

How acts of terrorism are financed and orchestrated in secrecy today: criminal offenses, donations, legal businesses and smartphone applications

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Abstract

The aim of this study is to present how acts of terrorism are financed and orchestrated in secrecy today, by committing criminal offenses, through donations, and by legal businesses and by the use of smartphone applications. Terrorists abuse the anonymity of the internet, and constantly look for secure channels of communication, to further their goals and to stay one step ahead of law enforcement. Through encrypted channels, terrorists spread their propaganda, recruit new members, and try to reach potential financiers etc.

In this paper, we introduce the categories of smartphone apps used by terrorists. We also examine the weak point of these apps, and methods for infiltration.

Keywords: *terrorist financing, intelligence, smartphone applications, terrorist groups, IRA, security, propaganda, ISIS*

I. Introduction

Terrorist groups exploit the widespread access and the anonymity of the internet, especially the rapid growth of social media, to raise funds from sympathetic individuals on a global scale. The phenomenon represents a growing terrorist financing threat. Terrorist organizations spread their propaganda by social network and reach out to sympathisers. Terrorists also use social networks for fundraising campaigns. Terrorist organizations are able to reach a wide audience through peer-to-peer horizontal communication (such as Facebook, Twitter, Instagram etc.) and sometimes that continues through mobile messenger applications (such as WhatsApp or Viber) and even more secure communication networks (such as Surespot). Terrorists' use of organized crowdfunding is also a growing terrorist financing risk¹. Terrorist financing on social media can take several forms, donors may sometimes not even realize, that they are financing terrorist activity, because terrorists also conduct fundraising under fake charities, where donors believe they donate for humanitarian purpose. Platforms of

¹ FATF REPORT Emerging Terrorist Financing Risks October 2015, pp. 30-31.

<http://www.fatf-gafi.org/media/fatf/documents/reports/Emerging-Terrorist-Financing-Risks.pdf> (5/12/2018.)

social media are mouthpieces for broadcasting explicit calls for financial support. Terrorist supporters direct potential funders to communication platforms. Terrorists encourage donors to use encrypted mobile applications, to hide from external surveillance. This means serious a difficulty for efforts against terrorist financing. For example, the Telegram application is being used as a channel of communication regarding the exchange or transfer of funds and for recruitment purposes².

II. Sources and techniques of terrorist financing

1. Committing criminal offenses

Terrorism is a form of criminality, namely one of its most severe and dangerous form. Because of this, naturally terrorist organizations are not afraid to commit other criminal offenses. The risks of these other criminal offenses are usually lower than those of acts of terrorism, the sentences applicable are generally lower. Terrorists usually prefer such types of criminal offenses that generate a large income in a short amount of time. Out of these criminal offenses terrorists probably prefer drug-trafficking the most. Drug-trafficking generates 60-90% of the income of Colombian paramilitary groups and guerilla fighters of Colombia³. Furthermore, some fatwas expressly authorise Islamic terrorist organizations to use drug-trafficking as a tool in their fight against the decadent West⁴.

In addition, kidnapping is also a significant source of income for terrorists. For example, The Islamic Movement of Uzbekistan (IMU)⁵ earned 5 million USD by releasing 4 Japanese geologists, after kidnapping them in 1999 in Kyrgyzstan⁶.

Illegal immigrant smuggling is also a profitable tool for terrorists. The difference of the quality of life between developed and underdeveloped regions of the world, and the desire for the security provided by the democratic states brought economic and political migration into being. To get to Western Europe, a Bangladeshi or Chinese citizen should be prepared to sacrifice up to 20-25 thousand dollars⁷.

On the one hand, money laundering is a lucrative activity for terrorists, thus, it is a tool of terrorist financing. On the other hand, considerable proportion of the literature also considers terrorist financing and money laundering related phenomena. Terrorist financing is probably also going to integrate into the wider-sense definition of money laundering, as „reverse money laundering” or „money dirtying”, in a short time. Terrorist financing has the following different characteristics compared to money laundering⁸:

² Yuen Stacey, *It's not just Russia — terror financiers are also using social media propaganda*, available on <https://www.cnbc.com/2017/12/18/social-media-propaganda-terror-financiers-operate-on-internet.html> (accessed on 5/12/2018).

³ L.V.Berry, G.E. Curtis, R.A. Hudson, N.A. Kollars, *A Global Overview of Narcotics-Funded Terrorist and Other Extremist Groups*, Library of Congress 2002, p. 52.

⁴ R. Beers, F.X. Taylors, *Narco-Terror, The Worldwide Connection Between Drugs and Terror*, in *Terrorism and Government Information* 2002, p. 322.

⁵ The IMU is allied to the Islamic State, and considers itself part of it. Merhat Sharipzhan: IMU Declares It Is Now Part Of The Islamic State <https://www.rferl.org/a/imu-islamic-state/27174567.html> (accessed on 5/12/2018.)

⁶ L. Napoleoni, *Modern Jihad. Tracing the Dollars Behind the Terror Networks*, Pluto Press, London, 2003, pp. 89.

⁷ László Korinek, *A terrorizmus* in Katalin Gönczöl, Klára Kerecsi, László Korinek, *Kriminológia-Szakkriminológia Szerk, Lévy Miklós CompLex kiadó, Budapest, 2006, p. 456.*

⁸ Steven Mark Levy, *Federal Money Laundering Regulation (Banking, Corporate, and Securities Compliance)* New York, 2003, Chapter 2, pp. 18-20.

– The motive is rather violent (intimidation) than financial (for financial gain). The aim of terrorists is mainly to coerce a government agency, another State or an international body into doing, not doing or countenancing something, to intimidate the general public, or to conspire to change or disrupt the constitutional, economic or social order of another State, or to disrupt the operation of an international organization. These aims that are specified by international documents can also be found in the Hungarian Act C of 2012 on the Criminal Code, under section 314, which is about acts of terrorism. So financial gain is the aim of terrorists only in the rarest cases, while money laundering is clearly „profit-oriented”.

– Money from legal sources is also used for terrorist financing, as well as money from illegal sources. Significant portion of the money that terrorists get as financial support is from legal sources, such as charitable organizations, philanthropic donors, and legally operating companies. – The third distinguishing characteristic is the different in the amount of the sum involved. Larger acts of terrorism can also be organized and conducted by using relatively smaller sums of money. For example, the perpetrators of the aircraft hijackings of 2001 regularly withdrew humble amounts of financial support, disguised as foreign students, and none of the transfers reached the „magical” 10,000 dollars limit, without an exception.

There are other types of lucrative criminal offenses, which are used by terrorists to get money. The taxative listing of these is impossible. In 2002 the IRA allegedly gained 11 million USD by committing various criminal offenses. The largest portion of their income came from tobacco smuggling from Eastern Europe to England⁹. Large portion of the Al-Qaeda's European income came from credit card fraud; secret services estimated that this sum reached 1 million USD per month¹⁰.

2. Donations

The donation is giving terrorists or terrorist organizations cash, commercial bank money, securities, precious metals, precious stones, or other marketable assets of value, free of charge, without remuneration. Its typical form is monetary support. Terrorists favor cash, which has the highest liquidity among all assets.

Terrorists can be supported by private individuals, organizations (even other terrorist organizations) and states. In the criminal law sense, „donation” in a broader sense can be considered terrorist financing, while in economic sense, the perpetration of the criminal offense and the legal business activity can also be considered as part of this activity.

In the narrow sense, the regulation of criminal law regarding terrorist financing focuses on the donations of private individuals, if states support terrorist aims, that often presents an insoluble problem for criminal law¹¹. The state's donation's form (direct or indirect financial support), its cover (commercial deal, humanitarian aid etc.), and the military and economic power of the state (smaller or bigger country, or a

⁹ L. Clarke, D. Leppard, *Photos link more IRA Men to Colombia*, Sunday Times, 28 April 2002.

¹⁰ R. Gunaratna, *Inside Al Qaeda: Global Network of Terror*, Hurst&Company London, 2002, p. 65.

¹¹ Our far fetched and deliberately provocative example is the following. The radical armed Taliban are considered terrorists, today, and an international hunt was conducted against them in Afghanistan. The financial support of their activity is considered terrorist financing. The same Taliban attacked the Soviet troops with the same exact methods, they later used against the international forces. Does anybody think about it today to suggest the responsibility of the CIA, or in a broader sense, of the USA as state, because of committing terrorist financing 20+ plus years ago?! Of course not. According to today's Western standpoint, the Taliban attacking the Soviet forces were freedom fighters...

country with nuclear weapons, or maybe a superpower) makes a difference.

3. Legal businesses

Between 1991 and 1996, Osama bin Laden established 30 companies in Sudan, with 3000 employees altogether. Already in 1994-1995 Western and Israeli secret service sources talked about bin Laden as the key figure of terrorist financing.

Legal businesses have an increasingly larger role in terrorist financing, as it can also be stated in a general sense, that legal sources have an increasingly important role in terrorist financing. As we have already mentioned, mainly European jihadoist cells rely increasingly on legal sources of income, for example, on the salary, that they earn at their legal workplace. The attack of 9/11 was the last terrorist attack, which was wholly financed by Al-Qaeda, in 2002 global financing came to an end! Most of today's bomb attacks are acts of self-financing cells. Thus, a process that is named „*privatization of terrorist financing*” by the literature started¹².

If terrorists as employees use part of their legal income for terrorist purposes, it can be regarded as part of legal business in a broader sense. If we go by past years' experiences of larger acts of terrorism, a sum of 8-10,000 USD is already enough to finance a serious attack, then our fear that a terrorist cell of 4-5 members is able to save this kind of money in 2-3 years in practically in any developed or moderately developed country¹³, and able to strike, without the need of any additional sources may be realistic!

III. Terrorists' use of the internet and their search for secure platforms

As Róbert Bartkó states: „*The particular prevention methods evolve alongside terrorist acts, so the statement that can be regarded as a „chliché” today, that criminals are always one step ahead of law enforcement authorities, still seems to be confirmed*”¹⁴.

Criminals and terrorist financiers are constantly adjusting their techniques, to always stay one step ahead of law enforcement; they gladly use unique or experimental products and services to further their goals¹⁵.

The biggest challenge for intelligence regarding counterterrorism is in the inherent difficulty of unearthing plots that involve a few people who do their planning and preparation covertly and take operational security very seriously¹⁶. Terrorism generates perceptible extra expenses in the sphere of law enforcement, justice and secret service. Out of these spheres, secret services' extra expenses are the most significant. The most effective tools against terrorism are in the hands of secret services. For example, the most severe economic criminal offenses and the fight against terrorism are specifically among the scope of duties of the Polish secret services, which were reorganized in 2002, so the

¹² Sean S. Costigan, David Gold, *Terroronomics*, ASHGATE, Printed in Great Britain, 2007, p. 14.

¹³ If we count by a cell of 5 members, 2 years are enough to save 10,000 USD, if one member saves 1000 USD per year. This is barely more than 80 USD per month.

¹⁴ Robert Bartkó, *A terrorizmus elleni küzdelem kriminálpolitikai kérdései*, Győr, UNIVERSITAS-GYŐR Nonprofit Kft., 2011, p. 68.

¹⁵ Sean McCrossan, *Combating the Proliferation of Mobile and Internet Payment Systems as Money Laundering Vehicles*, CAMS-FCI, p. 15.

<https://www.acams.org/wp-content/uploads/2015/08/Combating-the-Proliferation-of-Mobile-and-Internet-Payment-Systems-as-ML-Vehicles-S-McCrossan.pdf> (5/12/2018.)

¹⁶ Pillar Paul R., *Terrorism and Current Challenges for Intelligence*, GSSR Special Issue: What the New Administration Needs to Know About Terrorism and Counterterrorism, February 2017, p. 108.

<http://georgetownsecuritystudiesreview.org/wp-content/uploads/2017/02/GSSR-What-the-New-Administration-Needs-to-Know-About-Terrorism-and-Counterterrorism.pdf> (5/12/2018.)

conclusion can be clearly drawn that terrorist financing is also among their scope of authorities¹⁷. We can only have estimations about the increased expenses; they are among the most serious state secrets in every country¹⁸. The fight against terrorism has presumably increased the budget of secret services by billions of dollars on a global scale.

„The Internet has revolutionized terrorism forever.” Terrorists exploit possibilities provided by the cyberspace to further their goals in ways never before possible¹⁹. According to *Gabriel Weimann, terrorists use the internet for psychological warfare, publicity and propaganda, data mining, fundraising, recruitment and mobilization, networking, sharing information, planning and coordination*²⁰. Because of governments’ increased surveillance over telephone systems and social media, and because social media platforms’ measures against them, terrorists are forced to find safer and more hidden alternatives to communicate to conduct transactions. (Such as the Telegram app, this is known for its high level encryption²¹). They turned to the *dark web*²², to supplement their activities conducted on other platforms. Terrorists use social media rather for propaganda and recruitment purposes, and the dark web for communication and transactions, because the latter has highly secure platforms. The encryptions of the dark web make it very difficult for law enforcement agencies to track down the IP addresses of the users. Because of its very high security and anonymity, the dark web is a home of many illegal activities²³.

IV. Smartphone applications used by terrorists for security, messaging, and propaganda

In Laith Alkhouri’s and Alex Kassirer’s report titled *Dissecting Jihadists’ Digital Toolbox* Alkhouri and Kassirer lists and examines the digital tools used by jihadists. These tools are the following: secure browsers, virtual private networks (VPNs) and proxy

¹⁷ Emil Pływaczewski, Wojciech Filipkowski, *The Development of Organised Crime Policies in Poland: From Socialist Regime to Rechtsstaat* in *Organised Crime in Europe* Edited by Cyrille Fijnaut and Letizia Paoli, Springer, 2004, p. 918.

¹⁸ Because if the exact portion of the budget of secret services of a given country that is spent on the fight against terrorism, and the way this sum increases, year by year (how it changes) was made public, terrorists could also draw significant conclusions from this data.

¹⁹ Ariel Victoria Lieberman, *Terrorism, the Internet, and Propaganda: A Deadly Combination*, Journal of National Security Law and Policy, 2017, Volume 9, 122. http://jnslp.com/wp-content/uploads/2017/04/Terrorism_the_Internet_and_Propaganda_FINAL.pdf (accessed on 5/12/2018).

²⁰ Gabriel Weimann, *www.terror.net How Modern Terrorism Uses The Internet*, United States Institute Of Peace, Special Report, 2004. 5-10. <https://www.usip.org/sites/default/files/sr116.pdf> (5/12/2018.)

²¹ Rebecca Tan, *Terrorists’ love for Telegram, explained. It’s become ISIS’s „app of choice.”* <https://www.vox.com/world/2017/6/30/15886506/terrorism-isis-telegram-social-media-russia-pavel-durov-twitter> (accessed on 5/12/2018).

²² „The „dark web” is a part of the world wide web that requires special software to access. Once inside, web sites and other services can be accessed through a browser in much the same way as the normal web.

However, some sites are effectively „hidden”, in that they have not been indexed by a search engine and can only be accessed if you know the address of the site.” <https://www.iflscience.com/technology/what-dark-web/all/> (accessed on 5/12/2018)

²³ Erdal Ozkaya, (2017), *The Use of Social Media for Terrorism*, in NATO Defence Against Terrorism Review. 9. 47, pp. 8-9.

https://www.researchgate.net/publication/322486831_The_Use_of_Social_Media_for_Terrorism (accessed on 5/12/2018.)

services, protected e-mail services, mobile security applications, encrypted messengers, and mobile propaganda applications²⁴. In this article we follow Alkhouri's és Kassirer's categorization of applications²⁵, and examine mobile security applications, encrypted messengers, and mobile propaganda applications. Certain platforms, such as Facebook and Twitter have taken steps against terrorist's social media activity. Twitter in particular has taken serious measures against ISIS-supporter accounts. Tech-expert terrorists demonstrate their adaptive abilities by circumventing barriers set up against them by using the tools of digital technology. Today's terrorists are constantly looking for alternative possibilities to further their agenda and to communicate securely with each other²⁶.

Tech savvy terrorists realize, that the use of smartphone applications involves risks for their users, without proper precautions, third persons are able to access their sensitive information, such as their GPS location, IP address etc. To lessen the security risks, tech-expert supporters of terrorism recommend the use of several smartphone applications. The main use of these applications is to secure the location and the data of their users, to clean their devices and to delete their browser history. The following security applications are preferred by and recommended for jihadists: Locker, FAKE GPS, D-Vasive Pro, AMC Security, ESET Mobile Security, Battery Saver, Call/SMS Blocker, Privacy Locker, APP Manager, iSHREDDER PRO, Override DNS, DNSCrypt, Net Guard, AFWall, F-Secure Freedom, Hide.me, Tutanota. For example, FAKE GPS hides the user's location, and provides fake GPS data²⁷.

To avoid surveillance, terrorists use messaging applications that implement *end-to-end encryption*, such as the Telegram or the Signal application²⁸.

Terrorists have been using encrypted messaging applications for years. Terrorists prefer messaging applications, which use end-to-end encryption.

Terrorists use the following apps, during their daily operations: the Swiss Threema, which implements end-to-end encryption, and was praised by a pro-ISIS technology guide, for its high security, in April 2016. Telegram, which was created by Pavel Durov, the founder of the Russian VKontakte, seems to be the most preferred application of lone wolf terrorists and terrorist groups.

However advanced an application may be, sceptical jihadists do not fully trust any of them, because most of them are Western developments. In February 2013 a jihadist media logistics unit called the Global Islamic Media Front (GIMF) released the Asrar al-Darshah (Secrets of Chatting), which is an encryption plugin, compatible with several instant messaging platforms. This plugin enables users the encryption of live messaging on messaging platforms, such as Paltalk, Google Chat, Yahoo, MSN és Pidgin²⁹. The Islamic State also developed its own encrypted chat app, called Alrawi³⁰.

²⁴ Laith Alkhouri, Alex Kassirer, *Tech for Jihad: Dissecting Jihadists' Digital Toolbox*, Flashpoint, July 2016, p. 1. <https://www.flashpoint-intel.com/wp-content/uploads/2016/08/TechForJihad.pdf> (accessed on 5/12/2018.)

²⁵ Ibid.

²⁶ Ibid., p. 1.

²⁷ Ibid., p. 6.

²⁸ Paganini, Pierluigi: *The Role of Technology in Modern Terrorism* <https://resources.infosecinstitute.com/the-role-of-technology-in-modern-terrorism/#gref> (5/12/2018.)

²⁹ Alkhouri, Laith & Kassirer, Alex: *Tech for Jihad: Dissecting Jihadists' Digital Toolbox*, Flashpoint, July 2016, pp 7-8.

<https://www.flashpoint-intel.com/wp-content/uploads/2016/08/TechForJihad.pdf> (5/12/2018.)

³⁰ Constine, Josh: *ISIS Has Its Own Encrypted Chat App*

The Islamic State used Telegram to recruit the perpetrators of the Christmas market attack in Berlin, 2016. The terrorist attack of Saint Petersburg in 2017, in which 15 people died, was planned by using the application. Telegram was ideal: it has very high level encryption, it has private chat rooms, self-destructing messages, it's easy to join, and to create new accounts³¹.

Husnain Rashid, a British ISIS supporter urged his followers on the Telegram, to target the 4-year-old Prince George. Furthermore Rashid encouraged his followers to commit acts of terrorism, during the World Cup in Russia; he urged them to inject cyanide into fruit and vegetables in stores and to poison ice cream. Rashid's activities specialized in assisting lone wolf terrorists. He sent 360,000 (!) messages on 150 different chat threads on Telegram, between November 2016 and his arrest on 22 November 2017. Police could only access a handful of these messages. Sajid Javid, the Secretary of State for the Home Department accused Telegram of being a „mouthpiece for terror”³².

In December 2015, FBI's Director James Comey called upon tech companies providing users with end-to-end encryption to review „their business model” and stop implementing it³³.

Russia and Iran tried to ban Telegram³⁴. The ban had no success in Russia, so far³⁵, and it also failed in Iran³⁶.

ISIS and other jihadist groups developed their own propaganda applications. The A'maq Agency app provides news and warzone videos for ISIS supporters. The Al-Bayan Radio is the Islamic State's official radio station, and it is also available as an android application.

The app called Voice of Jihad was released by the Afghan Taliban in April 2016 was originally available on Google Play store, but after about 48 hours Google removed the application, which resurfaced in the Amazon app store, several days later. This application provided news, announcements, reports, articles, and videos.

ISIS's jihadist themed Alphabet application teaches the arabic alphabet to children³⁷. The terrorist organization released the Alphabet (Huroof) app for children

<https://techcrunch.com/2016/01/16/isis-app/?guccounter=2> (5/12/2018.)

³¹ Tan, Rebecca: Terrorists' love for Telegram, explained. It's become ISIS's „app of choice.”

<https://www.vox.com/world/2017/6/30/15886506/terrorism-isis-telegram-social-media-russia-pavel-durov-twitter> (5/12/2018.)

³² Victoria Ward, Steven Swinford, Dominic Nicholls, *Telegram app is 'mouthpiece' for terror, Sajid Javid says as jihadi admits encouraging attack on Prince George*

<https://www.telegraph.co.uk/news/2018/05/31/islamic-state-supporter-admits-encouraging-jihadis-attack-prince/> (accessed on 5/12/2018).

³³ Pierluigi Paganini, *Islamic State launches the Kybernetiq magazine for cyber jihadists* <http://securityaffairs.co/wordpress/43435/hacking/kybernetiq-magazine-cyber-jihad.html> (accessed on 5/12/2018.)

³⁴ Palko Karasz, *What Is Telegram and Why Are Iran and Russia Trying to Ban It?*

<https://www.nytimes.com/2018/05/02/world/europe/telegram-iran-russia.html> (accessed on 5/12/2018).

³⁵ Maria Kolomychenko, *Russia tries more precise technology to block Telegram messenger*

<https://www.reuters.com/article/us-russia-telegram/russia-tries-more-precise-technology-to-block-telegram-messenger-idUSKCN1LF1ZZ> (accessed on 5/12/2018).

³⁶ Rohollah Faghihi, *Iran's conservatives return to Telegram after failed ban*

<https://www.al-monitor.com/pulse/originals/2018/11/iran-telegram-ban-conservative-media-rejoin-tasnim-fars.html> (accessed on 5/12/2018).

³⁷ Laith Alkhouri, Alex Kassirer, *Tech for Jihad: Dissecting Jihadists' Digital Toolbox*, Flashpoint, 2016. július, 7-9, available on

<https://www.flashpoint-intel.com/wp-content/uploads/2016/08/TechForJihad.pdf> (accessed on

on 10 May 2016, in which children can match arabic letters to jihadi themed images (such as rocket, rifle, tank etc.)³⁸. The bizarre application was released by ISIS' Office of Zeal. According to the press release of the Office of Zeal, the app „teaches the cubs the alphabet letters”³⁹.

In 2013 ISIS released its Dawn of Glad Tidings app, which enabled terrorists of the Ismalic State to orchestrate their social media campaign on Twitter on a very high level. The app enabled the participant twitter accounts to post tens of thousands tweets⁴⁰. According to Michael Weiss and Hassan Hassan the Islamic State also used Zello, a „free walkie-talkie app”⁴¹ which is popular among the younger targets of ISIS. The application lets users listen to preachers discreetly⁴².

V. Terrorists' risks of using smartphone applications and a way of infiltration for law enforcement

ISIS' use of smartphone applications is not without risks for the terrorist organization. On the 1st of June 2016 Amaq and later other social media sources reported of a fake version of the Amaq Agency and other fake ISIS related apps circulating online. The sources warned supporters to only download apps from official sources, and to verify with the officially released checksum, before installation.

All of the apps of ISIS are developed for Android Operating System. The main difference between iPhone and Android devices is that Android lets users develop and install new apps outside its designated app store. Android applications can be developed and installed independently as APK (Android application package) files, without ever entering Google Play Store. This technique is called „sideloading”, the Islamic State's main method to circumvent Google's and Apple's rules. This technique makes it easier for law enforcement agencies and vigilantes to plant malwares into fake apps, and to infiltrate the community of terrorists. A common defense against this is verifying the app by uniquely generated checksum files. The former warnings prove that not every ISIS supporter bothers with verifying their apps. ISIS' official Nashir and Amaq channels are often removed, so ISIS supporters have to turn to secondary and less reliable media outlets and make more and more mistakes regarding verification⁴³.

Al-Khabir al-Taqni, a jihadist supporter and self-proclaimed security expert ranked 33 smartphone messaging apps on Twitter, by their level of security, as unsafe, moderately

5/12/2018).

³⁸ Rita Katz, *ISIS's Mobile App Developers Are in Crisis Mode*, available on https://motherboard.vice.com/en_us/article/qkj34q/isis-mobile-app-developers-are-in-crisis-mode (accessed on 5/12/2018).

³⁹ The Islamic State calls the children „cubs” its adult terrorists „lions”. See Don Reisinger, *ISIS Has Launched A Mobile App For Children*, available on

<http://fortune.com/2016/05/11/isis-mobile-app-children/> (accessed on 5/12/2018).

⁴⁰ Mohammad-Mahmoud Ould Mohamedou, *A Theory of ISIS: Political Violence and the Transformation of the Global Order*, Pluto Press, 2018, p. 205.

⁴¹ Cortney Moore, *What Is Zello and How Do You Use It?*, available on

<https://www.tomsguide.com/us/zello-app-guide,news-25805.html> (accessed on 5/12/2018).

⁴² Weiss Michael, Hassan Hassan, *Az Iszlám Állam. A terror hadserege belülről*, Budapest, HVG Könyvek, 2015, pp. 205-206.

⁴³ Rita Katz, *ISIS's Mobile App Developers Are in Crisis Mode*, available on

https://motherboard.vice.com/en_us/article/qkj34q/isis-mobile-app-developers-are-in-crisis-mode (accessed on 5/12/2018).

safe, safe, and safest. For example, WhatsApp got the lowest ranking, among 15 other applications, like Viber. Al-Khabir warned jihadist against using these applications because they are closed source apps, and or use very weak or no encryption⁴⁴.

VI. Conclusion

*On the internet terrorists can be monitored, kept under observation, their activities can be studied; there are theories, that by this, terrorists's online presence works against them. Websites and message boards act as an early warning system, regarding acts of terrorism*⁴⁵. The anonymity of the internet is not just advantageous for terrorists, because the anonymity also gives covert agents opportunities for infiltration. In the USA, several FBI agents already managed to infiltrate terrorist organizations successfully, thus thwarting terrorist attacks⁴⁶.

An efficient fight against terrorism requires the knowledge and understanding of every aspect of terrorism, including terrorists' online activities and their use of smartphone applications.

Our stance is that smartphone apps are platforms, where terrorists activity can and must be studied, where covert agents can infiltrate terrorist organizations, and could also prevent terrorist financing, acts of terrorism, recruitment etc. Terrorist related smartphone apps should be traced and infiltrated, and fake terrorist apps should be developed with surveillance malwares planted in them.

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⁴⁴ Rita Katz, *Almost Any Messaging App Will Do—If You're ISIS*, available on

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⁴⁵ Maura Conway, *Terrorist „use” of the Internet and fighting back*, Department of Political Science College Green Trinity College Dublin 2 Ireland, p. 22., available on https://www.oii.ox.ac.uk/archive/downloads/research/cybersafety/papers/maura_conway.pdf (accessed on 5/12/2018).

⁴⁶ József Kis-Benedek, *Dzsihadizmus, radikalizmus, terrorizmus*, Zrínyi Kiadó, 2016, pp. 195-196.

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