

**HEARING BEFORE THE UNITED STATES SENATE COMMITTEE ON THE
JUDICIARY SUBCOMMITTEE ON CRIME AND TERRORISM**

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I. INTRODUCTION

Chairman Graham, Ranking Member Whitehouse, and distinguished members of the Subcommittee, thank you for this opportunity to appear before you today. My name is Colin Stretch, and since July 2013, I've served as the General Counsel of Facebook. We appreciate this Subcommittee's hard work as it continues to seek more effective ways to combat crime, terrorism, and other threats to our national security.

At Facebook, we take all of these threats very seriously. One of our chief commitments is to create innovative technology that gives people the power to build community and bring the world closer together. We're proud that over 2 billion people around the world come to Facebook every month to share with friends and family, to learn about new products and services, to volunteer or donate to organizations they care about, or help out in a crisis. The promise of real connection, of extending the benefits of real world connections online, is at the heart of what we do and has helped us grow into a global company.

Being at the forefront of new technology also means being at the forefront of new legal, security, and policy challenges. Our teams work every day to confront these challenges head on. Thousands of Facebook employees around the world work to make Facebook a place where both expression and personal safety are protected and respected.

You have asked me to discuss several important issues for our platform and others like it—the threat of extremist content online, and what we know now about the efforts by foreign actors to interfere with the 2016 election.

When it comes to the 2016 election, I want to be clear: The foreign interference we saw is reprehensible and outrageous and opened a new battleground for our company, our industry, and our society. That foreign actors, hiding behind fake accounts, abused our platform and other internet services to try to sow division and discord—and to try to undermine our election process—is an assault on democracy, and it violates all of our values.

At Facebook, we build tools to help people connect, and to be a force for good in the world. What these actors did goes against everything Facebook stands for. Our goal is to bring people closer together; what we saw from these actors was an insidious attempt to drive people apart. And we're determined to prevent it from happening again.

I'd also like to address some of the challenges we face in fighting terrorism online and what we're doing to solve those challenges.

Keeping our community safe on Facebook is critical to our mission. Our stance is simple: There's no place on Facebook for terrorism. We remove terrorists and posts that support terrorism whenever we become aware of them. When we receive reports of potential terrorism posts, we urgently scrutinize those reports. And in the rare cases when we uncover evidence of imminent harm, we promptly inform authorities. Although academic research finds that the radicalization of members of groups like ISIS and Al Qaeda primarily occurs offline, we know that the internet does play a role—and we don't want Facebook to be used for any terrorist activity whatsoever. While there are challenges to fighting terrorism, we believe technology, and Facebook, can be part of the solution.

II. FIGHTING ELECTION INTERFERENCE ON FACEBOOK

Let me turn first to the issue of foreign interference in the 2016 election. I want to share with you what we know so far about what happened—and what we're doing about it. At the outset, let me explain how our service works and why people choose to use it.

A. Understanding what you see on Facebook

1. The News Feed Experience: A Personalized Collection of Stories. When people come to Facebook to share with their friends and discover new things, they see a personalized homepage we call News Feed. News Feed is a constantly updating, highly personalized list of stories, including status updates, photos, videos, links, and activity from the people and things you're connected to on Facebook. The goal of News Feed is to show people the stories that are most relevant to them. The average person has thousands of things on any given day that they could read in their News Feed, so we use personalized ranking to determine the order of stories we show them. Each person's News Feed is unique. It's shaped by the friends they add; the people, topics, and news sources they follow; the groups they join; and other signals like their past interactions. On average, a person in the US is served roughly 220 stories in News Feed each day. Over the time period in question, from 2015 to 2017, Americans using Facebook were exposed to, or "served," a total of over 33 trillion stories in their News Feeds.

2. Advertising and Pages as Sources of Stories in News Feed. News Feed is also a place where people see ads on Facebook. To advertise in News Feed, a person must first set up a Facebook account—using their real identity—and then create a Facebook Page. Facebook Pages represent a wide range of people, places, and things, including causes, that people are interested in. Any user may create a Page to express support for or interest in a topic, but only official representatives can create a Page on behalf of an organization, business, brand, or public figure. It is against our terms for Pages to contain false, misleading, fraudulent, or deceptive claims or content. Facebook marks some official Pages—such as for a public figure, media company, or brand—with a "verified" badge to let people know they're authentic. All Pages must comply with our Community Standards and ensure that all the stories they post or share respect our policies prohibiting hate speech, violence, and sexual content, among other restrictions. People can like or follow a Page to get updates, such as posts, photos, or videos, in their News Feed. The average person in the US likes 178 Pages. People do not necessarily see every update from each of the Pages they are connected to. Our News Feed ranking determines how relevant we think a story from a Page will be to each person. We make it easy for people to override our recommendations by giving them additional controls over whether they see a Page's updates

higher in their News Feed or not at all. For context, from 2015 to 2017, people in the United States saw 11.1 trillion posts from Pages on Facebook.

3. Advertising to Promote Pages. Page administrators can create ads to promote their Page and show their posts to more people. The vast majority of our advertisers are small- and medium-sized businesses that use our self-service tools to create ads to reach their customers. Advertisers choose the audience they want to reach based on demographics, interests, behaviors or contact information. They can choose from different ad formats, upload images or video, and write the text they want people to see. Advertisers can serve ads on our platform for as little as \$0.50 per day using a credit card or other payment method. By using these tools, advertisers agree to our Self-Serve Ad Terms. Before ads appear on Facebook or Instagram, they go through our ad review process that includes automated checks of an ad's images, text, targeting and positioning, in addition to the content on the ad's landing page. People on Facebook can also report ads, find more information about why they are being shown a particular ad, and update their ad preferences to influence the type of ads they see.

B. Promoting Authentic Conversation

Our authenticity policy is the cornerstone of how we prevent abuse on our platform, and was the basis of our internal investigation and what we found.

From the beginning, we have always believed that Facebook is a place for authentic dialogue, and that the best way to ensure authenticity is to require people to use the names they are known by. Fake accounts undermine this objective, and are closely related to the creation and spread of inauthentic communication such as spam—as well as used to carry out disinformation campaigns like the one associated with the Internet Research Agency (IRA), a Russian company located in St. Petersburg.

We build and update technical systems every day to better identify and remove inauthentic accounts, which also helps reduce the distribution of material that can be spread by accounts that violate our policies. Each day, we block millions of fake accounts at registration. Our systems examine thousands of account attributes and focus on detecting behaviors that are very difficult for bad actors to fake, including their connections to others on our platform. By constantly improving our techniques, we also aim to reduce the incentives for bad actors who rely on distribution to make their efforts worthwhile.

Protecting authenticity is an ongoing challenge. As our tools and security efforts evolve, so will the techniques of those who want to evade our authenticity requirements. As in other areas of cybersecurity, our security and operations teams need to continually adapt.

C. Protecting the Security of the 2016 Election and Learning Lessons Quickly

1. The Evolution of Facebook's Security Protections. From its earliest days, Facebook has always been focused on security. These efforts are continuous and involve regular contact with law enforcement authorities in the United States and around the world. Elections are particularly sensitive events for our security operations, and as the role our service plays in promoting political dialogue and debate has grown, so has the attention of our security team.

As your investigation has revealed, our country now faces a new type of national cyber-security threat—one that will require a new level of investment and cooperation across our society. At Facebook, we're prepared to do our part. At each step of this process, we have spoken out about threats to internet platforms, shared our findings, and provided information to investigators. As we learn more, we will continue to identify and implement improvements to our security systems, and work more closely with other technology companies to share information on how to identify and prevent threats and how to respond faster and more effectively.

2. Security Leading Up to the 2016 Election.

a. Fighting Hacking and Malware. For years, we had been aware of other types of activity that appeared to come from Russian sources—largely traditional security threats such as attacking people's accounts or using social media platforms to spread stolen information. What we saw early in the 2016 campaign cycle followed this pattern. Our security team that focuses on threat intelligence—which investigates advanced security threats as part of our overall information security organization—was, from the outset, alert to the possibility of Russian activity. In several instances before November 8, 2016, this team detected and mitigated threats from actors with ties to Russia and reported them to US law enforcement officials. This included activity from a cluster of accounts we had assessed to belong to a group (APT28) that the US government has publicly linked to Russian military intelligence services. This activity, which was aimed at employees of major US political parties, fell into the normal categories of offensive cyber activities we monitor for. We warned the targets who were at highest risk, and were later in contact with law enforcement authorities about this activity.

Later in the summer we also started to see a new kind of behavior from APT28-related accounts—namely, the creation of fake personas that were then used to seed stolen information to journalists. These fake personas were organized under the banner of an organization that called itself DC Leaks. This activity violated our policies, and we removed the DC Leaks accounts.

b. Understanding Fake Accounts and Fake News. After the election, when the public discussion of “fake news” rapidly accelerated, we continued to investigate and learn more about the new threat of using fake accounts to amplify divisive material and deceptively influence civic discourse. We shared what we learned with government officials and others in the tech industry. And in April 2017, we shared our findings with the public by publishing a white paper that described the activity we detected and the initial techniques we used to combat it.

As with all security threats, we have also been applying what we learned in order to do better in the future. We use a variety of technologies and techniques to detect and shut down fake accounts, and in October 2016, for example, we disabled about 5.8 million fake accounts in the United States. At the time, our automated tooling did not yet reflect our knowledge of fake accounts focused on social or political issues. But we incorporated what we learned from the 2016 elections into our detection systems, and as a result of these improvements, we disabled more than 30,000 accounts in advance of the French election. This same technology helped us disable tens of thousands more accounts before the German elections in September. In other words, we believe that we're already doing better at detecting these forms of abuse, although we know that people who want to abuse our platform will get better too and so we must stay

vigilant.

3. Investigating the Role of Ads and Foreign Interference. After the 2016 election, we learned from press accounts and statements by congressional leaders that Russian actors might have tried to interfere in the election by exploiting Facebook's ad tools. This is not something we had seen before, and so we started an investigation that continues to this day. We found that fake accounts associated with the IRA spent approximately \$100,000 on more than 3,000 Facebook and Instagram ads between June 2015 and August 2017. Our analysis also showed that these accounts used these ads to promote the roughly 120 Facebook Pages they had set up, which in turn posted more than 80,000 pieces of content between January 2015 and August 2017. The Facebook accounts that appeared tied to the IRA violated our policies because they came from a set of coordinated, inauthentic accounts. We shut these accounts down and began trying to understand how they misused our platform.

a. Advertising by Accounts Associated with the IRA. Below is an overview of what we've learned so far about the IRA's ads:

- **Impressions (an "impression" is how we count the number of times something is on screen, for example this can be the number of times something was on screen in a person's News Feed):**
 - 44% of total ad impressions were before the US election on November 8, 2016.
 - 56% of total ad impressions were after the election.
- **Reach (the number of people who saw a story at least once):**
 - We estimate 11.4 million people in the US saw at least one of these ads between 2015 and 2017.
- **Ads with zero impressions:**
 - Roughly 25% of the ads were never shown to anyone. That's because advertising auctions are designed so that ads reach people based on relevance, and certain ads may not reach anyone as a result.
- **Amount spent on ads:**
 - For 50% of the ads, less than \$3 was spent.
 - For 99% of the ads, less than \$1,000 was spent.
 - Many of the ads were paid for in Russian currency, though currency alone is a weak signal for suspicious activity.
- **Content of ads:**
 - Most of the ads appear to focus on divisive social and political messages across the ideological spectrum, touching on topics from LGBT matters to race issues to immigration to gun rights.
 - A number of the ads encourage people to follow Pages on these issues, which in turn produced posts on similarly charged subjects.

b. Content Posted by Pages Associated with the IRA. We estimate that roughly 29 million people were served content in their News Feeds directly from the IRA's 80,000 posts over the two years. Posts from these Pages were also shared, liked, and followed by people on Facebook, and, as a result, three times more people may have been exposed to a story that originated from the Russian operation. Our best estimate is that approximately 126 million people may have been served content from a Page associated with the IRA at some point during the two-year period. This equals about four-thousandths of one percent (0.004%) of content in News Feed, or approximately 1 out of 23,000 pieces of content.

Though the volume of these posts was a tiny fraction of the overall content on Facebook, **any amount is too much.** Those accounts and Pages violated Facebook's policies—which is why we removed them, as we do with all fake or malicious activity we find. We also deleted roughly 170 Instagram accounts that posted about 120,000 pieces of content.

Our review of this activity is ongoing. Many of the ads and posts we've seen so far are deeply disturbing—seemingly intended to amplify societal divisions and pit groups of people against each other. They would be controversial even if they came from authentic accounts in the United States. But coming from foreign actors using fake accounts they are simply unacceptable.

That's why we've given the ads and posts to Congress—because we want to do our part to help investigators gain a deeper understanding of foreign efforts to interfere in the US political system and explain those activities to the public. These actions run counter to Facebook's mission of building community and everything we stand for. And we are determined to do everything we can to address this new threat.

D. Mobilizing to Address the New Threat

We are taking steps to enhance trust in the authenticity of activity on our platform, including increasing ads transparency, implementing a more robust ads review process, imposing tighter content restrictions, and exploring how to add additional authenticity safeguards.

1. Promoting Authenticity and Preventing Fake Accounts. We maintain a calendar of upcoming elections and use internal and external resources to best predict the threat level to each. We take preventative measures based on our information, including working with election officials where appropriate. Within this framework, we set up direct communication channels to escalate issues quickly. These efforts complement our civic engagement work, which includes voter education. In October 2017, for example, we launched a Canadian Election Integrity Initiative to help candidates guard against hackers and help educate voters on how to spot false news.

Going forward, we're also requiring political advertisers to provide more documentation to verify their identities and disclose when they're running election ads. Potential advertisers will have to confirm the business or organization they represent before they can buy ads. Their accounts and their ads will be marked as political, and they will have to show details, including who paid for the ads. We'll start doing this with federal elections in the US and then move onto other elections in the US and other countries. For political advertisers that don't proactively identify themselves, we're building machine learning tools that will help us find them and

require them to verify their identity.

Authenticity is important for Pages as well as ads. We'll soon test ways for people to verify that the people and organizations behind political and issue-based Pages are who they say they are.

2. Partnering with Industry on Standards. We have been working with many others in the technology industry, including with Google and Twitter, on a range of elements related to this investigation. Our companies have a long history of working together on other issues such as child safety and counter-terrorism.

We are also reaching out to leaders in our industry and governments around the world to share information on bad actors and threats so that we can make sure they stay off all platforms. We are trying to make this an industry standard practice.

3. Strengthening Our Advertising Policies. We know that some of you and other members of Congress are exploring new legislative approaches to political advertising—and that's a conversation we welcome. We are already working with some of you on how best to put new requirements into law. But we aren't waiting for legislation. Instead we're taking steps where we can on our own, to improve our own approach to transparency, ad review, and authenticity requirements.

a. Providing Transparency. We believe that when you see an ad, you should know who ran it to be able to understand what other ads they're running—which is why we show you the Page name for any ads that run in your News Feed.

To provide even greater transparency for people and accountability for advertisers, we're now building new tools that will allow you to see the other ads a Page is running as well—including ads that aren't targeted to you directly. We hope that this will establish a new standard for our industry in ad transparency. We try to catch material that shouldn't be on Facebook before it's even posted—but because this is not always possible, we also take action when people report ads that violate our policies. We're grateful to our community for this support, and hope that more transparency will mean more people can report violating ads.

b. Enforcing Our Policies. We rely on both automated and manual ad review, and we're now taking steps to strengthen both. Reviewing ads means assessing not just what's in an ad but also the context in which it was bought and the intended audience—so we're changing our ads review system to pay more attention to these signals. We're also adding more than 1,000 people to our global ads review teams over the next year and investing more in machine learning to better understand when to flag and take down ads. Enforcement is never perfect, but we will get better at finding and removing improper ads.

c. Restricting Ad Content. We hold people on Facebook to our Community Standards, and we hold advertisers to even stricter guidelines. Our ads policies already prohibit shocking content, direct threats and the promotion of the sale or use of weapons. Going forward, we are expanding these policies to prevent ads that use even more subtle expressions of violence.

III. COUNTERING VIOLENT EXTREMISM

Now I would like to turn to the challenges we face in fighting terrorism online and our response.

A. Identifying Terrorist Content

One of the challenges we face is identifying the small fraction of terrorist content posted to a platform used by more than 2 billion people every month. We are getting better at using artificial intelligence (AI) to stop the spread of terrorist content on Facebook. We are currently focusing our most cutting-edge techniques to combat terrorist content about ISIS, Al Qaeda, and their affiliates, and we are working to expand to other terrorist organizations. We've gotten better at identifying and removing terrorist content from our site—in fact, most of the content we remove we identify on our own, before anyone has reported it. But because terrorists also adapt as technology evolves, we are constantly updating our technical solutions to try to stay ahead.

First, when someone tries to upload a terrorist photo or video, our systems look for whether the image matches a known terrorism photo or video. This means that if we previously removed a propaganda video from ISIS, we can work to prevent other accounts from uploading the same video to our site. In many cases, this means that terrorist content intended for upload to Facebook simply never reaches people.

Second, we have started to experiment with using AI to understand text that might be advocating for terrorism. We're currently experimenting with developing text-based signals to detect praise or support of terrorist organizations. That analysis goes into an algorithm that is in the early stages of learning how to detect similar posts.

Of course, we cannot rely on AI alone. A photo of an armed man waving an ISIS flag might be propaganda or recruiting material, but it could also be an image in a news story. To understand more nuanced cases, we need human expertise.

Our community of users helps us by reporting accounts or content that may violate our policies—including the small fraction that may be related to terrorism. Our Community Operations teams around the world—which we are growing by 3,000 people over the next year—work 24 hours a day and in dozens of languages to review these reports and determine the context.

We have also significantly grown our team of counterterrorism specialists. We have more than 150 people who are exclusively focused on countering terrorist content. Our team includes academic experts on counterterrorism, former prosecutors, and law enforcement agents and analysts, and engineers. This specialist team alone speaks nearly 30 languages.

B. Identifying Terrorist Clusters

We know from studies of terrorists that they tend to radicalize and operate in clusters. This offline trend is reflected online as well. So when we identify Pages, groups, posts, or profiles as supporting terrorism, we use AI to try to identify related material that may also support terrorism. We do this by examining signals that can reveal similarities among accounts.

C. Identifying Repeat Offenders

While we can disable terrorist accounts, those account owners may create new accounts using different identities. We have gotten much faster at detecting new fake accounts created by repeat offenders. Through this work, we've been able to dramatically reduce the time period that terrorist recidivist accounts are on Facebook. This work is continuous based on the evolving threat.

D. Getting the Full Picture

Another challenge we face is that we don't often have insight into what terrorists are doing on other platforms and beyond. Nor do we have the resources, legal authority, and information available to governments. We're only one piece of the picture, and the threats we're confronting are bigger than any one company, or even any one industry. That's why we are partnering with others to combat these threats.

First, we are partnering with our industry counterparts to more quickly identify and slow the spread of terrorist content online. For example, in 2016, we joined with Microsoft, Twitter, and YouTube to announce a shared industry database of "hashes"—unique digital fingerprints for photos and videos—for content produced by or in support of terrorist organizations. This collaboration has already proved fruitful; we have added several new partners, and hope to add more partners in the future.

And in June 2017, we partnered with those same companies to create the Global Internet Forum to Counter Terrorism. This formalizes and structures existing and future areas of collaboration between our companies and fosters cooperation with smaller tech companies, civil society groups, academics, governments, and international bodies such as the EU and the UN. While the scope of the Forum's work will evolve over time, we are focusing on refining technological solutions to combating terrorism, researching counter-terrorism efforts, and sharing knowledge across our industry, governments, and civil society.

Second, we cannot effectively combat terrorism and other security threats without help from governments and inter-governmental agencies. They have a key role to play in convening and providing expertise that is impossible for companies to develop independently. We have learned much through briefings from agencies in different countries about ISIS and Al Qaeda propaganda mechanisms. We have also participated in and benefited from efforts to support industry collaboration by organizations such as the National Counterterrorism Center (NCTC), the EU Internet Forum, the Global Coalition Against Daesh, and the UK Home Office.

We recognize there are serious and evolving threats to public safety and that law enforcement has an important responsibility to keep people safe. Our legal and safety teams work hard to respond to legitimate law enforcement requests while fulfilling our responsibility to protect people's privacy and security. We have a global team that strives to respond within minutes to emergency requests from law enforcement. In the second half of 2016, for example, we provided information in response to nearly 80% of the 1,695 requests for emergency disclosures that we received from US law enforcement agencies. We provide the information that we can in response to law enforcement requests, consistent with applicable law and our policies. In the second half

of 2016, for example, Facebook received 26,014 requests from US law enforcement agencies covering 41,492 accounts. We produced data in response to more than 83% of these requests.

E. Combatting Terrorism Beyond Our Platform

Finally, while we can try to find and remove terrorist content from Facebook, a key part of combating terrorism is disrupting the underlying ideologies that drive people to commit acts of violence. That's why we are engaged in counterspeech efforts. Counterspeech comes in many forms, but at its core these are efforts to prevent people from pursuing a hate-filled, violent life or convincing them to abandon such a life.

But counter-speech is only effective if it comes from credible speakers. So, we've partnered with non-governmental organizations and community groups to empower the voices that matter most. For example, last year we worked with the Institute for Strategic Dialogue to launch the Online Civil Courage Initiative, a project that has engaged with more than 100 anti-hate and anti-extremism organizations across Europe. We've also worked with Affinis Labs to host hackathons in places like Manila, Dhaka, and Jakarta, where community leaders joined forces with tech entrepreneurs to develop innovative solutions to push back against extremism and hate online. And finally, we've supported a student competition organized through the P2P: Facebook Global Digital Challenge. In less than three years, P2P has reached tens of millions of people worldwide through more than 500 anti-hate and extremism campaigns created by more than 5,500 university students in 68 countries.

IV. CONCLUSION

In conclusion, let me reiterate our commitment to combating terrorism, foreign interference in our democratic process, and other threats. We have a responsibility to do all we can to combat these threats, and we're committed to improving our efforts.

Of course, companies like Facebook cannot do this without help. We will continue to partner with appropriate authorities to counteract these threats. By working together, business, government, and civil society can make it much harder for malicious actors to harm us, while simultaneously ensuring that people can express themselves freely and openly. I'm here today to listen to your ideas and concerns, and I look forward to continuing this constructive dialogue.