NEW FRONTIERS AND NEW CHALLENGES: MANAGING SITE SAFETY AND SECURITY

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Abstract: As the industry pushes into new geographic frontiers, there are new challenges to maintaining the security and safety of personnel and contractors in an increasingly safety-conscious business environment. That safety matters should be obvious: we want our teams to be safe. Global travel and work in the marine environment are not new to this industry, but operating standards are changing, and with them the business risk. Using recent projects as examples, this paper discusses some of the challenges and the tools used to plan for safety and security during field activity, travel to remote locations, and potentially unstable social environments.

1. MANAGING SITE SAFETY AS AN ELEMENT OF BUSINESS RISK: A SUSTAINABLE BUSINESS PRACTICE

The safety of our project teams is paramount to our continuing businesses: we care about our staff and contractors, and they are central to our operations. On another level, the way we approach the safety of our project teams also reflects the organization's ability to manage business risk during a project, and beyond.

At the project level, safe execution of project tasks contributes to completing a project with fewer disruptions – from accidents, security concerns, and unplanned staffing changes.

A company's track record of completing projects with no or few incidents has value in securing future contracts. The subsea cable industry is also a player in offshore energy and the oil and gas industries, where high safety performance is a fundamental criterion for participation. Therefore, future business opportunities hinge on effectively managing project safety.

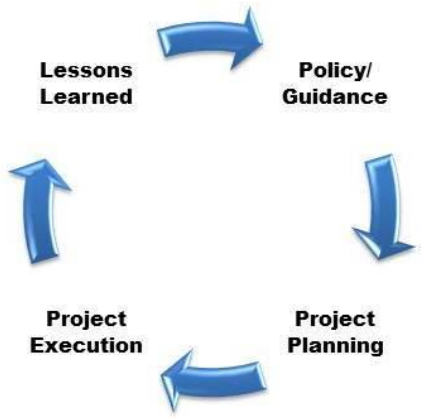

Figure 1: Safety Requires Continuous Improvement

This paper outlines tools and measures to manage safe operations, even as the industry seeks new frontiers.

2. MEASURES TO MANAGE SAFETY AND SECURITY DURING PROJECT WORK

Safety doesn't happen by accident. It begins long before the project, and

continues by learning from experience gained in the field. Safety performance is enhanced through a process of continuous improvement, using lessons from executions and using it to improve policies, plans, and procedures. See Figure 1.

2.1 Organizational Policies/Guidance

An organization's safety culture sets the tone and the stage for managing safety during project activities. In addition to health and safety guidance and requirements set by corporate policy and applicable laws and regulations (at the country and local level), other elements may include:

- Training programs
- Medical monitoring
- Confidential hotlines to report incidents or concerns
- Near-miss tracking
- Standards for contractors
- Stated authority to stop work for safety considerations

Each organization has a unique suite of concerns based on its business activities, location, role in a larger project team, and targeted markets.

While a company's safety policies and guidelines may need to be adapted to accommodate specific issues in frontier locations, a company's safety culture cannot change. It is critical that the importance of safety remain high and not affected by a particular circumstance or challenge.

2.2 Project Planning

There are a number of opportunities during the project planning cycle to consider safety and security. Examples are:

Constraints Analyses and Site Selection. During the desktop study and site selection process, the local social and environmental setting can be considered (these are often addressed in the context of permitting and regulatory constraints). Are the sites under consideration readily accessible? Do seasonal factors constrain field activity (seasons of heavy rain)? Who are the local stakeholders or communities and what is their relationship with the local government? These questions are typically part of the desktop study, but they also provide a preview of the likely site conditions facing the project team.

Scoping the In-country Site Visits, Field Surveys, and Meetings. Planning and scoping for project activities that involve in-country travel can consider seasonal concerns, election cycles, national holidays, and whether meetings with authorities and stakeholders are required at national versus regional levels, or both.

Team Selection. Team selection provides another opportunity to introduce safety and security considerations early in the project. In addition to technical qualifications, familiarity with the landing country/region, language skills (if applicable), and foreign travel and field experience should be considered.

2.3 Project Execution

A systematic approach – likely developed under an organization's safety policy or guidelines – is an effective means of preparing to execute site visits, field surveys, and other in-country activities. Figure 1 list examples of items to be considered in preparing travel/site safety plans.

Figure 2: Safety and Security Considerations

Depending on the scope of the activity, a number of parties may contribute to the preparation and review of safety planning, including health and safety managers, staff with in-country knowledge, and in some cases external specialists with expertise in security and contingency planning. The advice from those with recent 'on the ground' intelligence can be invaluable. The data gathering and planning process should be initiated as soon as feasible to allow for long-lead items such visas, vaccines, special equipment/gear, and alternate travel arrangements, if appropriate.

"Security risk" may include political or social stability (kidnapping, carjacking, and violent crime incidence, for example) in the landing country, and/or risk associated with transit to or access within the project area. Risk rankings can be found from a number of publicly available sources, such as foreign offices or the European Union (EU) list of airlines banned within the EU. [1]

The implementation of the travel/site safety plan should include monitoring or participation by the team's home office to provide support as required. If variations are made in the field, these should also be communicated.

2.4 Sharing Lessons Learned

A debrief or other means of communicating the effectiveness of safety and security measures provides a mechanism for improving safety programs and future projects and field efforts. Incidents and near-misses (valuable information for preventing accidents) can be captured in databases or other means for reporting and future training.

3. PROJECT EXAMPLES

Below are examples of measures ERM implemented for a project in West Africa for which ERM was tasked with permitting support, stakeholder engagement, and installation monitoring. We needed to be on the ground in 10 countries, some of which were considered to be high security risk areas. The project was executed with *no* safety or security reportables, in part attributable to the following:

- *Staffing and in-country contractors*. Project task managers and in-country contractors were selected based on their familiarity with and experience in the region, language fluency (English, French, Portuguese), and experience in remote work.
- *Site access and alternate transportation*. All air travel was reviewed for compliance with safety standards, and airlines banned by the EU were avoided. Overland travel included contingencies for mechanical failure including frequently travelling in convoy.
- *Planning for political instability*. One of the installations coincided with a national election that was expected to result in protests or other regional disruptions. The potential for social unrest was

considered in the travel risk assessment and mitigations. The installation was completed the day before the elections – which were followed by riots – and the project team avoided being stranded in-country.

- *Travel risk assessments and safety planning*. All travel was reviewed for potential safety and security risks. For high risk travel or field work, internal review and approval was required in the highest levels of the organization.
- *Communication*. Communication with non-traveling project team members at agreed-upon intervals helped provide assurance that activities in-country were proceeding safely and as planned.
- *Sharing Learning*: Safety was managed centrally for the overall assignment. This increased overall efficiency of implementation of the function. It also facilitated the sharing of learnings and thus continuous improvement. We maintained a log of safety observations, notes and tips and regularly shared experiences in team meetings.

We have applied similar measures elsewhere in the world to assure the safety of our staff and contractors, and to manage project risk, particularly in high-risk areas. In situations where a project is contentious, stakeholder and public meetings are planned to consider possible security risks.

In addition to travel and security concerns, high-risk activities like diving require thorough safety review. We have managed safety through contractor pre-qualification, including a review of safety records; review of dive plans and contingencies; provisions for adequate weather windows; and daily communication with the team lead.

There are a number of tools, measures and services that can be employed to maintain the safety and security of the project team. Most important, however, is the awareness of and commitment to a safety culture that precedes the project, and carries over to the safety of future efforts.

4. REFERENCES

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