# WAR AND PIRACY – EXECUTING SAFE AND SUCCESSFUL PROJECTS IN HIGH RISK TERRITORIES

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**Abstract:** Working within a zone designated as a 'High Risk Area' by Warlike Operations Area Committee (WOAC), provides many challenges in relation to personnel and asset security. In this paper, Global Marine Group (GMG) will share their experience when working on 'The Gulf to Africa'(G2A) project in 2017, installing a 1,527km fibre optic cable system between Salalah, Oman, Berbera, Somaliland and Bosaso, Puntland.
The security planning for this project was on going for nearly two years, involving liaison with many security sector specialists such as, EUNAVFOR, UKMTO, Dryad Maritime, Clearwater Intelligence Services and primarily SSI.
Despite the presence of both the European Naval Force and Combined Maritime Forces in the area of operations, a number of piracy incidents had occurred in the last six-month of 2016. This ensured GMG needed to provide the highest level of security possible to minimise risk during the installation operations. In order to comply with the International Maritime Organisation (IMO) guidance for security, meeting BMP4 requirements, GMG also took additional security measures for both its maritime and land based operations. This paper will discuss in more detail the measures and meticulous planning undertaken to ensure the project went smoothly with no security issues.

## 1. PROJECT OVERVIEW

Global Marine Group were contracted for the installation of the Gulf to Africa (G2A) Cable System, which included a base configuration linking Salalah, Oman to Berbera, Somaliland with a Branching Unit spur into Bosaso, Puntland with installation operations to occur in Q4, 2017.

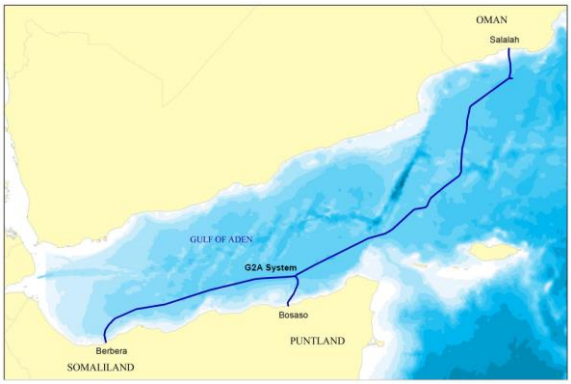


**Figure 1.1: Overview Map of System**

At the time of the installation, the Indian Ocean High Risk Area (HRA) had been proposed as a work site for the G2A project and working in this area presented numerous challenges that had to be addressed.

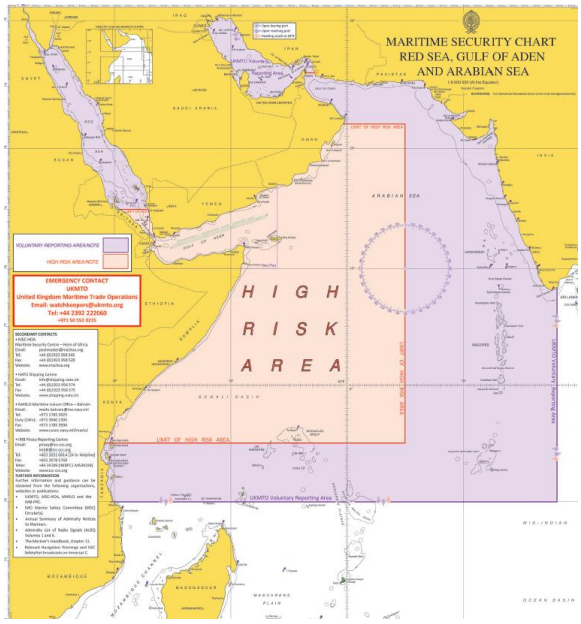


**Figure 1.2: High Risk Area**

The following sections describe GMG's structured approach to the G2A project and how, thorough planning enabled a seamless installation with zero incidents.

## 2. RISK REVIEW

The natural reaction to receiving a request to conduct operations in a high risk area is to say 'NO'. GMG took a step back and adopted a more structured approach, to review the risks associated with the G2A project. GMG recognised immediately that they could not conduct this assessment alone and that security expertise would be essential in enabling an informed and diligent decision. As such, GMG engaged the services of Ship Security International Ltd (SSI) to assist in the full risk assessment and operational planning for the project.

The first area to be reviewed, was the risk to employees and the vessel during operations from piracy, this being the most common concern when considering operations within a HRA. The act of piracy is defined as an attempt by armed persons to board or pursue vessels in transit on the high seas. This is different from petty thefts committed on ships in ports or anchorages. Vessels often have valuable cargo on board, as well as potential hostages, which acts as a monetary incentive for local people in areas with high levels of political instability and low associated income. Although pirate related attacks had decreased adjacent to Somalia, Yemen and elsewhere along the Gulf of Aden coastline, the risk of being approached or attacked still existed (ICC, 2015). (Figure 1.3).

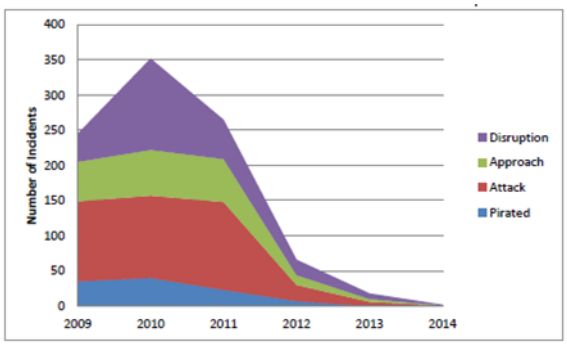


**Figure 1.3: Piracy Incidents**

Since 2011 the number of piracy attacks around Somalia has declined dramatically. This is due to a combination of vessels maintaining on-board security, widespread adoption of anti-piracy best practice measures, a significant naval presence from NATO, the EU and China, as well as development of onshore security forces, particularly in Somaliland and Puntland.

In 2015 there had been only a single incident reported by the International Maritime Bureau (IMB) in the Gulf of Aden; on 20/11/2015 it was reported that suspicious vessels approached a cargo ship. The observed skiffs, had armed personnel on board and carried boarding ladders. The vessel involved, hosted a security team on board who took up positions. After approaching to within 800m, the three skiffs departed. This incident demonstrated that the potential for piracy remained for unwary or unprepared vessels.

Toward the end of 2015 and through 2016, the amount of piracy incidents began to rise as shown in the illustration below:

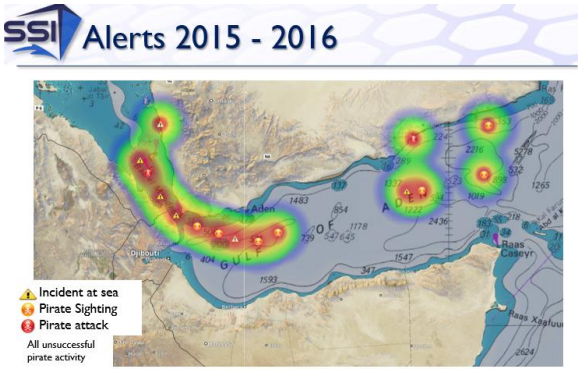


**Figure 1.4: 2015 – 2016 Piracy Incidents**

This trend also continued throughout 2017, with actual incidents at sea rising from six in 2016, to twenty five in 2017.

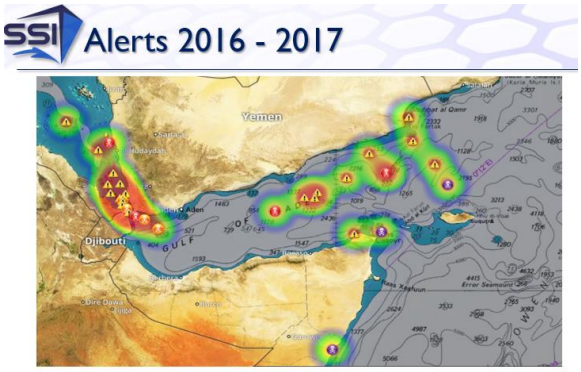


**Figure 1.5: 2016 – 2017 Piracy Incidents**

GMG worked with the relevant authorities to analyse each of the incidents, and it became apparent as to why this trend had continued to rise. Firstly, the transfer of a number of naval forces from the HRA zone to the Mediterranean to assist with migrant incidents had reduced naval patrols in the area. Ship owners had also become complacent due to the reduction of attacks and subsequently reduced their security arrangements. The combination of these factors had led to more opportunities for the reported incidents to occur. Based on this information, GMG concluded that if the planned installation vessel was made secure to at least meet the recommendation of BMP4, the risks could be managed to allow an incident free marine installation operation. The details of this risk management and the measures taken are outlined within the vessel based operations section in this paper.

The next area for consideration, was the land based operations, due to occur in three locations within the HRA, namely Salalah, Oman, Berbera, Somaliland and Bosaso, Puntland. However, during the period of the project, the Berbera landing was placed on hold. This only left the logistical risk management for the remaining two landing sites.

During the risk review process it was agreed with SSI, that the best course of action would be to conduct site visits to the landing locations, gather on site analysis of the risks and how they should be mitigated prior to any operations. However, through our existing knowledge from previous landings in Oman, it was not deemed necessary for SSI to visit Salalah. This was a known landing site to GMG from similar projects, therefore Bosaso, Puntland became the focus of this review.

## 3. SECURITY RECONNAISSANCE

Located in the North East of the Gulf of Aden coast, Bosaso is the economic heart of Puntland State. The town has an estimated population of 700,000, with representatives from multiple Somali clans.

The UK Foreign and Commonwealth Office advised against all travel to Bosaso, as there was a risk from terrorism and kidnapping. An appropriate security plan needed to be in place for the landing teams during the cable installation. SSI visiting Bosaso prior to any contract signature, became an integral part of understanding the risks that the project could bring.

SSI conducted the reconnaissance (recce) to Bosaso to ensure all logistic and security aspects were investigated, deemed suitable for the needs of the project and that costs were verified. The recce was facilitated with

the assistance of local agents who helped to identify details on the following points:

1. **Airports** – suitability, accessibility, and process
2. **Visas** – process and costs
3. **Accommodation and life support** – suitability and accessibility
4. **Shore Transport** – suitability and availability including logistical navigation routes (routine and emergency)
5. **Maritime Transport** – suitability and accessibility
6. **Government Security Forces Shore (GSF-S)** - suitability, accessibility, process and costs
7. **Government Security Forces Maritime (GSF-M)** - suitability, accessibility, process and costs
8. **Port Access** – accessibility and process
9. **General security conditions**

The information gathered on this recce, allowed GMG to analyse the risks and decide, through consultation with SSI, that the operations were viable, as long as mitigations where put into place as outlined in this paper.

## 4. LAND BASED OPERATIONS

Preparations for security arrangements and other logistical requirements for G2A in Bosaso, began implementation four weeks prior to any personnel arriving in country in order to ensure all security measures where fully understood by all parties. It was also critical for SSI to appoint one travel manager for the shore end team and they were to arrive in Bosaso forty eight hours prior to the shore team's arrival, with the goal of ensuring all security plans were in place and verified.

The travel plan for the team's arrival in Bosaso was the first area to be reviewed. The Bosaso Bender Quasim International Airport (BQIA), was found to be accessible for charter flights and suitable for the task. The airport is set against the ocean, on an open plain, with mountainous regions to the South. However, due to irregular flights and lack of emergency evacuation flights a private aircraft arrangement was recommended. A charter plane was hired for the shore end team and this remained available at all times should an emergency evacuation from the location be required.


Due to lack of adequate airport security or hanger facilities, it was also advised that our own dedicated twenty four hour security for the project aircraft be put in place.

Another key area of preparation for the shore landing team was to give them Hostile Environment Awareness Training (HEAT). This training was given to the team in Kenya which is where the charter aircraft was based and included preparing the team for the upcoming environment through outlining the following requirements:

- Familiarisation with bullet proof vehicles (one brought to hotel in Kenya)
- How and where to put on all body armour and PPE
- Logistics review for travel into the country, from airport to hotel and hotel to the works sit
- Presentations which confirmed protocols to be followed for travel and what to do in emergency scenarios, especially full evacuation
- Hierarchy and communication lines between all personnel on site

- The team medic review of procedures that would occur in the event of injuries

Accommodation was provided at the International Village Hotel and a block booking was made for the entirety of the works, so that only the project team where residents of the hotel at the time of operations. The hotel was situated in Bosaso town, approximately ten minutes from BQIA and fifteen minutes from the port. The hotel was protected by a solid perimeter wall, with barbed wire and electric fence topping. Access was controlled by an armed guard force, utilising an airlock gate system. All these factors led to this being the most suitable accommodation for the team. Other hotels were surveyed as part of the recce and a suitable secondary option was identified should it be required pre-operations or mid-operations (to change the routine). Upon arrival at the hotel, the team where given additional HEAT advice, ensuring all personnel where clear about what was required of them in the event of an incident at the hotel itself.

For transportation whilst in country, two B6 and two B7 armoured vehicles were used to transport the shore end team of twelve personnel. A secondary fleet was also identified to be utilised in the event of an incident or breakdown. It was noted and understood, that the use of armoured vehicles would raise the profile of the project in Bosaso. However, it remained the only way to fully secure the team in transit, and offer safe areas in the event of an incident at the shore landing site. The routes and times of the convoy were also altered daily to avoid increased exposure to incident.

Government Security Forces - Shore (GSF-S) were hired and utilised as follows:

- Four Mobile Support Units (each of four officers) for ground convoys and port and shore protection
- Four Officers for overnight hotel support
- Three Officers for 24hr aircraft protection
- Two Officers on the beach overnight to prevent interference or Improvised Explosive Devices

It was important that the same officers were used throughout the project and that the GSF-S received UK Foreign and Commonwealth Office (FCO) sanctioned training. This was all confirmed by the local security forces and verified by SSI, allowing all plans to be implemented upon arrival at the airport.

In relation to the marine operations for the shore landing, a team of divers were required to work offshore for the majority of the time in Bosaso. Safe access to the local port and security offshore was also a critical element of the installation. A local Colonel, was responsible for port security and made available a dedicated berth facility for the duration of the project. There were no secure parking, preparation areas, or equipment storage areas at this berth. Once the team had been deployed, vehicles moved away from the port until the maritime teams completed their tasks.

The same Colonel also provided Marines for maritime protection; he commanded a port protection force of 300 troops. The Marines were fully accustomed to maritime operations and the type of risks present and as such four Marines for each of the two protection boats were supplied. SSI representative also accompanied the shore team dive boat for the duration of the offshore operations.

During the operations themselves, the GMG Beach Master was tasked with reporting into the GMG Project Manager on a daily basis. SSI also had the same protocol along with the provision of daily situation reports. This ensured that each company was confident that all was well on the site and had a full

understanding of any changes in circumstances. This ensured informed decisions could be made about evacuation of the team, should it be deemed necessary.

## 5. VESSEL BASED OPERATIONS

As per the details within the land based operations, the safety and security of personnel and company assets was of paramount importance to GMG. As well as the risks highlighted for the land based team, significant risks also remained for the CS Sovereign, the designated main lay installation vessel for the project.

As previously mentioned the predominant risk when operating in this area, is piracy. The normal guidance that can be found in the form of IMO documentation, namely BMP4, highlights recommendations for additional measures to be implemented in the form of Anti-Piracy procedures and guidance for work in the HRA. Before these are implemented, it is important to understand what the key vulnerable areas are for a cable laying vessel:

1. **Low Transit Speed = High Risk** – (CS Sovereign was not assessed as high risk unless she is laying cable)
2. **Sea State/Weather** – The Gulf of Aden generally has calm seas year round, owing to the natural protection provided by nearby landmass; this however, is advantageous to pirates'
3. **Manoeuvrability** – The vessel is relatively fast but is restricted in her manoeuvrability severely when carrying out cable laying operations. If the worst case scenario was to arise and the vessel came under armed attack; the Master had the option of cutting the cable and increasing the vessel speed to full ahead to extract her from the threat as quickly as possible
4. Freeboard – The vessel freeboard was, in places low enough to raise the risk and require further mitigation

Based on these factors, a risk mitigation process proceeded and the following control measures were adopted to arm the vessel up to, and beyond the guidelines found in BMP4.

- Full guardian barrier on any part of the deck below 8m

- Razor wire coverage on areas that cannot be covered by guardian barriers
- Fully secured citadel with associated equipment
- External stairwell caging
- External door securing devices
- Removal of all equipment on deck that could be used to gain access to the accommodation and engine room i.e. cutting tools, general tools etc.

Additional to these security measures implemented on the vessel, it was also deemed necessary to appoint a Private Maritime Security Company (PMSC). Once again, GMG chose to use the expertise of SSI for this role and as such they gave provision for the following team and equipment:

- Four armed guards for transit in the Gulf of Aden (Port Said to Salalah)
- Two additional armed guards to board in Salalah for the remainder of the project so that a full team of six armed guards were available on the vessel

- A dedicated paramedic who would be able to deal with any trauma injuries from an incident
- Weapons and equipment to board at a floating armoury within the Red Sea:
    - Rifles and ammunition
    - Minox binoculars
    - Entel radios
    - Body Armour
        - Helmets
        - Night vision devices
        - INMARSAT,IsatPhone Pro
        - Comprehensive medical trauma pack
        - LRAD and Maxabeam systems

The hardening of the vessel and supply of security personnel and equipment gave the vessel the required safety factors necessary to work within this high risk zone at speeds and manoeuvrability restrictions that could make her a legitimate target to pirates. However, in the event that a piracy incident should occur it was vitally important that all personnel on the vessel fully understood their roles and requirements. SSI worked very closely with GMG to compile an anti-piracy procedure which outlined the following areas:

- Roles and responsibilities of the PMSC
- Rules of engagement and use of force
- Masters responsibility and overriding authority
- Evasive manoeuvres
- Procedures on siting of suspicion craft
- Procedures in the event of an attempted boarding
- Procedures in the event of a high jacking

Whilst a written document was a vital reference guide to all personnel, once again HEAT was a necessity to ensure that all ships personnel had experience in what to do in the event of a piracy incident. This was required in two phases. The first set of training was for the personnel taking the vessel from the UK to Salalah, Oman and passing through the Straits of Hormuz and Gulf of Aden and the second phase, delivered to the personnel who would be on-board for the entire cable installation project. It was an important decision to keep personnel on for the entirety of the project, as this ensured familiarity of the safety requirements and trust of knowledge within the team. Multiple practice sessions where run to simulate pirate attacks, so that it was very clear what the expectations were for each individual on the vessel should an attack happen.

## 6. CONCLUSION

This paper has discussed in detail the measures and meticulous planning undertaken to ensure the G2A project went smoothly. Rather than focussing on the installation operations the emphasis for GMG, was to firstly understand the risks associated with the project prior to agreeing a contract. The next step was to ensure a plan could be implemented that would keep all personnel and assets safe.

Thanks to the careful planning detailed in this paper, the project was delivered successfully, without any security incidents. This was in no doubt attributable to the combined team efforts of GMG, SSI, the cable system owners and local support, ensuring every procedure was followed as required to deliver this safe and successful cable installation project.

## 7. REFERENCES

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