

Improving Data Collection on Nonproliferation Assistance Projects and Programs Using Social Media

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Executive Summary

The primary purpose of this capstone research project was the exploration of state-managed social media as a viable methodology to fill knowledge gaps in known assistance programs and projects by member states regarding the activities pertinent to the United Nations' Resolution 1540. To this end, six states were chosen to narrow the focus of the team's research, and following the creation of a methodology, their social media apparatuses were examined for useful and relevant information.

The overarching conclusion drawn was that while state social media may be used to find information about 1540 assistance programs and projects, the number of items found using the methodology developed was fairly small, and furthermore did not provide data that was particularly relevant to the ASI database that Stimson curates. For this reason, this team **does not recommend** the use of this practice going forward. Even though the methodology developed did not provide the watershed results hoped for, some relevant information was found that this team considers useful for the Stimson center as they move forward with updating the ASI database.

The first two points of relevant data are in relation to language. The use of native speakers may provide more complete results from social media research, as colloquialism and technical translations may be carried out in a more accurate manner, as despite the best efforts of researchers there is most likely information that was missed due to gaps in language knowledge. Furthermore, it is highly recommended that both native language social media accounts, as well as other official accounts in a different language, be looked at separately, as these second language accounts are not always carbon copies of the original and may contain pertinent information not available in the original and vice versa.

This team also recommends that examining the political history of each individual state may be useful in focusing on relevant social media platforms or terminology. By examining when shifts in political parties, administrations, or leaders occur, this research showed that oftentimes the social media behavior changed during this time, and by pinpointing these changes timelines can be focused on in a more accurate manner. Finally, it is recommended that programs reported to

the Global Partnership and/or the UN be examined more closely than what is facially included in the reports submitted. In the case of Germany, one of the states looked at for this report, it was found that while they did indeed report the programs participated in, they did not break out individual training given, workshops held, or equipment provided, instead of grouping these individual projects into the larger programs. By having researchers with knowledge of the state's native language look at reported programs, perhaps more specific projects will be able to be found through general searching as in the case of Germany that will be relevant to the ASI database.

Though this team ultimately rejected searching social media as a viable means of collecting data related to 1540, there do exist some avenues of exploration to continue on that may lead to another researcher having more success. Combined with the above findings, future researchers may have more success if they are able to incorporate the following practices that this team was unable to. First, create a standard set of search terms to be used across states, as well as lists of these terms translated by native speakers. Second, to implement the use of computer programming personnel to create a program designed to flag terminology identified by the search terms list. Third, further analysis should be conducted on how state behavior influences social media usage. Researchers were unable to find concrete policies around social media usage for any of the states studied, but by identifying such policies, even if they are informal, researchers may have more success in finding relevant information.¹

¹The research team would like to also take this opportunity to thank the Stimson Center as well as the Humphrey School of Public Affairs for the opportunity to participate in this capstone research project, and the researchers are looking forward to seeing how this research will continue to change and adapt over the coming years.

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Introduction

Monitoring United Nations Resolution 1540 is a challenging task, with no clear best practices established for Non Governmental Organizations to locate and collect the information around the activities that are mandated within the resolution. Previous research has proved promising in examining social media accounts within the United States to find unreported US nonproliferation assistance projects and programs that go to the core of the 1540 mission. Building off of pilot research, a team of Humphrey students were tasked with creating a process to locate social media posts that shared information about nonproliferation assistance projects and programs related to the work of this resolution. The ultimate goal of this research was to curate a methodology that would prove beneficial to researchers in the future if the practice of social media analysis proved to be a viable option for collecting data on assistance activities related to preventing the proliferation of chemical, biological, radiological, and nuclear weapons and their means of delivery.

Background on 1540

In 2004, the United Nations Security Council first instituted a specific resolution aimed at preventing the proliferation and spread of nuclear, chemical and biological weapons to these groups and organizations, as well as any related materials or delivery systems. Resolution 1540 placed a mandate on states to “refrain from supporting by any means non-State actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological weapons and their means of delivery.”² This mandate codified an obligation for UN member states to work on crafting legislation that would control the proliferation of these materials within their own borders, as well as instituting further measures and regulations that would govern the transport, possession, and use of the materials within their states. By having member states introduce tougher controls, the goal was to decrease the likelihood of non-state actors or hostile actors from acquiring these weapons. This resolution has been extended several times, most recently with Resolution 2572 in April of 2021. As part of Resolution 1540, member states are also supposed to provide periodic reports detailing their internal legislation that pertains to CBRN control, the contact information of

² United Nations. (n.d.). *1540 Committee*. United Nations. <https://www.un.org/en/sc/1540/about-1540-committee/general-information.shtml>.

departments/offices/ministries in charge of the work, and what they are doing to provide assistance to other states who are working to implement 1540 related activities. This assistance is what this research is focused on.³

The information provided by states to the UNSC under 1540 obligation is often vague and incomplete, and for this reason several organizations exist that are focused on cataloguing and finding specific programs and projects that deal with the realm of 1540 enforcement. The two that are most relevant to this research are the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction Annex (GP Annex) and the Stimson Center's Assistance Support Initiative (ASI) database. The GP is a membership organization that has been in effect since 2002, and has published several documents outlining member states' projects and programs, the most recent being an annex published in 2020.⁴ The Stimson Center's ASI database is informational, in that Stimson collects and catalogues every confirmed project or program and lays out the area of focus, the states involved, and the partner organizations in charge of implementation.⁵ As not all information is published by states in their reports to the UN, and members of the GP often leave out activities that would constitute CBRN reduction, the research conducted by this team is exploratory in that the goal is to see if mining social media is a useful means of collecting this unreported data.

Methodology

As with all research projects that are exploratory in nature, there was a fair amount of trial and error involved in creating the eventual model that was used for research. This methodology section attempts to tackle the path taken to get to a workable model, as well as many of the dead ends that forced the researchers to re-evaluate methodology. While a previous research project had looked at US social media as a means of evaluating CBRN/ASI activities, the focus of this project was more international in nature and led to different challenges and opportunities.

³ Myjer E., Herbach J. (2018) Arms Control Law as the Common Legal Framework for CBRN Security. In: Malizia A., D'Arienzo M. (eds) Enhancing CBRNE Safety & Security: Proceedings of the SICCC 2017 Conference. Springer, Cham. https://doi.org/10.1007/978-3-319-91791-7_24

⁴ Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. Home. (n.d.). <https://www.gpwmd.com/>.

⁵ UNSCR 1540 Support - Assistance Support Initiative - Stimson Center. Assistance Support Initiative. <https://1540assistance.stimson.org/>.

Selection of Countries

In order to begin orienting and focusing, six states were selected based on the preference of each of the three researchers on this team. The primary reasoning for states being selected was linguistic in nature. Each member of the research team spoke at least one language besides English, and this allowed for a wide number of states to be profiled. States selected included The Republic of Korea, Australia, the United Kingdom, France, Germany, and Austria. This meant that Korean, English, French, and German speaking states were selected, which shaped both the nature of the research and the content that was found.

Following this initial selection, a review was undertaken to see where each state would be placed vis a vis Resolution 1540. This included examining their UN Resolution 1540 website profiles to see some past activities they had reported, the treaties that they had signed onto, and general posture towards CBRN activities. While all were of course against the proliferation and spread of these materials, two states, France and the UK, both possess Nuclear weapons. This changes the diplomatic posture of each of these states, including which treaties they have signed and which organizations they belong to, and where they may be directing funding and technical expertise in pursuit of fulfilling Resolution 1540 obligations. The ASI database was also examined to get a grasp of what sorts of activities each state was already involved in, and to allow a greater understanding of what activities were considered worthy of inclusion in any ASI data table entries moving forward.

As part of this process, the diplomatic status of each state was looked at to begin building a list of locations that may have social media that would contain relevant information. To do this, the Lowy Institute's Global Diplomacy Index was used. This tool provides information on where every diplomatic embassy and mission in the world is located, and allowed the researchers to exactly calculate the number of countries that each selected state was active in diplomatically. It was posited that each embassy would have its own social media account with differing levels of information available depending on the diplomatic style of the state, as well as the way in which the various governments siloed information. The states that this team had selected each had a large number of diplomatic posts, which was both a positive and a negative. On a positive note, it meant that they were active on the world stage, which in theory meant that they could be active

in 1540 related activities, but also a negative in that with such a large number of posts around the world it would be difficult to examine each and every one of their social media postings.

In order to look at the social media postings, those social media apparatus used by the various states first had to be identified, and once identified, profiled for usefulness. The first order of business was looking at the primary office in charge of work related to 1540. This was ascertained by looking at the ASI database, as well as the Global Partnership Annex from 2019, and once it became available, 2020. In all cases, the foreign ministry (or an office reporting to the foreign ministry) was identified as the primary office to be profiled, with the hope that once research began other ministries, offices, or departments would be identified through social media threads. The social media for these main offices was relatively easy to find via Google or quickly browsing each relevant foreign ministries home page on the internet. Social media used by these primary offices included Facebook, VK Kontakt, Instagram, Twitter, Soundcloud, Flickr, and even BuzzFeed channels that remained official even when no longer in use. For the vast majority of all platforms, there existed two parallel accounts, one in the states home language, and one in English. During the course of this research, it became apparent that while these parallel accounts were advertised as copies of one another simply translated, there were differences in the information provided, either due to translation errors, international vs internal posturing, or simple happenstance.

The social media platforms of individual diplomatic posts were also examined as a means of identifying possible sources of information. Based on the theory that embassies would be involved in any CBRN risk reduction work, even in a tertiary manner, the researchers began collecting lists of diplomatic social media accounts for each state. This proved easier in some cases than in others. Germany and Austria, for example, had readily available, comprehensive lists of every single one of their diplomatic social media accounts. These pages existed on their foreign ministry websites, and were simple to look at to determine accounts to examine. For other states, it was much more of a burden to find diplomatic accounts that were active, provided relevant information, or were updated in an even semi-consistent manner. The other issue that quickly arose following a cursory examination of each page was that states often posted in the host state's native language. As an example, all of the German social media accounts in Russia

posted primarily in Russian, with rare instances of English or German being mixed in. This use of the native language, while perhaps smart diplomatically, made searching these pages for information incredibly difficult as will be enumerated below. For this reason, focused research on these accounts proved to be an extremely difficult task.

Search Techniques

Following the selection of states and the handles of their social media apparatus, initial research was conducted to determine the best way to search for information. Following trial and error, Boolean search logic was determined to be the most useful and expedient way to search through thousands of posts in order to find those few that may contain relevant information. By filtering posts using Boolean logic, a much larger subset of data was able to be examined and catalogued for information relevant to the ASI database. While not all social media pages have advanced search features, there are enough means available online that to do this type of search is relatively straightforward. Boolean search methods allow for computer systems to search for a much wider array of information by using logic gates, words, and symbols that automatically refine the search parameters.⁶

As an example, the following line of code was searched on twitter:

```
(Bio* OR Chemical* OR 1540 OR IAEA) (from:GermanyDiplo) -filter:replies.
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The first set of parentheses tells twitter what words to search for, with the asterisks acting as a wildcard that indicates the word starts with these letters, but may have different endings that the researchers would still be interested in. In this case bio* was searched so that the terms biosafety and biosecurity would both be captured. By using the asterisk, one is able to better search a larger subset of words in comparison to just a single word . The OR means And/Or, whereas using the logic gate AND would require each word to be in the tweet. This is again done to maximize the number of items searched for. The next set of parentheses indicates the handle of which account (s) that you would like twitter to search for, in this case the handle is for the German Foreign Ministry's English Language Twitter page. Other logic gates allow words to be filtered out, or exact phrasing to be looked for. On the social media platforms examined for this

⁶ King, G., Keohane, R. O., & Verba, S. (2012). *Designing social inquiry: scientific inference in qualitative research*. Princeton Univ. Press.

research, there are further options to restrict which languages are searched for, as well as a timeframe to search within.

The time-consuming issue of this then becomes searching each embassy account. The knowledge of which words to search for is key, and simply searching “1540” for example leads to very few results if any, whereas general catchall terms such as “nuclear” allows a much larger subset of data to be examined but does increase the overall amount of Data to sift through, often including a majority of posts related to posturing.

Down the Rabbit Hole

Several different methods were used to search through the social media platforms of six member states, this narrative will explain and discuss the effectiveness of these methodologies as was experienced by the research team.

Limitations

State Behavior on Social Media

One of the most limiting factors that this team found while completing this project was the different ways that states utilize social media. Within this small sample of six states there is little uniformity in how they interact with social media on the internet. From the way they set up their social media accounts to what messages they send to the masses, it was complicated to create a uniform methodology that would work with each state or even just two states.

There were two different observations made regarding how states used social media, which complicated the gathering of the desired posts and program/ project information. The first was the way that the different states set up their social media presence. The main limitation for their setup is the concept of centralized versus decentralized management of social media accounts. During research, it became clear that countries with a centralized management apparatus for social media accounts were easier to gather and collect information. Examples of centralized social media management states were Austria and Germany. They clearly explain how they managed their accounts, which led to the team finding more useful information. France and the UK from the research were examples of decentralized social media management. Different parts

of the government operate many accounts, all with different agendas, set of rules, and information to convey. The most significant challenge of these decentralized states is locating all of the accounts that could potentially post about the project and programs of interest. In the end, researchers were unable to identify meaningful posts or interactions from these kinds of states with decentralized presences on the internet.

The second limitation found related to states' use of social media was related to the messages they were trying to convey. In this regard, further research about the behavior of states' social media actions would be recommended. During this research, two distinct types of social media use were categorized, providing information and posturing. Providing information is relatively straightforward; the state uses social media to provide pertinent information to a party of interest about enacting policies. During a time of covid, many states are using this type of interaction to provide updated information about their ongoing covid policies to their citizens. The second behavior is a little more abstract but can be simplified into the concept of values signaling. During research, it became clear that some states, i.e., France and the UK, use social media to communicate their values without clearly depicting what policies, programs, or projects are underway. Examples include the many tweets from either state in support of the JCPOA with Iran. While communicating support of the initiatives of 1540, these posturing positions do not add relevant examples to the search of this project.

Keyword searches/ translation

As the number of accounts that were to be queried grew, it became obvious that a standardized list of search terms should be generated to make sure that the same terms were being looked at for each state, so that a standard was maintained. This list was initially generated in English, both through examination of the ASI database and 1540 documentation, as well as by asking the Stimson team to make sure that a broad enough array of terms were being searched so that as much information as possible could be found. This list was then translated into the various target languages. It was also incumbent on the researchers to understand how each word changed in its different forms, to be able to account for alternative spellings and uses. The Boolean operation * was then used as a 'wild card' operator that allowed for these different forms to be captured during searches. Researchers expressed worry that there were terms in English that were missed

that should have been included on the list, as well as a worry that translations that were done were inaccurate. When doing translation work, the words may be translated correctly, but it may be unable to deal with complex linguistic phenomena. This includes when different forms of the word exist for spoken vs written communication, when slang may be used to refer to a technically specific term, or when regional forms of words exist. Though researchers attempted to deal with this logic issue, actual results may vary.

IP VPN/Geographical location

Another of the challenges encountered was the restriction of geographical location. This is an issue especially characteristic of China and the Republic of Korea. When it comes to accessing certain sites, information is censored by a government firewall. This is most apparent in China with access to Weibo. When looking at what countries to focus on for this project, the idea of looking at China was quickly discarded due to a firewall around various social media websites. Weibo is the main social media platform utilized in China, but access to some of its content and other conversations and posts that are not dealing with accentuating the ‘quality of life’ in China or pleasant conversations without real meaning is restricted.

When trying to access Weibo, the content of the site did not load properly or various functions were not available. As such, utilizing at least two VPN and one IP scrambler allowed for access to Weibo was needed. Even then, the censorship on Weibo would block various search functions or make various pages not load properly. Overall, the firewall around China made continued attempts at research not worth the effort. Additionally, the information mined from Weibo did not hold any information pertaining to government projects or policies outside the conventional propaganda or posts arguing the nuances of political propaganda or social issues.

In terms of the Republic of Korea, there are some gatekeeping tactics that are utilized as a way to protect individual information and privacy that is needed by the government to access or create some social media platform accounts. These are most common on domestic social media platforms such as Naver, Daum, and Kakao. While you can use an international phone number, the content viewed will be slightly different. One would be for international audiences the other

for domestic audiences. While this isn't much of an issue, it does make accessing more state specific information hard if an in state number is not obtained first.

Austria

Background

An advanced industrial economy, Austria is on record as a provider of assistance in the realms of legislation and implementation in regards to resolution 1540. Though not a power player in the realm of 1540, they are on record as having provided assistance in the past to strengthening export control systems in the Balkans. They also are on record on the official 1540 webpage as having provided some assistance regarding chemical weapons through their Armed Forces Disaster Relief Unit. When looking at the Stimson Center ASI database, Austria does not have a large number of known projects or programs related to 1540 over the past ten years, with just six programs being listed over that timeframe.⁷ Based on ASI information, Austria provides limited technical assistance, regulatory assistance, and has participated at a few conferences. Austria hosts IAEA headquarters, and houses one of the IAEA nuclear research laboratories in Siebersdorf. Initially researchers hoped that because Austria was hosting the IAEA, they may have been more involved in IAEA trainings, conferences, and workshops, but there was no data found to back up that indication.⁸

Social Media

As with all states, the first thing that researchers did when examining Austria was to isolate and identify the social media handles that may be useful for gathering information. This included looking at their current entries in the ASI database as well as their published information on the 1540 webpage to ascertain which accounts may have the most relevant information. Besides their central foreign ministry, Austria also has 98 distinct diplomatic missions/posts throughout the world, and each posting has its own social media handles. As with the other Western government's examined in this research, Twitter proved to be by far the most active social media platform. For this reason, instead of trolling through every single social media platform Twitter was chosen as the primary means of searching for usable information. The central foreign ministry operates a single Twitter account, with tweets appearing in either English or German,

⁷ Austria – Assistance Support Initiative "Austria – Assistance Support Initiative". 2021. Assistance Support Initiative. <https://1540assistance.stimson.org/beneficiary-country/austria/>.

⁸ United Nations. (n.d.). 1540 Committee. United Nations. <https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states/Austria.shtml>.

and are interspersed depending on if the tweet is meant for a domestic or international audience. The twitter accounts of embassies and diplomatic posts were looked at, but overall the information found on those accounts were tweeted in the host state's language. This meant that for individuals without language skills related to CBRN topics in that host language, searching and finding information was incredibly difficult.

Research Findings

Unfortunately, the information found on the central Twitter feed was not germane to this research project. Though dozens of tweets appeared when using the search terms outlined in the list discussed above, overall the Tweets were simply declaratory in nature, with the account expressing support for anti-nuclear weapon proliferation, international coalitions such as the IAEA and OPCW, and other, similarly political statements letting the world know that Austria cared. The most useful information gleaned from this account were the twitter handles of government ministers who also had twitter accounts, and were involved with a wide range of topics such as security, military affairs, public health, and international aid and development. These other twitter accounts were then examined using the same terms and logic operators, but no references even at a tangential level were found that were useful for this project.

Germany

Background

Germany proved to be an enigmatic state to study when it came to looking at aid provided in relation to 1540 work. A member of the Global Partnership, they are on record as having provided aid in the past in the area of CBRN containment, and list both financial and technical assistance as being provided by them in the past. On their UN 1540 website landing page, they speak about work that was previously completed including development of export control systems, construction and operation of chemical weapon destruction facilities, and decommissioning obsolete nuclear submarine fleets.⁹ For reasons outside the scope of this project, Stimson does not currently have robust information about Germany included in the ASI database. Because of this discrepancy, there was a larger amount of latitude on what could be

⁹ United Nations. (n.d.). 1540 Committee. United Nations. <https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states/germany.shtml>.

found and included in lists of ASI worthy activities in comparison to other states that did have entries already listed.

Social Media

As a state with a large diplomatic array (224 foreign posts), researchers were initially weary of attempting to find and catalogue all of the digital spaces that may be used to provide information. Luckily, the central German government is fastidious around providing listings of social media apparatus, and once this was found the overall ease of searching became much simpler. However, it quickly became apparent that Germany posted in the host state language in almost all cases. For this reason, it was soon determined by the researchers that due to their own individual language skills, even cursory searches using translation tools were unhelpful in finding and locating the information that this project hoped to uncover. For example, the embassy in Moscow did have a robust social media presence, both on Twitter and VK Kontakt, a popular Russian alternative to Facebook. Both had their own issues however in terms of accessibility and language. To view and interact with VK Kontakt, a phone number and account was required, and even once this barrier was overcome the bigger issue that also applied to Twitter became apparent; the vast majority of all posts were in Russian, a language that the researchers did not have knowledge of. By using translation services to compile a Russian keyword list, the issue became that without a thorough understanding of grammar, Cyrillic, and written vs spoken Russian, the ways in which the directly translated words were actually written made discovery of useful information next to impossible.

Research Findings

This left the primary accounts as the best place to gather information, and here at least there was information that was useful, or at least appeared to be. By using the Boolean operators explained above, hundreds of posts were found that mentioned keywords that could indicate information that was pertinent to this research project. Though many of the Tweets that popped up when searched were position statements, or references to speeches or statements given by the Foreign Minister, some did speak about concrete programs. Though detailed information was not included in the tweets, often a shortened hyperlink to a news story was included. For the hyperlinks that were operable, it usually laid out in clear terms the program that had been carried

out, the parties involved, and other relevant information. For those hyperlinks that were “broken” and inoperable, it normally still provided enough information from a combination of the content in the tweet and the date stamp to find a news story talking about what had occurred. For other items, no hyperlink was included, but again through Google, entries began appearing on the Germany list of specific items that were deemed useful enough to add to a list. The other great thing that came out of the perusal of the primary English and German accounts were hashtags or @’s that provided further accounts to study. By looking at these other pages, more information was able to be found, and further entries were able to be made.

The items found for Germany were by far the most numerous, and the best example of social media mining working as a means of finding information related to 1540. Appendix A includes over 30 distinct instances of the German government providing technical, financial, or material aid to other states to strengthen their own 1540 practices. Though Germany is a member of the GP, there are a number of differences between what is contained in the annual GP Annex and the list that has been compiled for a simple reason. Germany reports programs instead of projects. For a single example that clarifies this, one can look to the 2020 GP Annex. Germany reported on its work on Biosafety in the Caucasus region. Instead of listing every unique training, conference, or piece of aid given, they simply give a euro amount that they have provided to the project, as the lifespan of the project. In this case, this project has just received another three year round of funding, so they report as such.¹⁰ For the purposes of ASI inclusion, this is useful in that it gives a dollar amount, but what would be more useful is knowing the distinct activities that were carried out in 2020. Items found included the development of a molecular-epidemiological study to better tract infection chains in Georgia, the provision of Covid-19 diagnostic equipment, training, and materials, and a series of seminars on endemic febrile diseases.¹¹ By listing out specifically what was done, researchers would have a better understanding of what training has or has not been completed, and what things may need to be focused on in the future.

¹⁰ Global Partnership Working Group (GPWG) Annual Project Report (2020) International Threat Reduction Activities of Member Countries of the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. (2021).

¹¹ Biosicherheitsprojekt „Aufbau eines vorderasiatischen Netzwerks für biologische Sicherheit und Diagnostik gefährlicher Infektionskrankheiten“. InstMikroBioBw. (2020).
<https://instmikrobiobw.de/startseite/internationale-biosicherheit/georgien/aktivitaeten-2020>.

The Republic of Korea

Background

The Republic of Korea (ROK) has a long history of working in the realm of 1540. Their neighboring relationship with North Korea has made them particularly motivated to work in this field. Unlike other states that were researched, ROK is primarily a recipient of 1540 assistance, though they do provide some technical aid as well. In 2013, they invited the (International Atomic Energy Agency (IAEA)'s International Physical Protection Advisory Service (IPPAS) mission to assist its nuclear security regime. At the eighth plenary meeting of the Global Initiative to Combat Nuclear Terrorism held in May 2013 in Mexico City, the ROK was elected as Coordinator of the Implementation Assessment Group for the years 2013-2015.¹² In February of 2014, the ROK held another international symposium on nuclear security on the opening of the International Nuclear Security Academy. On March 25, 2014, Prime Minister Stephen Harper announced that Canada and the Republic of Korea would lead a joint commitment on the implementation of United Nations Security Council Resolution (UNSCR) 1540.

From 2013-2014 ROK held the Chair of the Committee of 1540 and the state has officially offered assistance through the 1540 Committee within its capacity.¹³ One such contribution amounted to around 1 million USD to the United Nations Office for Disarmament Affairs (UNODA) run trust fund for 1540.¹⁴ The state has also participated in regional and international level cooperation to achieve the effective implementation of this Resolution. In 2012, the ROK, Vietnam and the IAEA developed a Radiation Source Location Tracking (RADLOT) system in Vietnam, based on GPS technology. Additionally, the state contributed 1 million USD to the IAEA Nuclear Security Fund. Some past projects found in the ASI Database are: projects pertaining to the restriction and halting of arms and intelligence regarding the Democratic People's Republic of Korea (DPRK), increasing UN sanctions on regarding sharing or capacity building of proliferation activities, and counter measures to halt the DPRK's increase of nuclear technology or materials.

¹² "S/AC.44/2013/19" United Nations Security Council, www.un.org.

¹³ ASEAN 50, "ASEAN Regional Forum 2017: Annual Security Outlook," ARF Annual Security Outlook (ASEAN 50, August 2017), <https://aseanregionalforum.asean.org/wp-content/uploads/post/ARF-Annual-Security-Outlook-2017.pdf>.

¹⁴ "Korea (Republic of) 1540 Reporting," Nuclear Threat Initiative - Ten Years of Building a Safer World, October 28, 2015, <https://www.nti.org/analysis/articles/south-korea-1540-reporting/>.

Social Media

In terms of social media, this state has its own platforms and favors Naver Blog, Twitter, Facebook, Youtube, and Instagram. As such, it would be better to focus on what the government and individual ministries use rather than the state as a whole. However, the ROK also utilizes domestic media platforms like Daum, Kakao, and Line. Naver Blog and Kakao is a popular domestic social media platform utilized by the majority of Koreans while Daum is a popular internet browser (similar to Google). Line is a popular social media application similar to Facebook Messenger. Most of the western based social media platforms are geared towards their international audience or Western investors and allies. The in-country platforms are geared towards the domestic population and internal government officials. The state also utilizes social media like Twitter, Facebook, Naver Blog, and Instagram.

Research Findings

The first thing was to check all social media platforms using the search engine to identify if there was a 1540 social media presence and how it was structured. With the Republic of Korea, the various ministerial departments had their own Twitter, Facebook, Instagram, Youtube, and Naver Blog social media handles. To identify those handles, visiting the official websites, both English and Korean, was the first step. After identifying all the centralized governments ministries and outliers, searching social media platforms came next. The initial research was touch and go as researchers had to look at both Korean and English for each of the ministries and outliers. This proved to be time consuming and not very fruitful.

Each of the ministries had a variety of topics, but the primary findings was that each ministry used their social media differently depending on the department heads and messaging of each branch. It also depended on whether the social media was in Korean or English as the content varied by language. On top of that the English content was for international audiences while the Korean was for the domestic audience. Furthermore, depending on the individuals in the President's administration and their agenda, the content of the messaging changed. This is also true depending on the head of the ministry.

There was little to no concrete findings consisting of much information pertaining to anything other than propaganda or in celebration or condemnation of various political topics or achievements. Additionally, the Korean government as a whole utilizes social media to primarily communicate their thought process and intentions/justifications for various policy enactments. In the last decade, the government of the Republic of Korea has utilized social media to function as a mouthpiece for the ruling administration and communication of national level orders like new medical codes, summaries for policies and such. This makes finding any concrete or substantive findings regarding Resolution 1540 very difficult and convoluted. In conclusion, these inconsistencies and non-uniformities in social media usage makes finding Resolution 1540 specific information via social media impractical.

Most of the information that the researcher found regarding 1540 dated from 2013-2018. Part of this has to do with the political upheaval that ensued during this time with the impeachment of then President Park Geun-Hye and the criminal allegations leveled at former President Lee Myung-Bak. This sudden shift in administration led to a change in messaging and the focus of what was being presented by the government led social media platforms. As such, the topics presented by social media shifted as well. This has to do with the change in the ruling party in the National Assembly. The change from a conservative to a liberal party meant the departments became more focused on diplomacy and humanitarian aid rather than on military might and weapons development focused on the DPRK and DMZ situations.

Some various findings uncovered during research were social media posts made by news outlets or non-profit organizations that could lead to articles written regarding Resolution 1540 and pertaining projects. However, this led to a hunt through various ministry and department archives and staff blog postings. This, while fruitful, was time consuming and led to several other rabbit holes regarding interesting gatekeeping mechanisms, such as various firewalls that were required to be downloaded before some of the social media showed various content, formatting issues due to different coding, and content only being accessible to those with an in-country phone number.

Australia

Background

Australia provides assistance to states in the Oceanic region which lack the legal and regulatory infrastructure, implementation experience and/or resources needed to fulfill the provisions of UNSCR 1540.¹⁵ Much of this assistance relates to the UNSCR 1540 obligations in some way. In recent years, Australia has stepped-up its efforts to strengthen measures in the Asia-Pacific region to prevent weapons of mass destruction (WMD) proliferation. This includes the sharing of WMD with regional countries, regional experience in combating WMD proliferation and offering assistance, and training other states in improving implementation and enforcement of export controls on WMD-related materials.¹⁶

Australia promotes dialogue and cooperation on non-proliferation by advocating for international meetings associated with exchanging the sharing of ideas on implementation of “Non-proliferation Treaty (NPT) safeguards, CWC, and BWC [such as the CWC National Authorities meetings and the BWC Experts meetings.]”¹⁷ Australia in cooperation with New Zealand focused on assisting Pacific Island states with the preparation of their reports under UNSCR 1540. According to the ASI database past 1540 related projects Australia participated in Nonproliferation Security Initiatives, Nonproliferation Confidence Building Measures, Workshops on Nuclear Security and Safeguards, and projects dealing with biological and radiological issues.

Social Media

In terms of social media, the Australian government utilizes Twitter, Facebook, Youtube, and Instagram. However, most social media platforms are geared towards their international audience, investors and allies. Take for example the Australian embassy to Malaysia which has both a Twitter and Facebook account housed under the head delegate to Malaysia personal account. Additionally, the majority of posts made by each account are posted in the target language. The state uses its social media accounts for declarations, statements, or political

¹⁵ "1540 Committee," United Nations, [PAGE], accessed April, 2021, <https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states/australia.shtml>

¹⁶ "1540 Committee," United Nations, [PAGE], accessed April, 2021, <https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states/australia.shtml>

¹⁷ "1540 Committee," United Nations, [PAGE], accessed April, 2021, <https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states/australia.shtml>

announcements aimed at power plays or international recognition. For example, the Australian government prefers Twitter and Facebook. Their social media is broken down by ambassadors to each country housing an Australian Embassy or Consulate and then by head delegates to each country. As such, finding a centralized social media account is not possible for these particular social media platforms.

Research Findings

The first thing was to check all social media platforms using the search engine to identify if there was a social media presence and how it was structured. With regard to Australia, there is no centralized government social media presence. On Twitter, Facebook, Youtube, and Instagram, the Australian government presence is broken down by embassy according to the host state (i.e., the Australian Embassy to Egypt). This was standard across all media platforms. Additionally, each ambassador had a personal embassy social media presence. There was no state department or ministry social media presence.

As with the other states searched for, numerous avenues of exploration were followed. Most were dealing with non-profits and international organizations that received monetary backing or held Australian researchers as part of a research expedition or project. Others had to do with news outlets and research institutions run by the state or in partnership with Australia. However, these were not found via social media and rather newspapers and online forums.

The United Kingdom

Background

The UK is a significant economic state with a highly educated and literate population. The research showed that the citizens of The UK have a high level of access to the internet. Per review, the team concluded that when removing messenger apps from utilization, the most commonly used platforms were Youtube, Facebook, Twitter, and Flickr. The United Kingdom (UK) is a vice-chair of the 1540 committee per the United Nations. The UK provides aid and assistance throughout the entire global community.¹⁸ The types of assistance that the UK offers

¹⁸“1540 Committee,” United Nations (United Nations), accessed April 30, 2021, <https://www.un.org/en/sc/1540/about-1540-committee/composition/chair-vice-chairs-members.shtml>.

are expertise and financial aid. Mainly through bilateral agreements and support of other international organizations, such as the IAEA Nuclear Security Fund. The UK has spent millions of dollars to aid in the goals set by 1540.¹⁹ According to the ASI database, the UK appears to primarily provide funding to support different assistance programs, they also appear to focus on creating outreach programs.

Social Media

Locating the leading social media platforms was quite simplistic. The best approach was to find the government website of the department or ministry in question, then discover the links to their official social media profile listed on that site. Twitter, Facebook, and sometimes Flickr pages were commonly located this way. The foreign ministry and other profiles were located this way. The UK has a widely decentralized approach to how the state manages its social media apparatus. There were countless profiles to be considered, even within just the foreign service.

Research Findings

Once the profiles of the central mission of the foreign service were located, the task was then to find posts pertinent to the search as tasked by the Stimson Center. This is a difficult task as the central profiles often post multiple times a day about policy positions that are not related to the topic of the CBRM.

After trying to locate information related to the project, the next two steps were expanding the search to foreign service missions. It was hypothesized that the UK would be interested in doing this type of work. For this expansion, the list of Commonwealth Countries was utilized since most of these countries have strong ties to the UK. In this phase of the search, it became apparent that the different missions of the British Foreign Ministry sporadically used their social media platforms like for other countries.

Next, after regrouping, it was decided to focus on both Twitter and central accounts only. In addition to using only central accounts the team also decided to uniformly use the keyword boolean search option. Similar to France, this showed that the UK is indeed interacting with the

¹⁹“1540 Committee,” United Nations (United Nations), accessed April 30, 2021, https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states/united_kingdom.shtml.

topic of interest on social media, yet not in the way that was desired for this project. The UK used its social media to support non-proliferation and make political statements about their support. The state managed social media platforms did not share detailed information about ongoing projects or programs and did not appear to be a tool to direct this research to such projects.

France

Background

France is a highly developed state with a robust economy and a highly trained workforce. This means that the literacy rate and access to the internet in France are relatively high. While researching France, it was found that messenger apps were some of the most commonly used social media platforms in France. The most used platforms used to disseminate information germane to this research were Youtube, Facebook, Twitter, and Flickr.²⁰ France is a committee member of the 1540 committee per the United Nations. France provides aid to all regions. They provide general assistance, including export control and physical security. France is also part of the G-8 initiative and the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. France is actively participating in projects, including the initiative to dismantle Russian submarines. France is also an active member and donor of the IAEA. France has many different entries in the ASI matrix; they appear to host workshops, provide regulatory assistance, and help to coordinate efforts across many topics and regions.

Social Media

Finding the different profiles that France uses was relatively easy at first. By going to the official website of the French Foreign Ministry, the team was able to quickly identify the main profile that the French post for in all things Foreign Affairs. Another technique was to google the French embassy or consulate in question and link to their official page, then identify their social media through those sites. In addition, searching on Twitter for a specific department or location was also beneficial to identify the platforms and profiles being used. The problem in identifying the platforms and profiles for France is that since France is one of the most active diplomatic states

²⁰“1540 Committee,” United Nations (United Nations), accessed April 30, 2021, <https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states/france.shtml>.

globally, they have a significant social media presence with many platforms and profiles which are not centrally managed. It would be a lengthy process to map the entire social media presence of the state.

Research Findings

Searching for posts or pages that were speaking directly to the interest of this project was rather complicated. On the main profiles for the Foreign Ministry, France is relatively active, posting multiple times a day. This creates a massive archive to sift through when combining all of the different places that France is posting. With little direction or a way to effectively sort through the various postings, this haystack was just too expansive to gain any pertinent information.

From the initial search, researchers opened up the search to try to focus on where it was hypothesized that France would be doing their aid work through a historical lens. As a former Colonial Empire, one could assume that France would continue to have strong connections with many of their former colonies focus their attention on these geographical areas. When expanding the search into these categories, it was soon realized that this would not be a fruitful endeavor. The satellite profiles of the embassies and colonies vary in their activity on social media. Upon reflection, this would make sense depending on access to the internet in the former colonies and the ability to connect with the everyday citizens of those states.

Next, once this research group coordinated and created a list of keywords and decided to focus on Twitter as the primary platform of interest, the boolean search function allowed for more detailed searches. With these keywords, it was clear that France was posting about the topics of interest. However, with the internet of locating and adding missed programs and projects to the ASI Database, these searches were not fruitful. It appears that, for the most part, France uses their social media presence to posture and show support for broad policy topics. It was not evidenced that they were using their central Twitter profiles to communicate detailed program and project information to the masses.

What it means for Stimson

Upon completion of the research phase of this project, this team was tasked with making a determination upon the efficacy of social media examination using the above methodology as a tool going forward for discovering information about 1540 activities. It is this team's recommendation that this technique not be used in the future, due to the varying limitations that presented themselves as outlined, as well as the lack of relevant data found for the majority of states studied. This is not to say however that the project was a failure, and there are several key findings that may be of use to the Stimson Center when working on compiling ASI entries in the future.

In the future, Stimson may choose to look for native speakers to do this work to ensure that all facets of the CBRN nomenclature are properly translated, as well as to make sure that any slang not readily available through dictionaries is included in the search parameters. Though non-native speakers were able to conduct this research, the overriding worry that information was being missed was a serious consideration. By engaging native speakers to help look for this information, or at least compile the proper keyword lists, more information may be able to be found. In this same vein, it was interesting to find that for states that operated two Twitter feeds, nominally in the state's own language and then one in English for an international community, that did not always mean that the same information was covered. Based on the findings of this team, no official policy of changing information was found. Instead, it can only be hypothesized that though the two feeds are often similar, for whatever reason translations are not always perfect, and occasionally one account will post something the other will not. For this reason, examining both is necessary to ensure totality of coverage. For Germany, the one state with new, usable information discovered, researchers discovered that for the most part the projects that Germany had not reported were simply lumped in with the programs that they did report, as outlined above when discussing the example of the German Biosafety in the Caucus' program. For future researchers, it may be worthwhile to conduct more in depth examinations of programs reported to the GP or the UN, and see if more specific information about that program does exist, as in the case of Germany.

If Stimson would like to revisit this style of research in the future there are a few best practices to take from this methodology, but Stimson would need to dynamically change many aspects of this plan of research to augment the desired results.

Recommendations and Conclusion

Based on the research that was completed as part of this capstone project, there are three “interesting practice” pieces that this team would recommend to future researchers if someone chose to continue this line of inquiry. The first is to do a more thorough analysis of how social media is actually used by different states. This includes finding any official policies around how social media should be used by staff, something that this team was unable to find for the states selected, as well as attempting to profile how each administration prefers to share information if there has been a leadership change during the time frame that is being examined. Some states may have centralized accounts, while others may take a more independent approach, and accurately figuring this out will be key to a successful search.

The second practice found useful was using a standardized list of terms that are then translated into the target languages when necessary. By making sure that the same words are being searched for, it allows for uniformity and clear direction that is not there when researchers are working off of individual lists. This team would also suggest that future researchers be wide ranging in the number and type of accounts that are examined. Though this team was ultimately forced to abandon the searching of embassies and diplomatic posts due to little information being found or language barriers, researchers with different language backgrounds may find it more useful to focus on particular states. Instead of focusing on the work that state A has done, instead, focus on the work that has been done in/ or for the benefit of state A.

The third recommendation is looking at including personnel with computer programming and development knowledge. Based on the research and scale of what is needing to be mined as well as the vast amount of databases covered, having persons knowledgeable in creating, operating, and maintaining a functioning computer program aimed at data mining would be preferable. This is impart due to the scale of the project and the implementation of a person who has computer programming skills will aid in cutting down the time spent.

One of the limitations of the project was that much of the data mining could be done if a software was developed or an existing data mining software was present to be utilized in extracting the usable data from social media. There are ways to mine usable raw data from social media sites to then be used for further analysis and analytics. As such, in order to compile, research, and analyse key terms from social media sites, looking to those specifically with computer programming, analytics, data mining, or other relevant field experience would be advised for better results.

Though this research was interesting and did have limited success in the case of Germany as outlined above, at this time it is not recommended that Stimson continue using social media analysis as a means of research in order to add new information and entries into the ASI database. Due to the limitations that were discovered, both in the way states use their social media platforms as well in the limited information that was able to be gathered, using social media did not dynamically return the results that were hoped for at the beginning of this project. Due to the fact that states use social media very differently, have built out their apparatuses in different ways, and use social media to convey different information about policy, the amount of time spent to do this research properly and effectively would be extensive and show limited results.

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Appendix A: Germany Found Items

Title: Training of Iraqi Chemical Weapons Inspectors

Donor/Funding Partner: Germany

Implementing Partner: OPCW

Unique Project Code:

Type of Partner: State

Country: Germany

Link To Program: <https://twitter.com/GermanyDiplo/status/160328059814281216>
<https://www.auswaertiges-amt.de/en/newsroom/news/131104-chemiewaffen/258084>

Project Description: Training of Iraqi Chemical Weapons Inspectors for the job of identifying and destroying chemical weapons in Syria

Description of Activities: Technical Assistance

CBRN Risk Addressed Code: Chemical?

Status: Completed (2013)

Title: Explosion Protection and Error Management

Donor/Funding Partner: Germany

Implementing Partner: OPCW, University of Wuppertal

Unique Project Code:

Type of Partner: State

Country: Germany

Link To

Program: <https://www.opcw.org/media-centre/news/2020/09/opcw-and-german-experts-build-member-state-capacity-explosion-protection><https://twitter.com/OPCW/status/1311287675715022850>

Project Description: German university and OPCW held online training on Explosion protection and error management from 7 September to 20 September, 2020. Benefited 24 participants from OPCW Member States in Africa, Asia, as well as Latin America and the Caribbean. A wide range of stakeholders participated including representatives from governments, National Authorities, chemical industry, and academia

Description of Activities: Technical Assistance

CBRN Risk Addressed Code: Multiple?

Status: Completed (2020)

Title: Biosecurity Training Conference and Training In Georgia

Donor/Funding Partner: Germany

Implementing Partner: Bundeswehr Institute of Microbiology

Unique Project Code:

Type of Partner: State

Country: Georgia

Link To Program: <https://twitter.com/GermanyDiplo/status/923550656560058369>

https://instmikrobiobw.de/fileadmin/user_upload/pdfs/AA_GEO_Flyer_ENG.pdf

Project Description: Training courses and studies in the area of biosecurity and biosafety as well as the diagnosis of infectious diseases are urgently required in Georgia due to the natural occurrence of numerous dangerous pathogens. Public health monitoring in Georgia has primarily been based on passive reports. It is most likely that infectious diseases are considerably under-reported across the country due to the lack of qualified scientific and technical laboratory staff. Although there has not been any increase in the immediate threat of terrorism from Georgia recently, the country's geostrategic position could make it an area of retreat for terrorist groups. To improve the biosecurity and biosafety situation in Georgia, the Bundeswehr Institute of Micro- biology (IMB) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH conducted a project with local authorities

Description of Activities: Technical Assistance and training

CBRN Risk Addressed Code: Multiple?

Status: Completed (2017)

Title: Biosecurity Training Workshop and Funding of New Research Lab in Kazakhstan

Donor/Funding Partner: Germany

Implementing Partner: Bundeswehr Institute of Microbiology and Kazakhstan

Unique Project Code:

Type of Partner: State

Country: Kazakhstan

Link To

Program: <https://www.auswaertiges-amt.de/en/aussenpolitik/themen/abruestung/-/218590>

<https://twitter.com/AuswaertigesAmt/status/585777024574365696>

Project Description: Ongoing part of the German Biosecurity Program which aims to support Kazakhstan's efforts to manage biological security risks, such as the intentional misuse of biological pathogens. It does this primarily by conducting training sessions and through scientific research into the existence and detection of dangerous biological pathogens. The German Kazakh network for addressing highly pathogenic microorganisms started in 2013, continues to this day. This tweet, from 2015, talks about the funding of research and a new lab (the US was also a funder of the lab). The information was presented in 2016 in a conference at Kazakh National Medical University in Almaty.

Description of Activities: Technical Assistance and training

CBRN Risk Addressed Code: Biosecurity

Status: Completed (2016)

Title: German-Tanzanian Network for the Diagnosis and Epidemiology of Infectious Diseases caused by Potential Biological Agents

Donor/Funding Partner: Germany

Implementing Partner: Bundeswehr Institute of Microbiology

Type of Partner: State

Country: Tanzania

Link To Program:

Project Description: Germany assisted Tanzania is developing tools and techniques for identifying infectious diseases caused by biological agents.

CBRN Risk Addressed Code: Biosecurity

Status: Completed (2013-2016)

Title: Franco-German Biosecurity Initiative for Mali

Donor/Funding Partner: Germany, France

Implementing Partner: Bundeswehr Institute of Microbiology

Type of Partner: State

Country: Mali

Link To Program: <https://instmikrobiobw.de/en/home/international-biosecurity-projects>

Project Description: Mobile Diagnostics for Assistance in the Event of Dangerous Infectious Disease Outbreaks. Focus was on building capacity within Mali of containing disease outbreaks and preventing the spread of dangerous disease.

CBRN Risk Addressed Code: Biosecurity

Status: Completed (2014-2016)

Title: Providing Mobile Biosecurity Lab Equipment to Tunisia

Donor/Funding Partner: Germany

Implementierung Partner: Bundeswehr Institute of Microbiology

Type of Partner: State

Country: Tunisia

Link To Program: <https://twitter.com/bundeswehrInfo/status/928920445008560130>

Project Description: Germany provided mobile diagnostic lab equipment to Tunisia.

CBRN Risk Addressed Code: Biosecurity

Status: Completed (2017)

Title: Southwest Asian Network for Biosecurity and the Diagnosis of Dangerous Infectious Diseases in the Caucasus Region

Donor/Funding Partner: Germany

Implementing Partner: Bundeswehr Institute of Microbiology, Georgian National Center for Disease Control and Public Health, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Type of Partner: State

Country: Georgia, Azerbaijan, Armenia

Link To Program: <https://instmikrobiobw.de/startseite/internationale-biosicherheit/georgien>

Program Description: Part of the German Biosecurity Initiative. Goals include the training of specialists in the diagnosis of dangerous pathogens, strengthening the specialist staff in the application of international laboratory standards, studies on the occurrence of dangerous pathogens in the Caucasus region, support in setting up regional collaborations in the field of research and biosecurity, promotion of young scientists in Georgia.

CBRN Risk Addressed Code: Biosecurity

Status: Ongoing (2013-Present)

Projects Completed under this Programs: On the Website link above (German) there is a detailed list of concrete projects completed by Month and Year. The below highlights seminars/conferences/trainings etc that were conducted as well as physical aid given, but does not include general meetings of the partnership discussing goals.

December 2020 – Institute of Microbiology teams and Georgian partners developed a molecular-epidemiological study to better track infection chains in Georgia

September 2020 - One of the Georgian doctoral students trained as part of the biosecurity project successfully initiated a series of seminars on endemic febrile diseases for employees of the Georgian health care system.

May 2020 – Transfer of diagnostic materials and equipment to Georgia to combat Covid-19

November 20-21, 2019 – Biosafety and Biosecurity Symposium took place in Tbilisi and was attended by regional scientists and politicians.

December 2018 – Workshop was held to establish new device diagnostic using real-time PCR testing. Partners from Azerbaijan also attended.

October 2018- A workshop was held by German scientists for Georgian partners on effective collection of field samples.

June 2018 – Workshop held by Dr. Chitimia-Dobler (IMB) for identifying ticks that may be carrying biologically dangerous diseases.

April 2018 – Field study conducted on natural occurrence of early summer meningoencephalitis.

October 2017 – Symposium on Biosecurity was organized and held in Georgia by the IMB, German Embassy, and German biosecurity experts

October 2017 – Lab training was carried out by MBI for Georgian scientists. A special workshop on organization techniques for researching biothreats was also conducted.

June 2017 - Training of the partners at the NCDC in diagnostic detection methods for highly dangerous pathogens. Staff from the Georgian Ministry of Agriculture were also invited to the event.

Title: German-Kazakh Network for the Diagnosis of Infectious Diseases caused by Potential Biological Agents

Donor/Funding Partner: Germany

Implementing Partner: Bundeswehr Institute for Microbiology, M. Aikimbayev's National Scientific Center for Especially Dangerous Infections, Research Institute of Biological Safety Problems

Type of Partner: State

Country: Kazakhstan

Link To Program: <https://instmikrobiobw.de/startseite/internationale-biosicherheit/kasachstan>

Project Description: The focus of this ongoing project is on identifying and developing detection methods for dangerous pathological diseases that occur naturally in the steppes. This includes institutional cooperation in a network with continuous expansion of the network on biosafety and biosecurity, establishing international lab standards, workshops and training on different aspects of biosafety and security, education of PhD students towards building biosecurity capacity, and implementation of studies to identify hemorrhagic fevers.

CBRN Risk Addressed Code: Biosecurity

Status: Ongoing (2013-Present)

Projects Completed under this Programs: On the Website link above (German) there is a detailed list of concrete projects completed by Month and Year. The below highlights seminars/conferences/trainings etc that were conducted, but does not include general meetings of the partnership discussing goals.

April 21-22 2021 – Online symposium with experts from Kazakhstan and Germany discussing COVID-19, Crimean-Congo hemorrhagic fever and early summer meningoencephalitis.

February 2021- Announcement of a series of lab training courses that will be held at Kazakh Universities around best practices for Biosafety. There is also a version of this training that will be available as an online course later this year.

December 2020 - The German-Kazakh Network for Biosafety, jointly supported by IMB and the German Society for International Cooperation (GIZ) GmbH, organized a series of online training courses on biosafety issues. More than 50 employees from the Partners National Scientific Center for Especially Dangerous Infections (NSCEDI) with its anti-plague stations spread across the country and nine new employees from the Partners Research Institute for Biosafety Problems (RIBSP) took part.

Title: Mobile Lab Training in Uzbekistan

Donor/Funding Partner: Germany

Implementing Partner: Bundeswehr Institute of Microbiology, State Committee on Industrial Safety of the Republic of Uzbekistan

Type of Partner: State

Country: Uzbekistan

Link To

Program: <https://instmikrobiobw.de/startseite/internationale-biosicherheit/usbekistan/aktivitaeten-2020>

Project Description: Initial visit by Bundeswehr Institute of Microbiology to Uzbekistan as part of larger future ongoing partnership. This first conference also included training for the State Committee on Industrial Safety of the Republic of Uzbekistan in the realm of mobile diagnostics.

CBRN Risk Addressed Code: Biosecurity

Status: Completed (October 2020)

Title: Ukrainian-German biosecurity initiative for risk management near the EU's external border

Donor/Funding Partner: Germany

Implementing Partner:

Type of Partner: State

Country: Ukraine

Link To Program: <https://instmikrobiobw.de/startseite/internationale-biosicherheit/ukraine>

Project Description: Part of the German biosecurity Initiative, goals include training of specialists in the diagnosis of dangerous pathogens, strengthening the specialist staff in the application of international laboratory standards, studies on the occurrence of dangerous

pathogens in Ukraine, establishment of a German-Ukrainian network for zoonosis risk management, promotion of young scientists in Ukraine.

CBRN Risk Addressed Code: Biosecurity

Status: Ongoing (2016-present)

Projects Completed under this Programs: On the Website link above (German) there is a detailed list of concrete projects completed by Month and Year. The below highlights seminars/conferences/trainings etc that were conducted as well as physical aid given, but does not include general meetings of the partnership discussing goals

November 2019 – participated in the Tbilisi Biosecurity symposium organized by Germany.

June 2019 – Conference on Zoonotic Diseases held in Munich, with joint presentations by members of the program team.

December 2018 – Five Ukrainian doctoral students received their certifications as “officers for biological safety”

November 2018 – Conference on Biorisk management was held. Provided information, training, and experts.

September 2018 – Lab equipment was presented by Germany to Ukraine

December 2017 - Workshop for young Ukrainian scientists on aspects of biosecurity and the basics of biorisk management.

April 2017 – Ukrainian scientists were brought to the MBI for training on lab techniques and with new lab equipment that is not yet available to them in Ukraine.

August 2016 - First laboratory training with Ukrainian scientists at the partner institute for the preparation of soil samples and the production of diagnostic tests for the detection of pathogenic agents.

Title: Biological Situations: Security Cooperation for Biological Threats in Tunisia

Donor/Funding Partner: Germany

Implementing Partner: Department of Tunisian Military Health, the Military Hospital in Tunis, Pasteur-Institute in Tunis, Charles-Nicolle-Hospital in Tunis

Type of Partner: State

Country: Tunisia

Link To Program: <https://instmikrobiobw.de/startseite/internationale-biosicherheit/tunesien>

Project Description: Goals and activities of this program included the delivery of a mobile diagnostic unit to the Tunisian partners, training of a Tunisian diagnostic team in the use of the mobile diagnostic unit, training of a Tunisian team of trainers for the mobile laboratory (train the trainer concept), promotion of young scientists in Tunisia, studies on the occurrence of dangerous pathogens in Tunisia.

CBRN Risk Addressed Code: Biosecurity

Status: Ongoing (2016-present)

Projects Completed under this Programs: On the Website link above (German) there is a detailed list of concrete projects completed by Month and Year. The below highlights seminars/conferences/trainings etc that were conducted as well as physical aid given, but does not include general meetings of the partnership discussing goals

June 2020 – IMB provided diagnostic detection tests, lab equipment for safe work with highlight pathogenic pathogens, and analysis devices to partners at the Military Hospital in Tunis

March 2020 - Further training for the new Tunisian diagnostic teams by the Tunisian trainers trained in the Train the Trainer program.

February 2020 – (Germany) Research stay for young Tunisian researchers at the IMB to work on joint research projects and to learn new laboratory techniques for the detection of infectious pathogens.

January 2020 - Sampling of 500 dromedaries by the German-Tunisian team of veterinary and scientific staff to investigate the natural occurrence of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in the Tunisian Sahara

November 2019 – Burkina Faso – Tunisian Mobile laboratory was moved to Bobo – Dioulasso for joint field training between the Tunisian diagnostic team and the team from the G5 Sahel partnership program.

April 2019 – Germany - Research stay for young Tunisian researchers at the IMB to learn laboratory techniques for the detection of various pathogens.

March 2019 - At the request of the partners, the German project team carried out a workshop to optimize West Nile virus diagnostics at the Tunis military hospital.

October 2018 – Germany - Research stay for young Tunisian researchers at the IMB to learn laboratory techniques for the detection of various pathogens. The young scientists then presented their research results to an international audience at the 16th Medical Biodefence Conference.

September 2018 - Outbreak simulation of a hemorrhagic fever as a field exercise to monitor the success of the previous training of the Tunisian diagnostic team in the mobile laboratory.

November 2017 - Official handover of the mobile laboratory unit to the military hospital in Tunis in the presence of the German ambassador and the inspectors of the Tunisian and German medical services as well as training of the Tunisian diagnostic team in the previously delivered mobile laboratory in Tunis.

July 2017 – Germany – Training of Tunisian diagnostic team to use mobile lab equipment at the IMB, along with a seminar on the “Biological Safety and Health Assurances”

Title: Biological Security in the Sahel: Establishment of an alliance for the protection from dangerous biological threats in the Sahel

Donor/Funding Partner: Germany

Implementing Partner: CICM, Mali; Centre Muraz, Burkina Faso; INRSP, Mauritania; CERMES, Niger; Health Ministry, Chad; Bundeswher Institute of Microbiology

Type of Partner: State

Country: Burkina-Faso, Mauritania, Mali, Niger, Chad

Link To Program: <https://instmikrobiobw.de/startseite/internationale-biosicherheit/g5-sahel>

Project Description: Training of specialists in the diagnosis of dangerous biological agents, delivery of mobile laboratory units to the partner countries of the G5 Sahel region, training of a regional diagnostic team for the mobile laboratory unit, training of a Tunisian team of trainers for the mobile laboratory (train the trainer concept), investigations into the occurrence of dangerous pathogens in the G5 Sahel region

CBRN Risk Addressed Code: Biosecurity

Status: Ongoing (2016-present)

Projects Completed under this Programs: On the Website link above (German) there is a detailed list of concrete projects completed by Month and Year. The below highlights seminars/conferences/trainings etc that were conducted as well as physical aid given, but does not include general meetings of the partnership discussing goals

January and February 2020 – Chad and Mauritania – Training of scientific personal on lab safety and biological safety.

November 2019 – Burkina Faso – Joint field training with Tunisian Biodiagnostic team trained as part of the German-Tunisian partnership.

September 2019 – Mali - Training measures to train the diagnostics team of the G5 Sahel partners to use the mobile laboratory unit

August 2019 - Burkina Faso and Niger - Education and training of scientific staff at the Center Muraz, Bobo-Dioulasso (Burkina Faso), and the Center de Recherche Médicale et Sanitaire (CERMES), Niamey (Niger), in various mobile diagnostic methods.

April 2019 - Mali - Training and further training of scientific staff of the Charles Mérieux Center for Infectiology (CICM) and the Malian Institute National de Recherche en Santé Publique (INRSP) in various mobile diagnostic methods.

November 2018 – Mali - Outbreak simulation of a hemorrhagic fever as a field exercise to monitor the success of the previous training of the diagnostic team of the G5 Sahel region in the mobile laboratory.

October 2018 - Germany - Research stay for diagnostic teams of the G5 Sahel partners at the IMB to learn laboratory techniques for the detection of various pathogens. The partners then presented their research results to an international audience at the 16th Medical Biodefence Conference.

July 2018 – Niger, Burkina Faso, Mauritania - Training measures to train the diagnostics team of the G5 Sahel partners to use the mobile laboratory components. Implementation of the third policy development workshop with the aim of strengthening the G5 Sahel biosecurity network and supporting the use of the mobile laboratory in an emergency.

February/March 2018 – Mali – Official handover of a mobile diagnostic lab to the G5 partnership team, along with further training.

October/November 2017 – Germany - advanced training in molecular biological and serological methods at the IMB in Munich for the Sahel partner scientists.

August 2017 – Mali - Training measures on the fundamentals of international biosafety guidelines and procedures for a risk assessment of biological hazardous substances. In addition to the G5 Sahel partners, representatives from other institutes and centers were also invited.

Title: Financial and Technical Assistance in the destruction of Russian Chemical Weapons

Donor/Funding Partner: Germany

Implementing Partner: Germany's Federal Office of Defense Technology and Procurement

Type of Partner: State

Country: Russia

Link To

Program: <https://www.dw.com/en/germany-to-help-russia-destroy-chemical-weapon-stockpile/a-3401229>

https://www.auswaertiges-amt.de/de/aussenpolitik/themen/abruestung-ruestungskontrolle/uebersicht-bcwaffen-node/-/207106#content_3

Project Description: Germany provided both financial and technical assistance to Russia in the destruction of chemical weapon stockpiles. They provided more than \$218M to build a facility in Pochev, Russia, that was used to around 7,500 tons of nerve agents that were stored in Russia.

They also provided technical support around this initiative.

CBRN Risk Addressed Code: Chemical Security

Status: Completed (2002-2015)

Title: Financial and Technical Assistance in the destruction of Russian Chemical Weapons

Donor/Funding Partner: Germany

Implementing Partner: Germany's Federal Office of Defense Technology and Procurement

Type of Partner: State

Country: Russia

Link To

Program: <https://www.dw.com/en/germany-to-help-russia-destroy-chemical-weapon-stockpile/a-3401229>

https://www.auswaertiges-amt.de/de/aussenpolitik/themen/abruestung-ruestungskontrolle/uebersicht-bcwaffen-node/-/207106#content_3

Project Description: Germany provided both financial and technical assistance to Russia in the destruction of chemical weapon stockpiles. They provided more than \$218M to build a facility in Pochev, Russia, that was used to around 7,500 tons of nerve agents that were stored in Russia.

They also provided technical support around this initiative.

CBRN Risk Addressed Code: Chemical Security

Status: Completed (2002-2015)

Title: Conference on Nuclear Decommissioning

Donor/Funding Partner: Engie, Aachen Institute for Nuclear Training, Nuclear Engineering International

Implementing Partner: Aachen Institute for Nuclear Training

Type of Partner: Non-profit

Country: Germany

Link To Program: <https://www.icond.de/welcome.html>

Project Description: Yearly International conference focused on providing information and technical assistance to operators and companies operating nuclear power plants who are working on or planning to being working on decommissioning projects. Over 300 yearly attendees.

CBRN Risk Addressed Code: Nuclear Security

Status: Ongoing (2012-present)