

# Energy Infrastructure Targeting in the Mediterranean: a Shifting Threat

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In January 2013 the largest ever terrorist attack on an oil facility took place at the Tigantourine gas complex, operated by Statoil, BP and the state-owned Sonatrach, at In Amenas in eastern Algeria. The attack was carried out by the Al Mulathameen Battalion, a terrorist group led by Mokhtar Belmokhtar (and linked to al-Qaeda), who targeted the main facility and accommodation camp – taking hundreds of workers hostage, including more than 130 foreign nationals, who were deliberately sought out. After making a series of demands and threats, the Algerian military assaulted the complex. Consequently, 39 foreign nationals and most of the attackers were killed, prompting Statoil and BP to suspend operations while they performed security risk assessments. While Belmokhtar claimed that the attack was in retaliation for Algeria allowing France to use its airspace during military operations against Islamist groups in northern Mali, the evidence suggests that the likely motive was hostage-taking – a tactic widely used throughout the region.

This attack, though extraordinary, did not happen in isolation. On the one hand, while Algeria has long been a rather risky operating environment for oil and gas ventures, regional security in North Africa has been deteriorating since the Arab Spring began in 2011. In fact, risk assessment firms predicted that energy assets and foreign personnel operating in southern Algeria were a potential target due to the growth of militant and illicit/criminal activity in North Africa and across the Sahara. More broadly, in large parts of the Mediterranean region – namely Egypt, Yemen, Tunisia, Libya, Syria and Turkey – oil and gas pipelines as well as energy facilities and personnel

have come under threat. Indeed, as much of this region has become the epicentre of instability, energy infrastructures (EI) – that is physical assets, such as pipelines and facilities, human capital (i.e. energy sector employees) and, to a lesser extent, information infrastructure that support the functions of energy systems and operations – have been increasingly targeted.

On the other hand, the In Amenas case, and the growing vulnerability of EI in the Mediterranean region, must also be understood within a global context where EI is more frequently targeted. Since 1980, there have been over 10,000 EI attacks, across the globe (see the Energy Infrastructure Attack Database), however many of those attacks have been within the last 14 years – with over 400 EI attacks occurring, on average, per year since 2000 (which is at least a 100% increase). Not only is the rate of increase in such attacks concerning but it is also the propensity of attacks to cluster in hotspots of instability or conflict where non-state actors target EI and use it as a channel or platform to air grievances, communicate to governments, affect state economic interests; and as a source of access and power and of income and status. It is worth noting that the Tigantourine gas complex attack was one of many that occurred during 2013. Beyond North Africa, EI was targeted in various parts of the Middle East, South Asia, West Africa and South America. For instance, in that same year Colombia leftist guerrillas carried out 163 oil pipeline bombings, in addition to other EI attacks, that created considerable economic and environmental costs, while in Nigeria former militants and criminal entrepreneurs repeatedly sabotaged oil pipelines, stealing anywhere from 100,000 barrels per day (bpd) to 150,000 bpd. While these other attacks captured some attention, it was because of their small, diffuse – though fre-

quent – nature that they were unable to command the international shock and attention that In Amenas received.

Given that large parts of the Mediterranean region have become hotspots of instability, it is worth examining the threat to energy infrastructures in this area. What types of assets are most commonly targeted, how are they targeted and what types of groups are carrying out such attacks? What are the different goals or motivations? And what are the EI protection strategies that are needed to enhance security? This analysis comes at a time when the excitement around the gas findings in the Eastern Mediterranean Levant Basin, which holds an estimated 3.45 trillion cubic metres of natural gas and 1.7 billion barrels of oil, is moderated by the heightened political tensions in the region. Ongoing fallout from the Arab Spring aside, natural gas findings off the coast of Cyprus have exacerbated relations between Greek and Turkish Cypriots while Israel and Lebanon are in a maritime border dispute in which both countries have declared overlapping boundaries in the Mediterranean Sea.

### El Targeting in the Mediterranean

Energy assets are symbolic, strategically important and comprised of distributed infrastructures, many in remote locations that make them difficult to protect and thus attractive targets (See the box for a snapshot of different types of EI targeting). While in the

1980s EI attacks were a common feature throughout Central and South America where leftist groups targeted electrical infrastructure and to some degree oil and gas pipelines, more recently oil and gas infrastructures (including those both on and offshore) have become the target of choice. A spotlight on the Mediterranean region reveals that threats to EI not only cut across the region – impacting states in varying ways – but have also followed a similar trajectory.

In the 1980s and 1990s, terrorist groups in France and Spain carried out a number of violent campaigns. In France, Corsican nationalists who advocated for an independent Corsica often targeted public buildings and infrastructures, particularly electrical lines and substations, as a way to communicate their opposition to French control. Similarly, in Spain, Basque nationalists also targeted electrical infrastructures during its violent campaign that spanned over 30 years.

But, since 2000, the war in Iraq set in motion regular clashes within communities as well as proxy wars between the Shiite and Sunni Muslim communities. This coupled with the contagion of instability throughout North Africa and the Middle East has elevated energy infrastructure vulnerability – particularly in the oil and gas sector – throughout the Mediterranean region. This comes at a time when, in 2014, the International Energy Agency warned that political risks in North Africa and the Middle East may prevent it from reaching future production goals.

#### SNAPSHOT OF EI TARGETS

- Electrical infrastructures: Due to their extent and remoteness electricity lines and substations are often attractive targets. Most attacks aimed at electrical infrastructure involve some type of explosive device.
- Pipelines: Pipelines (whether gas or oil) are often the target of sabotage or bombing, which result in down time and repairs that can take weeks. Like electricity assets, they are hard to protect due to their extent and remoteness.
- Oil and LNG tankers: Transit areas such as the South China Sea, Malacca straits, Gulf of Aden, Indian Ocean, and Gulf of Guinea have all been the home to armed banditry and hijacking of oil and LNG tankers. While armed banditry can incur financial costs, hijackings of tankers have resulted in multi-million dollar ransom payments
- Energy sector employees: Energy sector employees, particularly foreign nationals are often targeted for significant ransom payments as well as for leverage for other interests.
- Rigs: Largely non-violent, occupying drilling rigs and drilling vessels is largely the work of environmental activists.
- Facilities: Local community opposition to extractive projects often sit along a spectrum of conflict that include demonstrations, protests and blockades that are aimed at facilities.
- Energy Information Infrastructure: Cyber-attacks largely include intellectual property theft and espionage but can also threaten supervisory control and data acquisition systems which monitor and control infrastructure in the energy sector

## Turkey

Turkey's strategic importance in the energy world has grown through its becoming a key transit country for oil and gas resources headed towards the EU. However, it sits on the edge of an unstable neighbourhood and has its own history of domestic terrorism. Over the years the separatist Kurdistan Workers' Party (PKK), which has sought autonomy in southern Turkey, has targeted EI in an effort to communicate its grievances and, in doing so, leverage a national, if not international, platform. While in the mid-1980s it carried out its first attack aimed at the Kirkuk-Ceyhan pipeline, since then such attacks have been infrequent and often used as a last resort, though one that is sure to provide the group with maximum attention. The August 2008 attack aimed at the Baku-Tbilisi-Ceyhan (BTC) oil pipeline, which pumps one million barrels per day (bpd) and is regarded as one of the most important alternative oil transit pipelines, garnered global attention and concern that more similar attacks would follow. However, it was not until 2010 that the group increased EI attacks, thereby confirming its intent to undermine Turkey's strategic assets, which are integrally tied to its energy infrastructure and role as a transit country. In one 2012 attack it bombed part of the Baku-Tbilisi-Erzurum (BTE or Shah Deniz) gas pipeline, halting 16% of Turkey's daily gas intake for about a week. More recently, hostilities between Turkey and the PKK have subsided as a peace process has been underway, although peace is tenuous at best.

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## Algeria

Algeria possesses up to 2.4% of the world's oil and gas reserves, while contributing 1.8% and 2.4% of oil

and gas production as well as up to 5% of LNG. Up until the attack on the Tigantourine gas complex, it seemed to be largely immune from the contagion of violence and unrest unleashed by the Arab Spring. But the 2013 attack reminded the energy sector that Algeria is not immune to dynamics in the region. In fact, while EI attacks have been more common in other countries in the region it should be kept in mind that when Belmokhtar and his group decided to launch the world's most dramatic and devastating attack on an oil facility, they chose to do so in Algeria.

## Egypt

Within Egypt, the Sinai Peninsula has been home to a number of attacks aimed at its energy infrastructure. For instance, the gas pipeline connecting Egypt to Israel and Jordan was attacked at least once a month from mid-2011 to July 2012. Since then there have been at least another 15 reported EI attacks. The repeated nature of these attacks result in repeated disruptions and, at times, lengthy repairs. More recently, in January 2015, Egyptian jihadists claimed responsibility for bombing the pipeline yet again, noting that it was due to Amman's role in targeting the Islamic State group.

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ties like Berbers and Toubous, have carried out a number of attacks on energy facilities, including Ras Lanuf, Es Sider, and Zuetina (oil and gas terminals). Attacks have ranged from minor to major events such as those aimed at oil fields in the Sirte region which caused considerable damage. For some, the goal is to undermine the government, advance political objectives, or demand the recognition of their rights. For others it is simply about using the energy assets as a platform for garnering funds. In any event, for a country that relies on oil for most of its revenue, the targeting of energy infrastructure will only expedite the further deterioration of the country.

### Syria

Like Libya, as Syria has become engulfed in political turmoil and war, attacks aimed at its natural gas facilities have increased and thus caused substantial losses in daily energy supplies. Illustrative of this, during 2012, one attack aimed at a natural gas pipeline cut off the supply of 194 million cubic feet of natural gas per day while another attack on a natural gas field led to the loss of 70 million cubic feet of natural gas per day. Such attacks have continued and in many cases intensified. As recently as June and July 2015, Islamic State (IS) militants bombed a natural gas pipeline that serves Damascus and Homs as well as a power plant that provides energy to Hasaka. On the one hand IS has used its access to oil fields to generate income while, on the other it has bombed electrical and natural gas infrastructure to deny resources to the government and weaken its position.

### Protecting EI amidst Ongoing Volatility

This cursory overview of threats to EI in the Mediterranean region reveals a concerning trend. Despite this, EI protection strategies have yet to adapt to the

shifting and volatile conditions. While in some cases energy operations need to be temporarily suspended due to particularly hostile conditions, in the longer term a more holistic, cross-sectoral approach to securing energy infrastructure is needed in such volatile regions. This includes coordinating security strategies that stretch from onshore to offshore and leveraging an increase in naval activity in the region to enhance the protection of EI.

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Returning to the In Amenas case, though measures have been taken to enhance security it seems that they sit within the reactionary 'business-as-usual' approach which tends to lean more towards 'guns, gates and guards,' rather than a more holistic and tailored approach that will improve risk management. Not only are better diagnoses of operating contexts vital, but sustained analysis and engagement are also key. This includes adopting an evidence-based approach to understanding the power of contagion that creates clusters and the motivations and characteristics of violent non-state actors. Today's violent militia groups have a complex mix of shifting economic, social, political, cultural, and ideological grievances. They are also transnational and often have different, if not competing, agendas. Consequently, multi-pronged strategies must seek to isolate extremists by using a socio-anthropological lens to develop a deeper understanding of them, support host communities through tailored community engagement activities and enhance cross-border collaboration that could diminish the capacity of such groups to carry out attacks.