

#### Acknowledgements

First and foremost, we must thank the Counter Extremism Project and their One95 grant program for funding, supporting, and publishing this research. We would also like to extend our gratitude to Christopher McNaboe and his team of researchers at the Carter Center's Syria Conflict Mapping Project for their assistance with using Gephi. Finally, we would like to thank Kevin Chant at the University of California, Berkeley, for his work in writing and troubleshooting the script that allowed us to upload our data to Gephi.

#### **About the Authors**

Gregory Waters received his BA with Honors in Political Economy and Foreign Policy in the Middle East from the University of California, Berkeley, in 2016. Since then he has researched and written about the Syrian Civil War and extremist groups, primarily utilizing Syrian community Facebook pages for his projects. He has worked as a research consultant at the Counter Extremism Project since June 2017 and currently writes about Syria for the International Review and has previously been published by Bellingcat and openDemocracy.

Robert Postings received his BA with Honors in History from Oxford Brookes University in 2016. He currently writes about the Islamic State for the International Review. He has written articles using analysis of IS supporters on social media to gauge their reaction to major events and studying the widespread hacking of Facebook accounts by Islamic State supporters.

#### Abstract

This report analyzes the strength of the Islamic State's (IS) network on Facebook using online network measurement tools and uncovers the myriad of ways in which IS operates on Facebook. To do so, we mapped the accounts and connections between 1,000 IS-supporting Facebook profiles with links to 96 countries on every continent except Antarctica using the open-source network analysis and visualization software, Gephi. It should be noted, however, that hundreds of additional pro-IS profiles were excluded from the dataset. This is because while we were able to identify the IS supporting Facebook accounts, there was no information on those users' locations. Therefore, this data represents only a portion of IS's support network on the platform.

Our analysis of online IS communities globally, regionally, and nationally suggests that IS's online networks, in particular on Facebook, are growing and can be utilized to plan and direct terror attacks as well as mobilize foreign fighters for multiple areas of insurgency. Secondly, IS's presence on Facebook is pervasive and professionalized, contrary to the tech company's rhetoric and efforts to convince the public, policymakers, and corporate advertisers from believing otherwise. Our findings illustrate that IS has developed a structured and deliberate strategy of using Facebook to radicalize, recruit, support, and terrorize individuals around the world. According to our observations, it appears that IS utilizes a limited number of central players who work to magnify the group's presence on the platform, and also works to strengthen its networks so that no one individual IS Facebook account (node) serves as an irreplaceable connection (edge) to other pro-IS accounts located elsewhere.

# Contents

Abstract	3
Methodology	5
Glossary of Key Terms and Concepts	6
Key Data and Findings	7
Introduction	10
Identified Communities in the Global Network	12
Communities – 15	13
Communities – 28	17
Propagandists, Hackers, and Other Key Figures	19
Regional Analysis	27
Africa	28
Americas	40
Asia	47
Australia	61
Europe	62
Middle East	64
Turkey	72
Facebook's Failure to Police Extremism	74
Appendix A – Origins and current locations of all nodes	81
Appendix B – Community breakdown for Maps 2 and 3	84
Appendix C – Documented Foreign Fighters	89

### Methodology

We pursued several strategies to search for and identify IS members and supporters on Facebook (nodes). This included searching on Facebook for recently released IS propaganda using positive terminology, searching for geographic-based names, examining pro-IS Facebook pages, and using the Facebook search tool peoplefindThor to target specific cities and countries. IS supporters and members are identified by their uploaded pictures, posts, usernames, or likes. This includes any user who uploads an image of IS propaganda and posts it with a positive caption; makes a post explicitly depicting IS positively; has a pro-IS username; or positively comments on, shares, loves, or likes multiple times a pro-IS post (such as a link to an IS Telegram channel or IS propaganda) or pro-IS Facebook page. This means that we did not identify all pro-IS and IS-linked Facebook accounts on the platform, but the method helped ensure that no one is misidentified as an IS supporter.

We examined each node's timeline for other individuals who had liked, loved, or shared any pro-IS posts, and looked at the node's friend list for some of their connected IS supporters. With two notable exceptions, we did not examine the entire friend list of any node for other pro-IS profiles. This ensured that we did not skew the data with one highly connected network of IS supporters resulting from an overly-analyzed friend list.

The exceptions were for the Madagascar and Trinidad and Tobago networks. Every publicly viewable friend of these Facebook profiles was examined for any possible connection with IS internationally. Following our analysis, it is highly likely that these two networks are almost completely separated from the global IS support network on Facebook.

For all nodes, we recorded their number of friends or followers, country of origin (origin), current location (current), and any previous locations. Origin and current locations are determined using various criteria: *kunya* (war name) such as "al-Shami" and "al-Iraqi," declared location, and "liked" community Facebook pages. These locations are outdated for some nodes, particularly foreign fighters who have recently traveled to a new country. In these cases, observing the node's position on the global map will give a better indicator of where that individual currently resides. If a node has any notable attributes, such as clearly belonging to an active IS fighter or to a major IS propagandist, that information is recorded as well.

In order to search for and identify connections (edges) between IS members and supporters on Facebook, we created an archive of each node's Facebook friend list on Sublime Text, a source code editor. Individuals with multiple Facebook accounts are combined into one node with the friend list of each account archived together. Archived friend lists are then saved as .txt files and stored together in a single folder on Sublime Text. We then conducted basic searches of these archived friend lists for IS supporters and members as we identified them.

Establishing edges was challenging due to Facebook's profile viewing system, which gives users the option to limit what friends and non-friends can see. Often a user's friend list is only partially viewable by non-friends. In these cases, we could only archive what was viewable and searched that list on Sublime Text for the names of previously identified IS supporters to identify some connections. In other cases, pro-IS Facebook accounts friended each other after we had already archived friend lists, meaning that newer edges had to be determined manually. Furthermore, some users changed their usernames throughout the research period, which meant that we had to rely on recognizing accounts when searching a node's friend list in order to establish the edge. Therefore, this data represents the minimum level of connection between these pro-IS users. Since archiving friend lists effectively creates a snapshot of that person's connections on that date, this project can be viewed as a collection of snapshots of IS connections between October 2017 and March 2018.

\_

<sup>&</sup>lt;sup>1</sup> Some supporters claim to originate and live in IS strongholds such as Marawi, Bukamal, and Raqqa while their names or profiles make it clear that they had never been to these cities. In every case, due discretion was used to determine origin and current location.

Through this process, we identified and mapped 1,000 nodes and 5,347 edges using the open source network analysis and visualization program, Gephi. The program enables us to test and analyze how close-knit and connected different pro-IS networks are. Networks can either be defined by geography – such as the "Southeast Asia network" which consists of all nodes currently located in Southeast Asia – or as defined by Gephi, which groups nodes based on its analysis of their closeness and interconnectivity. The following report details these findings at the global, regional, and country level, as well as revealing cross-national communities of IS supporters. Complete datasets are included in the appendices.

## Glossary of Key Terms and Concepts

- Location Location refers to either the stated or inferred country of origin for a profile or the profile's stated or inferred current country of residence. Locations are determined through the methods described in the above Methodology section. Comparisons between IS-supporting networks in different locations only deal with the data collected in this research, not as general statements. For example, throughout this report, phrases such as "Afghans are not connected to Americans" will be used. It is to be understood that such statements only reflect the data collected here and does not discount possible connections existing outside of this dataset.
- Current location Unless otherwise stated, all current locations used are either those listed on an individual's profile or, when the current location is not known but the individual's origin is, origin location is used instead. While this adjustment may introduce some incorrect current locations, overall it provides more accurate data to assess.
- Node A Facebook profile of an IS member or supporter. For users who clearly have multiple Facebook profiles, such as propagandists, all associated friend lists are combined under one node.
- Edge A connection between two nodes, created when two individuals are Facebook friends or follow each other on Facebook.
- Core supporters/nodes Nodes from or currently in Iraq or Syria. These are considered core nodes due to their likely positions as official IS members or fighters.
- Network Any grouping of profiles (nodes) that are either directly friends with each other (edges) or connected through mutual Facebook friends. In this paper, the term network is used to describe both the complete 1,000-node global network of IS supporters as well as smaller networks at the regional and national levels.
- Community A sub-network of the main 1,000-node network, determined by Gephi based on nodes' connectivity to one-another. A community is not determined by geographic location. Community measurements rely solely on the strength and quantity of edges. The term community in this paper is used to describe the two sets of international communities identified by Gephi and detailed in the sub-sections "Communities 15" and "Communities 28" as well as to describe subsets of regional networks discussed.
- Periphery network Any of the regional networks only weak connection to the central network, the large circular group of nodes found on the lower right side of the global map. Periphery networks include all Asian and American networks, as well as the East Africa networks.
- Average weighted degree The average number of connections (edges) each node has.

- Average path length The average number of edges needed to traverse from one side of a network to the other. This measures the efficiency of communication across the network.
- Betweenness centrality Identifies nodes that provide the most direct path between disconnected networks.
- Closeness centrality Identifies nodes with close proximity, i.e. many strong connections, to significant nodes nodes that serve as bridges between disconnected networks or with many connections while not necessarily being significant themselves. Nodes with high closeness centrality can be considered 'gatekeepers' to significant nodes.
- Clustering coefficient Measures the number of closed triangles in a network versus all possible closed triangles between 0 and 1, i.e. examining whether a node's friends are also friends with each other. This is a measurement of network strength, meaning that if one node in a triangle is removed, communication between the other two nodes is not disrupted. Average clustering coefficient's closer to 1 means more triangles, closer to 0 means less.
- Eccentricity This measurement is used for individual nodes, not networks, and measures the number of 'steps' an individual node requires to cross a network. Eccentricity can never be greater than the network diameter and a significantly lower eccentricity implies that node holds a central position in the network.
- Eigenvector centrality Measures how connected nodes are to other nodes that Gephi deems important. Importance is measured based on a node's centrality within the network and connections to other central nodes. The higher a connection means a higher eigenvector centrality. Indicated centers of gravity.
- Graph density Measures the 'completeness' of a network by determining the level of connected edges versus total possible edges. Closer to 1 means dense, closer to 0 means not dense.
- Modularity Assesses the number of distinct communities within a network. The number of communities identified can be raised by lowering the resolution. Unless otherwise stated, a resolution of .4 has been used for all modularity measurements in this paper. This level preserves the smaller known communities such as Madagascar, Trinidad and Tobago, and Dara'a while breaking down larger groups into their component parts.

Network diameter – The maximum number of connections needed to traverse a network.

# Key Data and Findings

IS-supporting profiles (nodes) are widespread on Facebook. During the course of our research, we observed and documented the activities of these nodes, which included recruitment; posting propaganda; hacking, spamming, and reporting other non-IS users' profiles; and discussing terrorist activity over Facebook Live. For example, we found 28 nodes that are used exclusively to post IS propaganda. Some of their propaganda – including full-length IS videos – has remained on the popular social media platform for more than a year. Other pro-IS Facebook users also work to hack non-IS accounts and use the new account to share IS propaganda and post hateful and threatening messages. A group of American IS supporters holds weekly "meetings" on Facebook Live to discuss topics ranging from IS's ideology to how to avoid detection from the FBI.

In order to determine the scale and scope of IS's network on Facebook, we set out to map the presence of and relationships between pro-IS Facebook accounts around the world. Between October 2017 and March 2018, we

collected data on and **mapped 1,000 nodes** with a total of **5,347 edges**. An analysis of our dataset reveals IS's ongoing prevalence and use of the platform by supporters from around the world:

- Of the 1,000 nodes, only 430 (43%) had been removed by Facebook by March 5, 2018.
- Documented IS supporters had **88** origin countries and currently live in **84** different countries for a total of **96** unique countries.
- Supporters had previously visited or lived in 4 additional countries not included above: An Afghan and Eritrean both studied in **Uganda**, a Swede studied in **Peru**, a Somali studied in **Poland**, and a Libyan studied in **Slovakia**.
- 7.2% of nodes were female.
- 73% of profiles had visible posts.
- 13% of those profiles mentioned Palestine in their posts, 5% mentioned Myanmar, and 2% mentioned both.<sup>2</sup>

This report sheds further light on Facebook's failings to effectively prevent IS's extensive misuse of the platform. The majority of pro-IS accounts we identified were not removed by Facebook (570 accounts or 57%) by March 2018. IS propaganda was also observed going unremoved for extended periods of times including well over a year on several occasions. For example, an Amaq video – the official IS media branch – posted by a pro-IS profile has gone unremoved since September 2016. Official IS propaganda videos were also viewed thousands of times before being removed, including a full 45-minute official IS propaganda video, "We Will Surely Guide Them to Our Ways," which depicts combat during the Battle of Mosul and includes messages directed at western audiences from American, British, Canadian, Belgian, and Russian fighters in Iraq. Pro-IS accounts were also seen reinstated multiple times after being removed by Facebook. Perhaps most concerning is that Facebook's suggested friends algorithm, which recommended IS supporters, propagandists, and even fighters as suggested friends, reveals how the company's tools have aided in connecting extremist profiles and help expand IS networks.

### Regional origins and current locations of the 1,000 IS supporters

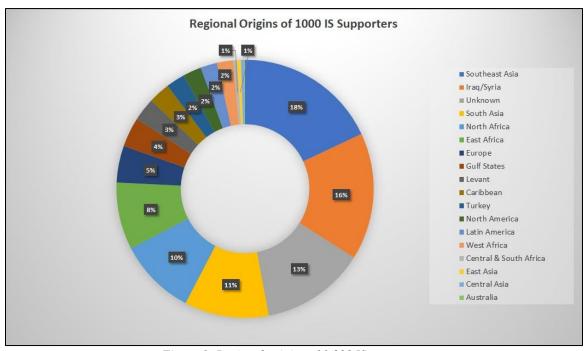


Figure 1: Regional origins of 1,000 IS supporters

<sup>&</sup>lt;sup>2</sup> This should serve as a minimum as it was not practical for us to search through entire profiles for posts on these topics, therefore some user may have been missed. We did however look through all pictures and videos posted by users.

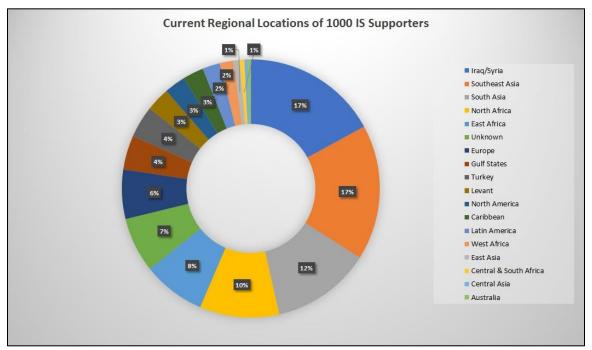


Figure 2: Current regional locations of 1,000 IS supporters

#### Countries with 20 IS supporters or more

How to read the graph: 'Total' minus 'Origin' gives number of foreigners or people of unknown origins currently in the country. 'Total' minus 'Current' gives the minimum number of people from that country currently abroad. 'Origin' < 'Current' implies the country is a draw for foreigners. 'Origin' > 'Current' implies the country supplies more foreigners than it draws. A full table can be found in Appendix A.

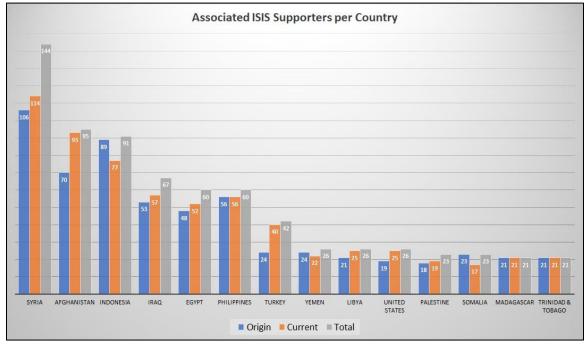


Figure 3: Associated IS supporters per country found in the dataset

<sup>&</sup>lt;sup>3</sup> 'Total' indicates the number of unique profiles either from the country or currently in the country. Total exceeds 1000 due to individuals traveling between countries.

### Introduction

Facebook is the most widely used social media site in the world, with 2.2 billion users as of March 2018.<sup>4</sup> Unfortunately, terrorist groups have used the popular social media platform to promote their propaganda, radicalize and recruit, and incite violence. As early as 2014, western intelligence agencies were expressing alarm at IS content on platforms like Facebook.<sup>5</sup> Since then, the tech company has repeatedly stated publicly "there's no place on Facebook for terrorism" and have claimed impressive statistics about the removal of extremist content.<sup>7</sup> However, terrorist content is still pervasive on Facebook despite these claims. As illustrated in this report, which has identified 1,000 IS supporters on Facebook affiliated to 96 different countries, IS's Facebook networks are growing and can be utilized to plan and direct terror attacks as well as mobilize foreign fighters for multiple areas of insurgency.

IS and their supporters have used Facebook in many ways – from using it as a platform to establish their allegiance to the group to disseminating extremist propaganda to inspiring terrorist acts. On June 13, 2016 Larossi Abballa stabbed a couple to death in their home in the town of Magnanville, France. Abballa then held the couple's 3-year-old child hostage and recorded a 13-minute-long live video on Facebook during which he pledged allegiance to IS, threatened more attacks by the group, and showed off the terrified child. While Facebook deleted the video, IS's Amaq news agency quickly issued a slightly shortened version to be promoted and shared online by supporters. One day earlier, Omar Mateen carried out a mass shooting that killed 49 at the Pulse nightclub in Orlando, Florida. On the day of the attack, Mateen posted a series of messages to Facebook, including ones stating, "Now taste the Islamic state vengeance."

Facebook profiles are often used to spread propaganda, and there are Facebook pages and groups dedicated to the spread of terrorist propaganda. <sup>10</sup> These groups and pages also provide places for IS supporters to meet other users who share their views and discuss extremist-related topics. We documented one particularly prominent group of American IS supporters that holds weekly discussions over Facebook Live where they discuss how to avoid detection from the FBI and ways they can help the "virtual caliphate." Additionally, one of the earliest American IS fighters in Syria, Abdullah Ramo Pazara, used Facebook to fundraise, coordinate the shipments of supplies to him, share information about fighting in Syria, and even recruit foreign fighters to join IS in Syria. <sup>11</sup>

Facebook is also a tool IS members use to encourage, assist, and direct attacks across the world. Abdelhamid Abaaoud, a key IS commander who fought in Syria, returned to his home country of Belgium and established an extensive IS cell to carry out attacks throughout Europe. He was linked to a series of attacks and was the

<sup>4</sup> "Company Info," Facebook Newsroom, March 31, 2018, <a href="https://newsroom.fb.com/company-info/">https://newsroom.fb.com/company-info/</a>.

<sup>&</sup>lt;sup>5</sup> Robert Hannigan, "The web is a terrorist's command-and-control network of choice," Financial Times, November 3, 2014, https://www.ft.com/content/c89b6c58-6342-11e4-8a63-00144feabdc0.

<sup>&</sup>lt;sup>6</sup> Monika Bickert, Brian Fishman, "Hard Questions: How We Counter Terrorism," Newsroom, June 15, 2017, https://newsroom.fb.com/news/2017/06/how-we-counter-terrorism/.

<sup>&</sup>lt;sup>7</sup> Monika Bickert and Brian Fishman, "Hard Questions: Are We Winning the War On Terrorism Online?" Newsroom, November 8, 2017, https://newsroom.fb.com/news/2017/11/hard-questions-are-we-winning-the-war-on-terrorism-online/.

<sup>&</sup>lt;sup>8</sup> Alissa J. Rubin and Lilia Blaise, "Killing Twice for ISIS and Saying So Live on Facebook," *New York Times*, June 14, 2016, <a href="https://www.nytimes.com/2016/06/15/world/europe/france-stabbing-police-magnanville-isis.html">https://www.nytimes.com/2016/06/15/world/europe/france-stabbing-police-magnanville-isis.html</a>.

<sup>&</sup>lt;sup>9</sup> Alan Blinder, Frances Robles and Richard Pérez-Peña, "Omar Mateen Posted to Facebook Amid Orlando Attack, Lawmaker Says," *New York Times*, June 16, 2016, https://www.nytimes.com/2016/06/17/us/orlando-shooting.html.

<sup>&</sup>lt;sup>10</sup> "Glen Allen Woman Sentenced to 4 ½ Years in Prison for Making False Statements in an International Terrorism Investigation," United States Department of Justice, May 11, 2015, <a href="https://www.justice.gov/usao-edva/pr/glen-allen-woman-sentenced-4-years-prison-making-false-statements-international">https://www.justice.gov/usao-edva/pr/glen-allen-woman-sentenced-4-years-prison-making-false-statements-international</a>; Lizzie Dearden, "Mother who spread Isis propaganda on Facebook spared jail for terror offences due to children's 'suffering'," <a href="mailto:Independent">Independent</a>, November 7, 2017, <a href="https://www.independent.co.uk/news/uk/crime/woman-isis-propaganda-facebook-jail-terror-offences-children-farhana-begum-ahmed-old-bailey-a8042196.html">https://www.independent.co.uk/news/uk/crime/woman-isis-propaganda-facebook-jail-terror-offences-children-farhana-begum-ahmed-old-bailey-a8042196.html</a>.

<sup>&</sup>lt;sup>11</sup> Alexander Meleagrou-Hitchens, Seamus Hughes and Bennett Clifford, "The Travelers," Program on Extremism, February 2018, <a href="https://extremism.gwu.edu/sites/g/files/zaxdzs2191/f/TravelersAmericanJihadistsinSyriaandIraq.pdf">https://extremism.gwu.edu/sites/g/files/zaxdzs2191/f/TravelersAmericanJihadistsinSyriaandIraq.pdf</a>.

mastermind of the November 2015 Paris attacks that killed 130.<sup>12</sup> Included in his network were 'scouts' – IS supporters working for Abaaoud – who travelled across Europe feeding information back to him on potential terror attack targets.<sup>13</sup> He remained in contact with his scouts using Facebook, exchanging hundreds of messages a month. The fake Facebook profile he set up to communicate with them as well as the profiles used by several jailed 'scouts' remain unremoved by Facebook.

Official members of IS also use online tools to communicate with supporters worldwide.<sup>14</sup> These official IS members on Facebook encourage supporters to carry out attacks and provide them with the necessary assistance. This style of attacks is often referred to as 'remote control' attacks.<sup>15</sup> IS organizer Abubakr Kurdi, for example, used Facebook to identify people willing to carry out attacks around the world for IS.<sup>16</sup> One of the men he recruited was Munir Hassan Mohammed, a Sudanese man living in the United Kingdom who attempted to carry out a bombing on Christmas in 2017. Mohammed pledged allegiance to IS on Facebook, and Kurdi – through the social media platform – provided him with instructions and advice on how to best carry out the attack.

The scale to which IS and its supporters use Facebook to achieve its deadly ends is concerning. In our research, we identified 1,000 pro-IS profiles, representing a fraction of IS supporting accounts on the platform. Our dataset includes profiles from Syria, Iraq, Egypt, and the Philippines, as should be expected given IS's prevalence there. However, Facebook profiles were also identified in Nepal, South Korea, and several South American countries, indicating the widespread geographical nature of IS supporters. IS networks were also found in countries that have robust counterterrorism and counter-extremism programs, including the United States where an IS network included people openly stating support for the terror group and discussing arrested terrorists they knew.

Once we mapped out the 1,000 pro-IS Facebook accounts, we analyzed the connections for international communities and organized information into national and regional networks for further analysis. This led to a variety of discoveries including how Malaysian IS supporters have the highest number of external connections out of the entire Southeast Asian region, whereas the Philippines was more internally focused with few external connections. It also led to the discovery of IS networks in Madagascar and Trinidad and Tobago – countries which have not yet experienced domestic IS attacks but may be threatened in the future.

We were also able to identify notable IS Facebook profiles, including people responsible for hacking accounts on behalf of IS, active IS fighters, and prolific propagandists. One profile belonged to a well-connected Jordanian or Egyptian national who is believed to have fought with or been associated with the IS affiliate Jaysh Khalid ibn al-Walid in southern Syria. This group is formed almost exclusively of local Syrians and, aside from this user, is largely isolated from the broader IS network on Facebook. This user's extensive connections both within Jaysh Khalid ibn al-Walid as well as to external IS supporters suggest he likely had a senior role within Jaysh Khalid ibn al-Walid. Moreover, we also observed pro-IS organizations such as Al-Ansar bank setting up Facebook pages and interacting with people on the platform.

We observed and analyzed the activities of IS propagandists on Facebook, the most active of which function as an official IS news source for supporters. Clear patterns and similarities between propaganda accounts were identified, such as only posting the text of propaganda releases while linking to pictures and videos in the post's

11

11

<sup>&</sup>lt;sup>12</sup> David Connett, "Paris Attacks: Mastermind of Attacks Abdelhamid Abaaoud Turned Back on Fantastic Life, Says Father," The Independent, November 16, 2015, <a href="https://www.independent.co.uk/news/world/europe/the-father-of-the-mastermind-of-the-paris-attacks-says-his-son-turned-his-back-on-a-fantastic-life-a6737041.html">https://www.independent.co.uk/news/world/europe/the-father-of-the-mastermind-of-the-paris-attacks-says-his-son-turned-his-back-on-a-fantastic-life-a6737041.html</a>.

<sup>&</sup>lt;sup>13</sup> Guy Van Vlierden, "Following the Facebook trail of Abdelhamid Abaaoud's scouts," emmejihad, March 19, 2018, <a href="https://emmejihad.wordpress.com/2018/03/19/following-the-facebook-trail-of-abdelhamid-abaaouds-scouts/">https://emmejihad.wordpress.com/2018/03/19/following-the-facebook-trail-of-abdelhamid-abaaouds-scouts/</a>.

<sup>&</sup>lt;sup>14</sup> Seamus Hughes and Alexander Meleagrou-Hitchens, "The Reach of ISIS's Virtual Entrepreneurs into the United States," Lawfare, March 28, 2017, <a href="https://www.lawfareblog.com/reach-isiss-virtual-entrepreneurs-united-states">https://www.lawfareblog.com/reach-isiss-virtual-entrepreneurs-united-states</a>.

<sup>&</sup>lt;sup>15</sup> Rukmini Callimachi, "Not 'Lone Wolves' After All: How ISIS Guides World's Terror Plots From Afar," The New York Times, February 04, 2017, https://www.nytimes.com/2017/02/04/world/asia/isis-messaging-app-terror-plot.html.

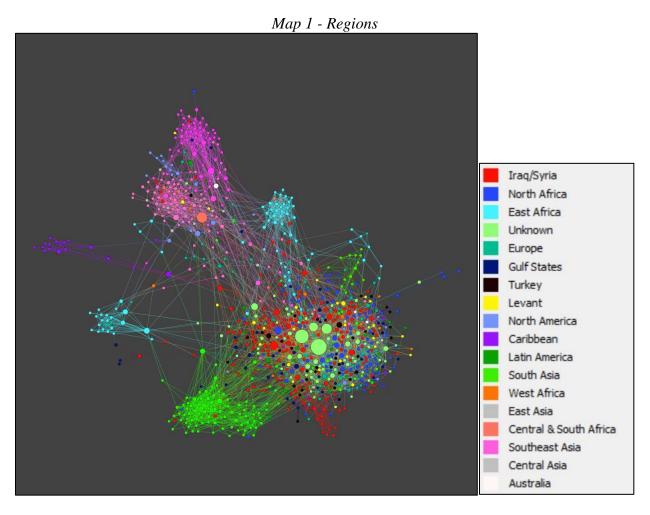
<sup>&</sup>lt;sup>16</sup> Ben Farmer, "Terrorists Plotted Christmas Bomb after Meeting Islamic State Commander on Facebook," The Telegraph, January 08, 2018, <a href="https://www.telegraph.co.uk/news/2018/01/08/terrorists-plotted-christmas-bomb-meeting-islamic-state-commander/">https://www.telegraph.co.uk/news/2018/01/08/terrorists-plotted-christmas-bomb-meeting-islamic-state-commander/</a>.

comments in an attempt to avoid Facebook's automated flagging tools. IS propagandists also take steps to help avoid being completely removed by Facebook, including among other things preparing backup accounts should Facebook remove their current operating account.

It is clear from our research that IS's Facebook networks are strong, extensive, and growing. These networks can, and are, leveraged to conduct foreign attacks and sustain native insurgencies and have helped IS remain a deadly force despite losing its territory in Iraq and Syria.

### Identified Communities in the Global Network

Gephi maps show individual profiles (nodes) as circles with lines (edges) connecting nodes who are friends with each other on Facebook. We have categorized the nodes' current locations into 17 global regions and 'Unknown'. The network map of these regions can be seen in Map 1. All nodes have been sized by their betweenness centrality – their role in bridging disconnected communities. The larger the node in the Gephi map, the more prominent role it has in the network.



Examining this map reveals three trends. First, "core" IS members on Facebook – individuals from Iraq and Syria who are likely official members of the terror group – are directly connected to or reside in almost every region of the world. The only exception appears to be the large North American group which is instead closely tied to the Southeast Asia region.

Second, the core supporters (in red) are not concentrated in one dense group but are instead spread across multiple areas of the global network. This schematic is likely the result of four things: a desire for global IS supporters to connect to those in Iraq and Syria; IS supporters in Iraq and Syria who know foreign fighters and are interested in expanding their existing networks; the size of territory held by the organization in Iraq and Syria potentially limiting in-person offline interactions between IS fighters in the two countries; and the fact that by the time this research project commenced, many of the core IS fighters had already fled Syria and Iraq for Turkey and Afghanistan as well as to countries in Africa.

Lastly, both the East Africa (light blue) and South Asia (light green) regions appear to have two highly separated communities within their own regional networks. The East African community on the left of the map is a highly connected Madagascar community, while the bulk of mainland East Africans can be seen on the right side of the map. Both are similarly connected to nodes in Southeast Asia and Iraq/Syria, while Madagascar also has several connections to nodes in Europe, Yemen, and Afghanistan. Likewise, pro-IS supporters in South Asia are split between individuals concentrated in Afghanistan and Pakistan, and others concentrated in Bangladesh. These two communities are directly connected by one individual from India.

The complete pro-IS network on Facebook of 1,000 nodes has an average weighted degree of 10.7, a network diameter of 11, an average path length of 3.73, a graph density of 0.011, and an average clustering coefficient of 0.238. The average clustering coefficient measures how many 'triangles' there are between nodes, i.e. the grouping of nodes. A higher coefficient (on a scale of 0 to 1) implies a more tight-knit group. The graph density simply measures how complete the graph is, i.e. how many edges exist out of all possible edges. If both of these measurements are high, the community is both tight-knit and highly connected. If the average clustering coefficient is high but the graph density is low, the community usually has a tight core but at least one less connected 'arm'.

Removing all nodes with only one edge, as shown in Map 1, provides the following data: average weighted degree of 11.4, network diameter of 9, average path length of 3.56, graph density of 0.012, and average clustering coefficient of 0.245. North America and East Africa both have extremely high average clustering coefficients – 0.628 and 0.537, respectively – and are much denser than the overall map. North America's graph density of 0.25 is 20 times as high as the complete network, while East Africa's .106 is almost 10 times as dense. These figures suggest that North America and East Africa have much more complete and dense pro-IS networks.

Notably, the North American nodes appear to be largely isolated from other geographically nearby IS supporters, with only two direct connections to Latin American nodes: an Argentinian and a Colombian. Likewise, the Trinidad and Tobago community appears to only have two individuals connected with the main US network.

We can also compare regions of comparable size to each other. South Asia, Southeast Asia, and Iraq/Syria all have more than 110 nodes. Yet South Asia has twice the graph density (0.096) and twice the average clustering coefficient (0.421) as Southeast Asia (0.046 and 0.286, respectively). Meanwhile, Iraq/Syria has a graph density of 0.03 and an average clustering coefficient of 0.222, the lowest and second lowest levels among any region with more than 10 nodes. This data reflects the nature of the IS insurgency in Afghanistan (South Asia) which is concentrated over a much smaller region than IS activity in Southeast Asia, which ranges from isolated cells in Indonesia to the Philippines. The low network measurements for Iraq/Syria is an indication of the greatly weakened status of IS in those countries.

#### Communities – 15

Yet the nature of the internet enables IS communities to easily expand beyond geographic boundaries. We can therefore break the global network down into individual communities based on connectivity, not region, in order to uncover international ties. Removing all nodes with only one connection and using a modularity resolution of

.7 identifies 15 unique communities, as shown in Map 2. At this level, most regional communities remain largely intact while incorporating individuals or groups from other regions as well. Geography still plays the main role in determining the strength of a network, yet several communities appear to span distant regions while maintaining strong internal ties. Appendix B provides a complete list of countries within the 15 communities below. A full analysis of all nodes and the communities they belong to is provided in the following section.

Notable Communities:<sup>17</sup>

Community 0 Afghanistan/Pakistan

Community 1 Trinidad and Tobago

Community 2 USA

Community 4 Egypt, Syria, three Americans

Community 5 East Africa

Community 6 Afghanistan/Pakistan and Iraq/Syria

Community 7 Indonesia and two Americans from Indonesia

Community 8 Madagascar

Community 9 Bangladesh and Somalia

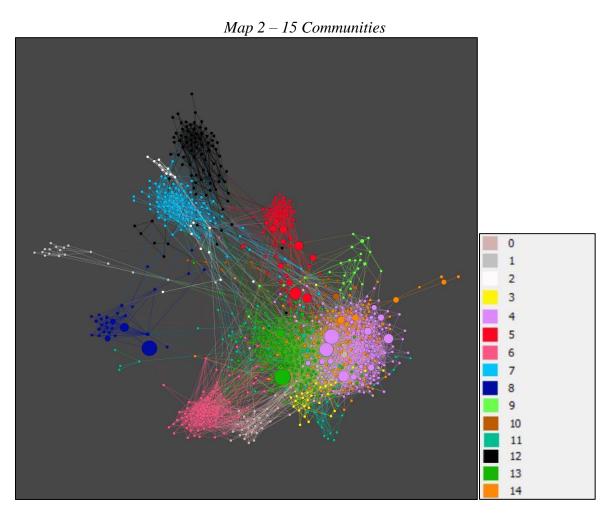
Community 10 Sudan and Russia

Community 11 Dara'a, Syria and Yemen

Community 12 Philippines, Indonesia, Thailand, two Americans, one Trinidadian

Community 13 Iraq/Syria and one American

Community 14 Turkey, Iraq/Syria, and one American



<sup>&</sup>lt;sup>17</sup> Communities are listed along with the major or notable countries their nodes are associated with.

The largest of the 15 communities is Community 4, with 141 nodes and 771 edges. Community 4 has among the lowest graph density (0.072) and average clustering coefficient (0.264), but it also has the second highest average weighted degree at 10.5. This community consists of individuals from or currently residing in 44 different countries. The bulk of these nodes are affiliated with Iraq/Syria (35) and Egypt (34) with nationals from every region previously categorized except for Central Asia, Central & South Africa, and Australia. Among these are 15 individuals currently living in Europe, five individuals currently living in the United States, and one Canadian. Of these 21 IS supporters, at least seven are foreign-born.

Community 4 appears to be largely centered around ID 954, a suspected Jordanian or Egyptian last believed to be fighting among or affiliate with IS's southern Syria affiliate, Jaish Khalid Ibn al-Walid. More on ID 954 can be found in the "Key Figures" section.

The Afghan/Pakistan network is split into two distinct networks, Community 0 and Community 6. Community 6 has almost twice as many edges on average as Community 0. Iraqi, Syrian, and Latin American individuals exist in both communities. Despite having significantly less edges, Community 0 contains nationals from 22 total countries compared to Community 6's 12 total countries.

One possible explanation for this disparity lies in the specific cities the Afghans and Pakistanis in Community 0 and 6 live in. All of the Afghans and Pakistanis with known city origins or current locations reside in Community 6. This includes 10 individuals currently living in Kabul, two people currently in Peshawar, Pakistan, and two individuals in Kandahar, Afghanistan. On the other hand, the more dispersed Community 0 has no specific city locations in South Asia.

Furthermore, the four nodes with the highest betweenness centrality in Community 6 reside in Afghanistan. Meanwhile three of the four nodes with the highest betweenness centrality in Community 0 are from Iraq, Tunisia, and Venezuela while the fourth is simply a propaganda account. Since betweenness centrality signifies which nodes connect otherwise largely disconnected communities, this information implies that Community 0 includes, or is, a foreign fighter mobilization network. As this project is revealing a snapshot of connections at the end of 2017, it may be that this network is utilized by individuals who have more recently traveled to Afghanistan, whereas Community 6 centers on an older Afghan and foreign fighter network.

As with the Afghan network, the East African network has also been separated. Madagascar forms its own network, Community 8, alongside eight other countries. Among these connections are four Southeast Asians, three Europeans, two Africans, and one Syrian. Crucially, no mainland East Africans exists in the new Madagascar community, implying that radicalization of and communication with Malagasy IS supporters is not dependent on IS's East African affiliates.

Similarly, while the main Trinidad and Tobago network, Community 1, is connected to both Community 12 (Southeast Asia and United States) and Community 13 (Iraq/Syria and United States), the only foreigners within its network are a Venezuelan and Spaniard. The largely homogenous community with direct connections to a core IS community likely results from the combination of native radicalization and the high number of Trinidadian foreign fighters. <sup>18</sup>

Both the Madagascar and Trinidad and Tobago communities have a similarly small number of nodes, but the Madagascar community has twice as many edges on average and a graph density of 0.257 compared to the Trinidad community's graph density of 0.175. This implies that Community 8 is significantly more developed

15

<sup>&</sup>lt;sup>18</sup> Emma Graham-Harrison and Joshua Surtees, "Trinidad's jihadis: how tiny nation became Isis recruiting ground," *Guardian* (London), February 2, 2018, <a href="https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq">https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq</a>.

than Community 1, as can be seen simply by observing the shape of each community: Community 8 is nearly spherical while Community 1 is drawn out.

The other East African community, Community 5, is almost as complete and tight-knit as Community 8. Although at 10.4 Community 5 has a higher average weighted degree than Community 8, it has a slighter lower graph density (0.209 vs 0.257) and average clustering coefficient (0.437 vs 0.559). However, as Community 5 consists of 21 more nodes than Community 8 and is spread over 21 countries instead of nine, it is in comparison an extremely tight and highly developed community. Alongside the 42 individuals from six East African countries the community includes five other Africans, two Southeast Asians, an Iraqi, Syrian, and a Trinidadian. Additionally, within the network is a Kenyan now living in the United States, an Ethiopian living in Saudi Arabia, a Somali living in Australia, and two Somali foreign fighters in Iraq. The breadth of this community both within East Africa and globally supports anecdotal evidence of the importance of east Africa for IS. The group has branches operating in Somalia known to have regional foreign fighters while there are also IS networks centered in Kenya which stretch throughout the country, across Africa, and even further afield.

While Community 5 contains half of the 23 Somali IS supporters documented, Community 9 centers around a network of seven Somalis and 12 Bangladeshis. Community 9 falls just behind the Trinidad community in terms of graph density (0.169 vs 0.175) and average clustering coefficient (0.431 vs 0.494) while having a higher average weighted degree (4.2 vs 3.3). Yet as with the comparison between Communities 5 and 8, the fact that Community 9 spans two geographic regions makes it highly connected in comparison to the geographically isolated Trinidad community. Community 9 contains 11 countries, two in South Asia, two in East Africa, three in North Africa, as well as one individual each from Syria, the United Arab Emirates, Russia, and Myanmar. As with Community 5, Community 9 hints at strong connections between prominent IS-controlled regions in Iraq/Syria and North Africa and its affiliates and supporters in East Africa and South Asia.

Southeast Asia also splits into two communities, again largely based around specific countries. The bulk of Community 7's 93 nodes comes from 59 Indonesians. However, there are 23 other countries present in this community, including a sizeable number of Malaysians, Thai, and Filipinos. At least two Indonesians and one Thai were foreign fighters in Syrian and Iraq, thus explaining the significant presence of individuals from the Middle East and North Africa in this community. Community 7 has the fifth highest average weighted degree at 7.9 but a slightly below average graph density (0.088) and average clustering coefficient (0.312). This is likely a result of the high number of foreigners included in the community network.

On the other hand, Community 12 spans three Southeast Asian countries but includes far fewer foreigners. Fifty-Two Filipinos make up the bulk of this Philippines-centric community's 92 nodes, with an additional 21 individuals from Indonesia, Thailand, and Malaysia. The rest of the 19 nodes come from or currently reside in 16 other countries. As with Community 7, these foreign connections can be partially attributed to several Southeast Asians living in foreign countries, including Iraq, Palestine, Saudi Arabia, and the United Kingdom. Community 12 is approximately 14% stronger than Community 7 with an average weighted degree of 8.6, an average graph density of 0.101, and an average clustering coefficient of 0.356. This is most likely due to the higher concentration of nodes from the same region.

One interesting network that appears under this modularity resolution is a Russia-Sudanese community. Community 10 has a moderate graph density of 0.139, a lower-than-average average clustering coefficient of 0.305, and an average weighted degree of 2.9 – the lowest of all 15 communities. Community 10 contains six countries in total, with nine out of a recorded 12 Sudanese IS supporters and eight Russians making up the majority of the 22 nodes. Included in the community is a Kazakhstan national, Egyptian, Syrian, and Turk. The Syrian, a man from Raqqa, is the sole connection between the Sudanese and Russian cells, suggesting that perhaps he is involved in external operations or recruitment.

#### Communities – 28

The importance of geographic proximity becomes even more clear when the global map is divided into 28 communities using a modularity resolution of 0.4. Here many communities begin to shed the foreign nodes along their periphery, strengthening the overall network that remains. Several of the communities from the large core are too small and disparate to have much meaning. These communities most likely exist solely online and are only incidental networks with weak connections. However, at least 15 communities with cross-national connections and a geographically centered core are visible. Map 3 displays the relationship between all 28 of these communities. A full list of countries within selected communities can be found in Appendix B.

Notable Communities:<sup>19</sup>

Community 0 Indonesia

Community 1 Dara'a (Syria)

Community 2 Sudan

Community 5 USA

Community 10 Thailand

Community 12 East Africa

Community 14 Philippines

Community 16 Trinidad and Tobago

Community 17 Madagascar

Community 20 Afghanistan

Community 21 North Africa

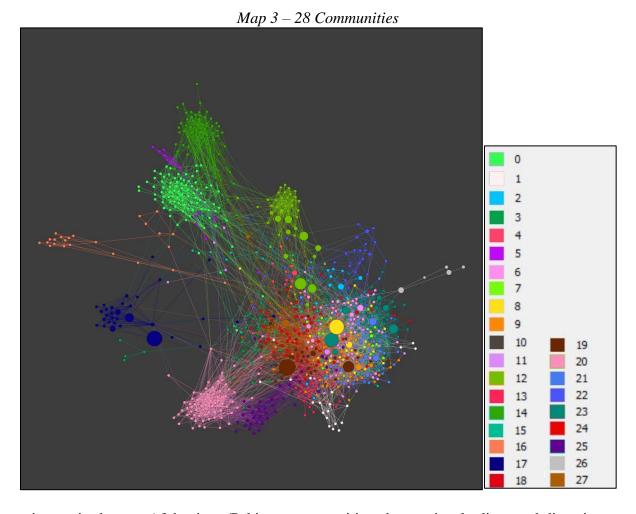
Community 22 Bangladesh, Somalia

Community 24 Iraq/Syria

Community 25 Afghanistan

Community 27 Iraq/Syria

<sup>&</sup>lt;sup>19</sup> Communities are listed along with the major or notable countries their nodes are associated with.



If we examine again the two Afghanistan/Pakistan communities, the previously discussed disparity grows. The smaller Community 6, now called Community 20, contains individuals from only seven countries and 85% of its nodes live in the Afghanistan/Pakistan region. Meanwhile, the new Community 0, now called Community 25, contains 15 different nationalities. Nearly 60% of Community 25's nodes have either an unknown location or live outside of the region.

Community 20 connects to the largely Filipino Community 14 through one Pakistani living in Afghanistan. Community 14, a smaller version of the old Community 7, has lost all of the nodes from Thailand and most of the nodes from Indonesia and Malaysia. This new community now only contains individuals from 14 countries outside of Southeast Asia, instead of the 16 countries within Community 7.

Community 20 has 67 nodes and Community 14 has 66 nodes, yet Community 20 has a significantly higher average weighted degree (13.3 vs 9.7), graph density (0.2 vs 0.15), and average clustering coefficient (0.469 vs 0.414). While Community 20's equivalent in Map 2 had the highest graph density and average clustering coefficient of those 15 communities, here Community 20 is only ranked ninth and eighth, respectively.

The Sudanese-Russian Community 10 from Map 2 has now been broken with the Russian nationals joining four other communities. Community 2 contains all of the Sudanese individuals alongside five other nationals from Denmark, Iraq, Palestine, Turkey, and the Ukraine. This group has the highest graph density (0.286) and fourth highest average clustering coefficient (0.568) of all 28 new communities. These new measurements mark a 105% and 86% increase respectively from the larger Community 10.

Likewise, Community 1 in Map 2 combined both the Dara'a, Syria IS supporters with a group of Yemeni IS supporters and 31 other individuals from 11 different countries. This community had an average weighted degree of 3.7, a graph density of 0.064, and an average clustering coefficient of 0.347; one of the lowest weighted degrees and graph densities of Map 2. However, the group is divided in Map 3, with the Dara'a IS supporters forming a tight-knit network in Community 1. Only two of the 21 nodes in this community are not suspected to reside in Dara'a. Community 1 has the second highest graph density (0.286) and average clustering coefficient (0.568) of Map 3. It also has the second highest average weighted degree (5.04) of all 15 communities with less than 30 nodes.

The Yemenis from the larger Community 1 have now joined Community 3, a 28-node network of nine Syrians and nine Yemenis connected to both Madagascar and Afghanistan. This network includes nationals from at least five other countries. While community 3 is one of the least dense communities in Map 3 with a graph density of only 0.13, it has the highest average clustering coefficient, 0.611. This is reflective of its two tight-knit cores of Syrians and Yemenis, both of which are only loosely connected to each other.

Lastly, the large 135 node Iraq/Syria community from Map 2, Community 13, is now split into two communities, Community 24 and 27. Community 27 is the stronger of the two with a graph density of 0.137 and an average clustering coefficient of 0.456. Fifteen of its 36 nodes' last known locations were in Iraq or Syria, with the rest of the nodes originating from 16 other countries. Community 24 is made of 45 nodes, 20 of which originate in Iraq or Syria. Eleven of the other nodes have unknown origins. The last 14 nodes come from ten other countries.

# Propagandists, Hackers, and Other Key Figures

#### **Propagandists**

A majority of the profiles identified in this research posted and shared official or unofficial IS propaganda, but a particular group of nodes were observed to be much more active at sharing pro-IS content. Among the 1,000 IS supporters identified, there were 28 unique Facebook accounts belonging to active pro-IS propagandists. At least 20 of the 28 propaganda accounts used hacked Facebook profiles. Eight of the propaganda accounts had at least four backups, with several having ten or more backup accounts should Facebook remove their more active account. For the purposes of this data, all backup accounts were combined into the main propaganda account as a single node. Backup accounts appear to be standardized for ease of recognition by followers. While sometimes the accounts' names are changed, or a nickname is added to identify the accounts as being run by the same person, in most cases they use the same unique profile or cover picture to make them easily identifiable.

For example, Figure 1 shows some of the accounts run by ID 559, a propagandist who uses the same profile picture on all their accounts, often uses similar cover photos, and usually has a similar phrase in the Facebook profile's "intro" section listing which number account it is.



Figure 1: Six accounts run by ID 559 demonstrating the similarity between one person's multiple propaganda accounts. The bottom two cover photos come from a popular pro-IS Facebook page that was taken down in early 2018.

Amaq statements and general IS news often appears to follow the regional theme of the propaganda account. For example, an Arabic-language account almost exclusively posts about IS in Syria and Iraq. Egyptian propaganda accounts typically post about IS activities in the Sinai Peninsula, Afghan accounts about Wilayat Khorasan – IS's province in Afghanistan and Pakistan – and the Israeli account about anti-Israel and anti-Jordan propaganda. There are exceptions, however, such as for major official IS video releases which tend to be more widely posted irrespective of regional focus.



Figure 2: A post from an Austrian IS supporter sharing accounts of two other pro-IS Austrians

These propagandists also connect other IS supporters to one another by posting links to pro-IS profiles and help organize online activity. While there are exceptions, these duties appear to a certain degree to be departmentalized. That is, pro-IS accounts that regularly share IS news generally do not post links to other pro-IS profiles or direct online activity. This departmentalization is likely used to protect the main propaganda accounts from removal by Facebook. Other profiles connect users by providing a link to another pro-IS account and advising their friends to also follow the advertised account. This is an important activity as it can help new propagandists build their online support network quickly, increases the resilience of said network, and draw an individual deeper into this IS network on Facebook.

Eight of the propagandists identified are unique from the other 20 IS Facebook propagandists. Firstly, these eight nodes post propaganda from all of IS's areas of operations and are not limited to regionally-focused propaganda posted by other pro-IS propagandists. Secondly, whereas other accounts can post a mix of official and unofficial IS content, these eight almost exclusively post official IS propaganda.

How these eight nodes post and share propaganda is also different from other pro-IS Facebook profiles. Instead of posting images or graphics of official IS statements, the eight accounts write out the text of the statement as a post. The main benefit of this, and likely the motivation for doing it, is to prevent the account from being identified as pro-IS and removed by the social media company. Posting the text rather than the statement means automated systems used by Facebook such as image matching, as well as human moderators reviewing the content, will have a harder time identifying it. Another added benefit is text posts can be translated by Facebook, Google, and other programs. This makes these propaganda accounts accessible to everyone no matter what language is spoken. If the node is looking to share a pro-IS photo or video, the user will make a text post usually stating that a new video or photo has been released. A series of links to other websites where the propaganda in question is hosted is then posted as a comment on the Facebook text post. Again, this is likely done in an attempt to avoid being detected by Facebook.

Additionally, these eight nodes have significantly more backup Facebook accounts compared to other IS supporting users. This system helps ensure that if one account is removed, they are able to easily switch to another account and continue the stream of propaganda. In one case, a Facebook propagandist's profile had 14 known backups. Another profile labeled their backup accounts in numerical order, for which we found an account marked backup number 15. All other accounts in this group of propagandists had at least four backups. We also observed nodes switching from one Facebook profile to a backup after some time, possibly in an effort to try and prevent Facebook from identifying and removing the user. ID 154, for instance, was seen returning to a previously created Facebook account more than a year after he last used it.

These eight nodes all also posted propaganda on a higher scale than other propagandist accounts, sharing nearly every piece of official IS propaganda produced. They also advertised other pro-IS accounts to follow as well as their own backup accounts. Outside of these two activities they made very few other posts. Given the amount of time and effort required to operate these profiles, it is likely that the individuals behind the accounts view themselves as self-appointed propagandists for IS. This is further reinforced by ID 154 who lists his work as 'Media at the Islamic State'. That same profile wrote a post requesting others apply to work with him in spreading propaganda. Such a post opens the possibility that these accounts are run by groups of people, rather than one individual. This also demonstrates a level of professionalism compared to other nodes.



Figure 3: Link to a Facebook propogandist's telegram account.

Five of these nodes also had their own encrypted Telegram channels, which they advertised for further communication and sharing of propaganda (Figure 3). Links were also provided to a range of other sites and messaging applications including Instagram, Tumblr, Twitter, Snapchat, Sarahah, Skype, and WeChat (Figure 4). Shared links to encrypted messaging apps were particularly concerning, showing how a mainstream platform like Facebook can provide a gateway to tools that help further facilitate the spread of IS content and even plan attacks.

The cross-platform nature of IS content shows how important cooperation between the companies involved is essential to combating IS online – suggesting the need for industry-wide standards. It is also important that companies which own multiple social media sites and platforms deploy their policies in a consistent manner. For instance, while Google has improved its ability to remove IS content from YouTube, Google+ has large numbers of pro-IS profiles active on it based on our own research.

This dataset and the related findings represent only a fraction of IS content on Facebook. Since completing our analysis, several other pro-IS propagandists matching the modus operandi of the eight nodes have been found.

#### **Hacking**

IS supporters also use Facebook to hack, report, and spam non-IS supporting profiles. According to our observations, accounts engaged in these activities appear to be largely run through Egyptian Facebook accounts. Many hacked profiles change their nickname to either "Spider of the Caliphate" or "Pirate of the Caliphate" and display a prominent affiliation to the Islamic State. Since these accounts initially have hundreds of non-IS supporting friends, IS supporters use the opportunity to post hateful and violent rhetoric targeting these individuals. This is a particularly rampant problem in Egypt, where IS supporters have hacked more than 60 Christian Facebook profiles.

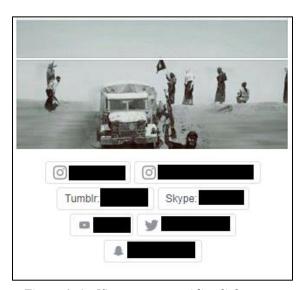


Figure 4: An IS supporter providing links to pro-IS Instagram, Tumblr, YouTube and Twitter accounts. As well as providing links to Skype

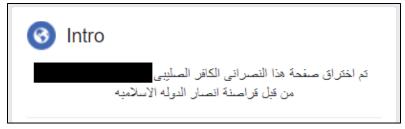


Figure 5: A hacked Egyptian Christian profile intro reads: "The profile of this Christian crusader [name] was hacked by supporters of the Islamic State."

Typically, when a pro-IS individual hacks a Christian user's profile, the individual posts on that profile stating that it "has been hacked by supporters of IS" (Figure 5). The Facebook profile info section is also changed to contain a similar message. These hacked profiles are then used to post hateful messages addressed towards Christians, such as using derogatory terms to describe them and making threatening

statements. In some cases, the Facebook profile info section is changed to include the phrase "we promise to slay him soon," referring to the owner of the account. Often when posting such content, several of the account's original friends are tagged to achieve a greater impact. Several of the hacked profiles are then used to spread IS propaganda.

Two hacked Facebook profiles, ID 842 and 843, appear to be regularly used by the people responsible for hacking them. These accounts post IS propaganda and various technical information, including how to hack Facebook profiles. They also coordinate the mass reporting of accounts. We also identified a private Facebook group, which was used to coordinate mass reporting. A hacked or IS propagandist account posts the name of a non-IS account to be reported or spammed and provides a link to that account as well as a justification for the attack, such as claiming that the target individual belongs to a state security



Figure 6: A post by an Egyptian IS supporter encouraging others to spam the account of a member of the Iraq security forces. The user posts a link to the account in the comments.

force, is a Christian, or posts anti-IS statements (Figure 6). Other IS supporters then report the account en masse, causing it to be temporarily removed by Facebook.

Other pro-IS accounts boast about their hacking and cyber knowledge. Some like or follow Facebook pages dedicated to hacking, others set their employment to "hacker at Facebook" or "hacker at Islamic State." In one case, an American IS propagandist regularly discusses hacking and cyber security strategies on his timeline and in direct messages with his friends. This user runs a pro-IS link-aggregation site hosted by Wix.com where he posts IS Telegram links daily. In one direct message conversation (Figure 7), he admits to attempting to find and join the United Cyber Caliphate (UCC), IS's hacking group, and explains several ways that he protects his identity online.<sup>20</sup>



Figure 7: An American IS propagandist (blue) discusses the UCC with another IS supporter (black) over Facebook Messenger. The American user posted these screenshots to his public timeline.

<sup>&</sup>lt;sup>20</sup> Laith Alkhour, Alex Kassirer, Allison Nixon, "Hacking for ISIS: The Emergent Cyber Threat Landscape," Flashpoint Group, April 2016, <a href="https://fortunascorner.com/wp-content/uploads/2016/05/Flashpoint">https://fortunascorner.com/wp-content/uploads/2016/05/Flashpoint</a> HackingForISIS April2016-1.pdf.

#### **Key Profiles and Pages**

Outside of propagandists and hackers, some profiles can be deduced as being key figures based on the data gathered for this research paper. One of these is ID 954, a suspected Jordanian or Egyptian last believed to be in Syria. It is likely that ID 954 fought alongside or is affiliated with IS's southwestern Syria affiliate, Jaish Khalid Ibn al-Walid. ID 954 has an eigenvector centrality of 0.84, the third highest of all 1,000 nodes and the highest among non-propaganda accounts. The eigenvector centrality measures a node's level of connection to other important nodes and indicates centers of gravity within a network. Additionally, ID 954 has the most edges of any non-propaganda account in the dataset, followed by ID 829 who is also in Community 4 of the 15 communities. In other words, ID 954 is the most central figure documented in this report. This is not to say that he is connected to every community, though. He is connected to at least one node in each of Iraq/Syria communities (4, 11, 13, and 14) as well as one of the Afghan Communities (6), the Bangladesh-Somalia Community (9), and the highly mixed Community 3. Fifty-two of ID 954's 67 connections lie within Community 4, while his only connections to the other communities are to each of the major propaganda accounts detailed below, several IS fighters last located in Iraq and Syria, two North Africans, a Pakistani, and a Bangladeshi. His Facebook network seems to indicate an elevated role within IS.

ID 339 is a similarly key figure who hails from and currently lives in Namibia and has nearly 5,000 friends, many of whom support IS. Unlike ID 954, his profile gives no indication that he has ever traveled abroad or physically joined an IS-affiliated group. Instead, he appears to be a man in his late teens or early twenties who has dedicated much of his time to building a large Facebook network of pro-IS friends. ID 339 likely built his network by actively seeking out other IS-supporting users. We have documented him openly asking others on Facebook if they are IS supporters (Figure 8). He is also part of at least three pro-IS Facebook groups – two Indonesian groups and a Tamil group – which likely helped him build connections, especially since many of his connections are to



Figure 8: ID 339 (black) asking some his friends (red and blue) if they are IS supporters.

Indonesian IS supporters. Additionally, after making initial connections with IS supporting Facebook users around the world, it is likely that Facebook presented him with further connections through the 'suggested friends' feature.

While he has a low eigenvector centrality, meaning he is not connected to important nodes, ID 339 has the third highest betweenness centrality, a measurement indicating which nodes serve as bridges between communities. He serves as the most central bridge connecting to a number of Indonesian and Filipino IS supporters, as well as multi-national nodes close to the Madagascar, Afghan, and East African networks and several nodes directly within the core IS network. While many nodes in the Indonesia and Philippines networks have individual connections to each other, ID 339 is central to much of the region's interconnections.

ID 339 has previously posted on Facebook asking people if they are IS supporters and has shared two pieces of IS propaganda. He has shared a nasheed (a form of vocal music which is popular in Islam) played

over a still image released by IS and a short video apparently produced by IS's Al Hayat media center. Nonetheless, he has gathered almost 5,000 friends and become a key Facebook profile with connections all over

the world. ID 339's online activities and Facebook connections demonstrates how someone who is not an official IS member or an active propagandist can still become an important figure of the pro-IS network on Facebook.

As well as profiles, pro-IS groups and pages are also active on Facebook. Some of the pages are popular and receive thousands of likes. Two Philippines-based groups are clear about their pro-IS nature, with the names 'DAWLATUL ISLAMIA ISIS ASG BIFF' and 'Dawlah Al-Islamiah in Islamic City of Marawi'.<sup>21</sup> While Facebook users in those groups are not particularly active that is not always the case. At the very least, these groups provide a place where IS supporters can build new connections on Facebook. In other cases, they can be used by IS supporters to discuss and carry out actions online and offline.



Figure 9: A pro-IS Tamil language group with 1,000 members.

In addition, pro-IS organizations have utilized Facebook in an official capacity. Al-Ansar Bank, which provides new Twitter and Facebook accounts for IS supporters, created a Facebook page and advertised it on their Telegram account. Shortly after Al-Ansar Bank's Facebook account was established, a known IS supporter identified during this research asked the organization for two new accounts, which Al Ansar Bank quickly delivered to him.

#### **Network Measurements of Propaganda Accounts**

IS propaganda Facebook accounts are among the most highly connected within the overall network. Three of the four nodes with the highest eigenvector centralities – nodes not just with the most connections but also connected to important nodes – belong to propaganda accounts. Of the ten nodes with the highest eigenvector centralities, two belong to hacked accounts.

ID	Origin	Current Location	Weighted Degree	Degree	Closeness Centrality	Betweenness Centrality	Page Ranks	Eigenvector Centrality
559	Unknown	Unknown	94	89	0.431	0.076	0.007	1.000
154	Unknown	Unknown	124	116	0.414	0.076	0.010	0.985
954	Jordan (Suspected)	Syria, Dara'a	67	67	0.398	0.024	0.005	0.843
557	Unknown	Unknown	86	85	0.415	0.057	0.007	0.797
489	Unknown	Unknown	58	58	0.397	0.018	0.004	0.712

<sup>-</sup>

<sup>&</sup>lt;sup>21</sup> ASG and BIFF stand for Abu Sayyef Group and Bangsamoro Islamic Freedom Fighters, two militant groups in the Philippines who have pledged allegiance to IS. DAWLATUL ISLAMIA and Dawlah Al-Islamiah are other terms for IS.

227	Egypt	Egypt	60	60	0.391	0.018	0.004	0.670
901	Unknown	Unknown	60	58	0.383	0.019	0.005	0.638
798	Spain	Unknown	63	62	0.405	0.048	0.005	0.632
842	Egypt	Egypt	53	53	0.387	0.016	0.004	0.602
874	Egypt	Egypt	44	44	0.374	0.009	0.003	0.571

Ten nodes with the highest eigenvector centralities. Yellow nodes are propagandists, red nodes are hacked accounts.

Despite their high level of connection, removing these five accounts barely affects the strength of the global network. This is due both to the nodes centered roles – they have few to no connections to the outlying networks – and the fact that so many other nodes are also highly connected to the global network.

Even removing all ten nodes with the highest eigenvector centralities leaves most of the graph unchanged. Graph density decreases 18% and the average clustering coefficient decreases 7%, but the network diameter remains 11 and the average path length increases by less than 5%. This indicates that while these nodes are the most central of the global map, they do not bridge any real gaps in the network. In other words, removing these nodes leaves all periphery networks connected to the central network.

It is not until all 20 nodes with the highest eigenvector centrality are removed that the network diameter increases from 11 to 12. At the stage, the graph density is still 18% lower than in the original network, the average clustering coefficient is now 11% lower, and the average path length has increased by just 7.5%.

Nodes	Avg Weighted Degree	Network Diameter	Radius	Avg Path Length	Graph Density	Clustering Coefficient
All	10.7	11	6	3.72	0.011	0.238
5 propagandists removed	9.9	11	0	3.85	0.01	0.228
Top 10 removed	9.37	11	0	3.9	0.009	0.221
Top 20 removed	8.56	12	0	4	0.009	0.211

Network statistics after removing nodes based on eigenvector centrality

If we instead measure and remove nodes with the highest betweenness centrality, the global map changes in minor but more significant ways. Betweenness centrality ignores many of the conditions required for other centrality measures, instead measuring nodes that create the most direct paths between otherwise disconnected communities. Nodes with the highest betweenness centrality can be considered bridges between communities.

Three of the five highest betweenness centralities belong to the same three propagandists as before. However, a Spanish national and the previously mentions Namibian ID 339 are also present.

ID	Origin	Current Location	Weighted Degree	Closeness Centrality	Betweenness Centrality	Page Rank	Eigenvector Centrality
559	Unknown	Unknown	94	0.431	0.076	0.007	1.000
154	Unknown	Unknown	124	0.414	0.076	0.010	0.985
339	Namibia	Namibia	42	0.361	0.059	0.004	0.127
557	Unknown	Unknown	86	0.415	0.057	0.007	0.797
798	Spain	Unknown	63	0.405	0.048	0.005	0.632
275	Iraq	Iraq, Tikrit	68	0.404	0.042	0.005	0.567

4	Philippines	Philippines	28	0.342	0.033	0.003 0.094
209	Egypt	Egypt	53	0.395	0.031	0.004 0.506
622	Unknown	Unknown	19	0.371	0.030	0.002 0.137

Ten nodes with the highest betweenness centralities. Yellow nodes are propaganda accounts. Note the low eigenvector centrality of ID 339.

When the 20 nodes with the highest betweenness centrality are removed, the graph density and average clustering coefficient do not decrease quite as much as when 20 nodes are removed based on eigenvector centrality. However, the average path length increases 11%, compared to only a 7.5% increase in the previous test.

Nodes	Avg Weighted Degree	Network Diameter	Radius	Avg Path Length	Graph Density	Clustering Coefficient
All	10.7	11	6	3.72	0.011	0.238
5 propagandists removed	9.9	11	0	3.89	0.01	0.23
Top 10 removed	9.5	11	0	3.98	0.01	0.224
Top 20 removed	9.02	11	0	4.13	0.009	0.22

Network statistics after removing nodes based on betweenness centrality

As with the previous test, the increase is not as large as it could be due to so many of the nodes with high betweenness centrality being grouped in the large central network. Furthermore, all of the periphery communities have multiple nodes connecting them to other communities. Even in isolated communities like Madagascar and Trinidad and Tobago who have clear central figures through which the majority of outside connections are made, both communities have at least three other nodes connected to outside IS supporters.

The difference in effect on removing nodes with the high eigenvector centrality and betweenness centrality nonetheless reveals an important lesson. Central nodes, whether they are people in positions of power or widely read propagandists, do not form the backbone of the global IS Facebook network. Breaking the network relies on locating regional bridges – nodes that serve as a connection between communities but are otherwise less connected.

This also poses a problem for Facebook as removing the most prolific propaganda accounts, which would be easiest to identify, would not have a significant effect on the overall network. Instead a more targeted approach against accounts which operate as regional bridges as well as a better rate of removal of all IS accounts is required.

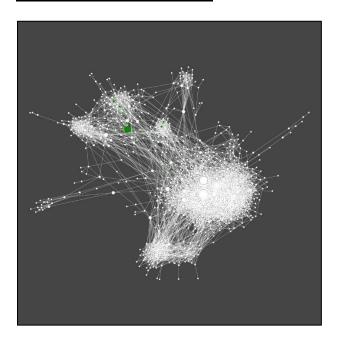
## Regional Analysis

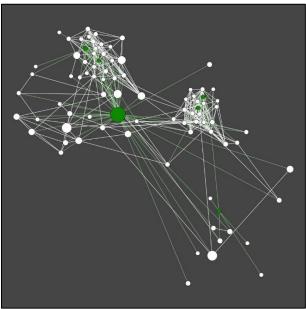
The following is a breakdown of the data for each region and select countries within those regions. Each section begins with a map showing the place of regional nodes within the entire network alongside a map showing the regional nodes and the nodes they are directly connected to. Next are the tables with the network measurements of the isolated regional or national network as well as the measurements for the regional/national network combined with its directly connected external nodes. Following the table is an analysis of these measurements, the history of IS in the region or country, and an assessment of IS's future in that area based on the combined data.

The one limitation of this analysis is the absence of nodes with unknown locations. While a few nodes' location can be inferred by their placement in the global network, the majority of nodes with unknown locations remain a mystery. Some of these nodes, particularly those connected to Iraq/Syria nodes, may increase network measurements had they been included. However, without knowing where these individuals currently are, including them in any network analysis would introduce too many unknowns.

#### Africa

#### **Central and Southern Africa**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
6	1	0.333	1	1	0.067	0	5

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
86	347	8.07	5	2.6	0.095	0.457	1

Few nodes in Central and Southern Africa were identified in this research. The men come from the Congo, Central African Republic, Namibia, and South Africa and appear largely embedded in external networks with an average of more than 14 external connections per node. The two CAR men are centrally embedded within the Indonesian network while a South Africa and Congo node are embedded in the mainland East Africa network. These connections imply that the men are in fact currently residing in those regions and may in fact be foreign fighters. Interestingly, of the 80 direct external connections, only eight are to IS supporters in North or West Africa. The lack of network connection across the Sahara likely reflects both the geographic limitations of maintaining networks across the vast desert and the more localized nature of terror activities in Central, South, and East Africa.

The most interesting of the six nodes in the region is the young man from Namibia with 43 direct connections, none of which are with the other nodes in the region. Since completing this dataset the authors did identify other Namibian IS supporters he is friends with, showing he does not just have connections to foreign IS supporters. This profile, ID 339, serves at the main hub connecting the Philippines, Indonesia, East Africa, and core IS

networks. His profile gives no indication that he is or ever was an active fighter or holds any prominent leadership position within IS. ID 339 may be one of the rare cases of a "casual" IS supporter who has actively embedded themselves into multiple IS networks almost solely through online connections.

IS has a significantly more limited presence in Central and South Africa compared to other parts of the continent. A small number of people from these countries have attempted or succeeded in joining IS. Over 20 people have reportedly made the journey from South Africa, while more have been detained in Turkey. <sup>22</sup> A couple of people from Namibia have also travelled to IS territory in Iraq and Syria. <sup>23</sup>

There have also been a limited number of attempted terror attacks in the region inspired by or directed by IS. In South Africa, two brothers were arrested while planning to carry out attack on the American Embassy and an unidentified Jewish building.<sup>24</sup> Several other countries including Rwanda and Angola have also seen the arrest of individuals or groups believed to be supporting IS.<sup>25</sup> People from this region have also been arrested in other countries on suspicion of links to IS. For example, a man from Cameron was arrested in Germany as part of an IS cell.<sup>26</sup>

In the Democratic Republic of the Congo (DRC) a group calling itself The City of Monotheism and Monotheists pledged allegiance to IS during October 2017. While not recognized by IS central, the pledge of allegiance gained much traction on pro-ISIS parts of the internet. However, the video of the pledge only contained a handful of fighters and they are unlikely to pose a serious threat in their current form.<sup>27</sup> IS have also reportedly made advance to local militia groups in the Central African Republic.<sup>28</sup> Though there are no suggestions anything came of this.

The data collected here demonstrates that these attempts at affiliation are not one-off events. IS has the ability – and in all likelihood the intent – to expand into Central and Southern Africa. Racial and religious tensions across the region, but particularly in South Africa and the DRC, provide fertile grounds for online IS recruitment. The Central and Southern African nodes embedded in two active insurgent networks, Indonesia and East Africa, exemplify the ease with which these online connections can shift into physical action. As IS increasingly focuses on directing foreign attacks through untrained locals, these Facebook networks will be leveraged to persuade individuals to carry out attacks in Central and Southern Africa.

\_

<sup>&</sup>lt;sup>22</sup> Azad Essa, Khadija Patel, "South African families among ISIL's newest recruits," al-Jazeera, May 29, 2015, https://www.aljazeera.com/news/2015/05/south-african-families-isil-newest-recruits-150529094806722.html.

<sup>&</sup>lt;sup>23</sup> "Police chief concerned about Namibians fighting for ISIS," New Era, July 1, 2015, <a href="https://www.newera.com.na/2015/07/01/police-chief-concerned-namibians-fighting-isis/">https://www.newera.com.na/2015/07/01/police-chief-concerned-namibians-fighting-isis/</a>.

<sup>&</sup>lt;sup>24</sup> Norimitsu Onishi, "South Africa Charges Twins Over Plot to Attack U.S. Embassy and Join ISIS," New York Times, July 11, 2016, https://www.nytimes.com/2016/07/12/world/africa/south-africa-islamic-state.html.

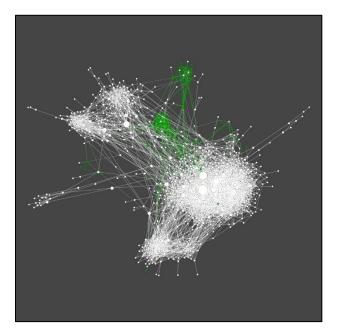
<sup>&</sup>lt;sup>25</sup> "Five men suspected of Angola plot deny ISIS allegiance," News 24, June 13, 2017, <a href="https://www.news24.com/Africa/News/five-men-suspected-of-angola-plot-deny-isis-allegiance-20170613">https://www.news24.com/Africa/News/five-men-suspected-of-angola-plot-deny-isis-allegiance-20170613</a>; Meira Svirsky, "Rwanda Arrests First-Known ISIS Operatives in Country," Clarion Project, January 31, 2016, <a href="https://clarionproject.org/rwanda-arrests-first-known-indivuduals-linked-isis-4/">https://clarionproject.org/rwanda-arrests-first-known-indivuduals-linked-isis-4/</a>.

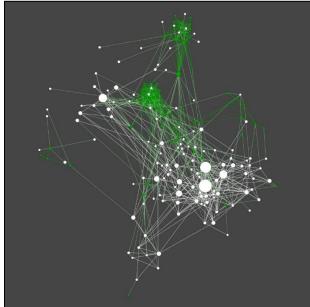
<sup>&</sup>lt;sup>26</sup> "Five 'key Isis recruiters' arrested in Germany," The Local, November 8, 2016, <a href="https://www.thelocal.de/20161108/key-isis-recruiters-arrested-in-germany-report-terrorism">https://www.thelocal.de/20161108/key-isis-recruiters-arrested-in-germany-report-terrorism</a>.

<sup>&</sup>lt;sup>27</sup> Caleb Weiss, "Islamic State-loyal group calls for people to join the jihad in the Congo," Long War Journal, October 15, 2017, https://www.longwarjournal.org/archives/2017/10/islamic-state-loyal-group-calls-for-people-to-join-the-jihad-in-the-congo.php.

<sup>&</sup>lt;sup>28</sup> Kaitlin Lavinder, "Terrorist Safe Haven? Bloodshed Spikes in Central African Republic," The Cipher Brief, November 16, 2017, <a href="https://www.thecipherbrief.com/terrorist-safe-haven-bloodshed-spikes-central-african-republic">https://www.thecipherbrief.com/terrorist-safe-haven-bloodshed-spikes-central-african-republic</a>.

#### **East Africa**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
80	301	7.525	7	2.623	0.095	0.537	7

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
208	800	70692	9	3.569	0.037	0.27	1

The isolated East Africa network consists of four main communities. There is the small and largely isolated Mauritanian network on the left, the Horn of Africa network in the center with nodes from Tanzania, Somalia, Kenya, Mozambique, Eritrea, Ethiopia, Burundi, and South Sudan, a seven-node Somali network to its right loosely connected to the Horn of Africa network through one Somali, and the isolated Madagascar network at the top of the map. These networks are both very strong and largely isolated from the global IS community. The isolated East Africa network has the second highest average clustering coefficient and fifth highest graph density while each node has on average less than three external connections. There are two Central African and two Syrians who, while not definitively living in mainland East Africa, are highly embedded within the East Africa network and thus may be foreign fighters.

The Mauritius network is connected to the Philippines network through a Mauritanian now living in Europe, as well as having one connection each to an American supporter and Afghan supporter. The mainland East African network is loosely connected to both Southeast Asia and core IS supporters in the MENA region while the small Somali network has no distinct patterns in its external connections, likely due to a lack of data. The Madagascar network is tied to Middle East and North African IS supporters through only two nodes, while it has at least two internal connections to European supporters and several connections to Southeast Asian IS supporters.

East Africa has long been threatened by extremist Islamic groups. The Al Qaeda linked Al Shabab controls large amounts of territory in Somalia and have succeeded in carrying out large scale terror attacks in neighboring

countries.<sup>29</sup> Smaller extremist Islamic groups exist across the region, and new ones are forming. Mozambique suffered from its first extremist Islamic attacks in late 2017, involving a string of attacks mainly on security forces in the north of the country.<sup>30</sup> There have been several high-profile terror attacks as well, like the attack on Kenya's Garissa University that killed almost 150.<sup>31</sup>

People from Eritrea, Kenya, Madagascar, Mauritius, Somalia, and Zimbabwe are known to have joined IS in Iraq and Syria in small numbers. People from those countries, and other East African countries will also have joined IS in Somalia and Libya.<sup>32</sup>

IS attempted to make inroads in this region shortly after their deceleration of a Caliphate. They made overtures to Al Shabab, but these were rejected by the group and it clamped down hard on any potential defectors. There have been some defections however, the Al Shabab commander Abdulqadir Mumin defected to IS and operates in the semi-autonomous Puntland region. Near the capital of Mogadishu in the town of Afgooye IS have regularly staged targeted killings showing they operate cells there. Al Shabab's commander in Kenya, Ahmad Iman Ali, also pledged allegiance to IS.<sup>33</sup>

A newly created group known as Islamic State in Somalia, Kenya, Tanzania, and Uganda, also known as Jahba East Africa, also pledged allegiance to IS in 2016. Less is known about this group and its capabilities, although it is suspected of being based in Somalia and founded by defected Al Shabab fighters including Kenyans, Tanzanians and Ugandans.<sup>34</sup> Jahba East Africa has links to an IS leader in Kenya, Mohamed Abdi Ali.

Ali formed a large IS network across Kenya, and was responsible for recruiting people to join IS, then assist them in reaching the group in Syria, Libya, or Somalia. He was arrested during 2016 while planning a large-scale terror attack, possibly involving Anthrax.<sup>35</sup> Other supporters and recruiters have been arrested across the region. While there have also been several other successful and attempted terror attacks by IS or its supporters.<sup>36</sup>

The data presented here empirically demonstrates for the first time just how extensive the IS network in East Africa is. It appears that the mainland network faces minimal to no limitations by national borders with national clusters from countries like Ethiopia, Somalia, Kenya, and Tanzania heavily interconnected with one another. In fact, Tanzania has the largest presence within the mainland network, suggesting the country may soon face increased security risks from IS cells either within Tanzania or of foreign fighters returning from abroad.

This network, along with the small isolated Somali network, almost perfectly mirror the areas of operation of the two main IS affiliates in the region: the Islamic State in Somalia and the Islamic State in Somalia, Kenya, Tanzania, and Uganda (ISISSKTU). Both affiliates were formed around al-Shabaab splinters, and while IS Somalia controls territory in Somalia's Puntland, ISISSKTU exists as "more of an ideological threat than a

<sup>&</sup>lt;sup>29</sup> "Who are Somalia's al-Shabab?," BBC, December 22, 2017, http://www.bbc.com/news/world-africa-15336689.

<sup>&</sup>lt;sup>30</sup> "Mozambique: Islamist Raids Continuing in Mocimboa Da Praia," All Africa, December 4, 2017, http://allafrica.com/stories/201712050740.html.

<sup>&</sup>lt;sup>31</sup> "Kenya attack: 147 dead in Garissa University assault," BBC, April 3, 2015, <a href="http://www.bbc.com/news/world-africa-32169080">http://www.bbc.com/news/world-africa-32169080</a>.

<sup>&</sup>lt;sup>32</sup> Richard Barrett, "BEYOND THE CALIPHATE: Foreign Fighters and the Threat of Returnees," Soufan Center, October 2017, <a href="http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf">http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf</a>; "FOREIGN FIGHTERS An Updated Assessment of the Flow of Foreign Fighters into Syria and Iraq," Soufan Group, December 2015, <a href="http://soufangroup.com/wp-content/uploads/2015/12/TSG">http://soufangroup.com/wp-content/uploads/2015/12/TSG</a>. ForeignFightersUpdate3.pdf.

<sup>&</sup>lt;sup>33</sup> Jason Warner, *Sub-Saharan Africa's Three "New" Islamic State Affiliates*, Combating Terrorism Center, Volume 10, Issue 1, January 2017, <a href="https://ctc.usma.edu/sub-saharan-africas-three-new-islamic-state-affiliates/">https://ctc.usma.edu/sub-saharan-africas-three-new-islamic-state-affiliates/</a>.

<sup>&</sup>lt;sup>34</sup> Lizzie Dreaden, "Isis: New terrorist group Jahba East Africa pledges allegiance to 'Islamic State' in Somalia," *Independent* (London), April 8, 2016, <a href="http://www.independent.co.uk/news/world/africa/isis-new-terrorist-group-jahba-east-africa-pledges-allegiance-to-islamic-state-in-somalia-a6974476.html">http://www.independent.co.uk/news/world/africa/isis-new-terrorist-group-jahba-east-africa-pledges-allegiance-to-islamic-state-in-somalia-a6974476.html</a>.

<sup>35 &</sup>quot;Kenya police 'foil anthrax attack' by 'IS-linked group'," BBC, May 4, 2016, http://www.bbc.com/news/world-africa-36198561.

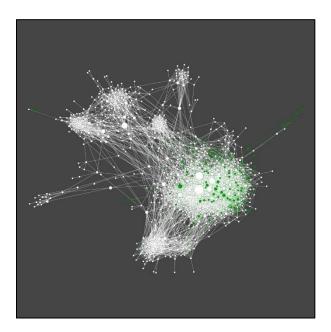
<sup>&</sup>lt;sup>36</sup> Stephen Rakowski, "Madagascar Wakes Up to ISIS," National Interest, December 24, 2015, <a href="http://nationalinterest.org/feature/madagascar-wakes-isis-14721">http://nationalinterest.org/feature/madagascar-wakes-isis-14721</a>.

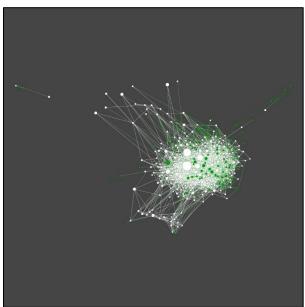
physical one" and is believed to contain much of al-Shabaabs former foreign fighters.<sup>37</sup> The strength of the mainland East Africa Facebook network indicates that ISISSKTU will be a growing threat to the region.

The low rate of external connections supports the anecdotal evidence that IS has struggled to infiltrate the region in a substantial official manner. However, it appears that targeted recruitment of locals – likely by other East Africans returning from foreign conflicts – is proving successful. Thus, we see several sophisticated and strong IS network in the region yet few foreigners embedded within and few connections to either the core IS network in Iraq and Syria or even to other peripheral IS networks. Nowhere is this more evident than in Madagascar, which appears to have a substantial and sophisticated IS network yet almost no external connections. Importantly, the Madagascar network has no direct connections to mainland East African networks. Again, this suggests native radicalization and recruitment. The extreme isolation of Madagascar's supporters offers a rare opportunity for the Madagascar government to seriously address issues of native radicalization before IS gains any official foothold in the country.

All these factors heavily indicate a continued expansion of IS activity in the region, regardless of any increased efforts by central IS figures to recruit. However, were central IS figures and leaders able to penetrate the region substantially, they would find sophisticated networks readily available, particularly in Madagascar. Thus, East African countries must identify the local factors pushing radicalization and the prevent ease of movement by East African recruiters across national borders. Otherwise, the East African and Madagascar networks will continue to grow and increasingly spread insurgent attacks outside of Somalia and Kenya.

#### **North Africa**





#### **Isolated Network Measurements**

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
99	131	2.646	11	4.166	0.027	0.147	25

Isolated Network and Immediate Connections Measurements

1501u	isotated Network and Immediate Connections Medicalements										
Noc	des	Edges	Avg Weighted	Diameter	Avg Path	Density	Avg Clustering	Connected			
			Degree		Length		Components	Components			

<sup>&</sup>lt;sup>37</sup> Jason Warner, *Sub-Saharan Africa's Three "New" Islamic State Affiliates*, Combating Terrorism Center, Vol 10, Issue 1, January 2017, <a href="https://ctc.usma.edu/sub-saharan-africas-three-new-islamic-state-affiliates/">https://ctc.usma.edu/sub-saharan-africas-three-new-islamic-state-affiliates/</a>.

405	2405	11.872	g	2.89	0.027	0.2	2
703	2703	11.6/2	/	2.07	0.027	0.2	<u>~</u>

As seen in the attached maps, North Africa is an integral part of the core IS supporting territory. External connections of peripheral IS territories are very weak yet do encompass most of the pro-IS regions documented here. While North Africans are well connected to the core IS networks, they do not seem to play an integral role. On average, nodes currently in North Africa have only four external connections and have among the lowest graph densities and average clustering coefficients both as an isolated network and when measured with their immediate external connections. In all likelihood these measurements stem from a lack of data as it was extremely difficult to find profiles for IS supporters in Egypt, Libya, and Tunisia, despite active IS insurgences in two of the countries.

Outside of Iraq and Syria, IS has arguably had the most success in North Africa. It was the source for some of the highest numbers of foreign fighters, while at one-point Libya was seen as the next location the group would shift to. IS has several other active province and affiliates in the region and has succeeded in several high-profile terror attacks.

Tunisia provided one of the highest numbers of foreign fighters in the world at around 3,000. Large numbers also came from other North African countries with close to 200 from Algeria, 600 from Libya, and 150 from Sudan.<sup>38</sup> Libya and Egypt also saw foreign fighters travel to join branches of IS there. In Egypt, IS is known to have gained at least Libyan and Palestinian recruits.<sup>39</sup> While Libya is one of the few places where the recruits aren't just regional. An American man was arrested in Tunisia attempting to join IS in Libya, while other recruits have come from all other Africa including as far away as Kenya.<sup>40</sup>

Following its deceleration of a Caliphate, IS received several pledges of allegiance from groups already existing in the region and created several Wilayat. In Algeria during September 2014, a commander from Al Qaeda in the Islamic Maghreb split from the group and pledged allegiance to IS creating Jund al-Khilafah. That same month they abducted a French tourist in Algeria and released a video showing his beheading. 41 In November, IS leader Baghdadi recognized their pledge of allegiance and reorganized them as Wilayat al-Jazair.<sup>42</sup> By the end of 2014 the group's leader and several fighters had been killed. In 2015 the group saw similar setbacks, culminating in a raid in May 2015 that killed most of the group's core fighters and five of its six most important commanders.<sup>43</sup> The group has never recovered, claiming only a couple of attacks on security forces since then and being limited to operating as small cells regularly targeted by security forces.<sup>44</sup>

Several groups in Tunisia pledged allegiance to IS or support the organization, most notably a group also calling itself Jund al-Khilafa, though separate from the Algerian one. It pledged allegiance to IS in December 2014 and

<sup>&</sup>lt;sup>38</sup> Richard Barrett, "BEYOND THE CALIPHATE: Foreign Fighters and the Threat of Returnees," Soufan Center, October 2017, http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf.

<sup>&</sup>lt;sup>39</sup> Iyad Abuheweila and Isabel Kershner, "ISIS Declares War on Hamas, and Gaza Families Disown Sons in Sinai," New York Times, January 10, 2018, https://www.nytimes.com/2018/01/10/world/middleeast/isis-hamas-sinai.html; Bel Trew, "Isis is regrouping and coming this way, warns Egypt," Times (London), November 10, 2017, https://www.thetimes.co.uk/article/isis-is-regrouping-and-coming-this-way-warns-egypt-96ht99v3j. <sup>40</sup> Aaron Katersky and Bill Hutchinson, "American arrested overseas trying to travel to Libya to join ISIS: Official," ABC News, February 27, 2018, http://abcnews.go.com/US/american-arrested-overseas-travel-libya-join-isis-official/story?id=53392801; "Kenyan trainee doctors killed in raid on Libya Isis base," Daily Nation, March 29, 2017, https://www.nation.co.ke/news/Kenyan-trainee-doctors-killed-in-Libya/1056-3868610ssbydxz/index.html.

<sup>41 &</sup>quot;Algerian army kills jihadist behind Herve Gourdel beheading," BBC, December 23, 2014, http://www.bbc.com/news/world-africa-30587765.

<sup>&</sup>lt;sup>42</sup> Priyanka Boghani, "Where the Black Flag of ISIS Flies," Frontline, May 13, 2016, http://apps.frontline.org/isis-affiliates/.

<sup>&</sup>lt;sup>43</sup> Nathaniel Barr, "If at First You Don't Succeed, Try Deception: The Islamic State's Expansion Efforts in Algeria," Jamestown Foundation, November 13, 2015, https://jamestown.org/program/if-at-first-you-dont-succeed-try-deception-the-islamic-states-expansion-efforts-inalgeria/#.VmT -3YrLIU.

<sup>&</sup>lt;sup>44</sup> "2 Algerian policemen killed in ISIS-claimed suicide bombing," News 24, September 1, 2017, https://www.news24.com/Africa/News/2-algerianpolicemen-killed-in-isis-claimed-suicide-bombing-20170901; "Algeria intensifies military operations against Islamic State," The Arab Weekly, March 5, 2017, https://thearabweekly.com/algeria-intensifies-military-operations-against-islamic-state.

in 2018 they were designated by the US as a separate terrorist organization, showing its continued threat. 45 Tunisia has seen several large-scale terror attacks by IS on civilians, including the March 2015 Bardo Museum attack and the June 2015 Sousee attack. The group has also carried out several attacks on security forces, while several cells and supporters have been arrested.<sup>46</sup>

IS has not claimed any attacks in Sudan, and they have no official presence in the country. There are however several openly IS supporting people in the country. While a group calling itself Jama'at al-I'tisam bil-Quran wal-Sunna appeared to pledge allegiance to IS in July 2014.<sup>47</sup> Multiple IS supporters have been arrested and cells dismantled, including those involving foreigners. 48 Sudan had a serious issue with radicalization at universities. Dozens of people were radicalized and travelled to join IS, at one university alone 20 British students left to join IS as well as many Sudanese students.<sup>49</sup>

It is difficult to accurately assess IS's broader trajectory in North Africa with the data presented here due to a lack of data points. However, several intriguing insights can be made. First, few nodes from or in Algeria were uncovered, reflecting and confirming the understanding that Wilayat al-Jazair has yet to recover from its 2015 setbacks. Second, 11 Sudanese nationals moderately well connected to each other and tied into the Egyptian and Libyan networks indicates that the IS threat in the country is only continuing to grow. Yet a twelfth Sudanese node was discovered with a last known location of Sirte, Libya. This individual has no direct connection to the other Sudanese nodes.

Lastly, all of the Tunisians and Algerians found still in the region found are currently living in their respected countries, with only foreign presence being a Venezuelan in Algeria. Two additionally Algerians IS supporters were documented, one living in Afghanistan and one in New York in the United States. Similarly, two additional Tunisians were uncovered currently fighting in Iraq or Syria while a third has also moved to New York. The lack of documented Algerian and Tunisian foreign fighters in Iraq and Syria, despite their high presence there, may indicate that these foreign fighters operated in separate units from the mostly native Syrian and Iraqi IS fighters documented in the project and thus have fewer connections to the bulk of the Iraq/Syria nodes.

<sup>&</sup>lt;sup>45</sup> Thomas Joscelyn, "State Department designates 7 ISIS-affiliated groups as terrorist organizations," Long War Journal, February 27, 2018, https://www.longwarjournal.org/archives/2018/02/state-department-designates-7-isis-affiliated-groups-as-terrorist-organizations.php.

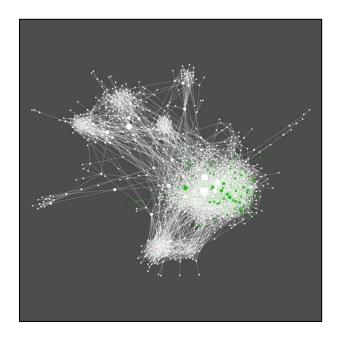
<sup>&</sup>lt;sup>46</sup> Jack Moore, "TUNISIA KILLS ISIS CHIEF PLANNING RAMADAN ATTACKS," Newsweek, May 29, 2017, http://www.newsweek.com/tunisia-kills-isis-chief-planning-ramadan-attacks-617047.

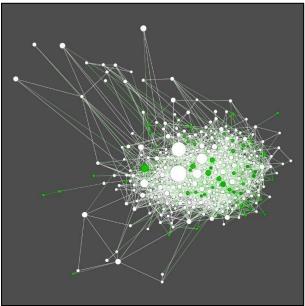
<sup>&</sup>lt;sup>47</sup> ICT Jihadi Monitoring Group Bimonthly Report, International Institute for Counter-Terrorism, July 2014, https://www.ict.org.il/UserFiles/JWMG272014.pdf.

<sup>&</sup>lt;sup>48</sup> "Sudanese security arrests another ISIS supporter," Sudan Tribune, August 3, 2015, http://www.sudantribune.com/spip.php?article55899.

<sup>&</sup>lt;sup>49</sup> Mark Townsend, "We've cleared Isis from our campus, says Sudan university after Britons are killed," *Guardian* (London), March 4, 2017, https://www.theguardian.com/world/2017/mar/04/sudanese-university-calms-parents-two-more-british-medical-students-killed-with-isis.

#### **Egypt**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
51	59	2.314	6	2.786	0.046	0.136	17

#### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
302	1880	12.45	6	2.63	0.041	0.218	1

There is minimal inter-connection between the documented nodes currently in Egypt. This indicates a failure on our part to find a network of active IS fighters. Rather, it appears that the nodes documented here are a mix of propaganda accounts, online supporters and foreign fighters. Sixteen of the 51 nodes currently in Egypt have no direct connections to others in Egypt and include at least three Syrians, a Kuwaiti, and an Emirati. These individuals likely belong in their own foreign fighter or active IS fighter network. Despite this, the one connected Egypt network is both relatively dense and inter-connected, indicating a tight network of propagandist and online supporters within the country.

In Egypt, IS has built one of its most successful and resilient branches. In November 2014 the Ansar Bait al-Magdis group which had operated in the Sinai for several years pledged allegiance to IS and became Wilayat Sinai. They operate as a high-level insurgency against Egyptian forces, who have been unable to snuff it out. The group often stages hit and run attacks on checkpoints while also utilizing IED's, car bombs, and snipers.<sup>50</sup> As well as waging a deadly insurgency against security forces in the Sinai they have also carried out several deadly terror attacks across Egypt. The November 2017 Al Rawda Mosque attack killed over 200 and became the country's most deadly terror attack ever. 51 The group also blew up a Russian airliner in October 2015 that killed over 200.<sup>52</sup> They also produce one of the highest quantities of IS propaganda outside Syria and Iraq, releasing statements, pictures, and videos.

<sup>&</sup>lt;sup>50</sup> "Sinai Province: Egypt's most dangerous group," BBC, May 12, 2016, http://www.bbc.com/news/world-middle-east-25882504.

<sup>&</sup>lt;sup>51</sup> Declan Walsh and Nour Youssef, "Militants Kill 305 at Sufi Mosque in Egypt's Deadliest Terrorist Attack," New York Times, November 24, 2017, https://www.nytimes.com/2017/11/24/world/middleeast/mosque-attack-egypt.html.

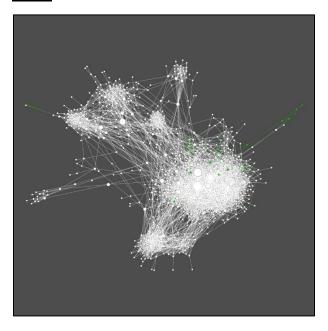
<sup>&</sup>lt;sup>52</sup> "Russian plane crash: What we know," BBC, November 17, 2015, http://www.bbc.com/news/world-middle-east-34687990.

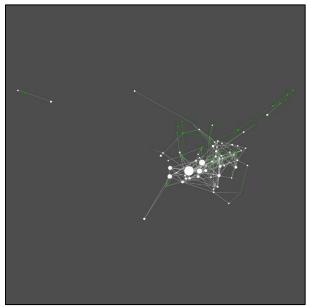
In IS's 9<sup>th</sup> edition of Rumiyah released in May 2017 it became clear that a separate IS group operated in Egypt outside the Sinai.<sup>53</sup> In 2018 this group was designated as a separate terrorist group by the US.<sup>54</sup> They are likely responsible for several attacks on churches in Egypt. Unlike in the Sinai where IS operate as an insurgency, in mainland Egypt the group mainly operate in cells.<sup>55</sup>

The Egyptian network documented is evenly dispersed throughout the entire core IS network – which again consists mostly of nodes with last known locations in Iraq, Syria, or unknown. The centrality of the Egyptian network, more so than even the other North African networks, reveals the importance this country holds for IS. Additionally, the bulk of foreign fighters currently in North Africa were discovered residing in Egypt, further reflecting IS's shift in focus from Libya to the Sinai as its Libyan affiliates lost all urban holdings by early 2017. Three additional Egyptians currently fight in Syria and Iraq while a fourth has traveled to Afghanistan to join IS there.

While this research provides little empirical data on the state of IS fighting networks in Egypt for the reasons stated above, it reveals much about IS's online presence in the country. Two prominent propaganda accounts are run through Egyptian profiles. While many Egyptian IS supporters on Facebook appear obsessed with hacking and threatening Egyptian Coptic Christian Facebook accounts. Over 60 such accounts have been hacked with the hacked accounts posting threatening messages including death threats to Coptic Christians as well as large amounts of IS propaganda. Egyptian accounts are also particularly active in coordinating spamming attacks against anti-IS profiles causing them to be temporarily removed.

#### Libya





#### Isolated Network Measurements

Nodes	Edges	Avg Weighted	Diameter	Avg Path	Density	Avg Clustering	Connected
		Degree		Length		Components	Components

<sup>&</sup>lt;sup>53</sup> Thomas Joscelyn, "Islamic State leader in Egypt says church bombings aren't popular," Long War Journal, May 4, 2017, <a href="https://www.longwarjournal.org/archives/2017/05/islamic-state-leader-in-egypt-says-church-bombings-arent-popular.php">https://www.longwarjournal.org/archives/2017/05/islamic-state-leader-in-egypt-says-church-bombings-arent-popular.php</a>.

<sup>&</sup>lt;sup>54</sup> Thomas Joscelyn, "State Department designates 7 ISIS-affiliated groups as terrorist organizations," Long War Journal, February 27, 2018, https://www.longwarjournal.org/archives/2018/02/state-department-designates-7-isis-affiliated-groups-as-terrorist-organizations.php.

<sup>&</sup>lt;sup>55</sup> Ali Abdelaty and Ahmed Aboulenein, "Islamic State extending attacks beyond Sinai to Egyptian heartland," Reuters, January 25, 2017, <a href="https://www.reuters.com/article/us-egypt-security/islamic-state-extending-attacks-beyond-sinai-to-egyptian-heartland-idUSKBN15924W">https://www.reuters.com/article/us-egypt-security/islamic-state-extending-attacks-beyond-sinai-to-egyptian-heartland-idUSKBN15924W</a>.

25	1 ~	1.0	4	2.22	0.05	0.050	1.1
1 25	1 15	1 1 7	1 4	777	1 0 05	1 0 259	
23	1.5	1.2	•	2.22	0.03	0.237	11

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
90	239	5.311	9	3.35	0.06	0.262	2

Throughout this project we struggled to find a detailed Libyan IS network. Many Libyan IS supporting accounts were private, making it impossible to tie them into the rest of the network. Other accounts had not been used for two or more years and thus had outdated friend lists. It is also likely that since IS was forced out of its urban stronghold of Sirte and into the southern desert, many of its fighters no longer have regular access to Facebook. This dearth in the data is reflected in Libya's network analysis. One third of the nodes currently in Libya have no direct connection to one another, as reflected in the very low average weighted degree, while the other nodes form a network of approximately three loosely connected components. All members of the connected network are native Libyans, while half of the unconnected nodes are foreigners from Sudan, Egypt, Nigeria, and Palestine.

At one-point Libya boasted by far the strongest IS branch outside Iraq and Syria. Exploiting the chaos from the fall of Gadhafi and the ongoing Libyan civil war. IS accepted a pledge of allegiance from various groups in Libya. They also sent back Libyan fighters from Syria, as well as experienced commanders from several countries to help the group expand there. 56 They formed several Wilayat in the country and were initially successful, seizing large parts of it including major cities like Sirte.<sup>57</sup> They also gathered large numbers of foreign fighters mainly from other parts of Africa.<sup>58</sup>

From their Libyan strongholds they carried out several terror attacks. Such as a January 2015 attack on a hotel in Tripoli and the February 2015 Al Qubbah bombings.<sup>59</sup> On multiple occasions the group also carried out mass executions of Christians. 60 The group has also been linked to several attacks outside the country. The attackers for the March 2015 Bardo Museum attack and the June 2015 Sousee attack trained in Libya. While there have been alleged links between IS Libya and attacks in Europe. 61

Despite their initially success IS was driven from their stronghold of Sirte by the end of 2016, while IS forces operating in parts of Benghazi were driven out of the city in early 2017. 62 The group still has a presence in the country however, falling back to more rural desert regions and setting up cells. In a February 2018 edition of the groups Al Naba newsletter IS said they were starting a new war of attrition in the country. Since then they have claimed several attacks.

While dozens of additional Libya IS supporting accounts were not documented due to most of their friend lists being private, we were able to analyze their profiles. The posts, pictures, and friend lists of all the Libyan accounts

<sup>&</sup>lt;sup>56</sup> Frederic Wehrey, "When the Islamic State Came to Libya," Atlantic, February 10, 2018, https://www.theatlantic.com/international/archive/2018/02/isis-libya-hiftar-al-qaeda-syria/552419/.

<sup>&</sup>lt;sup>57</sup> Johannes Saal, *The Islamic State's Libyan External Operations Hub: The Picture So Far*, Combating Terrorism Center, Volume 10, Issue 11, https://ctc.usma.edu/the-islamic-states-libyan-external-operations-hub-the-picture-so-far/.

<sup>&</sup>lt;sup>58</sup> Colin Freeman, "Isil recruiting migrant 'army of the poor' with \$1,000 sign-up bonuses," *Telegraph* (London), February 1, 2016,

https://www.telegraph.co.uk/news/worldnews/islamic-state/12134806/Isil-recruiting-migrant-army-of-the-poor-with-1000-sign-up-bonuses.html. <sup>59</sup> "Islamic State' attacks Libya hotel," DW, January 1, 2015, <a href="http://www.dw.com/en/islamic-state-attacks-libya-hotel/a-18217115">http://www.dw.com/en/islamic-state-attacks-libya-hotel/a-18217115</a>; "Libya violence: Islamic State attack 'kills 40' in al-Qubbah," BBC, February 20, 2015, http://www.bbc.com/news/world-africa-31549280.

<sup>&</sup>lt;sup>60</sup> Sylvia Westall, "Islamic State shoots and beheads 30 Ethiopian Christians in Libya: video," Reuters, April 19, 2015, https://www.reuters.com/article/us-mideast-crisis-islamicstate-killings/islamic-state-shoots-and-beheads-30-ethiopian-christians-in-libya-videoidUSKBN0NA0IE20150419.

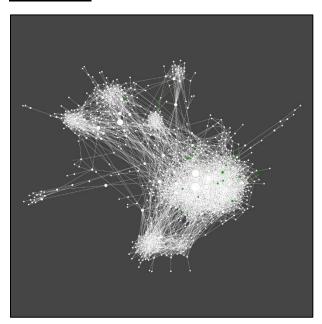
<sup>&</sup>lt;sup>61</sup> Johannes Saal, The Islamic State's Libyan External Operations Hub: The Picture So Far, Combating Terrorism Center, Volume 10, Issue 11, https://ctc.usma.edu/the-islamic-states-libyan-external-operations-hub-the-picture-so-far/.

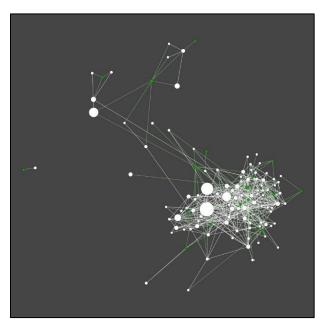
<sup>62 &</sup>quot;Libyan forces recapture ISIL headquarters in Sirte," Al-Jazeera, August 10, 2016, https://www.aljazeera.com/news/2016/08/libyan-forcesrecapture-isil-headquarter-sirte-160810205046540.html; Abdullah Ben Ibrahim, "ISIS flees Benghazi," Libya Observer, January 5, 2017, https://www.libyaobserver.ly/news/isis-flees-benghazi.

found revealed a clear trend of former members of the Shura Council of Benghazi Revolutionaries (BRSC) and <u>Ansar al-Sharia</u> members now supporting IS as well as strong direct connections between BRSC and Ansar al-Sharia supporters. This is not to say that the three groups are coordinating with each other, but is rather a result of many men from the same towns joining separate groups yet maintaining their pre-war connections on Facebook.

The presence, or lack thereof, of any strong Libyan IS network indicates a continued positive development for the country. While the group may be claiming a new war of attrition in Libya, they appear to lack the necessary urban networks that would see the necessary local support for the reemergence of urban IS strongholds. In all likelihood IS will continue to conduct a low scale insurgency in rural southern Libya while looking for any significant security lapses to take advantage of.

## **West Africa**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
18	2	0.235	2	1.33	0.015	0	15

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
116	454	7.828	8	2.9	0.068	0.301	2

The isolated West African network identified in this research is small and largely dispersed with the fifth smallest graph density and smallest average clustering coefficient. However, the eighteen West African-located nodes reside within sophisticated networks. When the nodes are measured alongside their immediate connections, the resultant network has the fourth and seventh highest graph density and average clustering coefficient, respectively. On average, each West African node has 6.4 direct external connections.

The majority of these nodes reside within the core networks connected to other nodes in the Middle East and North Africa region, indicating the possibility that these nodes are in fact foreign fighters. At the very least, these connections to the core IS region reflect the prominence of the IS insurgency in West and North Africa. One West

African node, a Senegalese man, serves as an important bridge connecting the Madagascar network with the small Russian/Sudanese network and the major Namibian node discussed above.

West Africa has had a history of extremist Islamic groups. In Nigeria and neighboring countries Boko Haram has claimed thousands of lives. Al Qaeda also has an extensive presence, with its Islamic Maghreb branch operating in parts of West Africa. In 2017 Jama'at Nusrat al-Islam wal Muslimeen was formed from several smaller groups and pledged allegiance to Al Qaeda, becoming the groups Mali branch. Multiple other extremist Islamic groups operate in the region, and there have been many terror attacks.

Exact details on the number of foreign fighters from this region are hard to come by. Though people from Senegal, Gambia, Morocco, and Ghana are known to have joined IS in Syria and Iraq. People from more countries in west Africa also joined IS in Libya during the groups height there.<sup>66</sup>

The real concern from IS in the region is through its branches and affiliates operating here. In 2015 Boko Haram pledged allegiance to IS and was renamed Wilayat West Africa. This was the most important pledge of allegiance IS had yet received. However, in August 2016 there was a falling out between Boko Haram and IS central. The latter tried to replace the group's leader Abubakar Shekau with Abu-Musab al-Barnawi. This caused a split in the group with a pro-Shekau and pro-Barnawi factions. The later remained clearly loyal to IS, carrying out attacks in their name and Amaq continues releasing propaganda from them. 68

IS have a second faction operating in West Africa, calling themselves the Islamic State in the Greater Sahel. The group was founded when fighters and the senior commander Adnan Abu Walid Sahraoui defected from another west Africa militant group, al-Mourabitoun, and pledged allegiance to IS in 2015. Their pledge of allegiance was recognized by Amaq over a year later. They operate in the Mali-Burkino Faso-Niger border area and have carried out several high-profile attacks, including the claimed killing of several French troops. Most infamously they carried out the Tongo Tongo ambush that killed 4 US soldiers in Niger.<sup>69</sup>

In March 2018 a Cuban man was arrested in Colombia on suspicion of preparing to carry out a terror attack on a restaurant regularly frequented by US officials. He had been in communication with IS supporters from Spain and Morocco who had encouraged him to carry out the attack and given him advice. This suggests that people outside of IS core territory are emulating their model of remote control attacks.<sup>70</sup>

The high degree of external connections and concentration of West African nodes within the core IS network indicates that this region is likely to experience an increasing degree of IS attention. With IS territories in Iraq and Syria nearly gone and severe urban losses in Libya, West Africa, with its plethora of ethnic divides and presence of western troops, may be seen as an enticing new region for IS veterans to flock to. After the Islamic

<sup>63 &</sup>quot;Africa's militant Islamist groups," BBC, December 6, 2013, http://www.bbc.com/news/world-africa-24587491.

<sup>&</sup>lt;sup>64</sup> Caleb Weiss, "Analysis: Merger of al Qaeda groups threatens security in West Africa," Long War Journal, March 18, 2017, https://www.longwarjournal.org/archives/2017/03/analysis-merger-of-al-qaeda-groups-threatens-security-in-west-africa.php.

<sup>65 &</sup>quot;Africa's militant Islamist groups," BBC, December 6, 2013, http://www.bbc.com/news/world-africa-24587491.

<sup>&</sup>lt;sup>66</sup> "Ghanaians 2nd highest ISIS recruits – Okudzeto," Ghana Web, October 10, 2017,

https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Ghanaians-2nd-highest-ISIS-recruits-Okudzeto-589502; Saja, "How Dawda Jallow became a radicalised jihadist and ISIS fighter," Whats On Gambia, May 10, 2017, http://www.whatson-gambia.com/news/headline-news/1844-how-dawda-jallow-became-a-radicalised-jihadist-and-isis-fighter; Richard Barrett, "FOREIGN FIGHTERS IN SYRIA," Soufan Group, June 2014, http://soufangroup.com/wp-content/uploads/2014/06/TSG-Foreign-Fighters-in-Syria.pdf.

<sup>&</sup>lt;sup>67</sup> "Nigeria's Boko Haram pledges allegiance to Islamic State," BBC, March 7, 2015, <a href="http://www.bbc.com/news/world-africa-31784538">http://www.bbc.com/news/world-africa-31784538</a>.

<sup>&</sup>lt;sup>68</sup> "Boko Haram Split Creates Two Deadly Forces," VOA Africa, August 2, 2017, <a href="https://www.voanews.com/a/boko-haram-split-two-deadly-forces/3970425.html">https://www.voanews.com/a/boko-haram-split-two-deadly-forces/3970425.html</a>.

<sup>&</sup>lt;sup>69</sup> Jason Warner, Sub-Saharan Africa's Three "New" Islamic State Affiliates, Combating Terrorism Center, Volume 10, Issue 1, January 2017, <a href="https://ctc.usma.edu/sub-saharan-africas-three-new-islamic-state-affiliates/">https://ctc.usma.edu/sub-saharan-africas-three-new-islamic-state-affiliates/</a>.

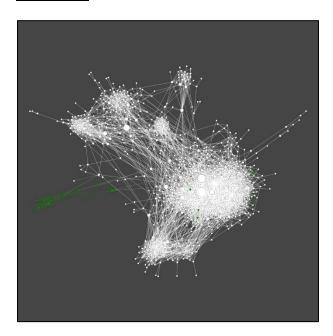
<sup>&</sup>lt;sup>70</sup> Joshua Goodman and Cesar Garcia, "Colombia charges Cuban in jihadist plot to kill US diplomats," AP, March 15, 2018, <a href="https://apnews.com/c11f965876b3437d83c3c4bb77dbd25f">https://apnews.com/c11f965876b3437d83c3c4bb77dbd25f</a>.

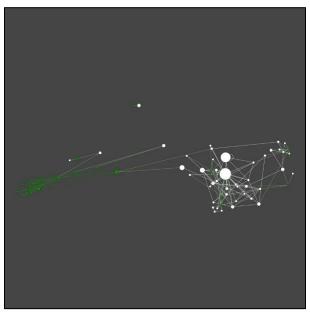
State in the Greater Sahel's success in killing four Americans, the IS affiliate is sure to see increased recruitment and funding from local insurgent groups and IS central.

Most of the West African nodes identified are currently in or from Morocco, almost all of whom are heavily embedded within the core IS network. Two of the Moroccan nodes now live in Europe while the third lives in the United Arab Emirates. According to Moroccan authorities, 1,623 nationals have traveled to Syria since 2011, with most joining IS.<sup>71</sup> It is entirely possible that many of the Moroccan nodes identified here are in fact foreign fighters. As the March 2018 case clearly demonstrates, these Moroccan supporters have already begun communicating with foreign supporters and organizing terror attacks abroad. Whether these men currently live in Morocco or are fighting abroad, their central presence within the online network suggests that IS is fully capable of expanding its recruitment and directing terror attacks in and around the country.

### Americas

## **Caribbean**





### **Isolated Network Measurements**

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
26	35	2.69	4	2.17	0.108	0.458	8

# Isolated Network and Immediate Connections Measurements

	Soluted Network and Immediate Connections Medistrements											
	Nodes	Edges	Avg Weighted	Diameter	Avg Path	Density	Avg Clustering	Connected				
		_	Degree		Length		Components	Components				
Ī	70	151	4.31	9	4	0.063	0.398	2				

The isolated Caribbean network has the third highest average clustering coefficient – just behind North America and Madagascar – and the highest regional density. These high network measurements come from the highly interconnected Trinidad and Tobago network, to which the vast majority of Caribbean nodes belong. The five other nodes are from or in Haiti, the Bahamas, Puerto Rico, and the Dominican Republic. Unlike the main North

<sup>&</sup>lt;sup>71</sup> "How the Islamic State Rose, Fell and Could Rise Again in the Maghreb," International Crisis Group, July 24, 2017, <a href="https://www.crisisgroup.org/middle-east-north-africa/north-africa/178-how-islamic-state-rose-fell-and-could-rise-again-maghreb.">https://www.crisisgroup.org/middle-east-north-africa/north-africa/178-how-islamic-state-rose-fell-and-could-rise-again-maghreb.</a>

America and Madagascar networks which are largely connected to Southeast Asia, two of the six Trinidadians' external connections are to Syrians. Three other nodes are connected to two Americans. However, the main core of nodes from Trinidad and Tobago have no external connections to IS fighters, all external connections run through the five least connected nodes.

The majority of IS activity in the Caribbean is limited to Trinidad and Tobago, something that is reflected in our data. The country has one of the highest per capita concentration of IS foreign fighters in the world, and the largest in the western hemisphere.<sup>72</sup> The official figure states 130 people travelled to join IS in Iraq and Syria.<sup>73</sup> Though an opposition official in the country has said the real number could be as many as 400.<sup>74</sup> Not everyone made it to Syria, with several being arrested in Turkey.<sup>75</sup>

The country has a much longer history of Islamic extremism though. In 1990 the country had a short-lived coup by Islamic extremists that took much of the government hostage for 6 days. While it failed, the people responsible where mainly released under amnesty deals and have continued preaching.<sup>76</sup> One of the members of a cell that attempted to attack the John F. Kennedy (JFK) International airport in New York City in the US during 2007 was from Trinidad and Tobago.<sup>77</sup>

A group of 16 men were arrested in 2011 allegedly having planned to assassinate the Prime Minister of Trinidad and Tobago. However, most were released without charge and the rest were charged with unrelated crimes.<sup>78</sup> Several of the people alleged to participate in the plot would go on to fight for IS in Syria. An interview with one of them, Shane Crawford, was published by IS in their Dabiq magazine.<sup>79</sup> There he not only encouraged people from Trinidad and Tobago to travel to Syria, but also to carry out attacks at home on behalf of IS.

In February 2018 an alleged plot to attack Trinidad and Tobago's carnival was stopped and several were arrested. Though like the planned assassination of the Prime Minister the majority of suspects were released and those charged where done so with unrelated crimes.<sup>80</sup>

Outside of Trinidad and Tobago there is an IS presence, though much less pronounced. The Jamaican man Trevor William Forrest was charged by a court in New York for recruiting people to join IS.<sup>81</sup> A women from the island of Aruba in the Caribbean was arrested in Belgium on suspicion of being an IS recruiter.<sup>82</sup> A Cuban man was

<sup>&</sup>lt;sup>72</sup> Frances Robles, "Trying to Stanch Trinidad's Flow of Young Recruits to ISIS," The New York Times, February 21, 2017, <a href="https://www.nytimes.com/2017/02/21/world/americas/trying-to-stanch-trinidads-flow-of-young-recruits-to-isis.html">https://www.nytimes.com/2017/02/21/world/americas/trying-to-stanch-trinidads-flow-of-young-recruits-to-isis.html</a>.

<sup>&</sup>lt;sup>73</sup> Frances Robles, "Trying to Stanch Trinidad's Flow of Young Recruits to ISIS," The New York Times, February 21, 2017, <a href="https://www.nytimes.com/2017/02/21/world/americas/trying-to-stanch-trinidads-flow-of-young-recruits-to-isis.html">https://www.nytimes.com/2017/02/21/world/americas/trying-to-stanch-trinidads-flow-of-young-recruits-to-isis.html</a>.

<sup>&</sup>lt;sup>74</sup> Gail Alexander, "Serious Threat to T&T," The Trinidad Guardian Newspaper, April 16, 2016, <a href="http://www.guardian.co.tt/news/2016-04-15/serious-threat-tt">http://www.guardian.co.tt/news/2016-04-15/serious-threat-tt</a>.

<sup>&</sup>lt;sup>75</sup> Uğur Ergan, "961 Foreign ISIL Members from 57 Countries Caught in Turkey in 2015," Hürriyet Daily News, January 19, 2016, http://www.hurriyetdailynews.com/961-foreign-isil-members-from-57-countries-caught-in-turkey-in-2015--93999.

<sup>&</sup>lt;sup>76</sup> Emma Graham-Harrison and Joshua Surtees, "Trinidad's Jihadis: How Tiny Nation Became Isis Recruiting Ground," The Guardian, February 02, 2018, <a href="https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq">https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq</a>.

<sup>&</sup>lt;sup>77</sup> William Finnegan, "Taking Down Terrorists in Court," The New Yorker, July 06, 2017, <a href="https://www.newyorker.com/magazine/2017/05/15/taking-down-terrorists-in-court">https://www.newyorker.com/magazine/2017/05/15/taking-down-terrorists-in-court</a>.

<sup>&</sup>lt;sup>78</sup> Frances Robles, "Trying to Stanch Trinidad's Flow of Young Recruits to ISIS," The New York Times, February 21, 2017, https://www.nytimes.com/2017/02/21/world/americas/trying-to-stanch-trinidads-flow-of-young-recruits-to-isis.html.

<sup>&</sup>lt;sup>79</sup> Emma Graham-Harrison and Joshua Surtees, "Trinidad's Jihadis: How Tiny Nation Became Isis Recruiting Ground," The Guardian, February 02, 2018, <a href="https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq">https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq</a>.

<sup>80 &</sup>quot;The Islamic State 'mega-attack' That Wasn't: How Trinidad's 'carnival Plot' Unravelled," Middle East Eye, March 1, 2018,

http://www.middleeasteye.net/news/trinidad-tobago-carnival-terror-plot-which-never-existed-cnn-guardian-nafeesa-mohammed-quits-1509808750.

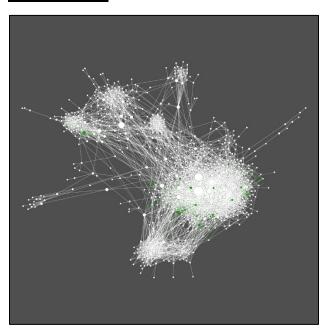
81 Jack Moore, "How a Radical Cleric's Arrest in Jamaica Reveals a Link between ISIS and the Caribbean," Newsweek, February 09, 2018, http://www.newsweek.com/isis-recruiters-arrest-jamaica-reveals-link-between-jihadi-group-and-caribbean-656769.

<sup>&</sup>lt;sup>82</sup> Curacao Chronicle, "Belgium Arrests Its First Female ISIS Recruiter – Aruban Born Rosliana Adelline Geerman," Curaçao Chronicle, August 28, 2014, <a href="http://curacaochronicle.com/region/belgium-arrests-its-first-female-isis-recruiter-aruban-born-rosliana-adelline-geerman/">http://curacaochronicle.com/region/belgium-arrests-its-first-female-isis-recruiter-aruban-born-rosliana-adelline-geerman/</a>.

arrested in Colombia in early 2018 preparing to attack US officials on behalf of IS.<sup>83</sup> There are also a small number of foreign fighters from other parts of the Caribbean that joined IS in Iraq and Syria.<sup>84</sup>

The two external connections to Syrian IS fighters reflects the high concentration of Trinidadian foreign fighters. This indicates that the local networks utilized to send men to fight in Iraq and Syria are still very much in play in the country. As the Dabiq interview suggests, IS clearly has an intent to radicalize and recruit in Trinidad and Tobago. However, the extensive involvement if Trinidadians abroad is antithesis to the minimal external connections exhibited in the Facebook network. Therefore, it would appear that while many IS supporters within the country are heavily connected on social media, their external connections likely run through other platforms or off social media. Nevertheless, the high concentration and sophistication of the Trinidad and Tobago network – along with the presence of IS supporters across the Caribbean – represent a ticking time bomb of sorts for the region. Both of the Dominican Republic nodes are heavily connected to Iraqi and Syrian IS fighters while the Haitian node has eight direct connections to Syrian, Turkish, North African, and Russian IS supporters. Through these networks, veteran IS fighters will be able to continue to expand the online community into both the United States and Latin America.

## **Latin America**





### **Isolated Network Measurements**

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
22	9	0.82	3	1.64	0.039	0	15

### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
211	1171	11.1	7	2.9	0.053	0.29	1

<sup>&</sup>lt;sup>83</sup> Joshua Goodman and Cesar Garcia, "Colombia Charges Cuban in Jihadist Plot to Kill US Diplomats," AP News, March 15, 2018, https://apnews.com/c11f965876b3437d83c3c4bb77dbd25f.

<sup>&</sup>lt;sup>84</sup> Jack Moore, "How a Radical Cleric's Arrest in Jamaica Reveals a Link between ISIS and the Caribbean," Newsweek, February 09, 2018, <a href="http://www.newsweek.com/isis-recruiters-arrest-jamaica-reveals-link-between-jihadi-group-and-caribbean-656769">http://www.newsweek.com/isis-recruiters-arrest-jamaica-reveals-link-between-jihadi-group-and-caribbean-656769</a>.

Latin American nodes are highly embedded with core IS supporters from the Middle East and North Africa, as well as being present in both the Afghan and Filipino networks. On average, Latin American nodes have more than nine external connections each, making them the third most externally connected region after Central and South Africa and Australia. But while they are highly connected to external regions, the nodes uncovered in Latin America have few to no direct connections to each other. This mirrors recent news of an attempted IS attack in Colombia directed by IS supporters in Spain and Morocco.

Several Latin Americans serve central roles within their networks. A Colombian man possibly of Chechen origins is directly connected to the majority of the Philippines network and is the only direct link between that network and the Afghan network. Another Colombian account, this time a female, serves as a bridge between the Afghan network and many Middle Eastern nodes, as well as four other Latin American nodes from Argentina, Venezuela, and Guatemala.

While not generally viewed as a region facing a serious terrorist risk there are elements of extremist Islamic terrorism, there is certainly a presence of terrorists in the continent. Enough of a presence that shortly after 9/11 a senior US official even suggested bombing South America to target terrorists. Even with that extreme suggestion and the occasional hyperbolic article over the risk of extremist Islamic terrorism in South America. The continent is certainly the one least at risk from terrorist groups like IS. However, this does not mean there is no risk.

While occurring in small numbers, some people from Latin America have travelled to Iraq and Syria to fight for IS. <sup>86</sup> In 2014, 19 Trinidadian and Tobago citizens were arrested by Venezuelan police. They had reportedly been planning to travel to Syria to fight with an extremist group. <sup>87</sup> They had also been practicing firing weapons in what police described as 'pre-jihad training'. <sup>88</sup> Large numbers of the Trinidad and Tobago citizens who have gone to fight with IS in Syria, travelled through South American countries as the first stage of their journey. <sup>89</sup>

In 2016 a Telegram channel called "Ansar al-Khilafah #Brazil" expressed support for IS' leader Abu Bakr al-Baghdadi. A 2007 plot to attack JFK airport involved three men from Guyana. One of the attackers travelled to Guyana from America to try and contact a high ranking Al Qaeda official. In March 2018 a Cuban man was arrested in Colombia preparing to carry out an attack on US officials in the country in the name of IS. He was in contact with people in Argentina and planned to travel there next to carry out more attacks.

<sup>&</sup>lt;sup>85</sup> Mark Hosenball, "Fighting Terror by Attacking... South America?" Newsweek, March 13, 2010, <a href="http://www.newsweek.com/fighting-terror-attacking-south-america-126355">http://www.newsweek.com/fighting-terror-attacking-south-america-126355</a>.

<sup>&</sup>lt;sup>86</sup> "FOREIGN FIGHTERS An Updated Assessment of the Flow of Foreign Fighters into Syria and Iraq," Soufan Group, December 2015, http://soufangroup.com/wp-content/uploads/2015/12/TSG\_ForeignFightersUpdate3.pdf.

<sup>&</sup>lt;sup>87</sup> Jamaica Observer Limited, "19 Trinidadians Arrested in Venezuela," Jamaica Observer, March 28, 2014, <a href="http://www.jamaicaobserver.com/news/19-Trinidadians-arrested-in-Venezuela-\_16360749">http://www.jamaicaobserver.com/news/19-Trinidadians-arrested-in-Venezuela-\_16360749</a>.

<sup>&</sup>lt;sup>88</sup> Caribbean News Now, "Trinidad Muslims Travel to Venezuela for Jihadist Training," Caribbean News Now, May 13, 2014, <a href="https://caribbeannewsnow.com/headline-Trinidad-Muslims-travel-to-Venezuela-for-jihadist-training-21089.html">https://caribbeannewsnow.com/headline-Trinidad-Muslims-travel-to-Venezuela-for-jihadist-training-21089.html</a>.

<sup>&</sup>lt;sup>89</sup> Emma Graham-Harrison and Joshua Surtees, "Trinidad's Jihadis: How Tiny Nation Became Isis Recruiting Ground," The Guardian, February 02, 2018, <a href="https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq">https://www.theguardian.com/world/2018/feb/02/trinidad-jihadis-isis-tobago-tariq-abdul-haqq</a>.

<sup>90</sup> Elsa Vulliamy, "Brazilian Jihadist Group Becomes First in South America to Pledge Allegiance to Isis," The Independent, July 18, 2016, http://www.independent.co.uk/news/world/americas/isis-brazil-rio-olympics-2016-jihadist-group-ansar-al-khilafah-terrorism-a7143116.html.

<sup>91</sup> William Finnegan, "Taking Down Terrorists in Court," The New Yorker, July 06, 2017, <a href="https://www.newyorker.com/magazine/2017/05/15/taking-down-terrorists-in-court">https://www.newyorker.com/magazine/2017/05/15/taking-down-terrorists-in-court</a>.

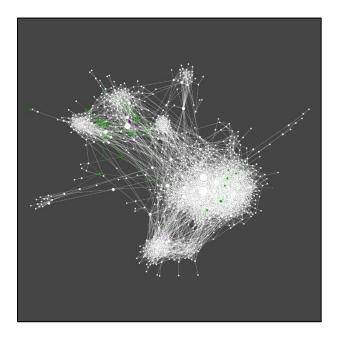
<sup>&</sup>lt;sup>92</sup> Joshua Goodman and Cesar Garcia, "Colombia Charges Cuban in Jihadist Plot to Kill US Diplomats," AP News, March 15, 2018, <a href="https://apnews.com/c11f965876b3437d83c3c4bb77dbd25f">https://apnews.com/c11f965876b3437d83c3c4bb77dbd25f</a>; Segui Leyendo, "La Detención De Un Yihadista En Colombia Enciende Las Alarmas En Buenos Aires," Infobae, March 17, 2018, <a href="https://www.infobae.com/politica/2018/03/17/la-detencion-de-un-yihadista-en-colombia-enciende-las-alarmas-en-buenos-aires/">https://www.infobae.com/politica/2018/03/17/la-detencion-de-un-yihadista-en-colombia-enciende-las-alarmas-en-buenos-aires/</a>.

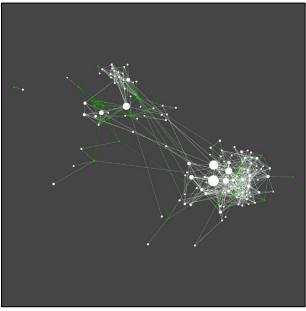
In all of their recent yearly posture statements the US' SOUTHCOM have warned about the risk of IS in Latin America. <sup>93</sup> As head of SOUTHCOM General John Kelly warned IS may want to infiltrate the southern border of America using people recruited in Latin America. <sup>94</sup> One report claimed that there were links between IS groups and Latin America, as opposed to the existence of just supporters there. According to the report, the IS affiliate Islamic State in the Greater Sahel based in the Niger-Mali border area is reportedly in contact with Latin American cartels who supposedly pay ISGS to help smuggle drugs.

IS targets many Latin American Facebook accounts for hacking and turns them into propaganda accounts. These hacked accounts are so plentiful in fact that we stopped recording them since they give little information on local networks. What it does indicate, however, is that IS is making a concerted effort to tap into Latin America's Arab and Muslim population, long a haven for other terror groups like Hezbollah and al-Qaeda. Propaganda accounts serve the dual purpose of keeping IS supporters informed online and potentially radicalizing or recruiting the friends of the hacked account who now have and IS news feed on their Facebook wall.

IS will look to expand operations in this region, taking advantage of existing internal conflicts in countries like Venezuela, Nicaragua, and Colombia to carry out attacks against western officials. While four Colombians and an American living in Colombia were documented, none had a direct connection to each other. If this trend holds true across the region, it means that IS will have to rely on foreign connections to local Latin Americans in order to carry out attacks, as was the case with the Cuban arrested in March 2018. Thus, the threat of increased IS attacks in Latin America remains high, yet not as high as it will be if sophisticated domestic networks begin to form across the region.

## **North America**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
27	34	2.52	4	1.97	0.097	0.628	12

<sup>93 &</sup>quot;2018 Posture Statement," SOUTHCOM, February 15, 2018,

http://www.southcom.mil/Portals/7/Documents/Posture%20Statements/SOUTHCOM\_2018\_Posture\_Statement\_FINAL.PDF?ver=2018-02-15-090330-243.

<sup>&</sup>lt;sup>94</sup> Investors Business Daily, "General: IS Recruits Could Enter U.S. Via Caribbean," Investors Business Daily, March 13 2015, <a href="https://www.investors.com/isis-could-enter-us-via-caribbean/">https://www.investors.com/isis-could-enter-us-via-caribbean/</a>.

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
152	571	7.513	8	3.3	0.05	0.37	2

The isolated North American network has the highest average clustering coefficient of any regional or national network – 17% higher than the next highest network – and the fourth highest density. The highly inter-connected network indicates a very well-developed community of IS supporters in North America, reflected in the main American network of 14 nodes. Ten North American nodes have no connections to one another and instead are highly embedded within foreign networks. Eight of these nodes reside in a heavily Middle East and North African community, including a Tunisian-born American connected to 26 nodes from this region. These eight nodes and their direct connections represent one of the two loosely connected components that make up the network of North America and immediately connected nodes.

The other component is the 14 aforementioned Americans along with two other isolated American nodes. This component is largely connected to Southeast Asia with a few exceptions in East Africa, Europe, Syria, and South Asia. The two isolated American nodes are heavily embedded within the Indonesian community, including an Indonesian-born American directly connected to 18 Indonesian nodes, two Tanzanians, an Afghan, Syrian, Lebanese, Egyptian, and Argentinian. This individual serves as the main bridge between the two loosely connected components. Overall, the North American network is well connected to external IS networks, with each node having on average almost six external connections.

Like for Al Qaeda before it, IS has directed much of their propaganda against America, with the country being targeted in speeches, magazines, and videos. Outside of propaganda there are two ways that IS has physically interacted in the US: inspiring or directing attacks within the country and recruiting people to travel to IS territory. Around 250 to 300 people have attempted to travel to IS territory from the US, though many of those were arrested before they could leave. <sup>95</sup> The majority who did leave went to Iraq and Syria. One man was arrested in Yemen where he attempted to join IS and another was arrested in Tunisia while trying to reach IS in Libya. <sup>96</sup> Around 180 succeeded in traveling from Canada to join IS.

Multiple attacks have been either inspired or directed by IS in America, including the deadly Pulse Nightclub shooting in 2016 that killed 49 and wounded 58.<sup>98</sup> At least one attempted attack in America was also funded by IS central.<sup>99</sup> Canada has also suffered several attacks likely inspired by IS. A 2014 attack that killed 2 was claimed by the group, while an attack in 2015 was praised by the group in their Dabiq magazine.<sup>100</sup>

<sup>&</sup>lt;sup>95</sup> Alexander Meleagrou-Hitchens, Seamus Hughes, Bennet Clifford, "The Travelers: American Jihadists in Syria and Iraq," Program on Extremsim, George Washington University, <a href="https://extremism.gwu.edu/sites/extremism.gwu.edu/files/TravelersAmericanJihadistsinSyriaandIraq.pdf">https://extremism.gwu.edu/sites/extremism.gwu.edu/sites/extremism.gwu.edu/files/TravelersAmericanJihadistsinSyriaandIraq.pdf</a>.

<sup>&</sup>lt;sup>96</sup> Conor McCormick-Cavanagh, "American Man Tried to Join ISIS in Libya through Tunisia in 2016," Medium, March 01, 2018, <a href="https://medium.com/@ConorMichael28/american-man-tried-to-join-isis-in-libya-through-tunisia-in-2016-935d716cbca2">https://medium.com/@ConorMichael28/american-man-tried-to-join-isis-in-libya-through-tunisia-in-2016-935d716cbca2</a>; Andrew Keshner, "Brooklyn Man Pleads Guilty to Traveling to Yemen to Join ISIS," NY Daily News, February 17, 2018, <a href="https://www.nydailynews.com/new-york/nyc-crime/brooklyn-man-pleads-guilty-traveling-yemen-join-isis-article-1.3826146">https://www.nydailynews.com/new-york/nyc-crime/brooklyn-man-pleads-guilty-traveling-yemen-join-isis-article-1.3826146</a>.

<sup>&</sup>lt;sup>97</sup>Richard Barrett, "BEYOND THE CALIPHATE: Foreign Fighters and the Threat of Returnees," Soufan Center, October 2017, http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf.

<sup>&</sup>lt;sup>98</sup> John Haltiwanger, "ISIS in America: How Many times Has the Islamic State Attacked the U.S.?" Newsweek, December 11, 2017, http://www.newsweek.com/islamic-state-america-attacks-744497.

<sup>&</sup>lt;sup>99</sup> Seamus Hughes, "The Only Islamic State-Funded Plot in the U.S.: The Curious Case of Mohamed Elshinawy," Lawfare, March 7, 2018, <a href="https://www.lawfareblog.com/only-islamic-state-funded-plot-us-curious-case-mohamed-elshinawy">https://www.lawfareblog.com/only-islamic-state-funded-plot-us-curious-case-mohamed-elshinawy</a>.

Stewart Bell, "ISIS Takes Credit for Inspiring Terrorist Attacks That Killed Two Canadian Soldiers," National Post, January 24, 2015, <a href="http://nationalpost.com/news/canada/isis-takes-credit-for-inspiring-terrorist-attacks-that-killed-two-canadian-soldiers">http://nationalpost.com/news/canada/isis-takes-credit-for-inspiring-terrorist-attacks-that-killed-two-canadian-soldiers</a>; Dan Oakes and National Reporting Team, "Islamic State Magazine Praises Terror Attacks in Australia," ABC News, February 13, 2015, <a href="http://www.abc.net.au/news/2015-02-13/islamic-state-magazine-praises-terror-attacks-in-australia/6092100">http://www.abc.net.au/news/2015-02-13/islamic-state-magazine-praises-terror-attacks-in-australia/6092100</a>.

<sup>100</sup> Warren Richey, "Are Terrorists Crossing the US-Mexico Border? Excerpts from the Case File.," The Christian Science Monitor, January 15, 2017, <a href="https://www.csmonitor.com/USA/Justice/2017/0115/Are-terrorists-crossing-the-US-Mexico-border-Excerpts-from-the-case-file.">https://www.csmonitor.com/USA/Justice/2017/0115/Are-terrorists-crossing-the-US-Mexico-border-Excerpts-from-the-case-file.</a>

Mexico has been much less affected by IS. There is no known instance of someone there traveling to fight for IS. There have also been no known attempted or successful attacks in the country. It has however been a thoroughfare for potential IS recruits. People from the US have tried traveling into Mexico then towards Syria from there to make the journey look less suspicious. One man making the journey even planned on forming contacts and discover smuggling routes so that he could help build a network for Americans to utilize allowing them to reach Syria. More concerning is that he envisioned the route allowing IS fighters to return to carry out attacks in America. <sup>101</sup>

The data presented above reveals a sobering degree of IS penetration within North America. Nearly every regional IS network in the world has multiple direct connections to American IS supporters online. These networks can and will be used both to draw American IS supporters into foreign conflicts as well as to encourage IS attacks within the United States. The main American IS network uncovered in this research consisted of multiple users actively engaged in spreading propaganda, radicalizing, and recruiting for IS. One user runs a link-aggregation website to which he daily posts links to IS and suspected al-Qaeda Telegram channels, as well as newly released IS media. Here an important note must be made: while these men express clear admiration for IS, they also appeared to equally support al-Qaeda's terrorist activities around the world. This indicates that strict ideological allegiance plays a lesser role among American supporters than in other regions.

The American cell had multiple links to at least one attempted terrorist, Everitt Aaron Jameson, who attempted to communicate with the cell shortly before his planned attack. Fortunately, the main members of the cell suspected him of being a "spy" and thus did not engage with him. However, following his arrest, these men posted statements on Facebook saying "someone should've took him under his wing to show how to spot undercover agents" followed by "next week live show will contain tips on how to avoid getting busted…we gotta do better to help new converts." Another post linked at least one member of the cell to a Utah teen who attempted to bomb his high school. Regarding the teen, the user stated "actually I think that's the guy. Yeah, he was told how to make a peroxide bomb. The info was put into a (google?) dropbox and he was gonna do it." Several users within this cell have also made statements urging themselves or others to commit terror attacks, such as "Wallahi I may have to gas up the car and go meet some people…I will leave nothing but their bones" and "I literally want to CHOP a guilty person's head off."

As of date these IS supporters had not been able to connect with any official IS members, though not for lack of trying. However, likely a major reason for the very public and blatantly pro-IS discussions held by this group is an attempt to attract the attention of official IS leaders. It is only a matter of time before these pre-existing sophisticated networks are taken advantage of by experience IS operatives to conduct terror attacks within the United States.

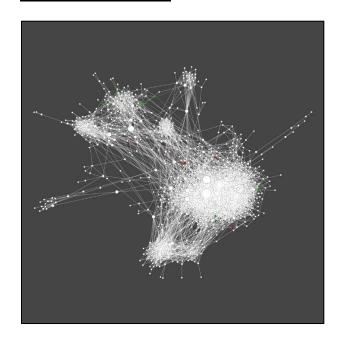
<sup>101</sup> Warren Richey, "Are Terrorists Crossing the US-Mexico Border? Excerpts from the Case File.," The Christian Science Monitor, January 15, 2017, https://www.csmonitor.com/USA/Justice/2017/0115/Are-terrorists-crossing-the-US-Mexico-border-Excerpts-from-the-case-file.

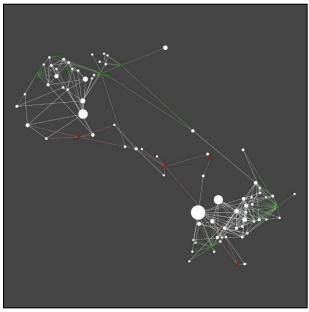
<sup>102</sup> Jeremy B. White, "Isis supporter arrested for plotting Christmas bombing of San Francisco," Independent, December 22, 2018, https://www.independent.co.uk/news/world/americas/christmas-bomb-plot-terror-isis-fbi-san-francisco-everitt-aaron-jameson-a8125521.html.

<sup>&</sup>lt;sup>103</sup> "Teen drawn to ISIS brought homemade bomb to Utah school, police say," NBC News, March 6, 2018, <a href="https://www.nbcnews.com/news/us-news/teen-drawn-isis-brought-homemade-bomb-utah-school-police-say-n854351">https://www.nbcnews.com/news/us-news/teen-drawn-isis-brought-homemade-bomb-utah-school-police-say-n854351</a>.

### Asia

# **Central and East Asia**





#### **Isolated Network Measurements**

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
12	0	0	0	0	0	0	12

## Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
86	222	5.163	10	4.74	0.061	0.487	1

Few Central and East Asian nodes were identified in this research. This is likely results from a lack of directly targeting the region during the data gathering process and the relative isolation of native Central Asian networks from the global IS network. However, the nodes that were identified reside in strong networks. The graph density and average clustering coefficient of the isolated nodes and their immediate connections are the seventh and second highest of all regional networks. These nodes are also highly connected, with an average of seven external connections per node. Yet none of the 12 nodes in this region are connected to each other.

Four individuals in Central Asia and eight individuals in East Asia have been identified, with six of the East Asian nodes embedded within the Indonesian network. This is largely due to the fact that three of these individuals were born in Indonesia prior to moving to South Korea and Taiwan, where they currently reside. The other two East Asian nodes – a Yemeni living in China and a South Korean – are directly connected to several Iraq/Syria and North Africa nodes, with the Yemeni also having connections to two other Yemeni IS supporters. Three of the four Central Asia nodes reside within the core IS community while fourth node, a man from Tajikistan, is loosely connected to the broader Southeast Asia network.

Central Asia has seen many of its citizens travel to IS territory in Iraq and Syria to live and fight. The Soufan group estimates at least 5,000 people from Central Asia succeeded in making the journey. <sup>104</sup> This included high profile figures such as Gulmurod Khalimov who led Tajikistan's police special forces. He was an important figure of the establishment and had conducted several counter-terrorism courses run by the US government. He would end up becoming IS Minister for War before his death. <sup>105</sup> Central Asia also saw entire groups pledge allegiance to IS. Such as the Islamic Movement of Uzbekistan, which operates with IS' Khorasan branch in Pakistan and Afghanistan. <sup>106</sup>

IS have been unable to succeed in carrying out any high-profile terror attacks in Central Asia. A limited number of attacks have been claimed, such as the stabbing of a policemen in Kyrgyzstan. While there have been arrests of claimed IS supporters and the dismantling of cells in several countries in the region.

Central Asians however have been responsible for several high-profile terror attacks in various countries around the world. The 2016 Ataturk Airport attack was carried out by several Central Asians and Russians who had reportedly been dispatched from IS territory in Syria. <sup>109</sup> In Turkey an Uzbek attacker was responsible for the New Years Day 2017 attack in Istanbul, he had been in contact with IS members in Syria. In Sweden an Uzbek attacker carried out the 2017 Stockholm attack. While not claimed by IS the attacker was in contact with IS embers living in Syria before, during, and after the attack. Attacks in America and Russia have also been carried out by people from Central Asia. <sup>110</sup>

Most of the countries in East Asia suffer very little from the threat of IS. The group lacks any way to expand there, and their propaganda and message resonates very little with the countries populations. That does not mean there is no risk however.

A small number of people from East Asia are believed to have travelled to or attempted to travel to IS territory. This includes people from Japan and South Korea.<sup>111</sup> While the countries citizens have been targeted by IS. Two Japanese citizens were executed by the group, due to the country supplying financial aid to the anti-IS fight.<sup>112</sup> Another concern, especially for Hong Kong and Taiwan, is the risk from radicalized domestic workers in the country originally from south east Asian countries like Indonesia.<sup>113</sup>

China is the exception for East Asian countries when it comes to IS. The country suffers from a low level separatist conflict in its eastern Xingjian province where the largest ethnic group is the Muslim Uighurs. Mainly led by the

<sup>&</sup>lt;sup>104</sup> Richard Barrett, "BEYOND THE CALIPHATE: Foreign Fighters and the Threat of Returnees," Soufan Center, October 2017, http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf.

<sup>&</sup>lt;sup>105</sup> Yahoo News, "Isis: US-trained Tajik Special Forces Chief Gulmurod Khalimov Becomes Isis 'war Minister'," Yahoo News, September 06, 2016, <a href="https://uk.news.yahoo.com/isis-us-trained-tajik-special-150308829.html">https://uk.news.yahoo.com/isis-us-trained-tajik-special-150308829.html</a>.

Terrorism Center at West Point, "Combating Terrorism Center at West Point," Combating Terrorism Center at West Point, November 15, 2017, <a href="https://ctc.usma.edu/the-islamic-movement-of-uzbekistan-opens-a-door-to-the-islamic-state/">https://ctc.usma.edu/the-islamic-movement-of-uzbekistan-opens-a-door-to-the-islamic-state/</a>

107 Site, "'Amaq Reports 1st IS Attack in Kyrgyzstan, Stabbing Police Officer," SITE Intelligence Group, October 27, 2017, <a href="https://news.siteintelgroup.com/Jihadist-News/amaq-reports-1st-is-attack-in-kyrgyzstan-stabbing-police-officer.html">https://news.siteintelgroup.com/Jihadist-News/amaq-reports-1st-is-attack-in-kyrgyzstan-stabbing-police-officer.html</a>.

<sup>108 &</sup>quot;Kyrgyzstan: Authorities Present Their Case for Claimed IS Cell," Eurasianet, July 21, 2015, https://eurasianet.org/node/74326.

<sup>&</sup>lt;sup>109</sup> Faith Karimi, "ISIS Leadership Helped Plan Istanbul Attack, Source Says," CNN, July 01, 2016, <a href="https://www.cnn.com/2016/06/30/europe/turkey-istanbul-ataturk-airport-attack/">https://www.cnn.com/2016/06/30/europe/turkey-istanbul-ataturk-airport-attack/</a>.

Goktug Sonmez, "Violent Extremism among Central Asians: The Istanbul, St. Petersburg, Stockholm, and New York City Attacks – Combating Terrorism Center at West Point," Combating Terrorism Center at West Point, December, 2017, <a href="https://ctc.usma.edu/violent-extremism-among-central-asians-the-istanbul-st-petersburg-stockholm-and-new-york-city-attacks/">https://ctc.usma.edu/violent-extremism-among-central-asians-the-istanbul-st-petersburg-stockholm-and-new-york-city-attacks/</a>.

<sup>111</sup> John Hudson, "A Top Japanese General on ISIS: "Terrorism Is Never Tolerated", "Foreign Policy, October 15, 2014, http://foreignpolicy.com/2014/10/15/a-top-japanese-general-on-isis-terrorism-is-never-tolerated/; Madison Park, "Police: Korean Teen May Have Fled to Syria for ISIS," CNN, January 23, 2015, , accessed April 17, 2018, https://www.cnn.com/2015/01/22/world/isis-korea-teenager/index.html. 112 Jake Adelstein and Nathalie-Kyoko Stucky, "Inside Japan's New War With the Islamic State," VICE News, February 06, 2015, https://news.vice.com/article/inside-japans-new-war-with-the-islamic-state.

<sup>&</sup>lt;sup>113</sup> Jack Moore, "Domestic Workers in Hong Kong Are Being Radicalized by ISIS Recruiters, a Report Has Found," Newsweek, July 26, 2017, <a href="http://www.newsweek.com/hong-kong-domestic-workers-being-radicalized-isis-recruiters-642020;">http://www.newsweek.com/hong-kong-domestic-workers-being-radicalized-isis-recruiters-642020;</a> Taiwan News, "Taiwan Deports Suspected ISIS Member to Indonesia," Taiwan News, February 24, 2017, <a href="https://www.taiwannews.com.tw/en/news/3102765">https://www.taiwannews.com.tw/en/news/3102765</a>.

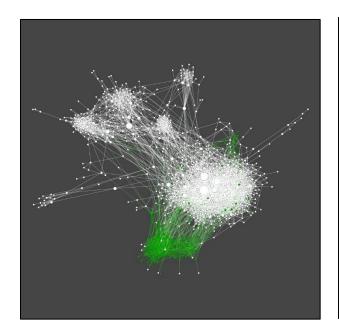
Turkistan Islamic Party, which is affiliated to Al Qaeda.<sup>114</sup> IS has targeted propaganda at Uighurs and has succeeded in recruiting large numbers to fight in Iraq and Syria. The exact number is unclear, with the Chinese government saying 300 fight for IS while Syria's ambassador to China has stated that 5,000 are fighting for various groups including IS.<sup>115</sup>

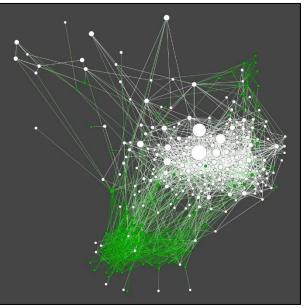
The group has also carried out attacks against Chinese citizens in Pakistan. While in a video released in 2017 IS directly threatened China, saying they will cause 'rivers of blood' to run in the country. Mandarin language propaganda released by IS suggests they have also attempted to recruit from other Muslim minorities in China. 117

The lack of Central Asia data makes any analysis particularly difficult due to the high presence of these individuals within foreign fighter networks in Iraq and Syria and participation in several ongoing insurgencies within their own countries. This it is clear that the data assembled here will not provide insights into what can assumedly be a strong network. However, the east Asia data does provide some interesting insights. First is the importance of ex-pat communities in the region; the East Asian connection to the Indonesian network demonstrates how individuals carry origin networks with them when they immigrate. As IS expands its reach in Southeast Asia, countries such as China and the Gulf States which employ huge numbers of Southeast Asian workers will be at an increased risk of terror networks and attacks.

Equally as troubling is the fact that several native East Asians have managed to embed themselves within far reaching, global IS networks on Facebook. The one native South Korean is connected to 21 nodes, including seven in North Africa and four in Iraq/Syria. While these men likely only interact with IS supporters online, i.e. are not part of a physical network, they can still be persuaded to launch attacks in their home country.

## **South Asia**





<sup>114</sup> Lucy Hornby, "Isis Uighurs Threaten 'rivers of Blood' in China," Financial Times, March 2, 2017 <a href="https://www.ft.com/content/ddeb5872-ff1f-11e6-96f8-3700c5664d30">https://www.ft.com/content/ddeb5872-ff1f-11e6-96f8-3700c5664d30</a>.

Ben Blanchard, "Syria Says up to 5,000 Chinese Uighurs Fighting in Militant Groups," Reuters, May 11, 2017,
 <a href="https://www.reuters.com/article/uk-mideast-crisis-syria-china/syria-says-up-to-5000-chinese-uighurs-fighting-in-militant-groups-idUSKBN1840UP">https://www.reuters.com/article/uk-mideast-crisis-syria-china/syria-says-up-to-5000-chinese-uighurs-fighting-in-militant-groups-idUSKBN1840UP</a>.
 Katie Hunt, "Abducted Chinese Teachers Reportedly Killed by ISIS in Pakistan," CNN, June 10, 2017,
 <a href="https://www.cnn.com/2017/06/09/asia/pakistan-china-isis-teachers/index.html">https://www.cnn.com/2017/06/09/asia/pakistan-china-isis-teachers/index.html</a>.

<sup>&</sup>lt;sup>117</sup>Lucy Hornby, "Isis Uighurs Threaten 'rivers of Blood' in China," Financial Times, March 2, 2017 <a href="https://www.ft.com/content/ddeb5872-ff1f-11e6-96f8-3700c5664d30">https://www.ft.com/content/ddeb5872-ff1f-11e6-96f8-3700c5664d30</a>.

#### **Isolated Network Measurements**

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
124	616	9.94	8	2.95	0.081	0.42	15

### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
342	2040	11.93	7	2.98	0.035	0.23	1

The isolated South Asia network consists of 13 unconnected nodes and two main communities with one shared node. Those communities, one centered in Bangladesh the other in Afghanistan, are connected by an Indian IS supporter. As discussed in previous sections, the Afghan/Pakistan network is in fact made of two distinct communities. One Pakistani currently living in Afghanistan serves as the network's sole bridge to the Southeast Asia network, connecting to a Colombian in Indonesia, a Filipino, and a node from Myanmar. Meanwhile, most of the small Bangladeshi network's connections are with IS supporters currently living in Iraq/Syria and North Africa.

Since the South Asia network consists of two very distinct communities, the isolated network has a relatively low graph density and average clustering coefficient compared to the separate Afghanistan network measurements and the Bangladesh network measurements. Both of these networks are only loosely tied to the core IS community, reflecting the relatively recent influx of foreign fighters from Syrian and Iraq to Afghanistan. On average, each South Asian node has just less than three direct external connections. Unlike the Afghan network, only one of the 14 nodes currently in Bangladesh is a foreigner – a man from Myanmar most likely a Rohingya refugee.

While being a region containing some of the most populous Muslim countries, only a limited number of IS foreign fighters have come from most countries in South Asia. With only around 40 from Bangladesh, 32 from Sri Lanka, and 75 from India. The number of fighters from Afghanistan and Iran are unknown. The exceptions are Pakistan which saw over 600 foreign fighters and the Maldives. Which had 200 people travel to join IS, one of the highest per-capita number of recruits. <sup>118</sup>

Despite this general lack of foreign fighters IS have made inroads with south Asia. They have succeeded in building up large number of supporters in some South Asian countries who, for whatever reason, have preferred to stay in their home countries rather then travel to IS territory in Iraq and Syria. IS propaganda has in several cases focused on South Asia. With videos, magazines, and statements being released in several languages used in the region. An article in the groups Dabiq magazine had an interview with IS Emir for Bangladesh. Showing the groups aspirations in the region. 120

IS have succeeded in carrying out attacks in most countries in the region. Including mass casualty attacks like the July 2016 Dhaka attack and the June 2017 Tehran attacks. <sup>121</sup> In the disputed Kashmir region spanning India and

\_

<sup>&</sup>lt;sup>118</sup> Richard Barrett, "BEYOND THE CALIPHATE: Foreign Fighters and the Threat of Returnees," Soufan Center, October 2017, http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf.

<sup>&</sup>lt;sup>119</sup> Manoj Anand, "ISIS Propaganda Material in Bengali Worry Security Agencies," Https://www.deccanchronicle.com/, July 05, 2016, https://www.deccanchronicle.com/nation/current-affairs/050716/isis-literature-in-bengali.html.

<sup>&</sup>lt;sup>120</sup>Tasneem Khalil, "Meet the Ameer of ISIS in Bangladesh – People, Power, States," People, Power, States, August 04, 2017, https://tasneemkhalil.com/meet-the-ameer-of-isis-in-bangladesh-2dab494c4d6e.

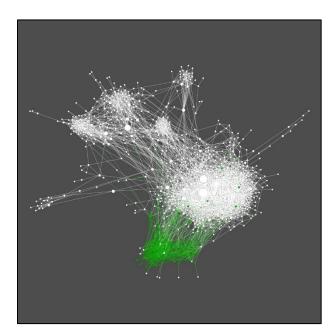
<sup>121&</sup>quot; ISIS Publication Details How Non-Muslims Identified, Killed in Bangladesh Cafe Terror Attack," The Straits Times, October 06, 2016, http://www.straitstimes.com/asia/se-asia/isis-publication-details-how-non-muslims-identified-killed-in-bangladesh-cafe-terror; Bethan McKernan Beirut, "Tehran Attacks: Isis Claims Responsibility for 'first Major Attack on Iran'," The Independent, June 07, 2017,

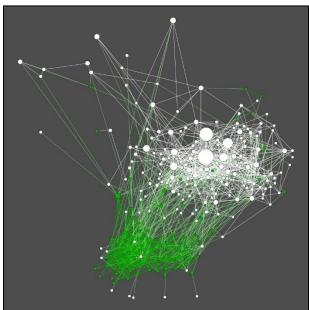
Pakistan a group of militants have pledged allegiance to IS. 122 While the groups flags are regularly seen at protests there and at funerals of militants. 123 Though IS hasn't recognized the pledge of allegiance, they have claimed several assassinations in Kashmir. 124

The South Asia data confirms the long-standing belief that India's Muslim population is largely resistant to both al-Qaeda and IS recruitment. This large geographic gap in the IS online network helps to separate the Afghan and Bangladeshi networks. Separation of the veteran Afghan network from Bangladesh and Myanmar is an important first step in minimizing the risk of increased IS insurgency in the two countries. However, the presence of a Burmese IS supporter embedded within the Bangladesh network is a sobering reminder that as long as the ethnic cleansing continues in Burma, locals and refugees will radicalize and join these networks. These connections will only strengthen as time goes on.

Thus, while the South Asia network shows little foreign fighter presence so far and relative geographic isolation of the two communities – one along the Afghan-Pakistan border and the other along the Bangladesh-Myanmar border – the strength of both of these networks implies an increased risk of IS activity in both countries. In Afghanistan, where IS already holds territory, these network measurements signify a sophisticated, locally embedded community.

# **Afghanistan and Pakistan**





 $\frac{http://www.independent.co.uk/News/world/middle-east/tehran-attacks-isis-suicide-bomb-iran-first-ever-terrorism-claim-responsibility-parliament-shrine-a7776631.html.$ 

<sup>122</sup> Bharti Jain, "Pledge Allegiance to Islamic State, Exhorts Video of 'Kashmiri Fighter' - Times of India," The Times of India, December 25, 2017, https://timesofindia.indiatimes.com/india/pledge-allegiance-to-islamic-state-exhorts-video-of-kashmiri-fighter/articleshow/62245683.cms.

<sup>&</sup>lt;sup>123</sup> Anuj Tiwari, "No More Pakistani Flag, Now Kashmiri Ultras Wrap Dead Bodies Of Terrorists In ISIS Flag," Indiatimes.com, July 14, 2017, , accessed April 17, 2018, <a href="https://www.indiatimes.com/news/india/no-more-pakistani-flag-now-kashmiri-ultras-wrap-dead-bodies-of-terrorists-in-isis-flag-325811.html">https://www.indiatimes.com/news/india/no-more-pakistani-flag-now-kashmiri-ultras-wrap-dead-bodies-of-terrorists-in-isis-flag-325811.html</a>.

<sup>&</sup>lt;sup>124</sup>Shuja-ul-Haq, "ISIS Claims First Attack in Kashmir's Zakura; DGP Says It's a Matter of Investigation," India Today, November 19, 2017, <a href="https://www.indiatoday.in/india/story/isis-terror-group-claims-first-attack-in-kashmir-zakura-1089628-2017-11-19">https://www.indiatoday.in/india/story/isis-terror-group-claims-first-attack-in-kashmir-zakura-1089628-2017-11-19</a>.

#### Isolated Network Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
102	583	11.432	5	2.188	0.113	0.433	9

#### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
281	1570	11.174	7	2.9	0.04	0.242	1

The Afghanistan/Pakistan network has the second and fourth highest graph densities and average clustering coefficients of all national and regional networks, despite consisting of two distinct communities. It is one of the few networks to significantly increase in strength when measured as an isolated community with no outside connections. This reflects the highly local nature of the IS insurgency in Afghanistan. However, there are still foreign fighters present in this data, as implicated by the fact that on average each node in the region is connected to almost three external nodes. The network contains three Iraqis, two North Africans, a Syrian, Indonesian, and Bangladeshi along with 16 unknown nodes, many of which are likely Arab in origin. Many of the immediate external connections run through these Iraqi and Syrian nodes.

IS had started making inroads into Afghanistan and Pakistan in 2014, before its declaration of a caliphate. IS received defections from Al Qaeda in the region while potential commanders from Afghanistan like Abdul Rauf Aliza, a member of the Afghanistan Taliban, visited IS in Iraq. The group also sent emissaries to Pakistan to recruit there. In January 2015 several commanders from the Pakistan Taliban, Afghanistan Taliban, and other militant groups pledged allegiance to IS in a video. IS spokesperson recognized the pledge of allegiance and announced the creation of Wilayat Khorasan covering Afghanistan and Pakistan in the same month. Around To fighters from Iraq and Syria also travelled to Afghanistan to help form the group's core. So would receive pledges of allegiance from entire organizations, including the Islamic Movement of Uzbekistan and Jundallah in Pakistan. The large number of defections from the Afghan Taliban to IS is reflected in the profiles of Afghan IS supporters. Many are friends with several Taliban supporters across the country, likely a holdover from before IS surfaced in Afghanistan.

While losing their presence in several areas of Afghanistan after early victories, and positive statements from the US about their operations against the group, IS Khorasan is still a serious threat. A recent investigation by the BBC showed they had a presence in 30 districts. They actively control territory in Nangarhar province of Afghanistan and have resisted a long-term US and Afghan government offensive to drive them out there. Is In

<sup>126</sup> Seth G. Jones, "Expanding the Caliphate ISIS' South Asia Stratergy." FroeignPoicy.com, June 11, 2015, https://www.foreignaffairs.com/articles/afghanistan/2015-06-11/expanding-caliphate.

<sup>&</sup>lt;sup>125</sup> Don Rassler, "Situating the Emergence of the Islamic State of Khorasan," Combatting Terrorism Centre at Westpoint, March 2015. https://ctc.usma.edu/situating-the-emergence-of-the-islamic-state-of-khorasan/; Agence France Presse, "Islamic State gaining ground in Afghanistan: UN," Yahoo.com, September 26, 2015, https://www.yahoo.com/news/islamic-state-gaining-ground-afghanistan-un-235952988.html.

<sup>127</sup> Don Rassler, "Situating the Emergence of the Islamic State of Khorasan," Combatting Terrorism Centre at Westpoint, March 2015, https://document.com/state-in/stat

https://ctc.usma.edu/situating-the-emergence-of-the-islamic-state-of-khorasan/.

128 Agence France Presse, "Islamic State gaining ground in Afghanistan: UN," Yahoo.com, September 26, 2015, https://www.yahoo.com/news/islamic-state-gaining-ground-afghanistan-un-235952988.html.

<sup>&</sup>lt;sup>129</sup> Damon Mehl, "The Islamic Movement of Uzbekistan Opens a Door to the Islamic State,"

Combatting Terrorism Centre at Westpoint, June, 2015, <a href="https://ctc.usma.edu/the-islamic-movement-of-uzbekistan-opens-a-door-to-the-islamic-state/">https://ctc.usma.edu/the-islamic-movement-of-uzbekistan-opens-a-door-to-the-islamic-state/</a>; Saud Mehsud and Mubasher Bukhari, "Pakistan Taliban splinter group vows allegiance to Islamic State," Reuters.com., November 18, 2014, <a href="https://www.reuters.com/article/us-pakistan-militants-is/pakistan-taliban-splinter-group-vows-allegiance-to-islamic-state-idUSKCN0J20YO20141118">https://www.reuters.com/article/us-pakistan-militants-is/pakistan-taliban-splinter-group-vows-allegiance-to-islamic-state-idUSKCN0J20YO20141118</a>.

<sup>&</sup>lt;sup>130</sup> Mujib Mashal, "In Tangled Afghan War, a Thin Line of Defense Against ISIS," New York Times, December 25, 2017, https://www.nytimes.com/2017/12/25/world/asia/eastern-afghanistan-isis.html.

<sup>&</sup>lt;sup>131</sup> Shoaib Sharifi and Louise Adamou, "Taliban Threaten 70% of Afghanistan, BBC Finds," BBC.com, January 31, 2018, http://www.bbc.com/news/world-asia-42863116.

<sup>&</sup>lt;sup>132</sup> Mujib Mashal, "In Tangled Afghan War, a Thin Line of Defense Against ISIS," New York Times, December 25, 2017, <a href="https://www.nytimes.com/2017/12/25/world/asia/eastern-afghanistan-isis.html">https://www.nytimes.com/2017/12/25/world/asia/eastern-afghanistan-isis.html</a>.

the Northern Jowzan province they took control of two districts after the defection of a Taliban commander. Repeated attacks by the Taliban to recapture this area from ISIS have failed. <sup>133</sup> In Pakistan they have been able to stage occasional attacks while Afghanistan's capital of Kabul has an extensive IS network, allowing them to regularly stage complex high casualty attacks. <sup>134</sup>

The increased strength of the network in Afghanistan/Pakistan when measured on its own indicates the local nature of the insurgency. This, and the large number of pro-IS profiles found, suggests IS-Khorasan will be exceptionally self-sustaining in the future and will not require a boost of foreign fighters from outside the region to be able to maintain its strength. There is no expectation for it to reduce in intensity.

The weakened network when including outside connections and that they mainly go through Iraq/Syria profiles suggests that even if foreign fighters did want to travel there it could be more difficult to do so, especially based on connections made on social media. It may require more personal physical connections for someone to be more successful in joining IS territory in Afghanistan.

The large number of profiles from Pakistan suggests IS could be more active in that country, rather than staging the occasional attacks and killings they do. However, a large number of supporters does not always equal effective capabilities in the country. The efforts of security forces in Pakistan could play a part in this. Likely the greater opportunities presented by Afghanistan and the successes IS have achieved there suggests a conscious decision for Pakistani supporters to focus there instead of Pakistan. The large number of profiles, and their well connectedness with Afghanistan, suggests Pakistan will continue to present an important body of recruits for IS activities in Afghanistan – particularly in Nangarhar province which borders Pakistan.

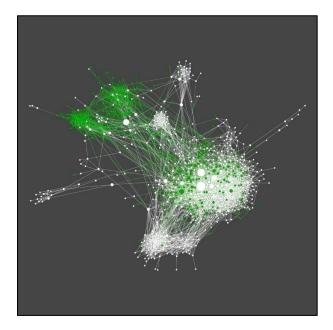
The particularly large number of profiles identified in Kabul is another concern. This data suggests that there are extensive number of IS supporters in the city, who could form or join pre-existing cells. It hints at more than enough people being there to continue IS's high rate of terror attacks.

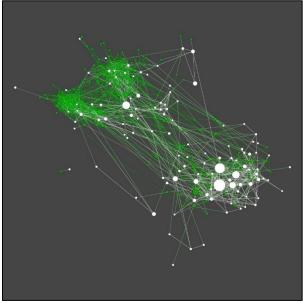
\_

<sup>&</sup>lt;sup>133</sup> Martin Sahak and Girish Gupta, "Islamic State seizes new Afghanistan foothold after luring Taliban defectors," Reuters.com, December 1, 2017, https://www.reuters.com/article/us-afghanistan-islamic-state/islamic-state-seizes-new-afghan-foothold-after-luring-taliban-defectors-idUSKBN1DV3G5.

<sup>&</sup>lt;sup>134</sup> Salman Masood, "Pakistan Church Attacked by 2 Suicide Bombers," New York Times, December 17, 2017, <a href="https://www.nytimes.com/2017/12/17/world/asia/pakistan-quetta-church-attack.html">https://www.nytimes.com/2017/12/17/world/asia/pakistan-quetta-church-attack.html</a>; Hugh Tomlinson and Haroon Janjua, "Middle-class ISIS recruits blamed for new wave of terror in Kabul," The Times, March 10, 2018, <a href="https://www.thetimes.co.uk/article/middle-class-isis-recruits-blamed-for-new-waves-of-terror-in-kabul-nnvr3rgb2">https://www.thetimes.co.uk/article/middle-class-isis-recruits-blamed-for-new-waves-of-terror-in-kabul-nnvr3rgb2</a>.

## **Southeast Asia**





Isolated Network Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
318	1309	8.23	7	3.38	0.026	0.257	2

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
166	553	6.663	7	3.19	0.04	0.286	12

The Southeast Asia network is the most isolated of all the regional networks documented. Each node currently in Southeast Asia has on average less than two connections outside of the region. In comparison, the similarly isolated Caribbean, South Asia, and East Africa networks all have on average 2.6 connections outside of their region. The regional network and its directly connected nodes have the second weakest graph density and one of the lowest average clustering coefficients – again demonstrating the minimal external connections of this largely geographically isolated network. However, just the isolated regional network has the third highest average weighted degree, or number of internal connections, and a graph density and average clustering coefficient in the top half of all the isolated regional networks.

As well as people from the Philippines, Indonesia, and Malaysia other Southeast Asians have travelled to Syria and Iraq to join IS or have been arrested while attempting to do so. Singapore has admitted some of their citizens have gone to fight for IS and the group has claimed they have Cambodian members. While there is no current evidence, it is entirely possible people from other Southeast Asian states like Myanmar, Thailand, Brunei and others have travelled to Syria. In fact, one profile found in this research is of a Thai IS supporter who claims to be living in "Damascus, Syria."

lass Danson Cheong, "ISIS recruitment video of fighter who claims to be from Singapore surfaces online," The Straits Times, September 24, 2017, <a href="http://www.straitstimes.com/singapore/isis-recruitment-video-of-fighter-who-claims-to-be-from-singapore-surfaces-online">http://www.straitstimes.com/singapore/isis-recruitment-video-of-fighter-who-claims-to-be-from-singapore-surfaces-online</a>; Alice Cuddy, "Cambodian jihadists among us: ISIS," phnompenhpost.com, June 23, 2014, <a href="http://www.phnompenhpost.com/national/cambodian-jihadists-among-us-isis-video">http://www.phnompenhpost.com/national/cambodian-jihadists-among-us-isis-video</a>.

In Brunei there have been several cases of Indonesians being deported or arrested for support of IS. <sup>136</sup> Furthermore, the police chief of Cambodia has said the country must be ready for IS. <sup>137</sup> Myanmar, which has a local Islamic insurgency, has been the focus of propaganda by IS condemning the countries treatment of the Rohingya ethnic group. Malaysia detained an Indonesian IS supporting man planning to head to Myanmar to carry out an attack. <sup>138</sup>

Thailand has had a long running Islamic insurgency in the deep south of the country, however this has so far remained unaffected by global jihadist groups like IS.<sup>139</sup> The Thai government deny IS have any presence in the country though there is evidence to the contrary. An Australian intelligence report stated that Thais have provided financial support to IS, and that over 100,000 Thailand based Facebook users had visited IS related online communities last year.<sup>140</sup>

Southeast Asia being the most isolated of networks suggests that foreign fighters from outside the region may struggle to travel to fight for IS groups here in large numbers. This would certainly be the case if they are attempting to make the journey based off social media connections. Instead, physical connections seem be more important. This could be a blow for IS, who during the battle of Marawi stressed the Philippines as a destination for Hijrah.

Conversely, the exceptionally high interconnectivity within the Southeast Asia region suggests regional foreign fighters will continue to be prominent among the IS insurgency in the Philippines. Many fought during the Battle of Marawi, while high ranking commanders like Amin Baco and others are from Malaysia. These potential regional foreign fighters are more likely to have personal connections to assist in their journey to the Philippines, while this research shows that on Facebook people in the region also have significant connections to IS supporters in the Philippines, and even active IS fighters. These connections are important prerequisites in a successful journey to join and fight for IS here.

This research identified IS supporters in Thailand, Myanmar, Cambodia, and Brunei. This reiterates the importance for all the countries in the Southeast Asia region to take the threat of a terror attack as credible and serious. This is even the case for countries which are not traditional locations for terror attacks. IS supporters have attempted to carry out attacks in such countries not typically associated with attacks, such as South Africa and Colombia. The apparent lack of awareness and preparation in some Southeast Asian countries, such as Thailand, for such an eventuality is troubling. Both Thailand and Myanmar also have pre-existing insurgencies. The presence of IS supporters in these countries risk the potential of greater radicalization and influence from IS in these pre-existing insurgencies.

<sup>1</sup> 

<sup>&</sup>lt;sup>136</sup> Xinhua, "4 Indonesian deported for IS terror links in Brunei," Xinhua.com, April 7, 2017, <a href="http://www.xinhuanet.com/english/2017">http://www.xinhuanet.com/english/2017</a> 04/07/c\_136191014.htm.

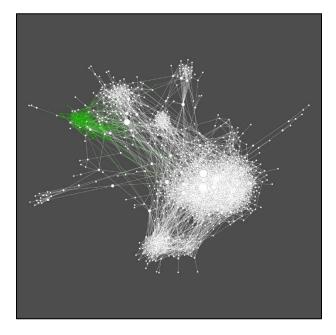
<sup>&</sup>lt;sup>137</sup> Ouch Sony, "Cambodia must be ready for IS, national police chief says," The Cambodia Daily, March 14, 2017, https://www.cambodiadaily.com/news/cambodia-must-be-ready-for-is-national-police-chief-says-126480/.

<sup>&</sup>lt;sup>138</sup> Rozanna Latiff, "Myanmar faces danger from Islamic State militants, Malaysian police say," Reuters.com, January 4, 2017, https://www.reuters.com/article/us-malaysia-security-rohingya/myanmar-faces-danger-from-islamic-state-militants-malaysian-police-say-idUSKBN1400PX.

<sup>&</sup>lt;sup>139</sup> Austin Bodetti, "Will Southern Thailand Turn to Jihad?" The Diplomat, November 20, 2017, <a href="https://thediplomat.com/2017/11/will-southern-thailand-turn-to-jihad/">https://thediplomat.com/2017/11/will-southern-thailand-turn-to-jihad/</a>.

<sup>&</sup>lt;sup>140</sup> Jason Johnson, "Faint ISIS Footprint in Thailand's Deep South," Asia Times, March 08, 2017, <a href="http://www.atimes.com/article/faint-footprint-thailands-deep-south/">http://www.atimes.com/article/faint-footprint-thailands-deep-south/</a>.

# **Philippines**





Isolated Network Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
55	219	7.96	4	2.09	0.147	0.392	4

### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
129	499	7.736	7	2.78	0.06	0.283	1

The Philippines is the densest, or most complete, of all the regional or national networks documented and has one of the highest average clustering coefficients. Its average weighted degree is second only to the Afghanistan network and yet its average path length, the average number of nodes needed to traverse the network, is lower. This data implies that the Philippines network is extremely inter-connected and complete and that it does not exist as isolated cells but as a large group with many connections between each member. This has significant negative implications for counter-terrorism operations in the country. Fortunately, the Philippines network has the least number of external connections of all the significant national networks, indicating that it is still largely isolated from external IS communities.

At least 100 people from the Philippines have travelled to join IS in Iraq and Syria. <sup>141</sup> The country also had several groups pledge allegiance to IS following the declaration of a Caliphate. This included the Maute Group, <u>Abu Sayyef</u>, Ansharul Khilafah Philippines, and Bangsamoro Islamic Freedom Fighters. <sup>142</sup> Many fighters, mainly from Southeast Asia, have travelled to the Philippines to fight with IS groups there. <sup>143</sup> Several terror attacks have been carried out or attempted in the country by groups that pledged allegiance to IS. Most notable was the Davao

\_

<sup>&</sup>lt;sup>141</sup> The Soufan Group, "Foreign Fighters, An updated assessment of the flow of foreign fighters into Iraq and Syria," The Soufan Group, December 2015, http://soufangroup.com/wp-content/uploads/2015/12/TSG\_ForeignFightersUpdate3.pdf.

<sup>&</sup>lt;sup>142</sup>Caleb Weiss, "Philippines-based Jihadist Groups Pledge Allegiance to the Islamic State," FDD's Long War Journal, February 15, 2016, https://www.longwarjournal.org/archives/2016/02/philippines-based-jihadist-groups-pledge-allegiance-to-the-islamic-state.php.

<sup>&</sup>lt;sup>143</sup> Thomas M. Sanderson and Maxwell B. Markusen, "A Call to Battle in the Philippines: Investigating Foreign Fighters in Marawi," Centre for Strategic and International Studies, January 05, 2018, <a href="https://www.csis.org/analysis/call-battle-philippines-investigating-foreign-fighters-marawi">https://www.csis.org/analysis/call-battle-philippines-investigating-foreign-fighters-marawi</a>.

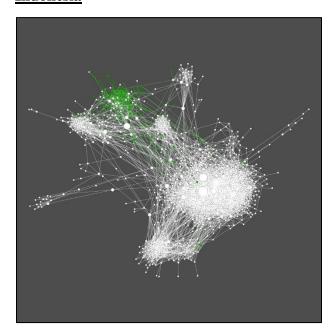
city bombing in 2016 that killed 15 and wounded 70.<sup>144</sup> Multiple hostages have also been taken by IS linked groups, several of which are still missing.<sup>145</sup>

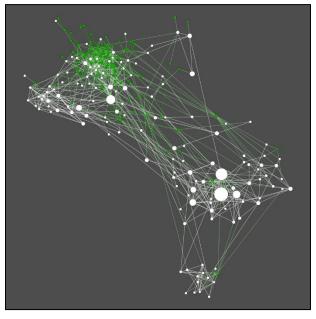
Multiple clashes have occurred between security forces and IS linked groups in the country. The most bloody of these started in May 2017 after IS militants from Abu Sayyef and the Maute group seized the city of Marawi. A grueling 5-month battle followed before the city was recaptured, though the cost was high. Over 1,000 militants, soldiers, and civilians were killed while the city was left in ruins. The Philippines has often featured in IS media, especially during that battle, and it is a destination that IS has encouraged foreigners to travel to and fight for the group. Despite losing the Battle of Marawi, IS in the Philippines is still a strong group, continuing to clash with security forces and recruit new fighters. 147

The Philippines having one of the most isolated networks is intriguing and seemingly contradictory to the large number of regional foreign fighters fighting in the Philippines. This suggests that many of these connections are based on real life connections, rather than being built over social media. For foreign fighters wishing to travel to the Philippines knowing someone personally will be more essential then building up even extensive connections on social media. This will make it especially difficult for people outside the region, who have less opportunities to build up these connections, to travel to the Philippines.

The exceptionally high interconnectivity amongst IS in the Philippines, even between the four different identifiable components is very concerning. This suggests there is a high level of connection between separate IS cells and groups within the Philippines. An interconnected insurgency poses a significant problem for Philippines counter terrorism activities, while this would give IS groups exploiting these connections and cooperating closer together on the ground the opportunity to stage more deadly attacks like the Battle of Marawi.

# Indonesia





<sup>&</sup>lt;sup>144</sup> Julliane Love De Jesus, "Davao Blast Suspect Identified, Bato Says," Inquirer News, September 8, 2016, <a href="http://newsinfo.inquirer.net/813881/davao-blast-suspect-identified-bato-says">http://newsinfo.inquirer.net/813881/davao-blast-suspect-identified-bato-says</a>.

<sup>&</sup>lt;sup>145</sup> Felipe Villamor, "Abu Sayyaf Militants Behead Hostage, Philippine Forces Say," The New York Times, April 17, 2017, https://www.nytimes.com/2017/04/17/world/asia/philippines-abu-sayyaf-hostage-beheading-isis.html.

<sup>&</sup>lt;sup>146</sup> Robert Postings, "The Battle of Marawi: A Brief Summary," International Review, January 15, 2018, <a href="https://international-review.org/battle-marawi-brief-summary/">https://international-review.org/battle-marawi-brief-summary/</a>.

<sup>&</sup>lt;sup>147</sup> ABS-CBN News, "Twin Clashes Erupt in Lanao Sur as Maute Recruits Members," ABS-CBN News, January 22, 2018, <a href="http://news.abs-cbn.com/news/01/22/18/twin-clashes-erupt-in-lanao-sur-as-maute-recruits-members">http://news.abs-cbn.com/news/01/22/18/twin-clashes-erupt-in-lanao-sur-as-maute-recruits-members</a>.

#### Isolated Network Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
77	156	4.52	7	2.93	0.053	0.287	14

#### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
219	792	7.233	7	3.41	0.0333	0.288	1

The Indonesian network is only averagely complete and inter-connected compared to both other national and regional networks. However, the nodes here have on average more external connections than those in the Philippines network. Furthermore, while the Philippines network has only 4 loosely connected components, the Indonesian network has 14. These differences reflect the different nature of IS support in the two countries: while IS in the Philippines is carrying out a land-holding insurgency, IS in Indonesia exists only in isolated cells conducting infrequent terror attacks. These external connections also reflect the presence of foreign IS supporters in the networks: three Syrian and one Levantine node are all heavily embedded within the Indonesia network, although it is unclear if these individuals actually live in Indonesia.

Indonesia has the largest population of Muslims anywhere in the world, so it is unsurprising the country has provided large amounts of IS fighters. The exact figure is unknown, but it is certainly in the hundreds. In their 2015 report the Soufan group stated 700 Indonesians had travelled to ISIS territory in Iraq and Syria. 148 Others have gone to fight with IS groups in the Philippines. 149 However, this number means Indonesia has a lower percapita number of fighters then many other countries.

There is also an IS presence in Indonesia itself. Some sources report that as many as thirty groups have pledged allegiance to IS. 150 Å recent statement by Indonesia's military chief said that IS cells are in almost every province of the country. 151 The January 2016 Jakarta attack was the first IS claimed attack in Indonesia, and in May 2017 a bombing attack in Jakarta was also claimed by the group. 152 Several other failed or prevented attacks are believed to have been attempted by IS while multiple other attacks are suspected of having been inspired by them but not claimed by the group. 153

Indonesian militants have been known to be in contact with the now deceased Emir of ISIS in Southeast Asia, Isnilon Hapilon, who was based in the Philippines. Weapons have been purchased in the Philippines for Indonesian militants and joint training sessions have been organized for Indonesian and Philippines militants. 154 Indonesia has also been a base for attempted attacks outside the country. A cell of Indonesian pro-IS militants was arrested in the midst of planning an attack on Singapore. 155

<sup>&</sup>lt;sup>148</sup> The Soufan Group, "Foreign Fighters, An updated assessment of the flow of foreign fighters into Iraq and Syria," The Soufan Group, December 2015, http://soufangroup.com/wp-content/uploads/2015/12/TSG\_ForeignFightersUpdate3.pdf.

<sup>149</sup> Richard C. Paddock, "He Aimed to Fight in Syria. ISIS Had a Broader Plan: Southeast Asia," The New York Times, September 03, 2017, https://www.nytimes.com/2017/09/03/world/asia/isis-fighters-philippines-indonesia.html.

<sup>150</sup> BBC News. "The Islamic State Group's Influence in Indonesia," BBC News, July 20, 2016, http://www.bbc.com/news/world-asia-35312624.

<sup>151</sup> Kevin Lui, "Indonesia: ISIS Cells Are in 'Almost Every Province'," Time, June 13, 2017, http://time.com/4816005/indonesia-islamic-state-isis/. 152 ABC News, "Islamic State Claims Jakarta Attack, Police Officer among Dead," ABC News, June 23, 2016, http://www.abc.net.au/news/2016-01-14/jakarta-bombing-suspected-terrorists-civilians-dead-after-attack/7089218; Gayatri Suroyo, "Indonesia Makes Arrests as Islamic State Claims Jakarta Attacks," Reuters, May 26, 2017, , accessed April 08, 2018, https://www.reuters.com/article/us-indonesia-blast-arrests/indonesia-makes-

arrests-as-islamic-state-claims-jakarta-attacks-idUSKBN18M0F3. 153 Rukmini Callimachi, "Not Lone Wolves' After All: How ISIS Guides World's Terror Plots From Afar," The New York Times, February 04, 2017, https://www.nytimes.com/2017/02/04/world/asia/isis-messaging-app-terror-plot.html.

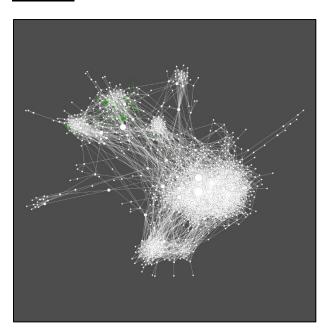
<sup>154</sup> Wahyudi Soeriaatmadja, "Trial of Terrorist in Jakarta Sheds Light on Arms Trail from Southern Philippines to Indonesia," The Straits Times, February 02, 2018, accessed April 08, 2018, http://www.straitstimes.com/asia/se-asia/tracing-the-arms-trail-into-indonesia.

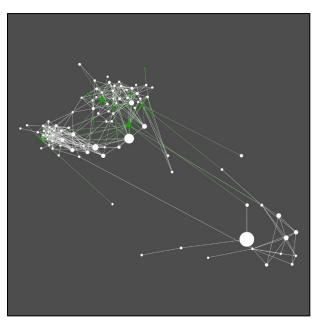
<sup>&</sup>lt;sup>155</sup> Arlina Arshad, "Plot to Attack Marina Bay with Rocket from Batam Foiled," The Straits Times, August 05, 2016, http://www.straitstimes.com/singapore/plot-to-attack-marina-bay-with-rocket-from-batam-foiled.

The Indonesian network of IS supporters on Facebook is far more loosely connected then in the Philippines. This suggests that the current state of IS in the country, smaller cells operating against security forces, will likely continue. The chance of them uniting or cooperating more closely seems slim based off this data, meaning that the risks of a greater insurgency like the one seen in the Philippines is low.

However, the greater external connections present some risks. It shows that Indonesians will be more likely to travel and join other IS groups overseas, as they have a greater chance of building connections that will enable such a journey. There is an increased risk of remote control style attacks in Indonesia compared to other regions in Southeast Asia which have fewer external connections – in other words, an attack that is enabled by an IS member overseas who provides support and advice on how to carry out the attack. Several previous failed and successful attacks in Indonesia have been conducted in this style. <sup>156</sup>

# **Malaysia**





Isolated Network Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
10	7	0.933	8	2.86	0.067	0.333	9

### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
99	347	7.01	8	3.06	0.072	0.398	1

The Malaysian network has a higher graph density and average clustering coefficient than both the Indonesian network and the overall Southeast Asian network. IS supporters currently in Malaysia are also three times more connected to external supporters than any other Southeast Asian network, reflecting Malaysian IS supporters' roles in many foreign conflicts.

<sup>&</sup>lt;sup>156</sup> Rukmini Callimachi, "Not 'Lone Wolves' After All: How ISIS Guides World's Terror Plots From Afar," The New York Times, February 04, 2017, https://www.nytimes.com/2017/02/04/world/asia/isis-messaging-app-terror-plot.html.

It is estimated around 100 Malaysians have gone to fight with IS in Iraq and Syria. Others are known to fight with IS affiliates in the Philippines. Some of these Malaysians have become leading figures, such as Amin Baco who fought in the Battle of Marawi and is touted as the next possible Emir of IS in Southeast Asia following the death of Isnilon Hapilon. Reportedly 75% of IS supporters in Malaysia are recruited online, particularly via social media. See Proceedings of the School of Isnilon Hapilon. See Proceedings of IS supporters in Malaysia are recruited online, particularly via social media.

Hundreds of IS supporters have been arrested in Malaysia itself and many cells dismantled. One cell was involved in the smuggling of weapons from Thailand into Malaysia. Meanwhile, several cells have been broken up close to the border with the Philippines. In February 2018 a cell was discovered made up of Filipinos and Malaysians set up on the direct orders of high ranking IS officials in the Philippines to help transfer prospective militants from Malaysia into the Philippines. 162

Malaysia has also suffered from terror attacks carried out by IS. An attack in June 2016 that killed eight people was carried out by people who had pledged allegiance to IS. It is believed to have been orchestrated by an important Malaysian militant in Syria, Muhamad Wanndy Mohamad Jedi. Several other IS related attacks have been foiled in the country as well. <sup>163</sup>

After the Philippines network, Malaysia has by far the most interconnected IS supporting network on Facebook. It is also by a significant margin the country amongst the Southeast Asia region with the most external connections. These statistics help explain several things about Malaysia and the country's relation to IS.

The country's very high per capita number of IS foreign fighters in Iraq and Syria amongst the Southeast Asian countries may be explained by the far greater external connections. Social media was an important tool for potential IS recruits, allowing someone to reach out and connect to active IS fighters who can vouch for the recruit and advise them in traveling to IS territory. A greater pro-IS presence on Facebook among Malaysians would have made it more likely for them to build these connections to assist in their travel to IS territory. It also would have made it easier for Malaysians living in IS territory to reach out and find potential recruits or attackers back in Malaysia.

The high number of external connections also helps explain why the country is such an important thoroughfare for IS supporters and other extremists. This data suggests it is far more likely for someone to have connections in Malaysia than any other Southeast Asian country. Therefore, if an IS supporter is traveling to or through Southeast Asia, their journey will most likely go through Malaysia as they are more likely to have connections there. The role of Malaysia as an important stepping stone for people attempting to travel to IS groups in southern Philippines can also help be explained by these high number of internal connections. A potential recruit is more likely to know someone in Malaysia than the Philippines on social media, and thus travels to Malaysia where they already have connections.

<sup>&</sup>lt;sup>157</sup> The Soufan Group, "Foreign Fighters, An updated assessment of the flow of foreign fighters into Iraq and Syria," The Soufan Group, December 2015, http://soufangroup.com/wp-content/uploads/2015/12/TSG\_ForeignFightersUpdate3.pdf.

<sup>&</sup>lt;sup>158</sup> Zam Yusa, "Amin Baco Touted as One of 2 Militants Looking to Be New IS Emir," Free Malaysia Today, January 26, 2018, http://www.freemalaysiatoday.com/category/nation/2017/12/20/amin-baco-touted-as-one-of-2-militants-looking-to-be-new-is-emir/.

<sup>&</sup>lt;sup>159</sup> Suman Varandani, "ISIS Recruitment: 75% Of New Islamic State Group Supporters In Malaysia Are Recruited Online," International Business Times, May 25, 2015, <a href="http://www.ibtimes.com/isis-recruitment-75-new-islamic-state-group-supporters-malaysia-are-recruited-online-1936440">http://www.ibtimes.com/isis-recruitment-75-new-islamic-state-group-supporters-malaysia-are-recruited-online-1936440</a>.

<sup>160</sup> Cristina Maza, "Malaysia's Reckoning With the Islamic State," The Diplomat, September 01, 2017, <a href="https://thediplomat.com/2017/08/malaysias-reckoning-with-the-islamic-state/">https://thediplomat.com/2017/08/malaysias-reckoning-with-the-islamic-state/</a>.

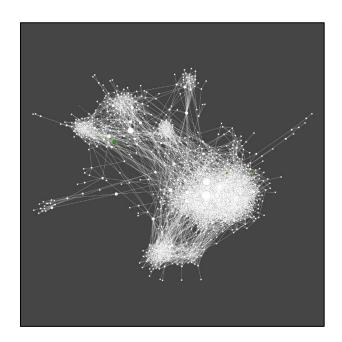
<sup>&</sup>lt;sup>161</sup> "ISIS Cell Found Smuggling Weapons into Malaysia," The Straits Times, May 05, 2017, , accessed April 08, 2018, http://www.straitstimes.com/asia/se-asia/isis-cell-found-smuggling-weapons-into-malaysia.

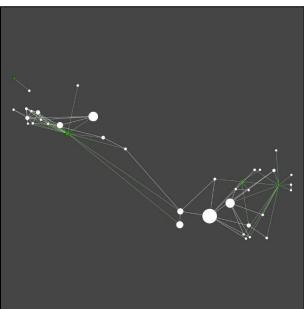
<sup>&</sup>lt;sup>162</sup> Nadirah H. Rodzi, "11 ISIS Suspects Picked up in Malaysian Swoop," The Straits Times, February 26, 2018, <a href="http://www.straitstimes.com/asia/se-asia/11-isis-suspects-picked-up-in-malaysian-swoop">http://www.straitstimes.com/asia/se-asia/11-isis-suspects-picked-up-in-malaysian-swoop</a>.

<sup>&</sup>lt;sup>163</sup> Sami Moubayed, "A Malaysian Jihadist's Journey through Facebook to Syria," Asia Times, February 21, 2017, <a href="http://www.atimes.com/article/malaysian-jihadists-journey-facebook-syria/">http://www.atimes.com/article/malaysian-jihadists-journey-facebook-syria/</a>.

These external connections mean that moving forward Malaysia will remain an important stopping point for extremists traveling through the region, especially people attempting to travel to the Philippines. The multiple cells set up to help facilitate this journey suggest IS in the Philippines is attempting to exploit this route. This stresses the importance of intra-country cooperation in the region especially between Malaysia and the Philippines. It also increases the risks of remote control style attacks. With large numbers of Malaysians active online and well connected to foreigners, it makes them easier to be recruited or find external operators to help them plan and carry out attacks.

### Australia





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
4	0	0	0	0	0	0	4

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
39	74	3.795	5	3.102	0.1	0.54	2

Few Australian IS supporters were identified in this research. However, the four users documented were extremely well connected to external IS supporters, with an average of almost ten external connections. One of these Australians plays a central role connecting the Philippines network to a prominent Egyptian and Iraqi IS fighter. The other three Australians are immigrants, two from Somalia and one from Saudi Arabia. One Somali is loosely connected to a North American network while the other two are imbedded in mixed foreign networks.

Over 250 people are estimated to have travelled to Iraq and Syria to join IS from Australia, while 200 more have been detained in the country attempting to leave. A document posted on social media by an IS supporter even

<sup>164</sup> The Soufan Group, "Foreign Fighters, An updated assessment of the flow of foreign fighters into Iraq and Syria," The Soufan Group, December 2015, <a href="http://soufangroup.com/wp-content/uploads/2015/12/TSG">http://soufangroup.com/wp-content/uploads/2015/12/TSG</a> ForeignFightersUpdate3.pdf.

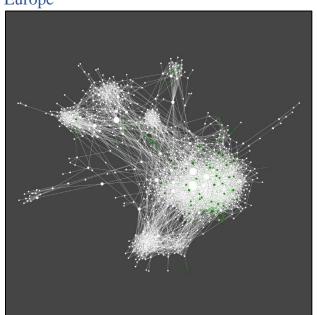
gave step by step instructions on how to leave Australia to fight for IS, and which people on social media where good contacts to get in touch with to assist in the journey. 165

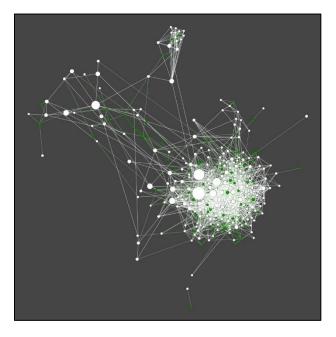
Outside of traveling to Syria, IS have called for attacks in Australia itself multiple times in official media. 166 Several IS inspired or directed plots have been disrupted, and multiple people have been arrested. 167 Most significant was the failed July 2017 plot to bomb an Australian plane bound for the United Arab Emirates. It was directed by an IS member in Syria and involved explosive being shipped to the attackers in Australia from IS members in Turkey. 168 In February 2017 a man was arrested in Australia who had been doing "credible" research into missile detection technology and long-range missiles for IS. 169

IS claimed the June 2017 hostage situation in Melbourne that left two people dead. This attack was likely inspired by IS, but there is no evidence of the attacker being in contact with the group. <sup>170</sup> The groups *Dabiq* magazine also praised a stabbing attack in October 2015 that killed one. 171

With such a small sample size, and only one person originally from Australia, it has hard to build effective analysis on the threat of IS moving forward in Australia. The links between the Australian and the Philippines suggests that is where IS supporters will turn their attention to following their defeats in Iraq and Syria. It is geographically closer, is known to host other foreign fighters, and is a location that IS has encouraged people to travel to. The fact that three of the IS supporters in Australia where originally from different countries suggests foreigners may serve important links between Australian IS supporters and those in other regions of the world.

# Europe





<sup>165</sup> Armando Cordoba, "The Chillingly Easy Guide to Joining ISIS," NewsComAu, March 22, 2015, http://www.news.com.au/national/islamic-state- $\underline{launches\text{--step by step-dossier-for-aussie-jiha dists-on-how-to-get-to-front line-in-syria/news-story/1e8e 63939 cdb 84 db 6582 f3 ad 6b a 34 da 1.}$ 

<sup>&</sup>lt;sup>166</sup>Helen Davidson, "Isis Instructs Followers to Kill Australians and Other 'disbelievers'," The Guardian, September 23, 2014, https://www.theguardian.com/world/2014/sep/23/islamic-state-followers-urged-to-launch-attacks-against-australians.

<sup>167</sup> Michelle Innis, "Australia Says It Foiled a Terrorist Plot," The New York Times, December 23, 2016, https://www.nytimes.com/2016/12/22/world/australia/melbourne-australia-christmas-bomb-plot.html.

<sup>&</sup>lt;sup>168</sup> Jacqueline Williams, "Australia Details 'Sophisticated' Plot by ISIS to Take Down Plane," The New York Times, August 04, 2017, https://www.nytimes.com/2017/08/04/world/australia/sydney-airport-terror-plot-isis.html.

<sup>&</sup>lt;sup>169</sup> Paul Farrell, "Man Charged in NSW Town of Young over Alleged Missile Advice to Isis," The Guardian, February 28, 2017, https://www.theguardian.com/australia-news/2017/feb/28/man-arrested-nsw-town-young-alleged-missile-advice-isis.

<sup>&</sup>lt;sup>170</sup> Melissa Davey and Christopher Knaus, "Isis Claims Responsibility for Melbourne Siege That Left Two People Dead," The Guardian, June 05, 2017, https://www.theguardian.com/australia-news/2017/jun/05/police-shoot-gunman-dead-and-free-hostage-in-melbourne. <sup>171</sup> *Dabiq*, Issue 12.

#### **Isolated Network Measurements**

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
61	22	0.721	7	2.57	0.012	0.317	42

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
313	1678	10.722	8	3.064	0.034	0.241	2

The 22 IS supporters currently in Europe are only mildly connected to each other with the only directly connected network consisting of ten Russians and a French, Egyptian, Swedish, Spanish, British, and Swiss national.

While too few nodes were collected from Europe – which has had thousands of citizens join IS in Syria and Iraq – to draw any overarching conclusion, similar research supports this network analysis. Nathaniel Rosenblatt of the New America International Security program has conducted his own analysis of European and Gulf State IS foreign fighters based on leaked registration forms of over 3,500 foreign fighters in Syria and Iraq. <sup>172</sup> Rosenblatt's research indicates that European networks are largely bound by national borders and resemble a hub and spoke model with one central figure connected to everyone else. Rosenblatt argues that this data indicates "that it was much easier to exhibit pro-ISIS sentiments in Europe than in the GCC."

Europe has faced a significant threat from IS. It has been a regular target of IS terror attacks and at least 6,000 people from Europe have travelled to join IS in Iraq and Syria. The majority of foreign fighters originated from just a handful of countries; 1,910 from France, 900 from Germany, and 850 from the UK.<sup>174</sup> The first attack believed to have been inspired by IS took place in 2014 and since then multiple attacks have been carried out by people inspired by IS propaganda.<sup>175</sup> Others carried out remote control attacks, where a potential attacker is coached over the internet by IS.<sup>176</sup> Finally, a handful of attacks have been directly planned by IS, including the November 2015 Paris attacks and the March 2016 Brussels attacks.<sup>177</sup>

IS has built up an extensive network across Europe, with direct connections to IS in Iraq and Syria. An analysis of IS in Belgium by the Counter Terrorism Centre showed that "91% of the arrest actions had some form of direct link to members of the Islamic State's central hub in Iraq and Syria." Meanwhile, in the UK a front company was used by an IS militant in Syria to help funnel funds to attackers across the world and purchase equipment for IS which was sent to Turkey and then smuggled into the groups territory. 179

<sup>&</sup>lt;sup>172</sup> Nathaniel Rosenblatt, "All Jihad is Local What ISIS' Files Tell Us About Its Fighters," New America, July 20, 2016, https://www.newamerica.org/international-security/policy-papers/all-jihad-is-local/.

<sup>&</sup>lt;sup>173</sup> Nathaniel Rosenblatt, "Foreign Fighters in the Islamic State of Iraq and Syria: A Network Analysis," Forthcoming paper presented at the American Political Science Association 2018 Conference, Boston, United States.

<sup>&</sup>lt;sup>174</sup> The Soufan Group, "Beyond the Caliphate: Foreign fighters and the threat of returnees," The Soufan Group, October 2017, <a href="http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf">http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf</a>.

Tis Tim Lister, "ISIS: 143 Attacks in 29 Countries Have Killed 2,043," CNN, February 12, 2018, <a href="https://edition.cnn.com/2015/12/17/world/mapping-isis-attacks-around-the-world/index.html">https://edition.cnn.com/2015/12/17/world/mapping-isis-attacks-around-the-world/index.html</a>.

<sup>&</sup>lt;sup>176</sup> Jack Moore, ""Be Quick": How ISIS Remotely Directs Its Operatives to Commit an Attack in Europe," Newsweek, July 25, 2017, <a href="http://www.newsweek.com/be-quick-how-isis-remotely-directs-its-operatives-commit-attack-europe-641448">http://www.newsweek.com/be-quick-how-isis-remotely-directs-its-operatives-commit-attack-europe-641448</a>.

<sup>&</sup>lt;sup>177</sup> Rukmini Callimachi, "Not 'Lone Wolves' After All: How ISIS Guides World's Terror Plots From Afar," The New York Times, February 04, 2017, <a href="https://www.nytimes.com/2017/02/04/world/asia/isis-messaging-app-terror-plot.html">https://www.nytimes.com/2017/02/04/world/asia/isis-messaging-app-terror-plot.html</a>.

<sup>&</sup>lt;sup>178</sup> Guy Van Vlierden, Jon Lewis, and Don Rassler, "Beyond the Caliphate: Belgium," Combating Terrorism Centre, February 2018, <a href="https://ctc.usma.edu/app/uploads/2018/02/CTC-Beyond-the-Caliphate-Belgium.pdf">https://ctc.usma.edu/app/uploads/2018/02/CTC-Beyond-the-Caliphate-Belgium.pdf</a>.

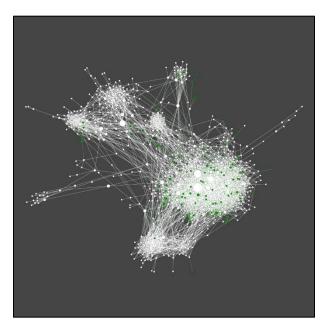
<sup>&</sup>lt;sup>179</sup> Seamus Hughes, "The Only Islamic State-Funded Plot in the U.S.: The Curious Case of Mohamed Elshinawy," Lawfare, March 11, 2018, <a href="https://www.lawfareblog.com/only-islamic-state-funded-plot-us-curious-case-mohamed-elshinawy">https://www.lawfareblog.com/only-islamic-state-funded-plot-us-curious-case-mohamed-elshinawy</a>.

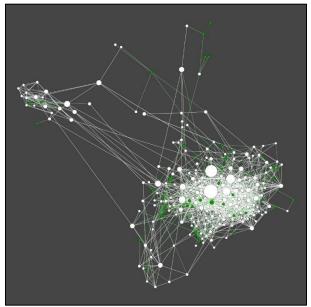
Europe continues to face a risk from IS inspired attacks even after the fall of their caliphate in Iraq and Syria. The supporters identified during this research project could well answer continued calls by IS to carry out attacks in their home countries. The high level of external connection suggests European IS supporters could continue to be targeted by IS external attack planners online to carry out remote control attacks. Facebook is a platform that is known to have been used to recruit and advise people for such attacks. High external connectedness means Europeans could still build the connections needed to travel to other areas where IS is active to fight for the group. There have been limited examples of this occurring: a Spanish man was arrested in the Philippines on suspicion of joining the group there and in Afghanistan there have been rumors of French fighters. <sup>181</sup>

A newly emerging issue for Europe could be the threat of remote control attacks directed from the continent, as opposed to being directed from IS controlled territory often to target locations in Europe. This recently occurred in a foiled attack in Colombia, which appeared to be directed by an IS supporter in Spain. Many Europeans worked as external operation planners for IS, while large numbers of former European fighters have returned home. It is likely some wish to continue IS' work and have gained the expertise to do so successfully through planning remote control attacks.

## Middle East

# **Gulf States**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
44	21	0.955	6	2.57	0.022	0.372	29

<sup>180</sup> Ben Farmer, "Terrorists Plotted Christmas Bomb after Meeting Islamic State Commander on Facebook," The Telegraph, January 08, 2018, <a href="https://www.telegraph.co.uk/news/2018/01/08/terrorists-plotted-christmas-bomb-meeting-islamic-state-commander/">https://www.telegraph.co.uk/news/2018/01/08/terrorists-plotted-christmas-bomb-meeting-islamic-state-commander/</a>.

<sup>&</sup>lt;sup>181</sup> AFP, "French Female IS Fighter Caught in Afghanistan: Officials," France 24, March 23, 2018, 2018, <a href="http://www.france24.com/en/20180323-french-female-fighter-caught-afghanistan-officials">http://www.france24.com/en/20180323-french-female-fighter-caught-afghanistan-officials</a>; Tetch Torres-Tupas, "AFP Files Complaint vs Spanish Man over Illegal Firearms, Explosives," Inquirer News, January 24, 2018, <a href="http://newsinfo.inquirer.net/963165/afp-files-complaint-vs-spanish-man-over-illegal-firearms-explosives">http://newsinfo.inquirer.net/963165/afp-files-complaint-vs-spanish-man-over-illegal-firearms-explosives</a>.

<sup>182</sup> Joshua Goodman and Cesar Garcia, "Colombia Charges Cuban in Jihadist Plot to Kill US Diplomats," AP News, March 15, 2018,

https://apnews.com/c11f965876b3437d83c3c4bb77dbd25f.

<sup>&</sup>lt;sup>183</sup> The Soufan Group, "Beyond the Caliphate: Foreign fighters and the threat of returnees," The Soufan Group, October 2017, <a href="http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf">http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf</a>.

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
245	1237	10.098	9	3	0.041	0.226	1

Of the 44 IS supporters currently in the Gulf States, half are in Yemen. The Gulf States network is both more complete and inter-connected than all other regions of comparable size: Turkey, Europe, and the Levant. The exception being that the Levant has a much higher average clustering coefficient. Gulf State IS supporters are on average directly connected to 5.5 nodes outside of the region, one of the lowest connectivity rates of all regions.

While too few nodes were collected from the Gulf States to draw any overarching conclusion, similar research supports this network analysis. Rosenblatt's research confirms that fighters from the Gulf States have more and stronger connections than those from Europe and that the Gulf State networks more easily span borders than European networks. Rosenblatt argues that this data indicates "that it was much easier to exhibit pro-ISIS sentiments in Europe than in the GCC." 184

Saudi Arabia, the largest and most populous of the Gulf states, has provided one of the highest number of fighters for IS. Over 3,500 people have travelled to join the group in Iraq and Syria. The other Gulf states have also seen fighters join IS, though in lesser numbers. Around 150 have travelled from Kuwait, while Qatar and the United Arab Emirates have seen a few dozen people make the journey between them. Oman has reportedly had no people travel to IS territory, if true making it the only Arab country where this is the case. Following their declaration of a Caliphate, IS also announced the creation of two wilayat in late 2014 in two Gulf States – Saudi Arabia and Yemen. Most of the IS activity in the region is within these wilayat.

In Saudi Arabia the group does not control any territory but have in several cases killed security forces and carried out mass casualty attacks. During May 2015 the group carried out two attacks that killed more than 20 civilians at Shia mosques. In August 2015 a suicide bombing at a mosque used by security forces killed 15. <sup>188</sup> Over time IS's ability to carry out attacks in Saudi Arabia has waned, either through the inability of the group or successes by security forces. However, IS, or at least people that support the group, are still active in the country with several cells being dismantled. <sup>189</sup>

With the fall of territory in Iraq and Syria there is no longer an easy location for IS supporters to travel to. This means that for those who wish to support IS, an attack at home is one of the more obvious options. IS supporters being present in multiple Gulf states presents the risk of individuals or cells carrying out attacks there. Even countries like Oman, which has avoided such attacks, have supporters in the country based off this dataset. It means that countries who have not experienced attacks before or have low rates of radicalization must not be complacent and security forces should be prepared for the eventuality of an attack.

<sup>&</sup>lt;sup>184</sup> Nathaniel Rosenblatt, "Foreign Fighters in the Islamic State of Iraq and Syria: A Network Analysis," Forthcoming paper presented at the American Political Science Association 2018 Conference, Boston, United States.

<sup>&</sup>lt;sup>185</sup> The Soufan Group, "Beyond the Caliphate: Foreign fighters and the threat of returnees," The Soufan Group, October 2017, <a href="http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf">http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf</a>.

<sup>&</sup>lt;sup>186</sup> Giorgio Cafiero, "What the Arab World Can Learn from Oman," The Huffington Post, September 03, 2016, <a href="https://www.huffingtonpost.com/giorgio-cafiero/what-the-arab-world-can-learn-from-oman">https://www.huffingtonpost.com/giorgio-cafiero/what-the-arab-world-can-learn-from-oman</a> b 8074584.html.

<sup>&</sup>lt;sup>187</sup> Harleen Gambhir, "ISIS Global Intelligence Summary," Institute for the Study of War, May 7, 2015. http://www.understandingwar.org/sites/default/files/ISIS%20INTSUM\_Final.pdf.

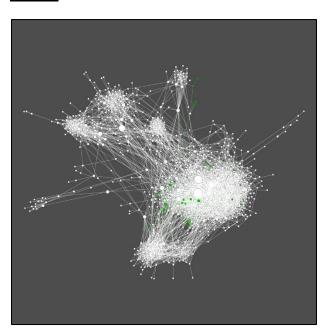
<sup>&</sup>lt;sup>188</sup> Harleen Gambhir, "ISIS Global Intelligence Summary," Institute for the Study of War, May 7, 2015. http://www.understandingwar.org/sites/default/files/ISIS%20INTSUM\_Final.pdf.

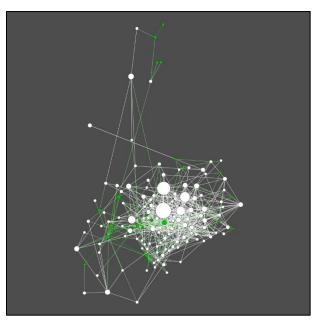
<sup>&</sup>lt;sup>189</sup> Al Arabiya English, "Saudi Arabia Dismantles ISIS Cell in Riyadh," Al Arabiya English, October 5, 2017, <a href="https://english.alarabiya.net/en/News/gulf/2017/10/05/Saudi-Arabia-says-it-dismantles-Islamic-State-cell-in-Riyadh.html">https://english.alarabiya.net/en/News/gulf/2017/10/05/Saudi-Arabia-says-it-dismantles-Islamic-State-cell-in-Riyadh.html</a>.

Based on the number of foreign fighters, Saudi Arabia far eclipses other Gulf states in terms of support for IS. However, only nine people in this dataset where originally from Saudi Arabia. This is not far off the one or two people that were found in Oman, UAE, Qatar, and Kuwait who all have only a fraction of the Saudi Arabia's population and a considerably smaller number of foreign fighters. With IS support in the country being well known from other evidence, this suggests that the online presence of IS supporters in Saudi Arabia is more limited. This may cause issues for IS's attempts to operate in the country and suggests that moving forward possible attacks will likely be staged by individuals or cells of people who have met and know each other in person.

Saudi Arabia has almost 8.5 million immigrants, making up about a quarter of the country's population. This is reflected in the data set. As well as the nine native Saudi Arabian IS supporters, 10 foreigners including people from the Philippines, Syria, and Ethiopia were found living in Saudi Arabia. While a small dataset, this suggests that IS supporters in Saudi Arabia could disproportionately be made up of foreigners. Several of the foreigners were Filipino women, most likely meaning they are domestic workers. Concerns have been raised about the threat of radicalized domestic workers – particularly from Southeast Asian countries like the Philippines – in places like Hong Kong. This suggests the risk of radicalized domestic workers should be something the Saudi Arabian and the workers home governments should take seriously.

# **Yemen**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
22	19	1.727	5	2.2	0.082	0.449	9

Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
138	588	8.52	7	2.76	0.062	0.226	1

While relatively few IS supporters currently in Yemen were identified, one highly connected and dense network has been documented. This network contains only half of the Yemen nodes – the other 11 nodes having no direct

<sup>&</sup>lt;sup>190</sup> Anne Barker, "Indonesian Maids Are the Latest Group of Women Backing Islamic State," ABC News, August 03, 2017, http://www.abc.net.au/news/2017-08-04/indonesian-maids-supporting-islamic-state/8772320.

connections to one another – and yet it has a higher graph density and average clustering coefficient than the Indonesia network and is nearly on par with the Afghanistan network. This network contains one Iraqi and Yemenis whose last known locations were Bayda and Aden, implying that this is a network of active IS fighters in southern Yemen.

Several wilayat were created in Yemen, mainly based on the countries existing provinces. <sup>191</sup> IS carried out its first attacks in 2015, targeting several locations in the country with terror attacks as well as clashing with both sides of Yemen's ongoing civil war. <sup>192</sup> However, disillusion with Yemen's IS Emir and reported defections to Al Qaeda in the country weakened the group. <sup>193</sup> IS now mainly has militants active in the country's Al-Bayda province where they mainly clash with Houthi forces. <sup>194</sup> In Aden, the largest city controlled by Saudi backed forces, they appear to have an extensive series of cells which are capable of often carrying out terror attacks and targeted killings. <sup>195</sup> IS in Yemen appears to have had a resurgence recently, staging more attacks in Aden, and the US warned that IS in Yemen had doubled in size through 2017. <sup>196</sup>

Half of IS supporters from the Gulf states being in Yemen suggests at the high level of support in the country. Yemen remains at a state of war, with two rivals fighting for control and factional issues within those two sides worsening the situation. Both IS and Al Qaeda in the Arabian Peninsula (AQAP) have exploited this to gain strength and form a foothold in the country. The large number of IS supporters in Yemen reinforces the idea that this affiliate has increased in strength recently.

The nature of the Yemen network is interesting. The well-connected network believed to contain people from Aden and Bayda suggests that these two pockets of IS in Yemen, while disconnected geographically, are in communication. Other supporters are disconnected from this network and are present in various areas of Yemen, including places where IS is no longer known to have a presence. This suggests that while they are supporters, they do not have direct connections with active IS fighters in Aden and Bayada. These supporters, if they wanted to actually join IS, may struggle to do so with an apparent lack of connections to active fighters, but their existence suggests that IS has greater potential in Yemen. This poses a danger to the various security forces in Yemen, since if IS is able to tap into these underutilized supporters it could greatly increase the groups strength. Furthermore, several of these supporters live in Saana, the Houthi-controlled capital of Yemen, where IS has previously been active but remains long dormant. These supporters present new areas IS in Yemen could expand to if they can find a way to utilize them.

The IS supporters identified in Aden present new recruits for existing IS cells in the city or people who can set up new cells. If they are active fighters, their connections with people in Yemen outside of Aden present opportunities for IS supporters to travel to Aden to join IS cells there. IS's ability to stage various attacks in Aden not only threatens security in the city but is an effective recruitment tactic, depicting IS as a more capable insurgent force than AQAP. Unfortunately, this data suggests IS has the fighters and supporters there to continue to stage attacks.

<sup>&</sup>lt;sup>191</sup> Joshua Koontz, "Desknote: The Growing Threat of ISIS in Yemen," Critical Threats, May 6, 2015, <a href="https://www.criticalthreats.org/analysis/desknote-the-growing-threat-of-isis-in-yemen">https://www.criticalthreats.org/analysis/desknote-the-growing-threat-of-isis-in-yemen</a>.

<sup>&</sup>lt;sup>192</sup> Sami Aboudi, "In Yemen Chaos, Islamic State Grows to Rival Al Qaeda," Reuters, June 30, 2015, <a href="https://www.reuters.com/article/us-yemen-security-islamicstate-insight/in-yemen-chaos-islamic-state-grows-to-rival-al-qaeda-idUSKCN0PA1T920150630">https://www.reuters.com/article/us-yemen-security-islamicstate-insight/in-yemen-chaos-islamic-state-grows-to-rival-al-qaeda-idUSKCN0PA1T920150630</a>.

<sup>&</sup>lt;sup>193</sup> Thomas Joscelyn and Bill Roggio, "More Islamic State Members Reject Governor of Yemen Province," FDD's Long War Journal, December 28, 2015, <a href="https://www.longwarjournal.org/archives/2015/12/more-islamic-state-members-reject-governor-of-yemen-province.php">https://www.longwarjournal.org/archives/2015/12/more-islamic-state-members-reject-governor-of-yemen-province.php</a>.

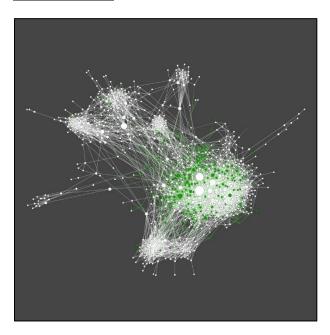
<sup>&</sup>lt;sup>194</sup> Critical Threats, "Gulf of Aden Security Review - November 30, 2017," Critical Threats, November 30, 2017, <a href="https://www.criticalthreats.org/briefs/gulf-of-aden-security-review/gulf-of-aden-security-review-november-30-2017">https://www.criticalthreats.org/briefs/gulf-of-aden-security-review/gulf-of-aden-security-review-november-30-2017</a>.

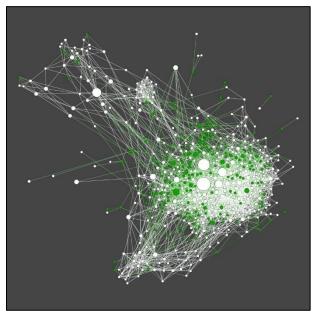
<sup>&</sup>lt;sup>195</sup> Agencies, "Yemen Attack: At Least 14 Killed in Raid on Aden Counter-terrorism Headquarters," The Guardian, February 25, 2018, https://www.theguardian.com/world/2018/feb/24/two-car-bombs-kill-at-least-six-and-wound-43-in-yemen-city-of-aden.

<sup>&</sup>lt;sup>196</sup> Courtney Kube, Robert Windrem and William M. Arkin, "U.S. Airstrikes against Yemen Terror Groups Grew Sixfold under Trump,"
NBCNews.com, February 2, 2018, <a href="https://www.nbcnews.com/news/mideast/u-s-airstrikes-yemen-have-increased-sixfold-under-trump-n843886">https://www.nbcnews.com/news/mideast/u-s-airstrikes-yemen-have-increased-sixfold-under-trump-n843886</a>.

External connections also provide opportunities for foreign fighters to reach IS in Yemen. Regional foreigners are known to have fought with the group while those from further afield have attempted to make the journey. <sup>197</sup> Foreign fighters, particularly from neighboring Saudi Arabia could prove useful for an expanding IS in Yemen. However, reaching the group would likely be difficult so making contact, possibly through social media, before the journey would be essential.

# **Iraq and Syria**





**Isolated Network Measurements** 

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
170	269	3.165	8	3.476	0.019	0.222	44

Isolated Network and Immediate Connections Measurements

isolated i	ctwork an	a miniculate Comit	octions incust	ai cilicitis			
Nodes	Edges	Avg Weighted	Diameter	Avg Path	Density	Avg Clustering	Connected
		Degree		Length		Components	Components
592	3373	11.395	8	3.15	0.019	0.21	2

Men who either traveled to Iraq and Syria to fight with IS or IS fighters originally from Iraq and Syria have connected and traveled to almost every region in this dataset. We have found Syria and Iraq veterans in or directly connected to Indonesia, the Philippines, East Africa, North Africa, Central and South Africa, Yemen, Turkey, Afghanistan, Pakistan, Europe, the Caribbean, Madagascar, and Latin America. The only network with no direct connections to Iraq or Syria appears to be the main North America network.

The isolated Iraq/Syria network has a very low connectivity. Instead, it is broken into 44 loosely connected components. A major cause of this is likely the fact that in May 2017 IS released a ruling prohibiting fighters from having Facebook accounts. However, the lack of strong connections also reflects the status of IS at the time of this research. By the end of 2017, IS held almost no territory in Iraq and Syria and many of its fighters had left the region for other IS hotspots. This is reflected in the discrepancy between the average weighted degree measurements of the isolated network and the network combined with its immediate connections. As a lone

<sup>107</sup> 

<sup>&</sup>lt;sup>197</sup> "New York Man Pleads Guilty to Attempting to Join ISIS in Yemen," United States Department of Justice, February 16, 2018 <a href="https://www.justice.gov/opa/pr/new-york-man-pleads-guilty-attempting-join-isis-yemen">https://www.justice.gov/opa/pr/new-york-man-pleads-guilty-attempting-join-isis-yemen</a>; Terrormonitor.org, Twitter Post, March 31, 2018, 12:33pm, <a href="https://twitter.com/Terror\_Monitor/status/980118460108718081">https://twitter.com/Terror\_Monitor/status/980118460108718081</a>.

network, Iraq/Syria nodes only have on average three connections, yet when those immediate connections are added to the network, each node has on average more than 11 connections.

One interesting exception can be found in the Dara'a, Syria IS network. This network, known as Jaish Khalid ibn al-Walid (JKW) and located in Southwest Syria along the border with Jordan and Israel, consists largely of local fighters and has been isolated from the main IS territories in the country since its foundation in 2016. Fifteen members of JKW were identified in one of the most complete networks yet. The JKW network has a moderate graph density of 0.396 but an average clustering coefficient of 0.763, by far the highest of any network in this dataset. The high degree of interconnectivity may partly explain why JKW has remained a cohesive and effective fighting force despite the assassinations of numerous emirs over the last two years. <sup>198</sup>

The group that would become IS originated in Iraq when a militant group there pledged allegiance to Al Qaeda in 2004. They were commonly known as Al Qaeda in Iraq, though after a merger with other groups in 2006 they renamed themselves as the Islamic State in Iraq. In 2010 Abu Bakr al-Baghdadi became the leader of the group. With the advent of the Syrian Civil War they expanded into Syria, setting up a branch in the country, Al Nusra. 199

In 2013 Baghdadi announced a merger of the Iraq and Syria branches and the formation of the Islamic State of Iraq and al Sham (ISIS). This was rejected by the leaders of Al Nusra and Al Qaeda, causing a split between them and ISIS.<sup>200</sup> However, ISIS were still able to seize territory in Syria.<sup>201</sup> They also advanced in Iraq, capturing major cities like Fallujah and Mosul by 2014.<sup>202</sup> In June 2014, standing at Al Nuri mosque in Mosul, the group's leader Baghdadi declared himself as Caliph and that ISIS, now rebranded as IS, was a new global caliphate.<sup>203</sup>

Following this announcement, multiple groups around the world pledged Baqiya, or allegiance, to Baghdadi and IS. Provinces were created in multiple parts of Africa, Middle East, and Asia.<sup>204</sup> In the following years an estimated 40,000 people would travel to IS territory in Iraq and Syria to live and fight for this new caliphate.<sup>205</sup> From Syria and Iraq IS would produce the propaganda that was so key to its success, work with its affiliates around the world to further the groups goals, and plan and direct terror attacks. While the group saw rapid losses of territory in 2017, they still control limited territory in Syria and in Iraq where they operate in several provinces as an insurgency.

The loosely connected nature of IS supporters in Iraq and Syria reflects how they are now a patchwork of statelets and cells spread across Iraq and Syria. It implies that while there is interconnectedness between them, it is limited and relies on other more secure places to communicate then mainstream social media. Conversely, the much higher levels of interconnectedness in JKW indicates their strength, indicating that they will remain as a strong force moving forward. As there are external connections from this group it also raises the possibility of people in JKW territory planning remote control attacks in other countries.

<sup>&</sup>lt;sup>198</sup> Aymenn Jawad al-Tamimi, "The Assassination of Jaysh Khalid ibn al-Waleed's Leader," Aymenn Jawad Al-Tamimi's Blog, October 24, 2016, <a href="http://www.aymennjawad.org/2016/10/the-assassination-of-jaysh-khalid-ibn-al-waleed">http://www.aymennjawad.org/2016/10/the-assassination-of-jaysh-khalid-ibn-al-waleed</a>; Paul McLoughlin, "Leadership of IS-linked southern Syrian militia 'wiped out' in suspected US strike," Al-Araby, June 29, 2017, <a href="https://www.alaraby.co.uk/english/news/2017/6/29/leadership-of-is-linked-syrian-militia-wiped-out-in-strike">https://www.alaraby.co.uk/english/news/2017/6/29/leadership-of-is-linked-syrian-militia-wiped-out-in-strike</a>.

<sup>199</sup> BBC News, "What Is 'Islamic State'?" BBC News, December 02, 2015, http://www.bbc.com/news/world-middle-east-29052144.

<sup>&</sup>lt;sup>200</sup> Thomas Joscelyn, "Al Qaeda's General Command Disowns the Islamic State of Iraq and the Sham," FDD's Long War Journal, February 03, 2014, <a href="https://www.longwarjournal.org/archives/2014/02/al qaedas general co.php">https://www.longwarjournal.org/archives/2014/02/al qaedas general co.php</a>.

<sup>&</sup>lt;sup>201</sup> Al Jazeera, "ISIL Recaptures Raqqa from Syria's Rebels," Al Jazeera, January 14, 2014, <a href="https://www.aljazeera.com/news/middleeast/2014/01/isil-recaptures-raqqa-from-syrias-rebels-2014114201917453586.html">https://www.aljazeera.com/news/middleeast/2014/01/isil-recaptures-raqqa-from-syrias-rebels-2014114201917453586.html</a>.

<sup>&</sup>lt;sup>202</sup> Suadad Al-salhy and Tim Arango, "Sunni Militants Drive Iraqi Army Out of Mosul," The New York Times, June 10, 2014, <a href="https://www.nytimes.com/2014/06/11/world/middleeast/militants-in-mosul.html">https://www.nytimes.com/2014/06/11/world/middleeast/militants-in-mosul.html</a>.

<sup>&</sup>lt;sup>203</sup> BBC News, "What Is 'Islamic State'?" BBC News, December 02, 2015, http://www.bbc.com/news/world-middle-east-29052144.

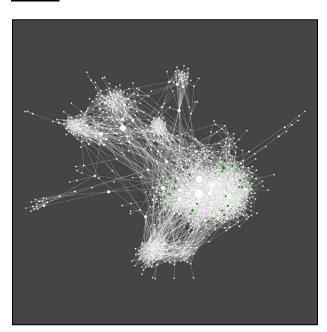
<sup>&</sup>lt;sup>204</sup> Karen Leigh, Jason French and Jovi Juan, "Islamic State and it's Affiliates," The Wall Street Journal, April 2016, <a href="http://graphics.wsj.com/islamic-state-and-its-affiliates/">http://graphics.wsj.com/islamic-state-and-its-affiliates/</a>.

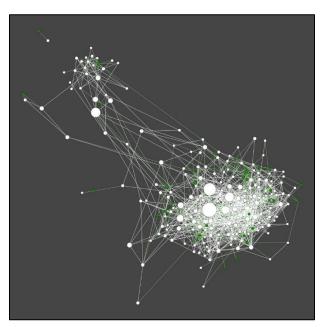
<sup>&</sup>lt;sup>205</sup> The Soufan Group, "Beyond the Caliphate: Foreign fighters and the threat of returnees," The Soufan Group, October 2017, <a href="http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf">http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf</a>.

Despite their looser interconnectedness, there are still many IS supporters in Iraq and Syria. This region had the most IS supporters found in the research, while Syria had the most IS supporters out of every individual country covered in this project. This alludes to IS still having large numbers of fighters in Iraq and Syria, while also suggesting they have the level of native support required to maintain an insurgency for an extended period.

The extensive number of external connections would have helped provide links to supporters wishing to travel to Iraq and Syria to fight or live there. With the fall of their caliphate the large numbers of foreign fighters IS once received will no longer continue. However, there is still the possibility of foreign fighters operating in the region. This is especially true if over time IS demonstrate a capable insurgency that will endure. Al Qaeda in Iraq as an insurgency gained several cohorts of foreign fighters, mostly regional fighters but also individuals from further afield. These external connections also allow IS supporters in Iraq and Syria to continue to plan remote control attacks in foreign countries, using contacts they have made or people they have recruited on Facebook. They also present opportunities for IS fighters in Iraq and Syria to travel to new locations to fight.

## **Levant**





### Isolated Network Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
31	8	0.516	3	1.5	0.017	0.417	24

### Isolated Network and Immediate Connections Measurements

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
233	1197	10.275	8	2.96	0.044	0.24	2

The isolated Levant network has an average clustering coefficient on par with the South Asia network yet has an extremely low graph density. This reflects combinations of a small, well-connected Palestine-Israel-Jordan network while the majority of rest of the Levant nodes have no direct connections to each other. However, this

<sup>&</sup>lt;sup>206</sup> Mathew Levitt, "Foreign Fighters and Their Economic Impact: A Case Study of Syria and Al-Qaeda in Iraq (AQI)," *Perspectives on Terrorism* 3, no. 3 (2009): <a href="http://www.terrorismanalysts.com/pt/index.php/pot/article/view/74/152">http://www.terrorismanalysts.com/pt/index.php/pot/article/view/74/152</a>.

region is highly connected to external networks, with each Levant node having on average 7.5 connections to external nodes.

As they are close to IS territory in Iraq and Syria, in some cases bordering them, it has been easier for many people from the Levant to travel and fight for the group. Around 3,000 have come from Jordan, 900 from Lebanon, and 60 from Israel. Some people have also travelled to IS territory in Syria and Iraq from Palestine, but the numbers are unknown.<sup>207</sup>

Despite their similar geographical closeness, IS have been unable to build as extensive networks or carry out as deadly attacks in the Levant as they have in Turkey. In Jordan the group has claimed one attack, in December 2016 at the city of Al Karak that killed 10.<sup>208</sup> Jordanian security forces have also clashed with IS along the border of Iraq when IS controlled those areas. This included a SVBIED attack on Jordanian forces that killed 6.<sup>209</sup> IS cells in the country continue to be arrested.<sup>210</sup>

In Lebanon IS claimed the deadly November 2015 Beirut bombings that killed over 40.<sup>211</sup> They have also carried out several other attacks and targeted killings.<sup>212</sup> Furthermore, a group in the country calling itself the Free Sunnis of Baalbek Brigade pledged allegiance to IS in 2014.<sup>213</sup> IS also succeeded in capturing a small amount of territory in Lebanon in mid-2014 after attacking across the border from Syria. They were finally driven out of their holdings in Arsal, Lebanon in late 2017.<sup>214</sup> IS cells in Lebanon continue to be arrested by security forces. In a recent case an arrested cell was set up by an Iraqi man sent to the country by IS.<sup>215</sup>

IS has had a complicated relationship in Palestine. Several groups operating in Palestine have either pledged allegiance to IS or are pro-IS. This includes the Sheikh Omar Hadid Brigade and the Mujahidin Shura Council in the Environs of Jerusalem. Despite some pro-IS groups in Palestine the main extremist group existing in Palestine, Hamas, has clashed with IS. These issues escalated in January 2018 when a video released by IS branch in Egypt claimed Hamas had betrayed Palestinians and called for attacks on the group before it showed the execution of a man accused of smuggling weapons to Hamas. The second structure of the

<sup>&</sup>lt;sup>207</sup> The Soufan Group, "Beyond the Caliphate: Foreign fighters and the threat of returnees," The Soufan Group, October 2017, <a href="http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf">http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf</a>; The Soufan Group, "Foreign Fighters, An updated assessment of the flow of foreign fighters into Iraq and Syria," The Soufan Group, December 2015, <a href="http://soufangroup.com/wp-content/uploads/2015/12/TSG">http://soufangroup.com/wp-content/uploads/2015/12/TSG</a> ForeignFightersUpdate3.pdf.

<sup>&</sup>lt;sup>208</sup> Dana Al Emam, "Jordanians Say Karak Attack Only Makes Them Stronger in Face of Terrorism," Jordan Times, December 19, 2016, <a href="http://jordantimes.com/news/local/jordanians-say-karak-attack-only-makes-them-stronger-face-terrorism">http://jordantimes.com/news/local/jordanians-say-karak-attack-only-makes-them-stronger-face-terrorism</a>.

<sup>&</sup>lt;sup>209</sup> BBC News, "Jordanian Troops Killed in Bomb Attack at Syria Border," BBC News, June 21, 2016, <a href="http://www.bbc.com/news/world-middle-east-36584885">http://www.bbc.com/news/world-middle-east-36584885</a>

<sup>&</sup>lt;sup>210</sup> Reuters, "Jordan Says It Foiled Large-scale ISIS Attack on Shopping Malls, Security Installations," Haaretz.com, January 16, 2018, <a href="https://www.haaretz.com/middle-east-news/jordan/jordan-says-it-foiled-large-scale-isis-attack-1.5729748">https://www.haaretz.com/middle-east-news/jordan/jordan-says-it-foiled-large-scale-isis-attack-1.5729748</a>.

<sup>&</sup>lt;sup>211</sup> Anne Barnard and Hwaida Saad, "ISIS Claims Responsibility for Blasts That Killed Dozens in Beirut," The New York Times, November 12, 2015, https://www.nytimes.com/2015/11/13/world/middleeast/lebanon-explosions-southern-beirut-hezbollah.html.

<sup>&</sup>lt;sup>212</sup> "Chapter 2. Country Reports: Middle East and North Africa," U.S. Department of State, 2016, https://www.state.gov/i/ct/rls/crt/2016/272232.htm#LEBANON.

<sup>213</sup> Stratfor, "Iraq: Free Sunnis of Baalbek Brigade Pledges Allegiance To Militant Leader," Stratfor, June 30, 2014, accessed April 08, 2018, https://worldview.stratfor.com/situation-report/iraq-free-sunnis-baalbek-brigade-pledges-allegiance-militant-leader.

<sup>&</sup>lt;sup>214</sup> Angus McDowall, "Islamic State Leaves Syria-Lebanon Border Zone," Reuters, August 29, 2017, <a href="https://www.reuters.com/article/us-mideast-crisis-lebanon-syria/islamic-state-leaves-syria-lebanon-border-zone-idUSKCN1B80PR?il=0.">https://www.reuters.com/article/us-mideast-crisis-lebanon-syria/islamic-state-leaves-syria-lebanon-border-zone-idUSKCN1B80PR?il=0.</a>

<sup>215</sup> Reuters. "Lebanon Disrupts Islamic State Cell Plot Using Informant," Reuters, January 19, 2018, <a href="https://www.reuters.com/article/us-lebanon-security-islamic-state/lebanon-disrupts-islamic-state-cell-plot-using-informant-idUSKBN1F81PI">https://www.reuters.com/article/us-lebanon-security-islamic-state/lebanon-disrupts-islamic-state-cell-plot-using-informant-idUSKBN1F81PI</a>.

<sup>&</sup>lt;sup>216</sup> Aymenn Jawad Al-Tamimi, "Jamaat Ansar Al-Dawla Al-Islamiya Fi Bayt Al-Maqdis: 11 August Statement: Translation and Analysis," Aymenn Jawad Al-Tamimi, August 13, 2014, <a href="http://www.aymennjawad.org/2014/08/jamaat-ansar-al-dawla-al-islamiya-fi-bayt-al">http://www.aymennjawad.org/2014/08/jamaat-ansar-al-dawla-al-islamiya-fi-bayt-al</a>.

<sup>&</sup>lt;sup>217</sup> Middle East Monitor, "Pro-ISIS Salafi Groups Seek Presence in the Gaza Strip," Middle East Monitor, July 29, 2015, https://www.middleeastmonitor.com/20150729-pro-isis-salafi-groups-seek-presence-in-the-gaza-strip/.

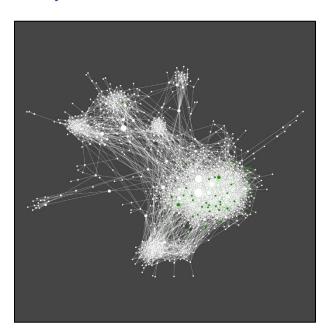
<sup>&</sup>lt;sup>218</sup> Iyad Abuheweila and Isabel Kershner, "ISIS Declares War on Hamas, and Gaza Families Disown Sons in Sinai," The New York Times, January 10, 2018, <a href="https://www.nytimes.com/2018/01/10/world/middleeast/isis-hamas-sinai.html">https://www.nytimes.com/2018/01/10/world/middleeast/isis-hamas-sinai.html</a>.

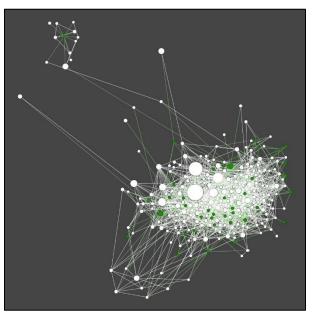
Despite their propaganda against Israel, IS has only carried out limited activity against the country. Pro-IS groups in Palestine have staged rocket attacks on Israel, as has the official IS branch in the Sinai. The first attack actually in Israel claimed through official media was in June 2017 when a stabbing attack killed an Israeli Police officer in Jerusalem. Several pro-IS cells have been dismantled by Israeli security forces.

The Levant dataset, though small, suggests there is more IS support in Palestine than other areas. With the presence of small pro-IS groups there as well as this apparent higher level of supporters, there is potential for greater IS activity in this area. This could involve clashing with Hamas or carrying out attacks against Israel. However, the lack of connectivity suggested by this research may pose a problem for any more coordinated activity. This would make larger activities as a group more difficult, suggesting any IS presence in the future will be on a smaller scale and limited to cells and individual supporters. This appears to be the same for Jordan, Israel, and Lebanon.

The high level of external connections as well as the geographical closeness to Syria, Iraq, and Egypt suggests this region will continue to be a source of IS foreign fighters. This should be a particular concern for Egypt, as Palestinians are already known to fight in the Sinai and this data suggests that there are a number of Palestinian IS supporters with external connections there.

# Turkey





#### **Isolated Network Measurements**

Nodes	Edges	Avg Weighted Degree	Diameter	Avg Path Length	Density	Avg Clustering Components	Connected Components
39	11	0.564	7	3.85	0.015	0	28

Isolated Network and Immediate Connections Measurements

Nodes Edges Avg Weighted Diameter Avg Path Density Avg Clustering Connected
---

<sup>219</sup> The Times of Israel, "Islamic State Claims Responsibility for Sinai Rocket Attack on Israel," The Times of Israel, October 16, 2017, <a href="https://www.timesofisrael.com/islamic-state-claims-responsibility-for-sinai-rocket-attack-on-israel/">https://www.timesofisrael.com/islamic-state-claims-responsibility-for-sinai-rocket-attack-on-israel/</a>.

<sup>&</sup>lt;sup>220</sup> Rachael Levy, "ISIS: We Are Operating in Gaza," Vocativ, August 25, 2014, , accessed April 08, 2018, <a href="http://www.vocativ.com/world/israel-world/isis-operating-gaza/">http://www.vocativ.com/world/israel-world/isis-operating-gaza/</a>; Jack Moore, "ISIS Claims First Deadly Attack in Israel after Jerusalem Stabbing," Newsweek, June 17, 2017, <a href="http://www.newsweek.com/isis-claims-first-deadly-attack-israel-after-jerusalem-stabbing-626934">http://www.newsweek.com/isis-claims-first-deadly-attack-israel-after-jerusalem-stabbing-626934</a>.

Reuters, "Israel Says It Foiled Planned ISIS-inspired Attack at Jerusalem," Reuters, September 28, 2017, <a href="https://www.reuters.com/article/us-israel-palestinians-shrine/israel-says-it-foiled-planned-isis-inspired-attack-at-jerusalem-holy-site-idUSKCN1C30YX">https://www.reuters.com/article/us-israel-palestinians-shrine/israel-says-it-foiled-planned-isis-inspired-attack-at-jerusalem-holy-site-idUSKCN1C30YX</a>.

		Degree		Length		Components	Components
254	1602	12.614	7	2.738	0.05	0.222	1

The Turkey network is unique and its data does not accurately reflect that state of IS support in the country – both from domestic supporters and the thousands of foreign supporters stuck in Turkey after trying to enter Syria. First, there were not enough nodes documented from Turkey to draw any broad conclusions on the status of IS networks in the country. Second, many IS fighters from Syria fled to Turkey over last year or two, leaving many isolated nodes within the context of the national network. Thus, examining only those nodes whose last known location was Turkey, the network is almost nonexistent. However, these nodes are highly connected to external networks with an average of 6.5 external connections per node. Again, this is due to the fact that only half of the nodes in this network are native Turks. There are 12 Syrians, an Iraqi, Libyan, and Saudi and two nodes of unknown origins.

Examining just the network of Turkish citizens reveals a slightly stronger community. On average, Turkish IS supporters have more than seven external connections, a graph density of 0.07 and average clustering coefficient of 0.265. While the vast majority of the 24 Turkey-origin nodes reside inside Middle East-oriented networks, one Turkish citizen is isolated from the rest and instead connected to 11 Southeast Asian nodes.

Despite not controlling territory in the country, IS has an extensive presence in Turkey. The country was an essential thoroughfare for foreign fighters traveling to the group in Syria and those leaving it. <sup>222</sup> Thousands of foreigners have been detained by Turkish security forces in the country. People from Turkey itself have joined the group in large numbers, with an estimated 1,500 making the journey. <sup>223</sup> Many IS cells and supporters are based in the country, with extensive IS networks being known to exist. <sup>224</sup> Additionally, thousands of people have been detained for suspected links to IS. <sup>225</sup>

Turkey was also a key part of IS's smuggling network. One of the ways the group would raise money was by selling oil, much of which went through the Turkish border. A variety of supplies and equipment was also smuggled into IS territory through Turkey, including equipment needed for the manufacture of weapons. IS even set up entire companies in Turkey to help buy equipment they needed.

The country was also an important location in IS plots around world. Members dispatched from the group's territory to carry out attacks would go through Turkey, including Abdelhamid Abaaoud who was the mastermind

<sup>222</sup> A G. ' HITTI T. I ' G. (

<sup>&</sup>lt;sup>222</sup> Aaron Stein, "The Islamic State in Turkey: A Deep Dive into a Dark Place," War on the Rocks, April 12, 2016, https://warontherocks.com/2016/04/the-islamic-state-in-turkey-a-deep-dive-into-a-dark-place/.

<sup>&</sup>lt;sup>223</sup> The Soufan Group, "Beyond the Caliphate: Foreign fighters and the threat of returnees," The Soufan Group, October 2017, <a href="http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf">http://thesoufancenter.org/wp-content/uploads/2017/10/Beyond-the-Caliphate-Foreign-Fighters-and-the-Threat-of-Returnees-TSC-Report-October-2017.pdf</a>.

<sup>&</sup>lt;sup>224</sup> Aaron Stein, "The Islamic State in Turkey: A Deep Dive into a Dark Place," War on the Rocks, April 12, 2016, https://warontherocks.com/2016/04/the-islamic-state-in-turkey-a-deep-dive-into-a-dark-place/.

<sup>&</sup>lt;sup>225</sup>Ceylan Yeginsu, "Turkey Detains 2 ISIS Militants Planning New Year's Eve Attack," The New York Times, December 30, 2015, <a href="https://www.nytimes.com/2015/12/31/world/europe/ankara-turkey-isis-attack.html">https://www.nytimes.com/2015/12/31/world/europe/ankara-turkey-isis-attack.html</a>; Al Jazeera, "Turkey Says over 800 Detained in Anti-ISIL Operations," ISIS News | Al Jazeera, February 06, 2017, <a href="https://www.aljazeera.com/news/2017/02/turkey-detains-hundreds-major-anti-isil-operation-170205124649016.html">https://www.aljazeera.com/news/2017/02/turkey-detains-hundreds-major-anti-isil-operation-170205124649016.html</a>.

<sup>&</sup>lt;sup>226</sup> Phillips, David L. "Research Paper: Turkey-ISIS Oil Trade." The Huffington Post. December 14, 2016. <a href="https://www.huffingtonpost.com/david-l-phillips/research-paper-turkey-isi">https://www.huffingtonpost.com/david-l-phillips/research-paper-turkey-isi</a> b 8808024.html.

<sup>&</sup>lt;sup>227</sup> Aaron Stein, "Islamic State Networks in Turkey," Atlantic Council, October 2016, <a href="http://www.publications.atlanticcouncil.org/islamic-state-networks-in-turkey/">http://www.publications.atlanticcouncil.org/islamic-state-networks-in-turkey/</a>.

<sup>&</sup>lt;sup>228</sup> "Treasury Sanctions ISIS Facilitators Across the Globe," U.S. Department of the Treasury, February 9, 2018, https://home.treasury.gov/news/press-release/sm0284.

behind the November 2015 Paris attacks that killed 130.<sup>229</sup> Furthermore, a plan to blow up an Australian plane involved explosives being successfully sent from Turkey to Australia by air freight.<sup>230</sup>

IS has also carried out many attacks within Turkey. This includes some of the deadliest attacks in Turkish history such as the October 2015 Ankara attack that killed 103, August 2016 Gaziantep attack that killed 55, and the June 2016 Istanbul attack that killed 45. Almost all the IS attacks carried out in Turkey were either remote controlled or directed by IS.<sup>231</sup>

The IS network in Turkey is unique amongst the countries we looked at, as it was made up of large numbers of foreigners as well as Turkish natives, though there are similarities to the Saudi Arabian network in that both contain large numbers of foreigners. Turkey's foreigners are made up of IS supporters fleeing Syria, as well as people who arrived in Turkey but were unable or unwilling to make the journey into Syria. Foreigners have been used several times in IS attacks in Turkey. With IS's loss of territory, centrally planned attacks carried out by people trained in Syria will be much harder to carry out, though not impossible. Conversely, as there are large numbers of external connections including ones to Syria, remote control attacks which have been carried out in Turkey before will possibly continue.

The large number of foreigners still present in Turkey suggests that the country is an important thoroughfare for IS supporters and members. Currently this network could help assist people who are leaving IS territory but have not given up on the group and its goals. It could provide connections for safe houses and other things IS supporters need while in Turkey, such as the contacts needed to travel to a new location, especially if they wanted to fight somewhere else. If IS successfully demonstrates their capabilities for a long-term insurgency in Iraq and Syria, Turkey could remain as a crucial stop-over point for foreign fighters, though on a much smaller scale.

## Facebook's Failure to Police Extremism

Facebook remains an important tool for IS supporters and members to spread its propaganda, radicalize others, and recruit new members. This research project revealed Facebook's ongoing inability to address IS content on its site in a manner that is comprehensive, consistent, and transparent. IS and its supporters have established an extensive and well-structure network of accounts, and Facebook's policy failures have allowed the platform to become a place for pro-IS networks to exist and proliferate. While the company has repeatedly stated that "there is no place for terrorists on Facebook," their current efforts to combat IS's misuse have not been sufficient.

The sheer reach and size of the networks identified in this project illustrates Facebook's deficient measures. We found 1,000 profiles explicitly supporting IS, all intertwined with only a few degrees of separation from one another. The importance of such a network cannot be understated. With such global reach, for example, an IS member in Syria could recruit someone in France to stage an attack in Paris, or could provide the contacts needed to assist someone interested in traveling to IS territory. The fact that several of the profiles we identified included active IS fighters and propagandists only furthers the concern about what IS related content remains and what activities occur on the platform.

<sup>&</sup>lt;sup>229</sup> Josh Keller, Haeyoun Park, and Jeremy White, "How the Organizer of the Paris Attacks Slipped Through Authorities' Hands," The New York Times, November 30, 2015, <a href="https://www.nytimes.com/interactive/2015/11/30/world/europe/paris-attacks-organizer-evaded-authorities.html">https://www.nytimes.com/interactive/2015/11/30/world/europe/paris-attacks-organizer-evaded-authorities.html</a>.

<sup>&</sup>lt;sup>230</sup> Jacqueline Williams, "Australia Details 'Sophisticated' Plot by ISIS to Take Down Plane," The New York Times, August 04, 2017, https://www.nytimes.com/2017/08/04/world/australia/sydney-airport-terror-plot-isis.html.

<sup>&</sup>lt;sup>231</sup> Marielle Ness, "Beyond the Caliphate: Turkey," Combating Terrorism Centre, June 2, 2017, <a href="https://ctc.usma.edu/app/uploads/2018/01/CTC-Turkey-Final.pdf">https://ctc.usma.edu/app/uploads/2018/01/CTC-Turkey-Final.pdf</a>.

Martin Evans, "Facebook Accused of Introducing Extremists to One Another through 'suggested Friends' Feature," The Telegraph, May 05, 2018, <a href="https://www.telegraph.co.uk/news/2018/05/65/facebook-accused-introducing-extremists-one-another-suggested/">https://www.telegraph.co.uk/news/2018/05/65/facebook-accused-introducing-extremists-one-another-suggested/</a>.

An analysis of the 1,000 accounts shows that 43% have been suspended by Facebook as of March 5, 2018. Removing profiles that disseminate IS propaganda, call for attacks, and otherwise support the group is important. It can help prevent others from accessing this material and can help sever the networks that connects these



Figure 1: An Amaq video on a pro-IS profile unremoved since September 2016.

supporters together. The fact that the majority of pro-IS profiles in this database have gone unremoved by Facebook at that time is troubling.

Given IS's ongoing presence on the platform, it is clear that Facebook's current content moderation systems are inadequate, contrary to the company's public statements. Facebook has said that they remove 99% of IS and Al Qaeda content using automated systems, even though the tech firm readily admitted in the past that "AI can't catch everything" and that "algorithms are not yet as good as people when it comes to understanding this kind of context."233 This reliance on automated systems means IS supporters' profiles often go unremoved by Facebook and can remain on the platform for extended periods of time. One example is the previously discussed ID 339 who, despite being an important and explicitly pro-IS profile that connects IS supporters from all around the world, does not actively share IS propaganda. The limited number of his posts means ID 339 is likely to be missed by automated systems. We

have also seen IS propogandists on Facebook taking steps to avoid being detected by automated systems – including avoiding uploading videos directly to Facebook and writing out official IS announcements as text posts – and sharing this advice to other pro-IS users.

Pro-IS posts and even official propaganda can remain on the platform for months or even years. This includes statements, pictures, and videos from a variety of sources including IS's Amag news agency. In one instance an Amag video was posted in September 2016 and remained available at the time of writing in April 2018. A full 45-minute official IS propaganda video, "We Will Surely Guide Them to Our Ways," was uploaded in May 2017 but was still viewable in April 2018. The video depicts combat footage from the Battle of Mosul and shows how IS produced a variety of weapon systems including car bombs and rocket launchers. This video was shared multiple times in April 2018, including by accounts that were removed by Facebook. Yet despite that this video still has not been removed. In several other instances, official IS propaganda has gone unremoved on Facebook for a similar period of time, and often unofficial pro-IS content can remain on the platform for even longer.



Figure 2: A full 45-minute official IS propaganda video, "We Will Surely Guide Them to Our Ways," uploaded in May 2017. It has 1,600 views.

IS content is not being removed quickly enough or prevented from being uploaded to Facebook, allowing IS content to be widely shared and viewed. A section of the official

<sup>&</sup>lt;sup>233</sup> Martin Evans, "Facebook Accused of Introducing Extremists to One Another through 'suggested Friends' Feature," The Telegraph, May 05, 2018, <a href="https://www.telegraph.co.uk/news/2018/05/65/facebook-accused-introducing-extremists-one-another-suggested/">https://www.telegraph.co.uk/news/2018/05/65/facebook-accused-introducing-extremists-one-another-suggested/</a>; Monika Bickert and Brian Fishman, "Hard Questions: How We Counter Terrorism," Newsroom, June 15, 2017, <a href="https://newsroom.fb.com/news/2017/06/how-we-counter-terrorism/">https://newsroom.fb.com/news/2017/06/how-we-counter-terrorism/</a>.

IS propaganda video *Inside the Khilafah* 7, produced by Al Hayat, was uploaded to Facebook by a supporter on February 9, 2018. It remained on the platform for over a week before being removed. Prior to that, it received more than 15,000 views and over 400 shares. Even after Facebook determined the clip violated its terms of service and should be removed, we observed other sections of that video being uploaded by different accounts, as well as full-length versions of *Inside the Khilafah* 7. In many cases, the clips and full videos received thousands of views.



Figure 3: A clip from Inside the Khilafah 7 uploaded to Facebook receiving over 15,000 views and 400 shares.

During our research, we witnessed some IS supporting profiles being reinstated by Facebook after being suspended. At least three profiles in our database were suspended by Facebook but later reinstated and allowed to post again. Pro-IS Facebook users also often posted about having their profiles reinstated, and some even posted saying they could help others get their profiles reinstated. According to a January 2018 report in the *Telegraph*, an IS supporter in the UK who shared large amounts of IS propaganda had his account reactivated nine times by Facebook after he complained to the moderators.<sup>234</sup>

In other cases, pro-IS profiles remain active despite having Facebook remove individual posts by that user. One IS supporter from and living in the United States, ID 592, had one of their posts identified as breaching Facebook user guidelines and removed. Their profile however remained up despite containing posts praising IS attackers, discussing attacks by the group, and containing links to another website the Facebook user ran with IS propaganda posters and links to pro-IS Telegram accounts. His profile remains active as of April 2018.

We also observed a case of recruitment over Facebook that occurred during the research period. Indonesian IS supporter ID 551 sent a friend request to the non-Muslim New York-based ID 548, which he accepted in late March 2017. Twelve days after ID 548 accepted ID 551's friend request, they had a short conversation in the comments of a post as follows:

ID 551: What your religion?

ID 548: I believe in one God. I really have no religion, but I find Islam very interesting.

ID 551: When you ready for convert to Islam?

ID 548: I have some questions that I would like to discuss. I apologize for the late response, but I am very busy as Spring Break for the University just came to an end and the last part of this semester has just begun.

ID 551: ok, I see. Good luck

ID 548: thank you

ID 551: you're welcome

ID 548: :)

Just over a month later on May 18, 2017, ID 551 posted an image from an official IS release to ID 548's Facebook wall which ID 548 liked. The image was not overtly IS, with the only identification being the IS flag in the top

<sup>&</sup>lt;sup>234</sup> Martin Evans, "Facebook Reinstated Account of Terror Suspect Nine times after He Complained They Were Stifling His Free Speec," The Telegraph, January 26, 2018, <a href="https://www.telegraph.co.uk/news/2018/01/26/facebook-reinstated-account-terror-suspect-nine-times-complained/">https://www.telegraph.co.uk/news/2018/01/26/facebook-reinstated-account-terror-suspect-nine-times-complained/</a>.



Figure 4: ID 154 recruiting people to work with him spreading propaganda.

right-hand corner. The image depicted several Qurans and ID 551 attached the caption "The miracle of Quran, still intact though buildings damaged." In July, ID 548 started posting Islamic, though not necessarily extremist, related content. His previous posts consisted of scientific topics mainly to do with space and art and videos relating to Hell. On September 4, ID 551 posted a clearly pro-IS image with the caption "the last caliphate" on ID 548's wall. On September 29, he posted a picture of children of southeast Asian origin in an IS training camp with the caption "tawheed," and on December 15, he posted a pro-IS image listing "Who hates the Islamic State and the Caliphate." All these explicitly pro-IS images were liked by ID 548.

Over a period of less than 6 months, ID 548 went from having no clear religion to becoming someone who

supports IS. Once the radicalization process was complete, ID 548 was able to rapidly connect to IS's Facebook network, becoming friends with dozens of pro-IS profiles including others in the US and around the world. These profiles included a well-known propagandist profile which would be able to provide ID 548 a constant stream of IS content. Notably, ID 548 became friends with several profiles of active IS fighters in the Philippines.

ID 551 played a clear role in radicalizing ID 548 and recruiting him as an IS supporter. Facebook was the platform that facilitated the process, and it also functioned as an IS news source for him. Furthermore, given his connections with existing IS networks on Facebook, the moment that ID 548 wishes to become more than an online supporter he has the necessary contacts available to him. These are individuals who can assist with traveling to fight for the group or staging an attack in America. This case provides a detailed insight into the scope to which IS has taken

advantage of Facebook's half-measures to combating extremism online.

Another user who runs multiple IS propaganda accounts has also been seen recruiting people on Facebook. In this case, we observed him posting a series of messages recruiting people to work with him to help spread IS propaganda. These are not just isolated incidents. A Bangladeshi man living in the UK was arrested on June 20, 2017 after authorities discovered that he sent thousands of messages on social media and messaging apps including Facebook to recruit people for IS.<sup>235</sup> Additionally, an IS external operations planner used Facebook to recruit a man in the UK to carry out an attack, and a Thai man used Facebook and Telegram to recruit nine Malaysians to form a cell with him to carry out attacks for IS.<sup>236</sup> This



Figure 5: Ten Facebook profiles with "Islamic State" in English or Arabic listed as their employer. All of these accounts were found in May 2018. Note the range of countries the users live in.

<sup>&</sup>lt;sup>235</sup> Lizzie Dearden, "Isis supporter who tried to recruit terrorists around the world from UK home jailed," *Independent* (London), February 26, 2018, <a href="https://www.independent.co.uk/news/uk/crime/isis-islamic-state-mohammed-kamal-hussain-recruiter-jailed-london-uk-terror-a8229666.html">https://www.independent.co.uk/news/uk/crime/isis-islamic-state-mohammed-kamal-hussain-recruiter-jailed-london-uk-terror-a8229666.html</a>.

<sup>236</sup> Ben Farmer, "Terrorists plotted Christmas bomb after meeting Islamic State commander on Facebook," *Telegraph* (London), January 8, 2018, <a href="https://www.telegraph.co.uk/news/2018/01/08/terrorists-plotted-christmas-bomb-meeting-islamic-state-commander/">https://www.telegraph.co.uk/news/2018/01/08/terrorists-plotted-christmas-bomb-meeting-islamic-state-commander/</a>; Amy Chew, "Terror Suspect

all suggests that the use of Facebook as a platform to recruit people for IS is widespread.

Many IS Facebook accounts listed IS, a version of the group's name, or one of IS's affiliates as their place of work in their profile (Figure 5). Doing so automatically generates a Facebook page for this declared workplace. Users cannot post content to these workplace pages but these pages do receive thousands of likes. Listing IS as their employer makes the profile easily identifiable as pro-IS so that others can see it and potentially bring the user into the wider pro-IS Facebook network. Moreover, doing so appears to have no effect on Facebook's

Notifications

Mark all as read · Settings

NEW

You have a new friend suggestion:

19 minutes ago

EARLIER

Figure 6: Facebook sending a notification for a new suggested friend - an active IS fighter in the Philippines



Figure 7: Two suggested friends on Facebook – a prolific pro-IS propogandist and an active IS fighter in the Philippines. Note the profile on the right has his work listed as "Abusayaff group," an IS affiliate in the Philippines.

removal systems, since many such profiles remain on the platform as of April 2018.

Facebook's algorithms have also actively helped connect IS supporters and build extremist networks through 'suggested friends'. The feature has promoted extremist profiles including those of IS supporters and active IS fighters and was likely the means by which ID 551 first found ID 548, according to our observations. In addition, both of us experienced this first-hand when conducting research for this report. Gregory Waters received dozens of pro-IS accounts as recommended friends after friending just one pro-IS account, and Robert Postings received an influx of Philippines-based IS supporters and fighters recommended friends after liking several non-extremist news pages about Marawi and the Philippines during IS's capture of the city (Figures 6 and 7). On two other occasions profiles used by us received an influx of IS supporters, propogandists, and active fighters. One profile was only used to view IS supporting profiles and did not friend any of those nodes while the other friended three nodes.

In these instances, many IS supporters and even active fighters appeared as suggested friends when a limited number of IS profiles were friended, or in the most extreme cases, no IS profiles were friended at all. Facebook, in their desire to connect as many people as possible, have inadvertently created a system which helps connects extremists and terrorists. A leaked memo from Facebook

Vice President Andrew Bosworth contained the lines "Maybe someone dies in a terrorist attack coordinated on our tools. And still we connect people." This suggests that Facebook's executive leadership either did not fully explore or simply ignored the ramifications of their connection-at-all-costs ethos, leading to situations where one of Facebook's features has contributed to the expansion of IS's network on the platform.

The risks posed by this IS supporting network on Facebook is made clear by a group of closely knit IS supporting Americans. The Facebook group appears to be unofficially headed by ID 592 and ID 596. In December 2017, ID 592 posted a link about the arrest of Everitt Aaron Jameson, who was charged with planning an IS inspired

Planning Islamic State Presence in Southern Thailand: Malaysian Security Source," Channel NewsAsia, April 19, 2018, , accessed April 21, 2018, <a href="https://www.channelnewsasia.com/news/asia/terror-suspect-planning-islamic-state-presence-in-thailand-10144370">https://www.channelnewsasia.com/news/asia/terror-suspect-planning-islamic-state-presence-in-thailand-10144370</a>.

<sup>&</sup>lt;sup>237</sup> Ryan Mac, Charlie Warzel, Alex Kantrowitz, "Growth At Any Cost: Top Facebook Executive Defended Data Collection In 2016 Memo — And Warned That Facebook Could Get People Killed," Buzzfeed, March 29, 2018, <a href="https://www.buzzfeed.com/ryanmac/growth-at-any-cost-top-facebook-executive-defended-data?utm">https://www.buzzfeed.com/ryanmac/growth-at-any-cost-top-facebook-executive-defended-data?utm</a> term=.apl1aOm7p#.sbjjERyW7.

terror attack he was going to carry out on a popular tourist destination in San Francisco during Christmas. <sup>238</sup> ID 592, ID 596, and another American IS supporter, ID 595, discussed in the comments of that post about how they were friends with him on Facebook and that Jameson had reached out to them, but they suspected him of being an undercover FBI agent and thus did not engage with him.



Figure 8: ID 592 (black) and 596 (blue) publicly discuss Everitt Aaron Jameson's arrest and claim to have known him.



Figure 9: A pro-IS American user (green) claims to know how the Utah teen learned how to make a bomb.

Jameson also participated in one of the weekly 'Facebook Live' sessions run by ID 596 which is believed to discuss overtly extremist and terrorist topics. After Jameson's arrest, ID 596 said that his next session would discuss tips on how to "avoid getting busted." Upon hearing of his arrest, ID 596 said "Someone should have taken him under their wing." Another post linked at least one member of the same American network to another attempted attacker, a Utah teen who attempted to bomb his high school. Referring to the teen, the user stated "actually I think that's the guy. Yeah, he was told how to make a peroxide bomb. The info was put into a (google?) dropbox and he was gonna do it." All of these discussions were held on publicly viewable Facebook profiles.

Jameson would be arrested and his attack prevented thanks to the efforts of undercover FBI agents.<sup>240</sup> However, if Jameson had established greater contact with ID 592, ID 595, or ID 596 instead of the undercover agents, the outcome could have been very different and his attack may well have succeeded. Facebook provided the opportunity

for Jameson to connect with likeminded people that could have aided his attack and perhaps even help him evade

<sup>&</sup>lt;sup>238</sup> "San Francisco: Man arrested over 'Christmas terror plan'," BBC, December 23, 2017, <a href="http://www.bbc.com/news/world-us-canada-42462463">http://www.bbc.com/news/world-us-canada-42462463</a>. <sup>239</sup> "Teen drawn to ISIS brought homemade bomb to Utah school, police say," NBC News, March 6, 2018, <a href="https://www.nbcnews.com/news/us-news/teen-drawn-isis-brought-homemade-bomb-utah-school-police-say-n854351">https://www.nbcnews.com/news/us-news/teen-drawn-isis-brought-homemade-bomb-utah-school-police-say-n854351</a>.

<sup>&</sup>lt;sup>240</sup> "San Francisco: Man arrested over 'Christmas terror plan'," BBC, December 23, 2017, <a href="http://www.bbc.com/news/world-us-canada-42462463">http://www.bbc.com/news/world-us-canada-42462463</a>.

detection from law enforcement. With such risks from this IS network on Facebook, it is important for Facebook to make greater efforts at combatting extremism on its platform.

Minimizing the exposure of pro-IS content on Facebook and effectively dismantling the pro-IS support networks that exist will help greatly to combat the group and prevent the spread of terror attacks around the world. This project has revealed the unfortunate failings of Facebook to effectively hinder IS's activities and presence on the platform, despite the company's claims.

## Appendix A – Origins and current locations of all nodes

How to read the Table A: 'Total' minus 'Origin' gives number of foreigners or people of unknown origins currently in the country. 'Total' minus 'Current' gives the minimum number of people from that country currently abroad. 'Origin' < 'Current' implies the country is a draw for foreigners. 'Origin' > 'Current' implies the country supplies more foreigners than it draws.

Table A: Unknown current locations filled

Region/Country	Origin	Current	Total	Region/Country	Origin	Current	Total
Iraq/Syria	159	171	211	Latin America	21	22	24
Iraq	53	57	67	Colombia	4	5	5
Syria	106	114	144	Brazil	3	4	4
Levant	29	31	38	Argentina	2	2	2
Jordan	5	6	8	Chile	2	2	2
Israel	1	2	2	Ecuador	1	2	2
Palestine	18	19	23	Venezuela	7	5	7
Lebanon	5	4	5	Guatemala	2	2	2
Turkey	24	40	42	Suriname	1	0	1
Gulf States	37	43	52	South Asia	106	125	135
Saudi Arabia	9	15	19	Afghanistan	70	93	95
Yemen	24	22	26	Pakistan	12	9	13
Qatar	2	3	3	Bangladesh	15	14	16
Oman	1	2	2	India	3	2	3
Kuwait	1	1	2	Iran	3	3	3
North Africa	97	100	119	Sri Lanka	1	2	2
Egypt	48	52	60	Maldives	1	2	2
Sudan	12	11	12	Nepal	1	0	1
Libya	21	25	26	Southeast Asia	180	170	191
Tunisia	9	6	12	Indonesia	89	77	91
Algeria	7	6	10	Philippines	56	56	60
East Africa	84	<b>79</b>	89	Thailand	16	17	18
Madagascar	21	21	21	Malaysia	13	15	16
Somalia	23	17	23	Myanmar	4	3	4
Tanzania	17	18	18	Cambodia	1	1	1
Ethiopia	9	8	10	Brunei	1	1	1
Kenya	6	5	6	East Asia	5	8	9
Mauritius	5	4	5	Japan	2	2	2
Mozambique	2	3	3	South Korea	1	3	3
Eritrea	1	1	1	China	1	1	2
Burundi	0	1	1	Taiwan	0	1	1
South Sudan	0	1	1	Hong Kong	1	1	1
West Africa	20	17	21	Central Asia	4	4	4
Morocco	15	12	15	Georgia	1	1	1
Burkina Faso	1	1	1	Azerbaijan	1	1	1
Senegal	1	1	1	Tajikistan	1	1	1

<sup>&</sup>lt;sup>241</sup> 'Total' indicates the number of unique profiles either from the country or currently in the country. Total exceeds 1000 due to individuals traveling between countries.

Ghana	0	1	1	Kyrgyzstan	1	1	1
Guinea	1	1	1	Australia	1	4	4
Gambia	1	1	1	Europe	46	62	72
Mali	1	0	1	United Kingdom	8	12	14
Central &	5	6	6	France	2	8	8
South Africa							
Central African	2	2	2	Spain	4	5	6
Republic							
South Africa	1	2	2	Netherlands	2	2	2
Namibia	1	1	1	Denmark	1	0	1
Congo	1	1	1	Germany	1	1	1
North America	23	27	30	Switzerland	1	2	2
United States	19	25	26	Austria	2	4	5
Canada	2	1	2	Italy	0	3	3
Mexico	2	1	2	Romania	1	1	1
Caribbean	27	26	28	Greece	2	2	3
Trinidad and	21	21	21	Norway	1	1	1
Tobago							
Dominican	4	2	4	Sweden	2	2	3
Republic							
Puerto Rico	0	1	1	Finland	0	1	1
Bahamas	1	1	1	Ukraine	1	1	2
Haiti	1	1	1	Russia	18	17	19
				Unknown	131	69	131
				Unknown Orig	in and	Current	69
				Location			

Table B: Current locations unchanged

Pagion/Country Origin Current

Region/Country	Origin	Current	Total	Region/Country	Origin	Current	Total
Iraq/Syria	159	145	211	Latin America	21	19	24
Iraq	53	46	67	Colombia	4	3	5
Syria	105	99	143	Brazil	3	4	4
Levant	29	28	38	Argentina	2	2	2
Jordan	5	5	8	Chile	2	2	2
Israel	1	2	2	Ecuador	1	2	2
Palestine	18	17	23	Venezuela	7	5	7
Lebanon	5	4	5	Guatemala	2	1	2
Turkey	24	35	42	Suriname	1	0	1
<b>Gulf States</b>	37	36	52	South Asia	106	103	135
Saudi Arabia	9	14	19	Afghanistan	70	77	96
Yemen	24	17	26	Pakistan	12	7	13
Qatar	2	2	3	Bangladesh	15	14	16
Oman	1	2	2	India	3	1	3
Kuwait	1	1	2	Iran	3	1	3
North Africa	97	86	119	Sri Lanka	1	1	2
Egypt	48	42	60	Maldives	1	2	2
Sudan	12	11	12	Nepal	1	0	1
Libya	21	22	25	Southeast Asia	180	158	191

82

Tunisia	9	6	12	Indonesia	89	70	91
Algeria	7	5	10	Philippines	56	55	60
East Africa	84	62	89	Thailand	16	16	18
Madagascar	21	19	21	Malaysia	13	12	16
Somalia	23	11	23	Myanmar	4	3	4
Tanzania	17	13	18	Cambodia	1	1	1
Ethiopia	9	5	10	Brunei	1	1	1
Kenya	6	4	6	East Asia	5	7	9
Mauritius	5	4	5	Japan	2	1	2
Mozambique	2	3	3	South Korea	1	3	3
Eritrea	1	1	1	China	1	1	2
Burundi	0	1	1	Taiwan	0	1	1
South Sudan	0	1	1	Hong Kong	1	1	1
West Africa	20	13	21	Central Asia	4	1	4
Morocco	15	10	15	Georgia	1	1	1
Burkina Faso	1	1	1	Azerbaijan	1	0	1
Senegal	1	0	1	Tajikistan	1	0	1
Ghana	0	1	1	Kyrgyzstan	1	0	1
Guinea	1	1	1	Australia	1	3	4
Gambia	1	0	1	Europe	46	58	72
Mali	1	0	1	United Kingdom	8	12	14
Central &	5	5	5	France	2	8	8
South Africa							
Central African	2	2	2	Spain	4	3	6
Republic							
South Africa	1	2	1	Netherlands	2	2	2
Namibia	1	1	1	Denmark	1	0	1
Congo	1	0	1	Germany	1	1	1
North America	23	25	34	Switzerland	1	2	2
United States	19	24	28	Austria	2	4	5
Canada	2	1	2	Italy	0	3	3
Mexico	2	0	2	Romania	1	1	1
Caribbean	27	26	28	Greece	2	1	3
Trinidad and	21	21	21	Norway	1	1	1
Tobago							
Dominican	4	2	4	Sweden	2	2	3
Republic							
Puerto Rico	0	1	1	Finland	0	1	1
Bahamas	1	1	1	Ukraine	1	1	2
Haiti	1	1	1	Russia	18	16	19
				Unknown	131	194	256
				Unknown Orig Location	in and	Current	69

## Appendix B – Community breakdown for Maps 2 and 3

Map 2: list of countries in select communities

Country			Ì		
Country	Origin	Current	Community 8	0	2
Community 0	1.0	22	France	0	
Afghanistan	16	22	Greece	1	1
Algeria	1	1	Indonesia	4	3
Bangladesh	1	1	Madagascar	21	21
Egypt	0	1	Morocco	1	1
Georgia	1	1	Palestine	1	1
Indonesia	1	2	Philippines	0	1
India	1	1	Senegal	1	1
Iraq	2	4	Syria	1	1
Libya	1	1	Unknown	2	0
Mexico	1	0	Community 9		
Morocco	2	1	Afghanistan	2	2
Mozambique	0	1	Bangladesh	12	13
Pakistan	3	2	Egypt	1	2
Palestine	1	1	Eritrea	1	1
Russia	3	3	Libya	1	2
Saudi Arabia	1	0	Myanmar	3	1
Syria	3	3	Russia	1	2
Tunisia	1	1	Somalia	7	6
Turkey	1	2	Sudan	1	0
UAE	0	1	Syria	1	2
Unknown	14	8	UAE	1	0
USA	1	1	<b>Community 10</b>		
Venezuela	2	1	Egypt	1	1
West Africa	1	0	Kyrgyzstan	1	1
Community 1			Russia	8	7
Spain	1	1	Sudan	9	9
Trinidad and Tobago	17	17	Syria	2	2
Unknown	1	1	Turkey	0	1
Venezuela	1	1	Unknown	1	1
Community 2			Community 11		
Indonesia	5	5	Afghanistan	1	0
Iraq	1	1	Ecuador	1	1
Netherlands	1	1	Egypt	2	1
Trinidad and Tobago	2	2	Indonesia	1	1
USA	11	11	Iraq	2	2
Community 4			Jordan	2	1
Afghanistan	0	1	Libya	4	5
Algeria	3	3	Palestine	5	4
Argentina	1	1	Saudi Arabia	1	1
Austria	0	1	Spain	1	1
Brazil	2	2	Syria	20	29
2111211			Jiiu	20	<u>-</u> /

Burkina Faso	1	1	Turkey	2	2
Canada	1	1	Unknown	9	4
Chile	1	1	Yemen	10	9
Columbia	1	2	Community 12		
Dominican Republic	1		Australia	1	1
Ecuador	0	1	Colombia	1	1
Egypt	29	31	France	0	1
France	1	4	Indonesia	11	10
Indonesia	1	0	Iraq	0	1
Iran	1	1	Libya	0	1
Iraq	8	10	Malaysia	2	2
Italy	0	2	Maldives	1	1
Jordan	2	2	Mauritius	5	4
Kuwait	1	0	Nigeria	1	0
Lebanon	2	1	Pakistan	0	1
Libya	2	2	Palestine	0	2
Malaysia	0	1	Philippines	52	51
Maldives	0	1	Saudi Arabia	0	2
Morocco	5	4	Syria	1	0
Mozambique	1	1	Tajikistan	1	1
Netherlands	1	1	Thailand	8	8
			Trinidad and		
Oman	1	1	Tobago	1	1
Palestine, Gaza	4	5	United Kingdom	0	1
Qatar	0	1	Unknown	5	1
Russia	2	2	USA	2	2
Saudi Arabia	2	4	Community 13		
South Korea	1	1	Afghanistan	1	3
Spain	1	2	Argentina	1	1
Sri Lanka	1	1	Austria	2	1
Sudan	2	2	Bahamas	1	1
Sweden	1	1	Chile	1	1
Switzerland	1	1	China	0	1
Syria	22	17	Colombia	1	1
Tunicio	2	1	Dominican	2	1
Tunisia	6	10	Republic	4	4
Turkey United Vinadom	1		Egypt Ethiopia	1	1
United Kingdom Unknown	27	1 15	Finland	0	1
USA Venezuela	3	5	Guatamala	1 1	1
	5	3	Guatemala India	1	
Yemen Community 5	J	3	India	2	1
Community 5	0	1			
Australia	0	1	Iraq	20	16
Brunei 1:	1	1	Israel	0	1
Burundi	0	1	Lebanon	1	1

Congo	1	1	Libya	2	2
Egypt	1	1	Malaysia	2	3
Ethiopia	6	5	Morocco	3	3
Gambia	1	1	Oman	0	1
Guinea	1	1	Palestine	2	3
Indonesia	1	1	Philippines	1	0
Iraq	1	3	Qatar	1	1
Kenya	6	5	Russia	2	1
Mozambique	1	1	Romania	1	1
Saudi Arabia	0	1	Saudi Arabia	2	5
Somalia	11	8	Somalia	1	1
South Africa	1	1	South Africa	0	1
Syria	1	1	Sri Lanka	0	1
Tanzania	17	18	Switzerland	0	1
Trinidad and Tobago	1	1	Syria	33	32
United Kingdom	1	1	Thailand	1	1
Unknown	3	1	Tunisia	2	1
USA	0	1	Turkey	4	8
Community 6			Ukraine	0	1
Afghanistan	46	59	United Kingdom	4	2
Algeria	1	0	Unknown	25	21
Bangladesh	1	0	USA	1	1
Colombia	1	1	Venezuela	3	3
Egypt	2	1	Yemen	5	4
Iraq	2	3	Community 14		
Mexico	1	1	Afghanistan	1	3
Pakistan	8	5	Algeria	2	2
Philippines	1	1	Australia	0	2
Palestine	1	0	Brazil	0	1
Saudi Arabia	0	1	Egypt	3	4
Syria	1	5	France	1	1
Unknown	12	0	Greece	1	1
Community 7			Haiti	1	1
Cambodia	1	1	Indonesia	2	1
Canada	1	0	Iraq	10	8
Central African					
Republic	2	2	Israel	1	1
Egypt	1	1	Jordan	1	2
Ghana	0	1	Libya	8	8
Hong Kong	1	1	Morocco	3	2
Indonesia	59	51	Myanmar	1	1
Iraq	0	2	Norway	1	1
Japan	2	2	Pakistan	1	1
Jordan	0	1	Palestine	1	0
Malaysia	8	8	Puerto Rico	0	1
Myanmar	1	1	Qatar	1	1

Namibia	1	1	Russia	1	1
Palestine	1	1	Saudi Arabia	1	0
Philippines	1	2	Somalia	2	1
Saudi Arabia	0	1	Spain	1	1
South Korea	0	2	Sweden	1	0
Suriname	1	0	Syria	11	9
Syria	3	3	Thailand	2	2
Taiwan	0	1	Tunisia	3	3
Thailand	4	5	Turkey	7	10
Turkey	1	1	United Kingdom	1	4
Unknown	5	1	Unknown	19	14
USA	0	3	USA	1	1
Yemen	0	1	Yemen	1	2

Map 3: List of countries in select communities

Country	Origin	Current	Community 20		
Community 0			Afghanistan	45	58
Cambodia	1	1	Algeria	1	0
Canada	1	1	Bangladesh	1	0
Central African					
Republic	2	2	Egypt	2	1
Ghana	0	1	Pakistan	8	5
Hong Kong	1	1	Saudi Arabia	0	1
Indonesia	57	50	Syria	0	2
Iraq	0	2	Unknown	10	0
Japan	2	2	Community 21		
Jordan	0	1	Algeria	3	2
Malaysia	9	9	Austria	0	1
Namibia	1	1	Egypt	13	11
Palestine	1	1	France	1	2
Philippines	1	2	Indonesia	1	0
Romania	1	1	Italy	0	1
Suriname	1	0	Jordan	1	0
South Korea	0	1	Lebanon	1	0
Syria	2	3	Libya	1	1
Thailand	1	2	Malaysia	0	1
Taiwan	0	1	Maldives	0	1
Tunisia	1	0	Palestine	1	1
Turkey	1	1	Qatar	0	1
Unknown	3	1	South Korea	1	1
USA	0	2	Syria	1	2
Community 1			Turkey	2	3
Burkina Faso	1	1	United Kingdom	1	1
Iraq	1	0	Unknown	8	4
Jordan	1	0	USA	0	2
Palestine	1	1	Yemen	1	0

			T		-
Syria	14	19	Community 22		
Unknown	3	0	Bangladesh	12	13
Community 2			Eritrea	1	1
Afghanistan	0	1	Indonesia	1	1
Austria	0	2	Iraq	1	1
Denmark	1	0	Jordan, Amman	1	1
Iraq	1	0	Myanmar	4	2
Palestine	1	1	Russia	1	2
Sudan	9	9	Somalia	7	6
Turkey	1	1	Syria	0	1
Ukraine	1	0	Thailand, Pattani	1	1
Unknown	0	1	Unknown	1	1
Community 5			Community 24		
Indonesia	2	2	Afghanistan	0	1
Iraq	1	1	Colombia	1	1
Netherlands	1	1	Dominican Republic	1	0
USA	11	11	Egypt	3	4
Community 10			Indonesia	2	1
Ecuador	1	1	Iraq	10	5
Indonesia	8	7	Israel	0	1
Palestine	1	1	Kuwait	1	0
Saudi Arabia	0	1	Malaysia	0	1
South Korea	0	1	Morocco	2	2
Syria	3	3	Palestine	1	2
Thailand	10	9	Qatar	1	1
Unknown	1	1	Saudi Arabia	1	2
Yemen	0	1	Sri Lanka	0	1
Community 12			Syria	10	11
Burundi	0	1	Turkey	0	3
Congo	1	1	United Kingdom	1	0
Egypt	1	1	Unknown	11	9
Ethiopia	0	1	Community 25		
Guinea	1	1	Afghanistan	16	22
Iraq	1	3	Algeria	1	1
Kenya	6	5	Bangladesh	1	0
Mozambique	1	1	India	1	1
Somalia	10	8	Indonesia	0	1
South Africa	1	1	Iraq, Kirkuk	1	2
Syria	1	1	Mozambique	0	1
Tanzania	19	18	Pakistan	3	2
United Kingdom	2	1	Palestine	1	1
Unknown	3	1	Saudi Arabia	1	0
USA	0	1	Syria Syria	2	1
Community 14	<u> </u>	1	Tunisia	1	1
Australia	1	1	Turkey	0	1
Colombia	1	1	Unknown	9	3
COMMINIA	1	1	Olikilowii	7	<u>J</u>

				_	
France	0	1	USA	1	1
Indonesia	2	2	Venezuela	1	1
Iraq	0	1	Community 27		
Libya	0	1	Argentina	1	1
Malaysia	1	1	Afghanistan	0	1
Maldives	1	1	Chile	1	1
Mauritius	1	0	Dominican Republic	1	1
Nigeria	1	0	Egypt	2	2
Pakistan	0	1	Iraq	6	7
Palestine	0	1	Libya	1	1
Philippines	52	51	Morocco	1	1
Saudi Arabia	0	2	Palestine	1	0
Syria	1	0	Russia	1	0
United Kingdom	0	1	Somalia	1	1
Unknown	4	1	Sweden	1	0
USA	1	1	Syria	7	10
Community 16			Thailand	1	1
Mauritius	4	4	Turkey	2	2
Syria	2	2	United Kingdom	1	2
Trinidad and					
Tobago	18	18	Unknown	6	3
Unknown	1	1	Venezuela	1	1
USA	1	1	Yemen	1	1
Community 17					
Egypt	1	0			
France	0	2			
Greece	1	1			
Indonesia	2	1			
Madagascar	21	21			
Philippines	0	1			
Senegal	1	1			
Syria	2	3			
Unknown	4	2			
•					

## Appendix C – Documented Foreign Fighters

Number of foreigners in	From	Number of S	Syrians in Foreign
		Countries	
Syria		1	Afghanistan
1	Afghanistan	4	Egypt
1	China	1	France
1	Dominican Republic	1	Greece
2	Egypt	1	Malaysia
1	Greece	2	Palestine
1	Indonesia	3	Saudi Arabia

1         Myanmar         1         Ukraine           1         Pakistan         1         Yemen           1         Palestine         1         Unknown           2         Russia         Number of Iraqis in Foreign Countries           1         Thailand         3         Afghanistan           2         Tunisia         1         Turkey           1         Turkey         1         United Kingdom           1         Venezuela         1         Yemen           1         Yemen         1         Yemen           12         Unknown         Image: Comparison of the property of t	2	Jordan	12 Turkey
1         Palestine         1         Unknown           2         Russia         Number of Iraqis in Foreign Countries           1         Thailand         3         Afghanistan           2         Tunisia         1         Turkey           1         Turkey         1         United Kingdom           1         Venezuela         1         Yemen           1         West Africa         1         Yemen           12         Unknown         Iraq           2         Afghanistan         1         Egypt           1         Indonesia         1         Mexico           1         Palestine         1         Philippines           2         Somalia         1         Unknown           Afghanistan         1         Bangladesh         1         Bangladesh           1         Egypt         1         Egypt         1         Egypt	1	Myanmar	1 Ukraine
2         Russia         Number of Iraqis in Foreign Countries           1         Thailand         3         Afghanistan           2         Turkey         1         Turkey           1         Turkey         1         United Kingdom           1         Venezuela         1         Yemen           1         Yemen         1         Yemen           12         Unknown         Iraq         2         Afghanistan           1         Egypt         1         Indonesia         1         Mexico           1         Palestine         1         Philippines         2         Somalia         1         Unknown           Afghanistan         1         Algeria         1         Bangladesh         1         Egypt	1	Pakistan	1 Yemen
Thailand   3	1	Palestine	1 Unknown
Tunisia	2	Russia	Number of Iraqis in Foreign Countries
1         Turkey         1         United Kingdom           1         Venezuela         1         Yemen           1         Yemen         1         Yemen           12         Unknown         Iraq         2         Afghanistan           1         Egypt         1         Indonesia         1         Mexico         1         Palestine         1         Philippines         2         Somalia         1         Unknown         Afghanistan         1         Algeria         1         Bangladesh         1         Egypt	1	Thailand	3 Afghanistan
1         Venezuela         1         Yemen           1         Yemen         12         Unknown           Iraq         2         Afghanistan           1         Egypt         1         Indonesia           1         Mexico         1         Palestine           1         Philippines         2         Somalia           1         Unknown         Afghanistan           1         Bangladesh           1         Egypt	2	Tunisia	1 Turkey
1         West Africa           1         Yemen           12         Unknown           Iraq         2           2         Afghanistan           1         Egypt           1         Indonesia           1         Mexico           1         Palestine           1         Philippines           2         Somalia           1         Unknown           Afghanistan         Algeria           1         Bangladesh           1         Egypt	1	Turkey	1 United Kingdom
1         Yemen           12         Unknown           Iraq         2           2         Afghanistan           1         Egypt           1         Indonesia           1         Mexico           1         Palestine           1         Philippines           2         Somalia           1         Unknown           Afghanistan         Algeria           1         Bangladesh           1         Egypt	1	Venezuela	1 Yemen
Iraq           2         Afghanistan           1         Egypt           1         Indonesia           1         Mexico           1         Palestine           1         Philippines           2         Somalia           1         Unknown           Afghanistan         I           1         Bangladesh           1         Egypt	1	West Africa	
Iraq           2         Afghanistan           1         Egypt           1         Indonesia           1         Mexico           1         Palestine           1         Philippines           2         Somalia           1         Unknown           Afghanistan         Algeria           1         Bangladesh           1         Egypt	1	Yemen	
2 Afghanistan 1 Egypt 1 Indonesia 1 Mexico 1 Palestine 1 Philippines 2 Somalia 1 Unknown  Afghanistan 1 Algeria 1 Bangladesh 1 Egypt	12	Unknown	
1Egypt1Indonesia1Mexico1Palestine1Philippines2Somalia1UnknownAfghanistanIndicate the part of	Iraq		
1         Indonesia           1         Mexico           1         Palestine           1         Philippines           2         Somalia           1         Unknown           Afghanistan         Algeria           1         Bangladesh           1         Egypt	2	Afghanistan	
1Mexico1Palestine1Philippines2Somalia1UnknownAfghanistan1Algeria1Bangladesh1Egypt	1	Egypt	
1 Palestine 1 Philippines 2 Somalia 1 Unknown  Afghanistan 1 Algeria 1 Bangladesh 1 Egypt	1	Indonesia	
1 Philippines 2 Somalia 1 Unknown  Afghanistan 1 Algeria 1 Bangladesh 1 Egypt		Mexico	
2 Somalia 1 Unknown  Afghanistan 1 Algeria 1 Bangladesh 1 Egypt	1	Palestine	
1 Unknown  Afghanistan  1 Algeria  1 Bangladesh  1 Egypt	1	Philippines	
Afghanistan  1 Algeria  1 Bangladesh  1 Egypt		Somalia	
1 Algeria 1 Bangladesh 1 Egypt	1	Unknown	
1 Bangladesh 1 Egypt	Afghanistan		
1 Egypt	1	Algeria	
	1	Bangladesh	
1 Indonesia	1		
1 midonesia	1	Indonesia	
3 Iraq			
1 Syria		· · · · · · · · · · · · · · · · · · ·	
15 Unknown		Unknown	
Southeast Asia			
1 Canada		Canada	
1 Egypt	1		
1 Syria	1		
3 Unknown	3	Unknown	