independent broadcast media in North Korea and all radios and TVs are tuned to government-owned stations. With only eight Internet hosts, the country ranks worst in the world for the number of users online per 100 people.<sup>89</sup> According to the World Bank, only 4% of the North Korean population has cell phone subscriptions and neither the World Bank nor the ITU provides data on Internet usage.<sup>90</sup> In the future, however, this could change, at which point explicit legal clarity indicating that there is no existing restriction on exporting personal communication technology to North Korean citizens might be needed to encourage companies to make their products available.

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## PART III: RECOMMENDATIONS

Personal communications tools, from email to anti-filtering software, clearly enhance the free flow of information, enabling citizens in repressive countries to communicate with one another and with the outside world. U.S. sanctions should therefore be updated in a targeted manner to help ordinary individuals access these vital services and tools, rather than indirectly helping their governments monitor and censor communications. This section of the paper outlines recommendations for harmonizing these changes across sanctions regimes to translate existing norms to the digital age. This framework includes a mechanism for updating these policies in the future to keep pace with technological developments as well as political changes. We argue that Congress can create a consistent, high-level policy that protects the free flow of information under current as well as future sanctions. We recommend that specific changes be enacted in regulations, however, because they can be adapted more easily to reflect new realities in each context. To complement these legal and regulatory actions, we encourage the Departments of State, Treasury, and Commerce to take additional steps to facilitate the implementation of these policies within the government and to encourage American companies to take advantage of them.

### *Translating Existing Norms to the Digital Age: Legislation vs. Regulation*

“Technological developments outpace the rate of legal evolution,” law professors observed in the late 1990s with regard to the Internet’s expansion.<sup>91</sup> There are many areas in which the law is currently struggling to meet the pace of technology, including privacy, security, and internet behavior generally. It is difficult to predict future changes and translate existing laws to the digital age.<sup>92</sup> Moreover, when a law is passed, it is often reactive and outdated after only a few years due to latest technological advances, but making subsequent revisions is difficult.

Two main conclusions result from this insight. First, any Congressional legislation should focus on general policy principles for a given issue, rather than being written to apply to specific technology products. Furthermore, since the process of updating and writing new laws can often take years, the law must be dynamic enough to be able to apply to future technological development or else its relevance will be limited. Guided by these two principles, this paper focuses on high-level principles regarding legislative changes that can be made by Congress. Specific recommendations focus on regulation enacted by federal agencies rather than legislation. In general, regulations are easier to adapt if unforeseen consequences occur in addition to being easier to update to reflect new technological developments.

## SPECIFIC RECOMMENDATIONS

Updating sanctions policy to reflect the need for access to personal communications tools can be achieved through regulation. In order to promote the free flow of information in sanctioned countries, the U.S. government should issue new General Licenses for Syria, Sudan, and Cuba based on the precedent established in General License D for Iran. Model text for these General Licenses is included in Supplement 1 of this paper and is based on the technical categories included in General License D and the Cuba Consumer Communications Devices exception. We recognize that there are nuances to each set of sanctions regulations and that it may be necessary to adopt individual licenses for each of the three countries that reflect minor differences in substance or implementation. However, OFAC should try to minimize these variations and strive to reflect the universal norm of the free flow of information in a consistent standard that companies can easily comply with.

With regard to North Korea, given the context and the structure of North Korean sanctions, a General



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License might not be the appropriate policy solution at this time. The principle of promoting the free flow of information, however, should guide future decisions about North Korean sanctions, especially if confusion or ambiguity arises as Internet penetration increases about whether companies can make their products available. We therefore recommend that the U.S. government consider this issue further and be prepared to make adjustments as necessary to ensure that the norm is reflected in the North Korean sanctions regime as it evolves.

After a consistent and actionable policy toward sanctioned countries has been established, the immediate next step will be implementation and outreach. Past efforts to authorize certain tools and services have often failed to achieve their intended goals because companies are unsure about whether and how they can actually use a license to make products available, including when questions arise about financial transactions and outstanding legal liabilities. The result is that companies take a risk-averse approach and often continue to withhold their products until they receive additional explicit authorization in the form of interpretive guidance or specific licenses. This is inefficient and counterproductive to the goals of the policy shift. We recommend that the Treasury and State Departments issue answers to Frequently Asked Questions (FAQs) as soon as possible after the licenses have been issued and update these FAQs on at least an annual basis. In addition, the Department of the Treasury, the Department of Commerce, and the Department of State should continue to engage in a comprehensive outreach campaign directed at multinational, smaller, and medium sized companies across the country to educate firms about the changes. These efforts will help raise awareness about the policy and provide greater clarity about how to actually implement it.

For these efforts to be successful, companies also need to take action. Companies should swiftly react to these regulatory changes and make their personal

communications technology products and services available, facilitating more secure communication and access to information in sanctioned countries. For these changes to actually benefit citizens in these countries and U.S. foreign policy, American companies need to show a greater willingness to engage and to utilize the licenses that are available. Companies can also provide better feedback to the U.S. government about the challenges that they face in these environments, which in turn may inform better policy on the availability of these tools as well as related issues like financial transactions. Ultimately, in addition to the positive human rights impact, companies who take advantage of these policies stand to benefit through the opening of additional markets for their products and services.

Congress can help ensure that sanctions legislation does not inhibit the transfer of vital information and communications technologies by making it U.S. policy that access to personal communications tools is protected under current and future sanctions. Access to this technology will not only benefit individuals living within these countries, but also strengthen U.S. sanctions as a whole for reasons we outline earlier in the paper. Model language for how Congress should approach this by establishing a “policy of the United States” or a “sense of Congress” enabling the free flow of information in sanctioned countries is included in Supplement 2 of this paper and draws heavily upon the precedent established in previous Iran sanctions bills. This language aims at creating a high-level policy while giving OFAC sufficient flexibility to issue clear and actionable authorizations for personal communications tools. Additionally, Congress can further the goals outlined in this paper by supporting Administration efforts to increase technical expertise at OFAC and the State Department, which would help the government keep the definitions of personal communications tools up-to-date to reflect new technological realities.

Going forward, given the rapid pace of technological



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development, structures need to be put in place to update these regulations when needed. The Department of the Treasury and Department of State should revisit the regulations in a timely manner (every twelve months at a minimum) and make changes expanding and clarifying the scope of the general license based on feedback received from outside stakeholders, including the companies themselves. In addition, because it is likely that some companies will continue to seek specific licenses for products beyond those explicitly covered by the General License, improving the OFAC application process is a critical corollary. In particular, establishing a clear timeline for processing specific license applications will resolve a great deal of uncertainty. BIS, for example, reviews export licenses on a specific timeline with ninety days to review the license, refer it to additional agencies as necessary, and resolve disputes.<sup>93</sup> Knowing that applications will be reviewed in a timely and predictable manner will give companies greater ability to plan and more incentive to actually submit license applications.

Sufficient technical capacity remains a key challenge in both updating regulations and reviewing license applications. In addition to what Congress can do to help increase the technical manpower at OFAC and the State Department, technologists from industry and civil society can contribute through an independent Technical Advisory Committee (TAC) focusing on sanctions and information technology. Bringing together civil society representatives who understand the needs and technical challenges faced by individuals on the ground in sanctioned countries with industry representatives who understand the risks and compliance challenges companies perceive, this body would provide concrete recommendations aimed at strengthening and improving sanctions. The TAC would ultimately give input to the Department of the Treasury, the Department of Commerce, and the Department of State on how the technical parameters of the sanctions could be updated or improved. The

TAC's report would also feed into the annual updates of the FAQs for these licenses.

Throughout this process, civil society will play an integral role in helping both the government and companies understand the situation on the ground in sanctioned countries and in providing advice and feedback on unexpected challenges that may arise.

## **CONCLUSION, OUTLINE OF OPEN RESEARCH QUESTIONS, AND NEXT STEPS**

The recommendations in this paper aim to translate and institutionalize existing norms to support free speech in current U.S. sanctions policy for the digital age. The goal is to establish a framework that can be applied to future sanctions and create a mechanism for updating the technical categories to reflect ongoing technological developments. However, simply updating the U.S. policy is not sufficient. Real change will require a concerted effort from the government, companies, and civil society. This is necessary to ensure that once these policies are in place, they actually have the desired impact of increasing the free flow of information and providing safer and more secure communications tools for citizens living under oppressive regimes.

### *Processing Financial Transactions*

The challenge of processing payments for authorized goods exported to sanctioned countries extends far beyond the provision of personal communications tools. General License D allows the sale of software and hardware to Iran, but implementing this in practice remains quite difficult for companies. As a result, for example, when Google unblocked its Play store in Iran in August 2013, it enabled only free apps. Google continues to block apps that require purchase or have in-app billing features.<sup>94</sup> Because there are very few viable banking channels available

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within the country—and the risk of unintentionally violating sanctions carries serious penalties—there is little incentive for companies to export fee-based goods and services, even to a country like Iran where there is a market for them.

Solutions such as the use of foreign credit cards or “gifting” as a way of purchasing U.S. goods and services without going through Iranian banks may work in the interim. They are not a long term or particularly scalable solution, however. These ad hoc methods also tend to favor those who have the means to acquire foreign credit cards or alternative forms of payment, meaning that the impact of the authorization is limited to a narrower group of well-resourced individuals rather than the broad swath of Iranian civilians whom it is intended to help. Some precedent for payments has been established in the carve-outs for the sale of food and medical devices to sanctioned countries, but there is a great deal of additional work to be done in this area.

### *Defining “Personal” vs. “Commercial” Communications Technology*

As the technical definitions evolve going forward, drawing the line between “personal” communications and commercial uses may also become increasingly difficult and requires further research. Agencies and companies alike seem to be struggling to figure out whether business conducted on a site like Facebook should be covered by existing or future authorizations. Questions also arise in Section (4)(b)(4) of General License D for Iran, which states that the license does not authorize the “exportation or reexportation, directly or indirectly, of web-hosting services that are for purposes other than personal communications (e.g., web-hosting services for commercial endeavors) or of domain name registration services.”<sup>95</sup> Drawing a clear line between personal and commercial web-hosting and domain name registration services has proven quite tricky. Even after General License D was

issued, there have been incidents of websites that are likely covered by the General License being taken down by American hosting companies citing U.S. sanctions.<sup>96</sup> Further research and analysis is required to explore how to define “personal” communications in such a way that it gives companies greater clarity in current legal grey areas while ensuring that it does not create loopholes in the sanctions.

### *International Outreach*

The issues described in this paper are not limited to the United States. Sanctions imposed by other nations—particularly in the European Union—also block the transfer of technology that civilians need to access information and communicate more safely. Therefore, outreach to international partners is key to ensure that their sanctions regimes also become more targeted vis-à-vis personal communications technology.

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# SUPPLEMENT 1: GENERAL LICENSE

## DRAFT LANGUAGE FOR GENERAL LICENSE FOR PERSONAL COMMUNICATIONS TOOLS

Our analysis finds that a precedent has already been established in the Cuban and Iranian sanctions for what personal consumer communications carve-outs should look like. Recognizing that the administration requires some flexibility to tailor sanctions regulations and licenses to each country as the particular circumstances warrant, we propose model language for these authorizations from existing sanctions against Iran and Cuba that can be adapted.

Below, we propose modules for future authorizations, drawing heavily on General License D but incorporating some of the broader language included in the CCD. It is not perfect and is intended to serve as a template to build and improve on. Moreover, as a note of caution to readers of this report in the more distant future: this model language is likely to be outdated within a few years and will require a careful review thereafter. This underlines the need to establish institutions and processes to continually review and update such provisions.

### *Text of Language Modules for General License*

1. *Mobile phones (including but not limited to smartphones). Personal Digital Assistants (PDAs), Subscriber Identity Module (SIM) cards designated EAR99 or classified on the CCL under ECCN 5A992.c; drivers and connectivity software for such hardware designated EAR99 or classified under ECCN 5D992.c; and services necessary for the operation of such hardware and software.*

2. *Satellite phones and Broadband Global Area Network (BGAN) hardware designated EAR99 or classified under ECCN 5A992.c; demand drivers and connectivity software for such hardware designated EAR99 or classified under ECCN 5D992.c; and services necessary for the operation of such hardware and software.*

3. *Modems, network interface cards, radio equipment (including antennae), routers, switches, and WiFi access points, designed for 50 or fewer concurrent users, designated EAR99 or classified under ECCNs 5A992.C, 5A991.b.2, or 5A991.b.4; drivers, communications, and connectivity software for such hardware designated EAR99 or classified under ECCN 5D992.c; and services necessary for the operation of such hardware and software.*

4. *Residential consumer satellite receive-only terminals, receiver equipment (including but not limited to antennae, receivers, set-top boxes and video decoders) designated EAR99 or classified under ECCNs 5A992.C, 5A991.b.2 or 5A991.b.4; drivers, communications, and connectivity software for such hardware designated EAR99 or classified under ECCN 5D992.C; and services necessary for the operation of such hardware and software.*

5. *Laptops, tablets, and personal computing devices, disk drives, data storage devices, computer peripherals, keyboards, and mice designated EAR99 or classified on the CCL under ECCNs 5A992.C, 5A991.b.2, 5A991.b.4 or 4A994.b; computer operating systems, and software required for effective consumer use of such hardware, including software updates and patches, designated EAR99 or classified under ECCN 5D992.c; and services necessary for the operation of such hardware and software.*

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6. *“Information security” equipment and software, including anti-virus and anti-malware software designated EAR99 or classified under ECCN 5D992.C, and services necessary for the operation of such software.*

7. *Anti-tracking software designated EAR99 or classified under ECCN 5D992.C, and services necessary for the operation of such software.*

8. *Mobile operating systems, online app stores, and related software designated EAR99 or classified under ECCN 5D992.C, and services necessary for the operation of such software.*

9. *Anti-censorship tools and related software designated EAR99 or classified under ECCN 5D992.C, and services necessary for the operation of such software.*

10. *Virtual Private Networks, proxy tools, and fee-based personal communications tools including voice, text, video, voice-over-IP telephony, video chat, and successor technologies, and communications and connectivity software required for effective consumer use designated EAR99 or classified under ECCN 5D992.C, and services necessary for the operation of such software.*

11. *Secure Sockets Layers (SSLs) designated EAR99 or classified under ECCN 5D992.C, and services necessary for the operation of such software.*

## *N.B. A descriptive analysis and lessons learned from Iran and Cuba sanctions*

General License D for Iran authorizes “the exportation or reexportation, directly or indirectly, from the United States or by U.S. persons, wherever located, to persons in Iran of fee-based services incident to the exchange of personal communications” as well as of “fee-based software.” The annex to the license enumerates eleven categories of technology: mobile phones (including smartphones) and related hardware such as subscriber identity module (SIM)

cards; satellite phones and broadband global area network (BGAN) hardware; modems, network interface cards, radio equipment, routers, switches, and WiFi access points; residential consumer satellite receivers; laptops, tablets, personal computers and peripherals; anti-virus and anti-malware software; anti-tracking software; mobile operation software and online app stores; anti-censorship tools and software; Virtual Private Networks (VPNs), proxy tools, and fee-based personal communications tools; and Secure Sockets Layers (SSLs).

In defining these categories, General License D appears to draw heavily on the categories included in 15 CFR 740.19 of the Export Administration Regulations, which details license exceptions for “Consumer Communications Devices.” The CCD list specifically includes mobile phones, cellular and satellite telephones, personal digital assistants, SIM cards, modems, network interface cards, radio equipment, computers and associated hardware, and anti-virus software. Both lists rely on the technical classifications in Category 5 of the Commerce Control List, which designates ECCNs related to telecommunications and “information security” hardware and software.<sup>97</sup>

Although there is significant overlap in the two lists, General License D is both more extensive in the technology it covers and exhaustive in terms of listing the hardware, software, and services authorized for export. The different approaches of the Treasury and Commerce Departments may account for some of the variation, but we argue that the precedent established in Cuba also made it possible for a broader and more exact authorization for Iran that may in turn have a greater impact on the actual availability of these tools on the ground.

While the Consumer Communications Devices exception “authorizes export or reexport of commodities and software described” in the CCD, General License D refers to services “incident to

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the exchange of personal communications over the Internet” and “related services.” The broader definition used in General License D means it can be expanded to cover a wider range of technology, while the annex contains a higher level of specificity for particular categories of technology. For example, the CCD includes computers, disk drives and solid state storage equipment, keyboards, mice, and similar devices, and software “to be used for equipment described,” all of which are authorized in General License D as well. Yet General License D also includes laptops and tablets, “computer operating systems, and software required for effective consumer use of such hardware, including software updates and patches” as well as “services necessary for the operation of such hardware and software.”

Other areas where General License D is more expansive include the authorization of mobile operating systems, online apps stores, and related software, as well anti-censorship tools, VPNs, proxy tools, and SSLs—technologies which are often used for more secure communications and bypassing government filtering and censorship. And General License D makes the financial transactions required for fee-based products legal, while the CCD imposes a “donation requirement” on exporters.



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## SUPPLEMENT 2: LEGISLATIVE LANGUAGE

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### DRAFT LANGUAGE FOR LEGISLATIVE TEXT

The changes that have been implemented by the Executive Branch over the past four years largely reflect an attempt to retroactively “fix” the restrictions that comprehensive sanctions place on the ability of individuals to communicate freely and securely in the digital age. The slow, evolutionary process of creating carve-outs for certain products underscores two of the central conclusions of this paper: (1) that lawmakers should carefully consider future sanctions’ impact on the availability of information and communications technology when crafting initial sanctions legislation, rather than trying to go back and fix it after the fact, and (2) specific product details should be omitted from legislation and instead authorized through regulation which is more flexible and easier to amend if necessary to address technology advances.

In practice, this gives Congress a limited but critical role in ensuring that sanctions legislation does not inhibit the transfer of vital information and communications technologies. In fact, there is some existing precedent where Members have included language in new sanctions bills addressing carve-outs that should be incorporated into existing sanctions regulation. For example, three months prior to the March 2010 General License for Iran, Sudan, and Cuba, Representative Jim Moran introduced a bill in the House of Representatives that called for the United States to help enhance Iranians’ access to the Internet and communications services. H.R. 4301, the Iranian Digital Empowerment Act, found that “[c]urrent sanctions Iran have had the unintended effect of stifling Iranians’ access to the Internet and related Internet technologies” and that the U.S. “has a vital interest in working to ensure that its policies do not unintentionally aid the repressive policies of the

Government of Iran or hinder the Iranian people’s basic rights and freedoms.”<sup>98</sup>

The bill expressed a Sense of Congress that the United States should not prohibit or restrict the export of software and related services that support access to news and information in Iran, communications between Iranian citizens and with the outside world, and “unfettered access to the Internet, which is a civil liberty that should be enjoyed by all people.”<sup>99</sup> It authorized the export of “[s]oftware and related services that allow private Iranian citizens to circumvent online censorship and monitoring efforts imposed by the Government of Iran” and “[s]oftware and related services that enable personal communication by the Iranian people.”<sup>100</sup>

Although the legislation was never enacted, the sentiments expressed in the Iranian Digital Empowerment Act were echoed heavily in the General License that OFAC issued in March 2010 to amend the Iranian, Cuban, and Sudanese regulations. The General License acknowledged how sanctions have a “chilling effect on the ability of companies to provide personal communications tools” and that “the free flow of information to individual Iranian citizens” is “essential to the national interest of the United States.”<sup>101</sup> The emphasis on valuing freedom of speech, assembly, and the press in the legislation was ultimately expressed in the General License, which authorized “services incident to the exchange of personal communications over the Internet,” including email, social networking, and blogging.

Similarly, in May 2013, Representative Ted Deutch offered amendments to H.R. 850, the Nuclear Iran Prevention Act, which added a Title on

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“Additional Authorities to Prevent Censorship Activities in Iran.” Among other provisions addressing sensitive technologies, the language included a Sense of Congress on “Availability of Consumer Communication Technologies in Iran,” the terminology used in General License D, as well as “Expedited Consideration of Requests for Authorization of Transfer of Goods and Services to Iran to Facilitate the Ability of Iranian Persons to Freely Communicate.”<sup>102</sup> The measures, designed to “prevent Iran from obtaining technologies used by the regime for repression and human rights abuses,” were adopted unanimously by the House Foreign Affairs Committee during markup on May 22, 2013.<sup>103</sup> Although the 2013 Iranian presidential elections were over and General License D had been issued by the time the bill passed the House in August 2013, the language remained in the text.<sup>104</sup>

The following language from the Deutch Amendment can be considered a template for future legislative efforts. This particular amendment was structured as a “Sense of Congress” attached to a sanctions bill for a specific country, a somewhat narrower construction that can be included in regional bills or specific sanctions legislation to clarify the policy toward the availability of personal communications tools in those countries. The language could also be expanded to create a free-standing “Policy of the United States” enshrining this principle, although such a policy would have to be worded carefully to account for the nuanced difference between an authorization of a class of goods and services and an exemption. The former provides greater ability to adjust regulations to reflect technological evolution.

This language makes it clear that Congress, even when it is in the midst of imposing new sanctions on a particular country or individuals within a country, supports the broader civilian population by helping to facilitate communication and the free flow of information among the people. It gives the

Departments of State and Treasury a mandate to update sanctions regulations to reflect this support. At the same time, keeping the language in the legislation broad and relying on regulatory changes for the specifics allows for greater flexibility to change or update the language to reflect important nuances and key developments. This text is not perfect and is intended to serve as a template to build and improve on.

### *Language for Legislative Text*

#### **Sec. 304. Sense of Congress on Availability of Consumer Communication Technologies in Iran.**

*It is the sense of Congress that—*

*(1) the Department of the Treasury and Department of State should encourage the free flow of information in Iran to counter the Government of Iran’s repression of its own people; and*

*(2) in order to facilitate the free flow of information in Iran, the Department of Treasury should ensure that certain consumer communication technologies are available to Iranian civil society and the Iranian people*

## FREQUENTLY-USED TERMS

*In the list below, we provide basic, non-technical definitions for a number of the terms used throughout the paper. These are intended to inform the reader.*

*Anti-censorship tool:* Any tool used to evade censorship, such as a proxy, Virtual Private Network, etc.

*Anti-virus software:* Software that attempts to prevent, detect and remove malware from a computer.

*Backdoor:* A hole or vulnerability in software that is made or used so that normal methods of authentication (identification verification) security can be bypassed. Malicious backdoors allow the software to be accessed by a third party, often allowing personal information and services to be monitored or used.

*Malware:* Short for malicious software, used to damage or disrupt a system.

*Proxy tool:* A tool used as an intermediary between a computer and the information it is trying to access. Such tools can be used to bypass filters and censorship apparatus and use the Internet anonymously or pseudo-anonymously.

*SSL (Secure Sockets Layers):* A way to provide secure connections over the Internet, using a cryptographic system of virtual keys. Websites that display HTTPS instead of HTTP at the beginning of a web address are using SSL, which is often used, for example, when a website wishes to securely obtain personal information such as a credit card number.

*VPN (Virtual Private Network):* A service, usually provided by a central “proxy server,” that allows client computers to establish secure channels of communication with each other over the open Internet. Computers connected by these “virtual private network” links can use them to exchange information as if they were in the same local private network.

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MAIN OFFICE

1899 L Street NW  
Suite 400  
Washington, DC 20036  
Phone 202 986 2700  
Fax 202 986 3696

NEW AMERICA NYC

199 Lafayette Street  
Suite 3B  
New York, NY 10012  
[nyc@newamerica.net](mailto:nyc@newamerica.net)



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