

SECURE OUR SMARTPHONES INITIATIVE:

One Year Later



Prepared by the Office of the New York State Attorney General

in consultation with
The Offices of the San Francisco District Attorney
and the Mayor of London



SECURE OUR SMARTPHONES (“SOS”) INITIATIVE: ONE YEAR LATER

EXECUTIVE SUMMARY

One year ago, in June 2013, New York State Attorney General Eric Schneiderman and San Francisco District Attorney George Gascón launched the Secure Our Smartphones (“SOS”) Initiative in response to the epidemic of smartphone theft and related violence. In 2013, thieves stole an estimated 3.1 million mobile devices in the United States, nearly double the number of devices stolen in 2012. Countless more were stolen internationally, leaving millions of victims in their wake. The theft of mobile devices, especially Apple iPhones, was so widespread, it inspired a new category of crime: “Apple Picking.”

To end a technology-oriented crime wave, the SOS Initiative pushed for a life-saving technological solution: a “kill switch” application to enable authorized users to remotely deactivate their stolen devices.

London Mayor Boris Johnson soon joined the SOS Initiative as a co-chair. From there, the initiative quickly grew into a broad-based, international coalition of more than 100 elected leaders, attorneys general, consumer advocates, and top law enforcement officials from major cities. The coalition urged industry stakeholders—wireless carriers, mobile device manufacturers, software developers, and industry trade groups—to work together, to adopt a kill switch as a default, opt-out solution on all mobile devices, and to save lives.

By reducing stolen phones to useless “bricks,” kill switches will diminish the secondary market for stolen phones and reduce the incentive for theft. Yet no wireless carrier or manufacturer offered a kill switch. Worse yet, industry voices, including the CTIA, the influential trade group for U.S. wireless carriers, fiercely opposed the technology, labeling it infeasible and unwise.

In its first year, the SOS Initiative caused a major shift in the smartphone industry and drew attention to developing a technological solution to the smartphone crime wave:

- ✓ On September 18, 2013, Apple unveiled “Activation Lock,” a proof-of-concept kill switch available (though not automatically enabled) on all iPhones running the iOS 7 operating system.
- ✓ In February 2014, in cooperation with District Attorney Gascón, California State Senator Mark Leno introduced the first legislation that would require technological theft-deterrent features enabled on all smartphones sold in the state.
- ✓ In February and March 2014, Senator Amy Klobuchar and Representative Jose Serrano introduced companion federal legislation to require carriers and manufacturers to make kill switch anti-theft solutions mandatory for all smartphones in the United States.
- ✓ On April 5, 2014, Samsung rolled out its own kill switch, dubbed “Reactivation Lock,” for certain new Verizon and U.S. Cellular “Galaxy” devices.

- ✓ On April 15, 2014, the CTIA abandoned its opposition to a kill switch and announced a “Smartphone Anti-Theft Voluntary Commitment,” in which AT&T, Sprint, T-Mobile, U.S. Cellular, Verizon Wireless, and others pledged to implement a kill switch-type solution on an opt-in basis.
- ✓ On May 15, 2014, Minnesota became the first state to mandate a kill switch on all smartphones. (Separate legislation is pending in California, Illinois, and New York.)

With the release of this report on June 19, 2014, the SOS Initiative achieves two major milestones:

- ✓ Microsoft confirms it will incorporate a kill switch-type theft-deterrence solution in the next release of its Windows Phone operating system, which will run on all Nokia smartphones; and,
- ✓ Google confirms it will incorporate a kill switch-type theft-deterrence solution in its next version of the Android operating system, the most popular mobile operating system worldwide.

Preliminary statistics following Apple’s adoption of Activation Lock—the first kill switch commercially available in the United States—appear to validate the kill switch as an effective tool to deter smartphone crime. The report releases new crime statistics indicating that in the first five months of 2014, shortly after Apple introduced Activation Lock, the theft of Apple devices *fell* by 17 percent in New York City, while thefts of Samsung products *increased* by 51 percent compared to the same time period in the previous year. Other cities experienced the same trend. In the six months after Apple introduced Activation Lock, iPhone thefts *fell* 24 percent in London and robberies *fell* 38 percent in San Francisco compared to the six months prior to Activation Lock. During the same period, thefts of other popular mobile devices *increased*.

The work of the SOS coalition continues. With the majority of phones still without an active kill switch, smartphone-related thefts and violence remain a tragic reality. Criminals have learned to target devices without available kill switches, increasing the importance of immediately implementing kill switches across all manufacturers. And because kill switches are available on an opt-in basis, not enough consumers are signing up—underscoring the urgency of the SOS call to make kill switches a standard, opt-out function on all phones.

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INTRODUCTION

Smartphone technology has revolutionized our lives. With just a few swipes or keystrokes, we can communicate with each other via text, voice, and video, access multimedia content, and connect with the world. The devices are powerful, portable, and popular.

Perhaps unsurprisingly, a smartphone is also a magnet for thieves, who resell the device for quick cash after snatching it from a victim. In 2013 alone, thieves stole more than 3.1 million mobile devices in the United States and countless more around the world. Seeking to end this crime wave, the Secure Our Smartphones (“SOS”) Initiative built a diverse, international coalition around a promising technological solution: a kill switch application to allow legitimate users to deactivate their stolen devices remotely. The coalition urged industry stakeholders—wireless carriers, mobile device manufacturers, software developers, and industry trade groups—to work together, to develop a kill switch for mobile devices, and to make it a default application on smartphones.

Coming just one year into this effort, this report shares new data on the scope of the smartphone theft problem, outlines the growth and early successes of the SOS Initiative, including the increasingly broad acceptance in the smartphone industry for kill switch-type solutions, and explains the steps remaining to achieve the coalition’s core objectives.

The report is divided into four sections:

- (1) **“SMARTPHONE THEFTS ARE DRIVING CRIME,”** describing the global mobile device crime wave and sharing new crime statistics from New York City, San Francisco, and London.
- (2) **“THE SOS INITIATIVE IS FORMED TO ADVANCE AN EFFECTIVE TECHNOLOGICAL SOLUTION,”** describing the promise of a kill switch solution, the emergence of the SOS coalition, and the efforts to achieve broad adoption of a technological theft-deterrence measure.
- (3) **“THE SOS INITIATIVE ACHIEVES INDUSTRY ACCEPTANCE OF KILL SWITCH,”** discussing the milestones to date in the SOS campaign to achieve widespread acceptance and implementation of a kill switch, including early results suggesting the effectiveness of kill switches.
- (4) **“KEY OBJECTIVES REMAIN FOR THE SOS INITIATIVE,”** outlining the four goals of the SOS Initiative as it enters its second year.

SMARTPHONE THEFTS ARE DRIVING CRIME

Smartphones are a magnet for thieves. By the end of last year, well over half of the U.S. population² and more than one in five people around the globe owned a smartphone.³ Unfortunately, the same portable, computing power that is so appealing to consumers also attracts thieves.

New mass market smartphones can retail in the United States for nearly \$1,000 when the price is not subsidized by a carrier.⁴ And in the weeks following introduction, coveted devices can fetch even higher prices on the international black market. Over time, even older devices retain substantial value. One study found a used Apple iPhone 4S still commanded US \$200 on the secondary market—or more than a third of its out-of-the-box, carrier-subsidized purchase price of US \$550—a year and a half after introduction.⁵

Smartphone-related thefts are on the rise globally. Consumer Reports estimated that, in 2013, thieves in the United States made off with 3.1 million mobile devices—or nearly twice as many as they had stolen in 2012.⁶ And numerous countries around the world face a similar theft epidemic. A 2013 study found that one in three Europeans experienced the theft or loss of a mobile device.⁷ Between 2009 and 2012, South Korea saw a five-fold increase in mobile device theft.⁸ And last year, criminals stole well over a million mobile devices in Colombia, a country with roughly one-seventh the population as the United States.⁹

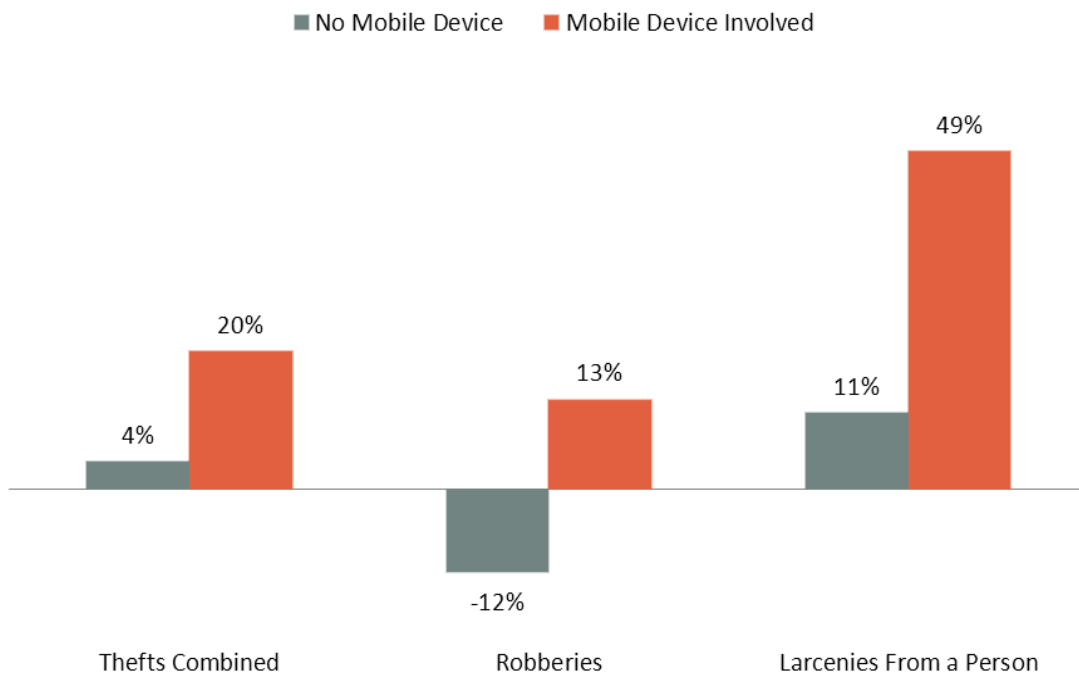
Unsurprisingly, the lucrative black market in stolen devices has attracted organized crime. An Interpol report, for example, found that, *every day*, Latin American theft rings trafficked in stolen mobile devices worth over a half million U.S. dollars.¹⁰

Mobile device theft has quickly become a major driver of robberies worldwide. In the U.S., the Federal Communications Commission estimated that one out of every three robberies involves a mobile phone.¹¹ As discussed in the next sections, in 2013, a mobile device played a role in roughly half of all robberies in New York City, San Francisco, and London.

New York City (United States)

Mobile device thefts represent an increasing share of all thefts in New York City. Between 2010 and 2013, the percentage of larcenies from a person involving a mobile device increased from 47 percent to 55 percent, and the percentage of robberies involving a mobile device increased from 40 percent to 46 percent. In 2013, more than one-quarter of all thefts and over half of grand larcenies from a person (55%) involved a mobile device. As reflected in the chart below, between 2010 and 2013, robberies not involving a mobile device fell by 12 percent, while the percentage involving mobile devices grew by nearly the same amount (13%).

Mobile Device Thefts Drove Increase in Thefts in New York City Between 2010 and 2013

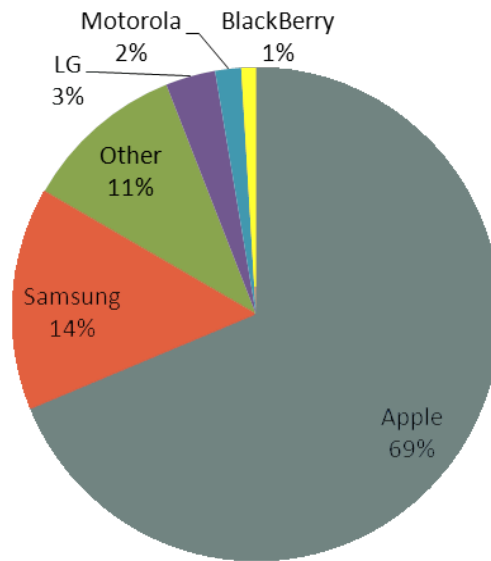


Source: Data from a Joint Project of the Deputy Commissioners of Operations and Strategic Initiatives at the New York City Police Department

San Francisco (California)

Smartphone theft is responsible for the increasing number of robberies in San Francisco. The majority (59%) of the approximately 4,000 robberies in San Francisco in 2013 involved the theft of a smartphone. The victims of those robberies ultimately recovered less than one in ten stolen devices. As reflected in the chart below, Apple devices constituted the vast majority (69%) of devices stolen in San Francisco robberies.*

In 2013, More San Francisco Robberies Involved Apple Devices than All Other Companies Combined



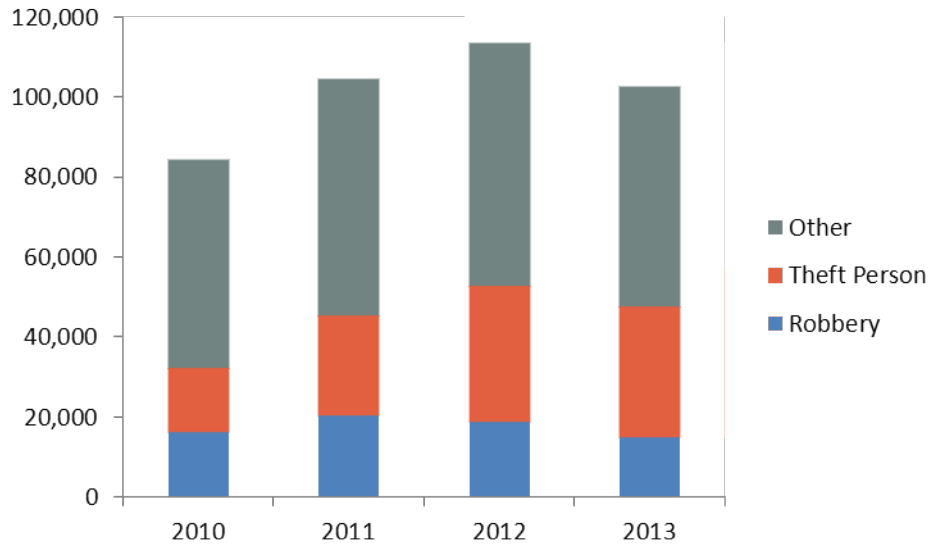
Source: City and County of San Francisco Police Department

* As discussed in more detail below, the relative percentage of robberies involving devices from particular manufacturers is expected to shift as kill switches, like Apple's Activation Lock, become more widely available.

London (United Kingdom)

Smartphones are a significant driver of thefts in London. Mobile device thefts from a person more than doubled between 2010 and 2013, increasing from 16,141 stolen mobile devices in 2010 to 32,872 in 2013. In 2013, nearly half (49%) of London robberies involved a mobile device. As shown on the chart below, despite a successful 2012 crackdown on mobile device theft, London police still received over 100,000 reports of stolen smartphones in 2013.

The Problem of Smartphone Theft Persists in London



Source: London Metropolitan Police

Accounts Internationally Detail Human Cost of Smartphone Crimes

Gunman In Megan Boken's Murder Given Life Sentence

CBS Local St. Louis — November 22, 2013

Young Chef Murdered For His iPhone Two Blocks From His Bx. Apartment

New York Post, Frank Rosario — April 20, 2012

Bronx iPhone Thief Drags 17-Year-Old Girl Downstairs, Punches Her In Face

NBC 4 New York — February 5, 2013

British Engineer Who "Fell In Love" With South Africa Is Hacked To Death On His Remote Farmstead By Machete-Wielding Thieves Who Only Took Mobile Phones

The Telegraph, Dan Newling & Erin Conway-Smith — November 16, 2012

Man Killed For iPhone On Southwest Houston St; Reward Offered For Information

ABC Local 13 New York (Houston KTRK) — October 11, 2013

Man Gets 32 Year Prison Sentence For iPhone Murder

The Sun Times, Tina Spondeles — April 12, 2013

Prosecutors: After Shoelace Broke, Teen Used Hoodie String To Kill 13-Year-Old

WIVB 4, Ed Drantch — May 9, 2014

Man Shot Dead After Argument On Brooklyn Street

New York Post, Matt McNulty — May 31, 2014

3 People Stabbed On Subway Platform In Jamaica, Queens

CBS Local 2 New York — February 2, 2013

THE SOS INITIATIVE ADVANCES A TECHNOLOGICAL SOLUTION

When car thefts soared in the 1990s, the auto industry responded with a series of anti-theft features—transponder keys, immobilizing devices, vehicle tracking systems—that, paired with focused police work, caused car thefts in the United States to plummet by more than 90 percent.¹² Entering 2013, the smartphone industry was just as capable of responding to the explosion of smartphone-related crime. Yet industry stakeholders were slow to acknowledge their responsibility to end the smartphone crime wave and even slower to develop workable technological solutions. And no wireless carrier, manufacturer, or software developer then offered a kill switch or other similarly effective theft-deterrent approach.

The Kill Switch Theft-Deterrence Strategy

The concept behind the kill switch is simple. A kill switch lets an authorized user remotely deactivate and, if recovered, reactivate the central functions of a mobile device. Initiating the theft-deterrence feature is similar to canceling a stolen credit card: a consumer calls a service number or logs onto a website, verifies his or her identity, and then “flips on” the kill switch. Reactivating the phone should be just as easy.

Once engaged, the kill switch “bricks” the stolen device: it cannot make or receive calls, connect to the internet, or access media content. A robust kill switch stands up to unsophisticated workarounds, with the device remaining inoperable even if an unauthorized user (1) attempts a “factory” or “hard” reset; (2) seeks to downgrade the operating system; or (3) removes the Subscriber Identity Module or “SIM” card. An activated kill switch converts an easy-to-sell, high-value multimedia device into a jumble of plastic and glass, drastically reducing its street value.

Certain promising kill switch technologies would go a step further, requiring a prospective user to furnish the owner’s credentials before reactivating a used device with a new wireless data network. Since this kill switch approach would not require the user to take any affirmative step, it would reduce the burden on less technologically savvy consumers.

The more mobile devices equipped with working kill switches, the less a criminal can expect a windfall by stumbling onto an unprotected device, and the less financial incentive there will be to target mobile devices in the first place. Widespread implementation, therefore, promises to reduce theft rates across jurisdictions and seriously disrupt the international black market for stolen smartphones.

A kill switch would also result in lower costs for consumers. Using theft statistics from 2012, a Creighton University study found that—with a mandatory kill switch on all smartphones—U.S. consumers would save \$580 million in device replacement costs and another \$2 billion in reduced insurance payments per year.¹³ Given the higher rates of smartphone theft today, a kill switch presumably would save consumers even more now.

At the start of 2013, the benefits of a kill switch were theoretical. Handset and operating system manufacturers had applications to protect and erase data stored on lost or stolen devices, like Apple’s Find My iPhone application and Samsung’s Find My Mobile. But no company offered a kill switch or other solution to make a stolen phone less valuable on the black market and, therefore, less attractive to steal.

The CTIA Blacklist

In mid-2012, the CTIA announced the creation of a “blacklist” database, where participating wireless carriers would deny service to devices registered as stolen. While slow to get started, this effort is a welcome part of a multi-layered approach to theft prevention. The limitations of the blacklist, however, highlight the critical need for complementary anti-theft technology like kill switches. A database approach is only as good as the input data, relying on consumers to report their phones stolen to their carrier and for the carrier to comprehensively input real-time entries for all thefts (and recoveries). Additionally, the limited geographic scope of the blacklist means it cannot prevent the use of stolen devices in China, Russia, and other non-participating countries where stolen device black markets thrive.

AG Schneiderman, DA Gascón, and Mayor Johnson Launch SOS Initiative

By the middle of 2013, New York State Attorney General Eric Schneiderman and San Francisco District Attorney George Gascón had each independently called on key players in the smartphone industry to prioritize theft-deterrence technology. In June 2013, Attorney General Schneiderman and District Attorney Gascón joined together and launched the SOS Initiative—a coordinated campaign to persuade the smartphone industry to make kill switches a default function on all smartphones.

The SOS Initiative developed the technical requirements needed for an effective kill switch, including that a device remain inoperable after a “factory reset” or the removal of the SIM card. The initiative also called on the smartphone industry to enable kill switches by default, with users free to opt-out voluntarily—an approach to maximize participation and, by extension, the effectiveness of a kill switch to deter crime.

Mayor Johnson joined as a co-chair of the SOS initiative on August 7, 2013, in recognition of the international dimensions of the smartphone crisis. Thereafter, the initiative rapidly grew to include more than 100 law enforcement officials, elected leaders, and consumer advocates from across the United States and around the world, all dedicated to harnessing technology to end the crime wave. They represented a broad-based, nonpartisan coalition, including 31 Republican and Democratic attorneys general, New York City Police Commissioner William Bratton, and 26 other major city police chiefs or commissioners. For a complete list of members, see Appendix B.

But as the SOS Initiative geared up, so did the smartphone industry’s opposition. CTIA, the wireless industry trade group, released a white paper entitled “Why a ‘Kill Switch’ Isn’t the Answer.” Through various channels, the group and its allies maintained that a kill switch was risky, technically impossible, and unlikely to make a dent in crime.

The SOS coalition engaged in a sustained effort to overcome these reservations, including:

- Engaging in a dialogue with industry stakeholders and experts, seeking to understand the technical hurdles in developing and implementing a kill switch solution;
- Convening a smartphone industry summit on the theft epidemic, with representatives from the CTIA and major smartphone industry players;

- Sending a sign-on letter to leading manufacturers from 31 attorneys general in the United States demanding the immediate implementation of theft-deterrence technology;
- Initiating an inquiry by SOS co-chair Attorney General Schneiderman into reports that five wireless carriers simultaneously rejected a kill switch proposal from Samsung; and
- Coordinating with federal and state legislators on measures to require kill switches on all smartphones.

Newspapers Join the Call for a Kill Switch

More Aggressive Steps Needed To Deter Smartphone Theft

Democrat & Chronicle — November 18, 2013

'Kill Switch' Could Curb Smartphone Thefts

The Chicago Tribune — December 12, 2013

Smartphones Need Kill Switches: Our View

USA Today — December 26, 2013

A Killer App At Last For Smartphone Thefts

SF Gate — April 7, 2014

Make Smartphone Kill Switches Automatic

San Francisco Chronicle — April 16, 2014

Smartphone “Kill Switch” Is An Idea Whose Time Has Come

Contra Costa Times (California) — April 28, 2014

Safety Switch For Smartphones

El Diario — May 6, 2014

The Need For Smarter Smartphones

Washington Post — May 12, 2014

THE SOS INITIATIVE LEADS TO INDUSTRY ACCEPTANCE OF KILL SWITCH

In the first year of the SOS Initiative, the early hostility of the smartphone industry, including the CTIA, to a kill switch faded—with manufacturers, carriers, and operating system developers announcing their commitment to making kill switches broadly available.

SOS Initiative Achieves Key Milestones

SEPTEMBER 18, 2013. Apple unveiled “Activation Lock,” a kill switch available on all iPhones running the newly released iOS 7 operating system. Prior to its introduction, critics claimed that an effective kill switch was beyond reach. Apple showed not only that a kill switch was possible, but made it available on the most popular mobile device in the market. (As explained in more detail below, preliminary data indicate that Activation Lock may already be reducing thefts.)

FEBRUARY 6, 2014. State Senator Mark Leno introduced California Senate Bill 962, the first state proposal to make kill switches mandatory on all phones. While allowing users to affirmatively opt out, the legislation required manufacturers to enable the kill switch by default. A version of the legislation passed the California State Senate on May 8, 2014. (Legislation is also pending in the New York and Illinois legislatures.)

FEBRUARY 13 & MARCH 3, 2014. Senator Amy Klobuchar and Representative Jose Serrano introduced companion federal legislation, “The Smartphone Theft Prevention Act,” to require carriers and manufacturers to make kill switch theft-deterrence solutions mandatory on all smartphones manufactured or sold in the United States. The SOS coalition provided input on the legislation, which incorporated many SOS kill switch guidelines, including requiring that deactivated devices remain inoperable after a factory reset.

APRIL 5, 2014. After several U.S. carriers reportedly rejected an earlier bid by Samsung to preload a kill switch created by a third-party developer, Samsung rolled out its own kill switch, dubbed “Reactivation Lock,” for certain new Verizon and U.S. Cellular “Galaxy” devices.

APRIL 15, 2014. The CTIA abandoned its opposition to a kill switch and announced a “Smartphone Anti-Theft Voluntary Commitment,” in which the major carriers (AT&T, Sprint, T-Mobile, U.S. Cellular, Verizon Wireless), operating system developers (Apple, Google, and Microsoft), device manufacturers (Apple, HTC, Huawei, LG, Motorola, Nokia, Samsung), and the major insurer of mobile devices in the United States (Asurion), committed themselves to implementing a kill switch-type solution. The participating companies agreed to a deadline of July 2015 for providing a “baseline anti-theft tool” on new devices that meets many of SOS’ kill switch guidelines, but does not require the solution to be opt-out.

MAY 15, 2014. Minnesota became the first state to mandate a kill switch on all smartphones. Among other things, by July 2015, the law requires all phones sold or purchased new in the state to incorporate a kill switch feature to “prevent the smart phone from being reactivated without a passcode or other similar authorization, even if the device is reprogrammed, is turned off and subsequently turned back on, has its network connectivity disabled and subsequently re-enabled, or has its SIM card removed.”

Google and Microsoft Confirm Plans for Kill Switch

Forty-two percent of smartphones in the United States and a similar percentage worldwide run Apple's iOS operating system, the second-largest market share for any operating system. On June 19, 2014, with the release of this report, the companies with the first and third-most popular operating systems have confirmed their plans to implement a kill switch:

1. Google, which produces Android—the most popular smartphone operating system globally—confirms that it will incorporate a kill switch-type theft-deterrence solution on its next version of the Android operating system. Today, Android runs on more than half of all smartphones in use in the United States; and,
2. Microsoft, which produces Windows Phone—the third most popular smartphone operating system worldwide—confirms it will incorporate a kill switch-type solution in the next release of its operating system, which runs on all Nokia smartphones.

Today's announcement means that a kill switch will be incorporated into the three dominant smartphone operating systems—Android, iOS, and Windows Phone—currently installed on 97 percent of smartphones in the United States.¹⁵

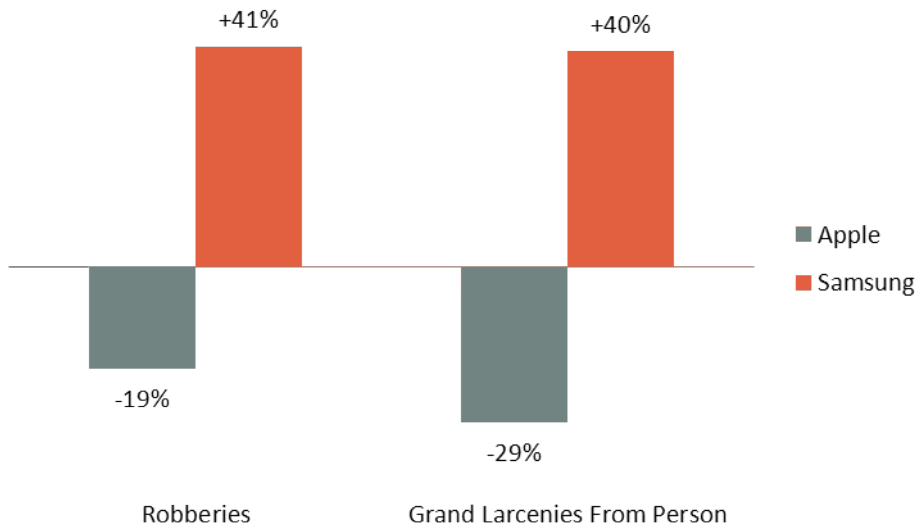
Preliminary Crime Data Suggest Kill Switches Deter Crime

A decline in iPhone thefts following the adoption of Apple's Activation Lock, the first kill switch-type solution commercially available in the United States, appears to validate the effectiveness of the kill switch approach and counsel in favor of broad implementation. While Apple products remain the most heavily targeted device for thieves, an analysis of crime statistics from three cities—New York, San Francisco, and London—reveal the same trend: after Apple introduced Activation Lock on September 18, 2013, iPhone thefts fell relative to thefts of mobile devices without theft-deterrence features.

In New York City, thefts of iPhones fell significantly after release of Apple's Activation Lock. In the first five months of 2014, just after Apple introduced Activation Lock, robberies and grand larcenies from a person involving Apple products dropped, respectively, by **19** percent and **29** percent, compared to the same time period in the previous year. This is shown in the chart below. The decrease in Apple thefts far surpassed the citywide decrease in all robberies (-10%) and all larcenies from a person (-18%). Perhaps most tellingly, both robberies and grand larcenies from a person involving a Samsung smartphone, another popular device, *increased* by over 40 percent compared to the first five months of 2013.*

*Samsung introduced its Reactivation Lock on certain devices in mid-April 2014, at the tail-end of the period reviewed. Assuming Samsung makes the kill switch broadly available across all of its devices, and arms the application by default (rather than require a user to "opt in" to use the application), Samsung thefts would be expected to experience a similar decline.

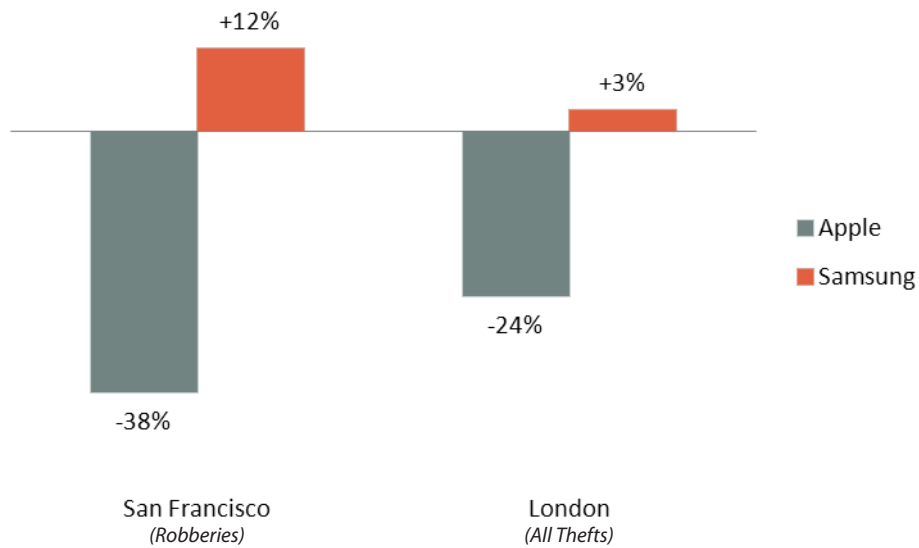
Apple Robberies and Grand Larcenies Drop Significantly, While Samsung Thefts Increase



Source: Preliminary Data From a Joint Project of the Deputy Commissioners of Operations and Strategic Initiatives at the New York City Police Department (first five months of 2013 and 2014)

Crime data from San Francisco and London show that the introduction of Activation Lock also corresponded with a decline in iPhone thefts and an increase in thefts of other devices in those cities as well. As reflected in the Chart below, iPhone robberies in San Francisco *declined* 38 percent, while robberies of Samsung devices *increased* 12 percent in the six months after Activation Lock compared to the six months prior to Activation Lock. In London, Apple thefts *declined* by 24 percent, while Samsung thefts *increased* by three percent in the same time period.

**iPhone Thefts *Declined* After Introduction of Activation Lock
While Thefts of Samsung Devices *Increased***



Source: City and County of San Francisco Police Department; London Metropolitan Police. Data compares iPhone and Samsung device thefts in the six months before and after Apple made Activation Lock available on September 18, 2013.

KEY OBJECTIVES REMAIN FOR THE SOS INITIATIVE

One year into the SOS Initiative, the smartphone industry has shifted its approach, committed to implementing kill switch technology on smartphones, and begun to accept its responsibility for keeping its customers safe. More is still required:

- **Enable Kill Switches by Default and Allow Users to “Opt Out.”**
All existing kill switches require users to affirmatively “opt in.” This means a consumer must seek out the technology and turn it on. This configuration reduces participation and weakens the kill switch’s potential to deter crime. Given early signs that kill switches like Apple’s Activation Lock are effective, there is no excuse for letting unnecessary barriers impede widespread use. To maximize effectiveness, while allowing users to opt out, manufacturers and developers must enable kill switches *by default*.
- **Make Kill Switches Immediately Available and Well Before 2015.**
The CTIA’s recent endorsement of a kill switch-type solution represents a promising turnaround. But with thousands of smartphones stolen each day, consumers cannot reasonably wait for effective theft-deterrent technology until July 2015, the formal deadline for participants in CTIA’s “Smartphone Anti-Theft Voluntary Commitment.” The CTIA and participating companies must move up their timelines and implement a default kill switch solution immediately.
- **Promote a Multi-Layered Strategy to Smartphone Security, Including Education.**
The smartphone industry as a whole needs to improve its efforts to educate consumers on the best ways to protect themselves and their devices. This should include information on theft-deterrence and privacy tools (including lock screens and mobile tracking devices) as well as when, where, and how to safely use mobile devices.
- **Enhance Cooperation with Law Enforcement to Stop Smartphone Theft.**
The smartphone industry needs to enhance its cooperation with law enforcement, particularly surrounding requests relating to stolen devices and allowing law enforcement to access its stolen phone database. This includes working to improve kill switch technology as criminals develop more sophisticated countermeasures and to develop further mechanisms to deny services (like mobile app and digital music purchases) to smartphones identified as stolen.

ACKNOWLEDGEMENTS

The SOS Initiative is grateful to the New York City Police Department, particularly the Deputy Commissioners of Operations and Strategic Initiatives, the City and County of San Francisco Police Department, and the London Metropolitan Police for their input and data, including the crime statistics furnished in this report.

APPENDIX A: SOS INITIATIVE JOINT STATEMENT (JUNE 13, 2013)

We are members of law enforcement, elected leaders from across the country, and consumer advocates. Collectively, we are responsible for the consumer protections and public safety of millions of Americans. In order to end the disturbing trend of robberies involving mobile communications devices, we have come together to create The Secure Our Smartphones Initiative.

It's time for manufacturers and carriers to put public safety before corporate profits. In 2012, 1.6 million Americans were victimized for their smartphones. This is a growing epidemic affecting all corners of our nation and accounting for a majority of the robberies in our cities. Last year, 50 percent of the robberies in San Francisco involved a stolen mobile communications device. Washington D.C Police report smartphone theft accounting for 38 percent of their robberies, with Philadelphia Police reporting this type of theft accounting for 33 percent of all robberies. In New York City, 20 percent of all robberies involved the theft of a smartphone; a 40 percent increase in the past year. These crimes have led to severe injuries and the loss of life. The trend indicates that the problem will only get worse if manufacturers and carriers do not take immediate action.

We appreciate the incremental effort made to create the CTIA database. Unfortunately, it has not had an impact. It does not prevent phones that have been "jail broken" from being reactivated. By far the clearest indication that the CTIA database has failed, however, is the fact that a similar database failed to slow cell phone thefts in the U.K., and the number of robberies in the U.S. has continued to rise since its implementation last year.

Unlike other types of crimes, manufacturers and carriers have the ability to end the growing number of smartphone thefts with a technological solution. The implementation of a kill switch would render stolen devices inoperable on any network, anywhere in the world. Such a feature would disable the device even if it is turned off or the SIM card has been removed. By eliminating the ability for the phone to be reactivated, the value of these mobile communications devices would be equivalent to that of a paperweight. As a result, the incentive to steal them would be eliminated.

We have seen technology prevent crime in the past. For example, when auto theft was on the rise in the 1990's, manufacturers created anti-theft technology which greatly reduced vehicle thefts nationwide. Law enforcement worked hand in hand with manufacturers to harness a technological solution then, preventing crime and victimization, there's no reason we cannot do it again.

With smartphone security firms indicating that manufacturers and carriers have the ability to implement a kill switch on all smartphones, the time for this technological solution to be realized is now. In the United States alone, smartphone manufacturers raked in over \$69 billion in sales last year. Mobile communications device manufacturers and carriers have an opportunity to end the victimization of millions of Americans and demonstrate their corporate responsibility by implementing a "kill switch."

Secure our Smartphones is unwavering in its commitment to public safety. With robberies involving mobile communication devices at an all-time high, we cannot stand by when a solution to the problem is readily available. Manufacturers and carriers have the opportunity to deter crime, eliminate the secondhand market for stolen mobile communications devices, and prevent their customers from becoming the next victim.

APPENDIX B: SECURE OUR SMARTPHONES INITIATIVE MEMBERS

Co-chaired by Attorney General Schneiderman, District Attorney Gascón, and London Mayor Johnson, the Secure Our Smartphones Initiative includes:

- Attorney General Martha Coakley, Massachusetts
- Attorney General Lisa Madigan, Illinois
- Attorney General Beau Biden, Delaware
- Attorney General Kathleen G. Kane, Pennsylvania
- Attorney General Lori Swanson, Minnesota
- Attorney General David Louie, Hawaii
- Attorney General George Jepsen, Connecticut
- Attorney General Jon Bruning, Nebraska
- Attorney General Tom Horne, Arizona
- Attorney General Dustin McDaniel, Arkansas
- Attorney General Pamela Jo Bondi, Florida
- Attorney General Greg Zoeller, Indiana
- Attorney General Tom Miller, Iowa
- Attorney General Jack Conway, Kentucky
- Attorney General Janet Mills, Maine
- Attorney General Douglas F. Gansler, Maryland
- Attorney General Bill Schuette, Michigan
- Attorney General Jim Hood, Mississippi
- Attorney General Chris Koster, Missouri
- Attorney General Catherine Cortez Masto, Nevada
- Attorney General Joseph Foster, New Hampshire
- Attorney General John Hoffman, New Jersey
- Attorney General Gary King, New Mexico
- Attorney General Wayne Stenehjem, North Dakota
- Attorney General Ellen F. Rosenblum, Oregon
- Attorney General Peter Kilmartin, Rhode Island
- Attorney General John E. Swallow, Utah
- Attorney General William H. Sorrell, Vermont
- Attorney General Lenny Rapadas, Guam
- Attorney General Luis Sánchez Betances, Puerto Rico
- Lieutenant Governor Gavin Newsom, California
- State Comptroller Tom DiNapoli, New York
- District Attorney Nancy O'Malley, Alameda County District Attorney's Office
- District Attorney Cyrus R. Vance, Jr, New York County District Attorney's Office
- District Attorney Kathleen Rice, Nassau County District Attorney's Office
- District Attorney Mark A. Peterson, Contra Costa County District Attorney's Office
- District Attorney Jeffrey F. Rosen, Santa Clara County District Attorney's Office
- District Attorney Donald DuBain, Solano County District Attorney's Office
- District Attorney Steve Wagstaffe, San Mateo County District Attorney's Office
- District Attorney Sandra Doorley, Monroe County District Attorney's Office
- District Attorney David Soares, Albany County District Attorney's Office
- District Attorney R. Seth Williams, Philadelphia County District Attorney's Office
- District Attorney Jackie Lacey, Los Angeles District Attorney's Office
- District Attorney Robert Johnson, Bronx District Attorney's Office

- Mayor Bill de Blasio, New York City
- Commissioner William J. Bratton, New York City Police Department
- Mayor Jean Quan, City of Oakland
- Senator Mark Leno, California State Senate
- Senator Leland Yee, California State Senate
- Assemblyman Marc Levine, California State Assembly
- Council member Libby Schaff, Oakland City Council
- Dan Kalb, Oakland City Council
- Board Member Betty Yee, California Board of Equalization
- Philadelphia Mayor Michael Nutter
- Councilwoman Blondell Reynolds Brown, Philadelphia City Council
- New York State Association of Chiefs of Police
- Superintendent Garry McCarthy, Chicago Police Department
- Chief Greg Suhr, San Francisco Police Department
- Commissioner Thomas V. Dale, Nassau County Police Department
- Commissioner Charles H. Ramesy, Philadelphia Police Department
- Chief Raymond A. Martinez, Miami Beach Police Department
- Chief Michael Davis, Brooklyn Park Police Department
- Chief Edward Flynn, Milwaukee Police Department
- Commissioner Anthony Batts, Baltimore Police Department
- Chief Susan Manheimer, San Mateo Police Department
- Superintendent Colonel Rick Fuentes, New Jersey State Police
- Commissioner Ed Davis, Boston Police Department
- Chief Jane Castar, Tampa Police Department
- Chief Kim Jacobs, Columbus Police Department
- Major Cities Police Chiefs Association
- President Marty Halloran, San Francisco Police Officers Association
- Executive Director Chuck Wexler, Police Executive Research Forum
- Director Sue Rahr, Washington State Criminal Justice Training Commission
- Richard Van Hauten, East Division Representative, Fort Worth Police Officers Association
- Sean Smoot, Chief Legal Counsel, Illinois Police Benevolent and Protective Association
- Consumers Union
- Christine Cole, Executive Director of the Program in Criminal Justice Policy and Management, Harvard Kennedy School
- Malcolm Sparrow, Professor of the Practice of Public Management, Harvard Kennedy School
- Bernard Melekian, Paratus Group
- Psychologist Richard G. Dudley Jr., MD, Vera Institute Trustee
- David Weisburd, Professor of Criminology, George Mason University
- Tracey Meares, Walton Hale Hamilton Professor, Yale School of Law
- Anthony Braga, Don M. Gottfredson Professor of Evidence-Based Criminology, Rutgers School of Criminal Justice
- Police Chief Dan Alexander, Boca Raton Police Department
- Rochester Police Chief James Sheppard
- Syracuse Mayor Stephanie Miner
- Syracuse Police Chief Frank Fowler
- Albany Mayor Gerald D. Jennings
- Albany Police Chief Steve Krokoff
- Ithaca Mayor Svante Myrick
- Binghamton Mayor Matthew T. Ryan

- Binghamton Police Chief Joseph T. Zikuski
- Newburgh Mayor Judy Kennedy
- Newburgh Police Chief Michael D. Ferrara
- Niagara Falls Mayor Paul Dyster
- E. Bryan DalPorto, Superintendent of Police in the City of Niagara Falls
- White Plains Mayor Thomas Roach
- White Plains Public Safety Commissioner David Chong
- Yonkers Mayor Mike Spano
- Yonkers Police Commissioner Charles Gardner
- New Rochelle Mayor Noam Bramson
- New Rochelle Police Commissioner Patrick Carroll
- Tonawanda Town Supervisor Anthony Caruana
- Tonawanda Police Chief Anthony Palombo
- Senator David Valesky, New York State Senate

An updated list can be found online at <http://www.ag.ny.gov/sos/initiative-members>

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