



# THE IN AMENAS ATTACK

Report of the investigation into the terrorist attack on In Amenas. Prepared for Statoil ASA's board of directors.

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## 1. EXECUTIVE SUMMARY

At 05:30 CET on 16 January 2013, joint venture personnel and two airline pilots took their seats on a bus outside the living quarters of the In Amenas gas facility in Algeria. Some were going to the airport, others to renew their documents in town. Minutes later they found themselves in the middle of one of the largest terrorist attacks against an oil and gas facility in the history of the industry.

Mokhtar Belmokhtar, the Algerian terrorist, would later claim responsibility for the attack. There were nearly 800 people at the site when 32 heavily armed terrorists attacked. Many were taken hostage in a siege that lasted four days. 40 innocent people from 10 countries lost their lives in the attack. With more than 130 foreign workers from nearly 30 different nationalities on the site, the attack attracted global attention. An extensive emergency response effort was launched by affected companies and governments around the world to come to the aid of those involved.

### 1.1 INTRODUCTION

For Statoil this attack was unprecedented and the most serious international crisis the company has ever faced. Five Statoil employees were killed; 12 others managed to get out alive.

On 26 February, the board of directors in Statoil ASA commissioned an investigation to determine the relevant chain of events before, during and after the attack, and to enable Statoil to further improve in the areas of security, risk assessment, and emergency preparedness.<sup>1</sup>

This report aims to answer two main questions:

- What happened at In Amenas between 16 and 19 January 2013?
- What can Statoil learn to improve security and emergency preparedness for the future?

The terrorists who perpetrated the attack against the In Amenas gas facility bear the sole responsibility for the loss of lives. The individuals and companies involved at In Amenas were victims of violent crime.

Even if governments and companies do everything in their power to protect people and assets, they will still face the threat of terrorism. This is true regardless of where enterprises are engaged, whether in Algeria or in Norway. How serious the threat is, and how to best counter it, will vary. The ability to understand and respond to changes in the security environment is one characteristic of companies with strong security cultures. This is a theme that will be found throughout this report.

The In Amenas terrorist attack was a multi-faceted and complex incident, taking place in a challenging regional and domestic context. Consequently, the investigation team has relied on information from a range of sources in multiple countries, locations, governments and companies. The investigation team is confident that it has had access to sufficient information on which to base its observations, conclusions and recommendations in response to its mandate.

Even so, the investigation team cannot claim to have complete or exhaustive answers to all questions. The investigation work has been done within a timeframe of six and a half months, and there are still questions where answers remain partial or incomplete. Criminal investigations are currently underway in several jurisdictions. They are likely to bring new, additional and more complete information about important questions.

### 1.2 OVERVIEW OF THE REPORT

This executive summary contains the investigation team's main conclusions, observations and recommendations for the future. The report is structured in a way that makes it accessible both as a whole, and as individual chapters.

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<sup>1</sup> The mandate is included in Appendix A to this report.

**Chapter 2** describes how the investigation team has conducted its work in response to the mandate.

Beyond that, the report is structured in four main parts.

#### Part I: The attack at In Amenas

**Chapter 3** gives an account of the events that took place at the In Amenas gas facility in the days immediately before, during and after the attack.

**Chapter 4** gives a short overview of Statoil's history in Algeria and early risk assessments. It also provides context and explains who the attackers were, and how they are likely to have planned the attack.

#### Part II: Preparedness and capabilities

**Chapter 5** describes security and emergency response capability and preparedness in the In Amenas joint venture and Statoil in the period before the attack, to understand how both were prepared to deal with threats to their people and assets.

#### Part III: Risk assessments and emergency response

This part of the report examines how the systems and capabilities described in Part II were put to use.

**Chapter 6** describes how risks were assessed and acted upon in the period from the Arab Spring until the attack.

**Chapter 7** examines the emergency response to the attack. Given our mandate, the investigation team pays more attention to Statoil's contribution than to the other actors involved.

#### Part IV: Observations and recommendations

**Chapter 8** contains the main observations of the investigation team.

**Chapter 9** summarises the investigation team's recommendations and advice to Statoil. It draws on what it considers to be best industry practices on security. The recommendations are given with the intent of inspiring learning and further improvement in the areas of security and emergency preparedness.

### 1.3 THE IN AMENAS JOINT VENTURE

In Amenas is one of Algeria's largest gas developments, and started producing in 2006. It is located approximately 1,300 km from the capital city of Algiers, and 50 km from the border to Libya. The contract area covers 2,750 km<sup>2</sup>, an area the size of Luxembourg, and the majority of reserves are contained in the Tiguentourine gas condensate field.

In Amenas is operated as a joint venture between the Algerian national oil company Sonatrach, BP and Statoil. BP is an experienced global operator with activities in Algeria since the mid-1950s and signed the production sharing contract for the In Amenas joint venture in 1998 (originally signed by Amoco). Statoil entered Algeria and the In Amenas project when the company bought 50 per cent of BP's interest in 2003.



Figure 1.1 Map of Algeria.

Oil and gas is a capital-intensive industry, involving extensive partnering and collaboration to manage big investments and complex projects. Joint ventures are a common arrangement for developing and operating oil and gas projects throughout the world. At In Amenas, the three companies second personnel into a joint operating body which is responsible for the daily operations.

A technical and administrative support centre is located in the town of Hassi Messaoud, 500 km north-west of In Amenas. This serves both the In Amenas joint venture and the In Salah joint venture where the same three companies are partners.

#### 1.4 SECURITY ARRANGEMENTS

Security at In Amenas is based on the principle of layered protection.

**Outer security** is the responsibility of the Algerian government, and governed by national legislation. Prevention of, and protection against, terrorism are state responsibilities. Intelligence gathering, area surveillance, and border control are sovereign responsibilities of the Algerian authorities.

Outer security for In Amenas is provided by the People's National Army ("the army"), and the Gendarmerie ("gendarmes"), comprising a range of units with diverse roles. When referring to the collective capability of these two organisations, this report will refer to them as "the military".

The 1,000 km border with Libya, running to the east of the In Amenas facility, is guarded by gendarme border guards, with reinforcements from the army when necessary.

The army is responsible for security in the wider desert area around In Amenas. To restrict unauthorised movement, the Algerian government has established a military zone around the oil and gas facilities.

The gendarmes are responsible for the desert zone immediately surrounding the facility. They are also responsible for providing security for transportation of personnel, and mobile drilling rigs, as well as manning vehicle check points on access roads to the facilities.

The In Amenas joint venture is responsible for **inner security** measures at In Amenas. It is set up to operate as an autonomous entity under the oversight of its owners. Inner security includes physical protective barriers, security plans and procedures, unarmed civilian guards, access controls, contingency plans, training and other measures to protect the joint venture's people and assets from security threats.

Management of inner security measures at In Amenas is a joint operation between the Sonatrach internal security department ("SSI") and the joint venture's Liaison department ("liaison"). Liaison services are provided by an external security contractor.

#### 1.5 MAIN CONCLUSIONS

Decisions are always made in real-time without the privilege of knowing in advance their consequences. Organisations learn and improve from experience and with the benefit from hindsight that follows the re-examination of assessments, actions and facts. That makes the past a good teacher.

The investigation team recognises that it is difficult to look at the events leading up to 16 January without being influenced by what followed later. Hindsight tends to make what was once improbable now seem inevitable and to turn weak signals into strong warnings. We have tried to be mindful of the risk of hindsight bias in our work.

We have also been conscious of the risks inherent in passing judgement on individual decisions and actions outside the wider context in which they were made. There are instances where the investigation team has considered the question of "what if?" What if the barriers had been stronger? What if the joint venture or its owners had reduced the number of expatriate personnel before the attack? What if the civilian guards had been armed? What if the plant had not shut down? What if the terrorists had succeeded in moving the hostages?

On these and other issues, the investigation team has considered whether different decisions or courses of action would clearly have led to another outcome. After many incidents it may be possible to identify a clear chain of cause and effect; we do not believe this to be the case here. Pointing to a single factor or variable does not appropriately acknowledge the complexity of the incident, nor the circumstances under which those responsible had to make their decisions. Therefore this report does not speculate on alternative scenarios or outcomes.



## The main conclusions of the investigation team are:

### On the attack:

- 1.5.1 The sum of outer and inner security measures failed to protect people at the site from the attack on In Amenas on 16 January. The Algerian military were not able to detect and prevent the attackers from reaching the site. Security measures at the site were not constructed to withstand or delay an attack of this scale, and relied on military protection working effectively.
- 1.5.2 Neither Statoil nor the joint venture could have prevented the attack, but there is reason to question the extent of their reliance on Algerian military protection. Neither of them conceived of a scenario where a large force of armed attackers reached the facility.
- 1.5.3 The joint venture incident management team led the civilian crisis response, supported by Sonatrach and many other agencies on the ground. Statoil's contribution to the overall emergency response was effective and professional. The investigation team has not identified areas where a different response by Statoil could have changed the outcome.

### On security in Statoil:

- 1.5.4 Statoil has an established security risk management system, but the company's overall capabilities and culture must be strengthened to respond to the security risks associated with operations in volatile and complex environments.

## 1.6 OBSERVATIONS

Alongside these main conclusions, the investigation team has made a number of observations.

### 1.6.1 Responsibilities of governments

Prevention of and protection against terrorism are the responsibilities of states. Statoil and the In Amenas joint venture trusted that the military would deter or detect and respond to any terrorist threat, and thus prevent it from getting close to In Amenas. For this particular attack, this could have happened at the border, in the outer military zone or in the security zone provided by the gendarmes.

Given this reliance on, and trust in, the military, and the influence this had on the design of the inner layer of security, it was only the Algerian military that could have prevented the attack on 16 January. The economic importance of the petroleum sector and a belief that the Algerian authorities would make every effort to protect critical oil and gas facilities further deepened this trust. Even during the violence of the 1990s, the Algerian authorities managed to safeguard the oil and gas installations in the south of the country, although there had been attacks on oil and gas workers and pipelines. There were strong economic incentives for the Algerian military to continue to protect this critical national infrastructure.

### 1.6.2 Responsibilities of companies

Inner security at the In Amenas site is the responsibility of the joint venture.

Physical protective measures were constructed on the assumption that the Algerian military would prevent and protect against an armed assault. This assumption also underpinned their security plans and security risk management.

The physical security measures could not delay the attackers significantly once they had reached the front gates of the living area and the production area. They were not constructed to withstand an armed assault, and certainly not a large terrorist attack.

### 1.6.3 An unforeseen attack

The investigation team has not found evidence to suggest that Statoil or the In Amenas joint venture were aware of any specific threat to, or had actionable warning of, the attack on In Amenas site.

Companies cannot expect to receive clear **tactical warnings**, with specific information about where, when, and how a potential adversary may attack. They should consider and think through the implications of scenarios where security layers break down.

Security management will in most cases have to interpret **strategic warnings**, which are derived from important changes in the security environment that may influence the character or level of security threats. In an effective security risk management system, this should trigger re-evaluation of security measures.

From 2011 the regional security situation deteriorated. The civil war and chaos in Libya turned a relatively stable neighbouring country into a large ungoverned space, with freedom of movement for criminals and militants. In parallel northern Mali developed into a safe-haven for jihadists and terrorists. This evolving security situation was discussed in the In Amenas joint venture and in Statoil but did not result in material changes to alert levels or security measures.

The attack against the In Amenas site was perpetrated by a determined and heavily armed group of 32 terrorists, following months of planning and preparation. The investigation team considers it likely that the terrorists benefited from insider knowledge in their planning of the attack but does not have evidence documenting insider participation in the execution of the attack.

Statoil recognised that Algeria was a high-risk security environment at the time of entry in 2003-04. The company implemented appropriate security measures related to its activities in the capital Algiers, where the security situation at the time was considered most challenging. Statoil secondees to the In Amenas joint venture took an active interest in local security issues.

As an owner, Statoil's insight and influence over security at In Amenas site were very limited. Statoil did not take the initiative to independently quality assure or verify security in the In Amenas joint venture.

#### **1.6.4 Statoil's security capability**

Between Statoil's entry to Algeria in 2003 and today, the company's international production has increased sevenfold. In the same period the company has taken the step from partner to operator, including in high-risk security environments. The international business area has increased its capacity to manage security risks, but the company's overall capabilities and culture must be strengthened to respond to the security risks associated with operations in volatile and complex environments. Statoil is yet to develop a culture where it is generally recognised that security is everybody's responsibility.

Statoil's governing documentation for security is extensive, and while a security framework is established, methodologies and practices are not consistent across the company. Statoil's security risk management processes do not follow through effectively from risk identification to action.

Statoil does not have an holistic approach to the organisation and management of security. Security is not established as a corporate function independent of safety, recognised for its distinct characteristics and requirements. In most cases security is a small part of broader health, safety and environment positions, and one for which few people in those roles have particular experience and expertise. As a consequence Statoil overall has insufficient full-time specialist resources dedicated to security. While in-house security expertise clearly exists, it is dispersed and not effectively utilised. In the absence of an effective security network, collaboration and coordination across units, disciplines and levels have been occasional rather than systematic.

Security is generally not well understood within Statoil's leadership ranks, and as a result has not been prioritised, resourced or managed appropriately. Internal reviews and audits have made similar observations as those found in this report, in response to which the company launched an improvement agenda, but this agenda has not been implemented with sufficient urgency.

#### **1.6.5 Professional and effective emergency response**

The attack on the In Amenas site was a major international incident. The civil emergency response involved the combined efforts of multiple companies, governments, agencies and actors, with the joint venture playing the lead role.

Statoil's contribution to the overall emergency response was effective and professional. Notification followed established procedures and extensive resources were made available. Statoil leadership set firm priorities, to save lives, and support those directly involved and affected. It gave the teams involved freedom to act. This was backed up with clear and honest communications. The whole organisation mobilised around the company's priorities.

Survivors and next-of-kin have given positive feedback on the support and follow-up that Statoil has provided after the incident. The investigation team considers that the systematic approach and resources made available to support those involved in the incident and their next-of-kin should be embedded in the company's plans for the future.

#### 1.6.6 Bravery in the face of terror

The investigation team decided from the outset not to reference individual interviews or assign particular views or statements to named individuals. That does not mean that the role of individuals has not been important.

Nowhere is this seen more clearly than in what happened at the In Amenas site during the attack. In the course of its work, the investigation team has heard stories of both unimaginable terror and despair, and of remarkable bravery and initiative to help others, often at great personal risk.

Many demonstrated courage and commitment to help and support their colleagues, putting their own lives at risk while saving those of others. The bravery and actions of many, not all of whom survived, provided support and inspiration for others. They all deserve our respect and recognition.

### 1.7 RECOMMENDATIONS

The investigation team highlights five improvement areas that are critical for Statoil to effectively manage, mitigate and respond to security risks facing it in future. Taken together, the recommendations are intended to support the development of an enduring organisational capability that will enable Statoil to achieve its corporate goals while safeguarding its people, assets and operations from deliberate acts of harm. They will also foster the necessary security culture, where security is everybody's responsibility that is essential for such a capability to be truly effective.

Detailed recommendations are given in chapter 9, and cover the following five areas:

- **Security at In Amenas:** Improve the joint venture's ability to detect, delay and stop potential attacks by reinforcing electronic and physical protective measures, enhancing its security risk management capability and developing a coherent programme of security training and exercising.
- **Organisation and capabilities:** Develop a clearly defined ambition for the company's security capability. Strengthen the total security organisation. Ensure an holistic approach to security.
- **Risk management systems:** Develop a security risk management system that is dynamic, fit-for-purpose and geared towards action.
- **Emergency preparedness and response:** Coordinate and standardise emergency response planning consistent with the principles of the Incident command system ("ICS").
- **Collaboration and networks:** Broaden and deepen cooperation with relevant government agencies and organisations. Reinforce networks and institutional relationships. Establish standards for security management and engagement in joint ventures and partnerships.

Statoil's ambition must be to develop a strong and coherent security culture in the company, where a set of common beliefs, attitudes, practices and behaviours are pervasive, internalised and shared across geographies, units and levels.

In this report, the investigation team identifies the need for a significant step-up and acceleration of Statoil's security capabilities. The investigation team does not, however, advocate specific ways these capabilities should be achieved or organised. While there are certain features that characterise organisations that successfully manage security risks, the precise arrangements and framework will vary with company legacies and geographies of operation.

Security is not an activity outside the operations of a company; to be successful it must be an intrinsic and embedded part of the company's core activities.

As the scale and scope of Statoil's activities develop, so must the company's ability to manage security risks. It must develop in step with the business, reflecting the evolving risk profile of the company. It is imperative that Statoil continuously assesses the risk it faces and adjusts its policies, procedures and organisation accordingly.

## 2. ABOUT THE INVESTIGATION

### 2.1 INTRODUCTION

On 26 February 2013, Statoil's board of directors announced that it had commissioned an investigation into the terrorist attack against the In Amenas gas facility. The investigation team met for the first time in Stavanger the same day.

The ambition of the investigation team has been to produce a report that will facilitate the improvements and learning Statoil's board of directors defined as a main objective for the investigation.

### 2.2 MANDATE

When the board of directors in Statoil ASA announced the investigation into the terrorist attack on In Amenas it laid down that:

*"The main objectives for the investigation are to;*

- *Determine the relevant chain of events before, during and after the In Amenas terror attack; and*
- *Enable Statoil to further improve within the areas of security, risk assessment, and emergency preparedness."*

The scope of the investigation work was defined in the following terms:

*"An Investigation team has been appointed by the board in order to as far as possible clarify and evaluate all relevant facts related to the terror attack from Statoil's perspective. This includes facts and evaluation concerning:*

- *Risk and security assessments, security arrangements and emergency preparedness and their implementation directly related to the In Amenas gas plant prior to the terrorist attack*
- *The notification of, and emergency response to, the terrorist attack including interaction with government authorities and entities and partners*

*Based on the facts and evaluations related to the In Amenas attack, also identify:*

- *Potential non-conformities with and areas of improvement in Statoil's existing system and procedures, or use of the systems, within the areas of security and emergency preparedness*
- *Potential areas of improvement related to organisational capabilities, including competencies, roles and responsibilities, training, culture and capacity within the areas of security and emergency preparedness.*

*The Investigation team shall have the authority to do the necessary research and clarifications. This includes right to inspect relevant installations and premises, access to all relevant personnel and information in order to comply with its mandate. Further the Investigation team shall have the possibility to commission external expert opinions within defined areas of security and emergency preparedness in its work.*

*The investigation will be conducted in accordance with Statoil's governing documentation for investigations of HSE accidents with the required adaptations as set out in this mandate or as agreed amended between the board and the Investigation team. Accident investigation of actual or potential accidents is a formal process intended to clarify the sequences of events, causes and consequences, and identify effective preventive measures based on proven methodologies which will be applied in this investigation as well.*

*Should the Investigation team during its work uncover technical, operational, organisational or other shortcomings or deficiencies which are critical in safety (including both security and emergency preparedness) terms, such matters shall be communicated immediately to the board and the chief executive officer.*

*To the extent possible the investigation should be aligned and coordinated with similar reviews conducted by other companies involved at the In Amenas facilities or relevant governments or governmental entities.”*

The full text of the mandate is included in **appendix A** to the report.

### 2.3 SCOPE AND LIMITATIONS

The starting point for looking at security in Statoil has been the In Amenas terrorist attack. The investigation team has taken a broad approach as warranted by the mandate.

The investigation team’s primary focus has been Statoil. The team has not reviewed the actions and performance of other companies or governments, which are only referenced to a limited extent.

Members of the investigation team have had the opportunity to discuss the In Amenas attack with senior representatives from the Algerian Ministry of National Defence. While these meetings have provided valuable information, the investigation team has not seen it as its task to evaluate the tactical assessments and operations of the military.

This is the first comprehensive investigation report about the In Amenas attack to be made public. During the six and a half months the investigation has had at its disposal, a large number of activities have been undertaken in a number of countries. Considering the scope and complexity of the incident, time has inevitably been a constraint. With time, new and additional information will become available.

While the investigation team is confident that it has had access to sufficient information on which to base its observations, conclusions and recommendations in response to the mandate it is also aware that it has not been able to fully exhaust every theme or question. Other investigations and intelligence may bring forward new information that supplements or even contradicts some of its findings. Within the legal restrictions that apply, the investigation team has tried to coordinate and exchange information with other on-going investigations.

Given the type of attack the investigation team has deemed certain parts of Statoil’s security work to be more central to the mandate than others. One particular area we have not considered in detail is cyber security.

Investigating the incident at In Amenas has led to several observations that apply across activities in Statoil, including collaboration between different parts of the organisation working with security.

Given that the investigation has been commissioned by a commercial company and does not have an official public mandate all contributions to the investigation have been voluntary. Statoil has provided all the information and documentation requested by the investigation team. The investigation team has had full access to the company’s electronic and physical archives, and to relevant crisis logs from Statoil and the In Amenas joint venture. This report is based on unclassified information.

It has not been within the investigation team’s scope to consider Statoil’s future international or commercial strategy.

The primary purpose of the investigation is to enable learning and improvement, and in the mandate from Statoil’s board of directors it is stated that “[t]he investigation is not undertaken to assign personal responsibility or liability”. The investigation team’s main objective has been to “[e]nable Statoil to further improve within the areas of security, risk assessment, and emergency preparedness”. Consequently it has not been the intention of the investigation team to express any opinion as to any legal assessment of the facts described, and terms such as “responsibility”, “accountability” etc, should be read accordingly.

Some of the recommendations from the investigation team cannot be made public because they deal with specific future protection measures at In Amenas. These recommendations have been communicated directly to the Statoil board of directors.

Over the course of the investigation, some interviewees have raised issues with the investigation team which fall outside the scope of the mandate. That does not mean that these issues do not deserve attention and the open way such issues were brought forward is a strength for the company in the future. The investigation team has communicated them to Statoil for follow up within the company’s established channels.

## 2.4 INVESTIGATION TEAM

The investigation team has consisted of six members, as appointed by Statoil's board of directors.

Torgeir Hagen, chair. Retired Lieutenant General. Former head of the Norwegian Intelligence Service, and member of the "22 July Commission".

Randi Grung-Olsen, deputy chair. Senior vice president of Corporate audit and internal investigation in Statoil.

Michael Adrian Fulcher, former director of counterterrorism, British Foreign and Commonwealth Office.

Leif D. Riis, Lieutenant Colonel, head of corporate security, and head of the analysis and security department at the Norwegian Defence Estates Agency ("Forsvarsbygg").

Erling Handal, chief accident investigator, internal investigation unit in Statoil.

James Bunn, principal accident investigator, internal investigation unit in Statoil.

## 2.5 INTERNAL RESOURCE GROUP

As part of the mandate, the Statoil board of directors appointed an internal resource group, consisting of Statoil managers and employee representatives, to ensure that the company's institutional knowledge and experience were made available for the investigation. The resource group has had the following members:

Arne Sigve Nylund, chair, senior vice president for processing and manufacturing in Marketing, Production and Renewables.

Torgeir Kydland, senior vice president for Europe and Asia in Development and Production International.

Tove Stuhr Sjøblom, senior vice president for sub-Saharan Africa in Development and Production International.

Arild Litlekalsøy, employee representative from In Amenas, Development and Production International.

Morten Lorentzen, employee representative from In Amenas, Development and Production International.

Kjetil Gjerstad, employee representative and coordinating head safety delegate onshore.

## 2.6 EXTERNAL ADVISORY EXPERT GROUP

The mandate further established an external advisory expert group as a resource for the investigation and the Statoil board of directors. The expert group has had the following members:

John Hamre, Ph.D, president of the Center for Strategic and International Studies (CSIS) in Washington D.C and former U.S. Deputy Secretary of Defence.

John E. McLaughlin, professor at the School of Advanced International Studies at Johns Hopkins University in Maryland USA, and former acting director of the Central Intelligence Agency.

Thorstein Skiaker, retired Lieutenant General and former head of the Norwegian Military's Joint Headquarters.

Thomas Hegghammer, Director of terrorism research, Norwegian Defence Research Establishment (FFI).

Wolfram Lacher, researcher at the German Institute for International and Security Affairs (Stiftung Wissenschaft und Politik) in Berlin.

The expert group has provided the investigation team with several specialist papers about areas of relevance to the investigation work. The report draws on this work, particularly in parts of chapters 4 and 9.

## 2.7 SECRETARIAT

A secretariat consisting of six people from Statoil has supported the investigation team. It has worked under the direction of the investigation team, provided administrative support and assisted in the drafting of the report.

The secretariat has been headed by Pål Eitheim, and consisted of the following members: Evan Fuery, Karen Vorraa, Per Arne Solend, Siv Helen Rygh Torstensen and Sunniva Furnes.

## 2.8 STRUCTURE OF THE WORK

The investigation team has conducted 136 interviews. This includes those directly affected by the incident, those involved in the emergency response, leaders and experts in and outside Statoil. Some of the interviews have been conducted in groups or as meetings with the investigation team.

All Statoil employees who were asked to give interviews have done so, and have met the investigation with a spirit of openness and cooperation.

Statoil lost five employees in the terrorist attack against In Amenas, including the company's country manager in Algeria and the operations managers at In Amenas. The investigation has therefore had to rely on indirect sources – such as documents, meeting minutes and interviews – on issues where these individuals would otherwise have been able to give personal and more extensive accounts.

Those interviewed have been informed about the investigation mandate. For documentation purposes formal interviews have been summarised either by a Norwegian law firm contracted for the purpose, or by the secretariat. The summaries have been reviewed and approved by the interviewees before finalisation. In compliance with the Norwegian Data Protection Act, interviewees have been asked to sign a consent form, in order to allow electronic storage of the interview summaries.

In order to encourage people to contribute relevant information to the investigation team, a dedicated section on the company's intranet has been set up, containing information about the investigation and relevant contact details. The investigation team has also interviewed or met with a number of people outside Statoil, including joint venture and contractor personnel.

International law firms and consultancies have been commissioned to provide background and input on specific points, e.g. Algerian law and the regional security situation.

## 2.9 SITE VISITS AND INTERNATIONAL ACTIVITY

The investigation team has made two field visits to In Amenas. During the first visit in April, the team visited Algiers, Hassi Messaoud and In Amenas. Representatives from the joint venture and Sonatrach provided on-site briefings, and facilitated a walk-through of the locations where the main events had taken place. During the second visit to In Amenas in August, members of the investigation team conducted a more detailed inspection of the facility.

As part of the investigation team's work, it has also had meetings, briefings or interviews in Algeria (Algiers, Hassi Messaoud, In Amenas, In Salah), Norway (Bergen, Kårstø, Oslo, Stavanger), the United States (Houston, New York, Washington, D.C.), the United Kingdom (London/Sunbury, Manchester), Canada (Ottawa), France (Paris), and Japan (Tokyo, Yokohama).

## 2.10 RELATION TO OTHER INVESTIGATIONS

At the time of publication of this report, several other investigations are on-going, including criminal investigations in Algeria, Canada, Japan, Norway, and the United States, and the coroner's inquest in the United Kingdom. Within the formal limitations that apply, the investigation team has tried to coordinate and exchange information with these.

Throughout the process the investigation team has also been in contact with various government officials and representatives. The purpose has been to broaden the investigation team's perspectives, as well as gaining information about the chain of events during the incident.

The investigation team has reviewed and considered evaluation reports made of emergency response and crisis management by the Norwegian and Japanese governments.

## 2.11 ACKNOWLEDGEMENTS

The investigation team is grateful for the efforts of a large number of people and organisations that have contributed to our work. It would in particular like to thank all those who have been interviewed by, and provided information to, the investigation team. The investigation team would also like to thank the following for having supported and made valuable contributions to the investigation:

- The internal **resource group** has approached their task with dedication and commitment, and provided important input to the investigation team. The group of Statoil personnel working at In Amenas has also given perspectives and contributions to its work.
- The external **advisory expert group's** input has provided both context to the investigation as well as important detailed insight into the region and questions addressed in this report.
- **The Center for Strategic and International Studies (CSIS)** hosted a workshop in Washington, D.C. on best practice in security for oil and gas companies. The workshop involved leading security professionals from a number of international oil and gas companies, and inspired important elements in our recommendations. The investigation team is grateful for CSIS' facilitation, and for the participants' time and willingness to share.
- **Statoil's organisation in Algiers** for hosting the investigation team and facilitating the visits to In Amenas and Hassi Messaoud.
- The **Royal Norwegian Embassy** in Algeria for its cooperation, and assistance in organising meetings and contacts in Algiers.
- **BP, Sonatrach and JGC** for their contributions to and cooperation with the investigation.
- **Sonatrach** and the **joint ventures** in Algeria for facilitating site visits to In Salah, In Amenas, and Hassi Messaoud during a very demanding period.
- The **governments** of Norway, Algeria, the United Kingdom, the United States, Canada and Japan for their cooperation with the investigation.
- Last, but not least, the **secretariat members** who have put in a tremendous amount of work in support of the investigation team's task. The secretariat has worked tirelessly to ensure that this report expresses the views and opinions of the investigation team. Without the contribution of the secretariat this report would not have been completed within the timeframe given in the mandate.

The views and opinions expressed in this report are the sole responsibility of the investigation team.

The investigation team concluded its work on this report on 8 September 2013.



▀ **PART I** / **THE TERRORIST**  
**ATTACK AT IN AMENAS**

### 3. THE ATTACK ON IN AMENAS

The attack that took place in the desert over four days in January 2013 was one of the largest terrorist attacks against an oil and gas facility in the industry's history. 40 innocent people from 10 different nations were killed in the attack on In Amenas. There were over 800 workers on the site. More than 130 of these were foreigners from almost 30 different nationalities. They all have their own story to tell, and it is impossible to capture the full extent of the tragedy over the course of a few pages.

The account that follows is based on a number of sources. Eyewitness accounts, information from the In Amenas joint venture, Statoil's partners BP and Sonatrach, the Algerian and other governments, crisis management logs, publicly available information such as news reports, and technical data have all added to our understanding of what happened at In Amenas. Members of the investigation team visited the In Amenas site (hereafter referred to as In Amenas) in April and August 2013.

The way Algerian authorities decided to resolve the situation is consistent with Algerian principles, policies and practices in dealing with terrorism. In their overall assessment of the operation, Algerian authorities have expressed regret over the loss of lives, but also concluded that the military intervention prevented the potential loss of even more lives.

There are different levels of detail in the narrative reflecting the information available to the investigation team about the events during the attack. In particular, more is known both about the events that took place in the living area compared to the central processing facility in the production area, and about the events of 16 and 17 January compared to the events at the site in the following days. All timings given in this report are central European time (CET), and are approximate based on witness accounts, with the exception of timings taken from phone records and technical logs. These are identified accordingly in the text.

## WEDNESDAY 16 JANUARY

### THE ATTACK

#### The terrorists attack

05:40

First attacking the bus, then launching near simultaneous attacks on the living and production areas, the terrorists are able to take control of In Amenas in around 15 minutes.

06:10

#### Attempts to restart the plant

Power is lost during the attack, and the plant shuts down. The terrorists in the production area try to force expatriate managers to restart it, before taking them into the gas processing trains. A Statoil employee decides to run from the terrorists, and escapes.

#### Bus passengers safe

08:00

The bus passengers arrive at a military camp.

### HOSTAGE SIEGE

#### Search for foreigners

Morning

The terrorists search the living and production areas for expatriate workers. Those found are grouped and tied together, some manage to hide. Algerian workers are not targeted, and during the day some of them are released.

08:25

#### Demands from the terrorists

The first call from the terrorists is made to BP. During the day more than 30 calls are made to the companies involved. The terrorists demand that the military withdraw, say they want free passage to Mall, and prisoners released. In the afternoon they start demanding free passage from the living area to the production area, to consolidate the hostages.

#### Preparing for the night

Afternoon

In the afternoon, the terrorists position vehicles to light up the area outside the living area. The terrorists prepare improvised explosive devices. Some Algerian workers provide food and water for their colleagues as the expatriate hostages prepare to spend the night outside. The Algerian workers are grouped in one building.

## THURSDAY 17 JANUARY

### MILITARY STRIKE

#### Helicopter attack

09:00

A helicopter fires into the living area injuring the terrorist leader and causing the terrorists to group the hostages together as human shields.

12:00

#### Vehicle convoy attacked

Around midday, the terrorists load hostages in the living area into vehicles, telling them they will regroup in the production area around 3.5 km away. As the vehicles leave the living area, they are attacked by the military and the terrorists fire back. The improvised explosive devices are detonated in some of the vehicles, others roll over without exploding. Statoil victims Victor Sneberg and Alf Vik are most likely killed.

#### Living area secured

15:00

The military has taken control and declared the living area secure. The remaining hostages and terrorists are now in the production area.

## FRIDAY 18 JANUARY

### EXPLOSION IN CENTRAL PROCESSING FACILITY

#### 15 hours in the desert

02:00

A group hiding in an office building in the production area decide to escape. They climb the fence and spend 15 hours in the desert before reaching the military. They witness the explosion at 16:00.

16:00

#### Explosion and fire

At around 14:00 the military is seen moving into the production area. At around 16:00 a large explosion is heard and felt by those in the desert. A fire starts, burning for several hours. Statoil victims Tore Bech, Hans M. Bjone and Thomas Snekkevik are most likely killed in the explosion.

## SATURDAY 19 JANUARY

### MILITARY DECLARE OPERATION OVER

Last people come out of hiding

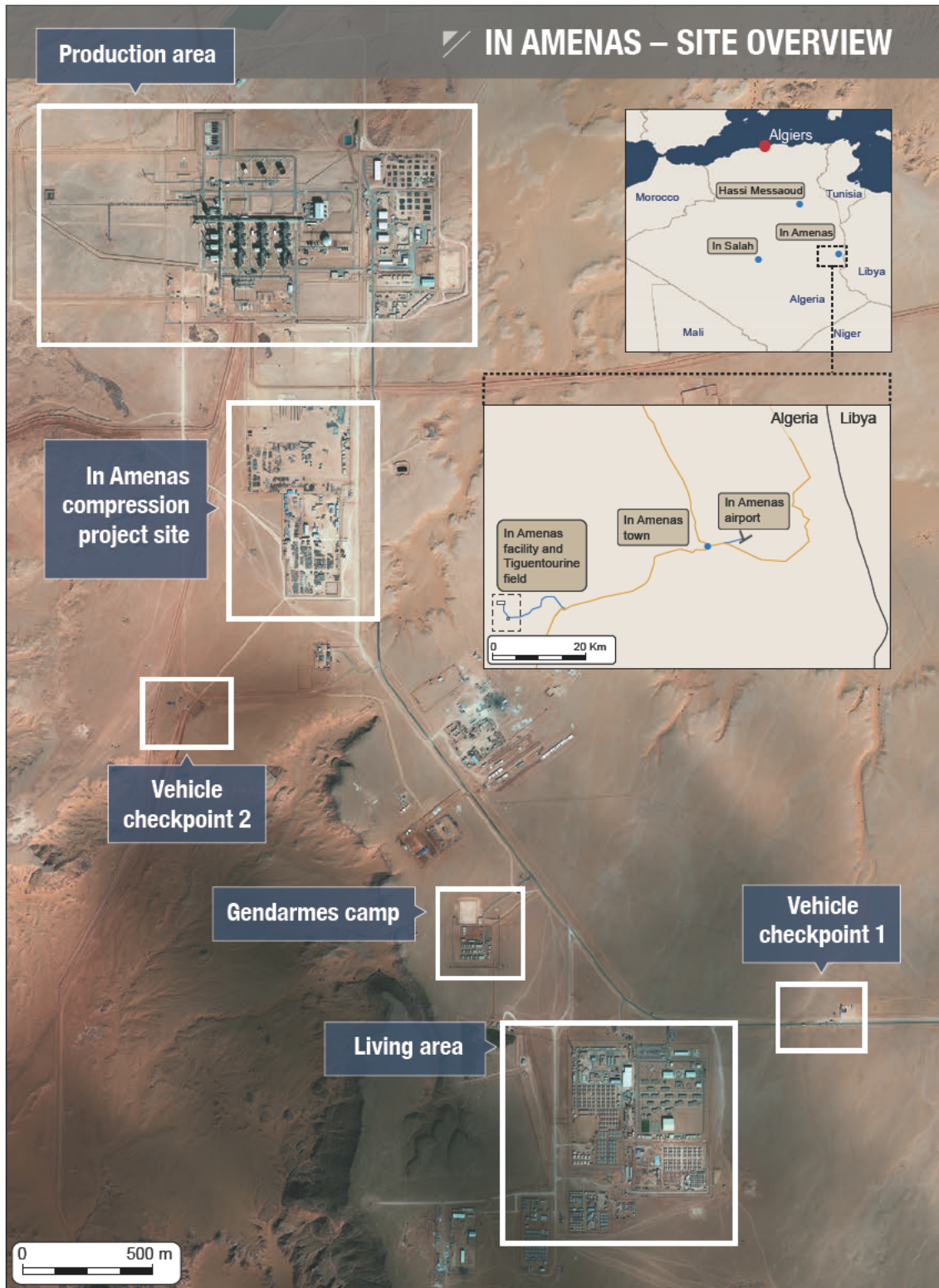
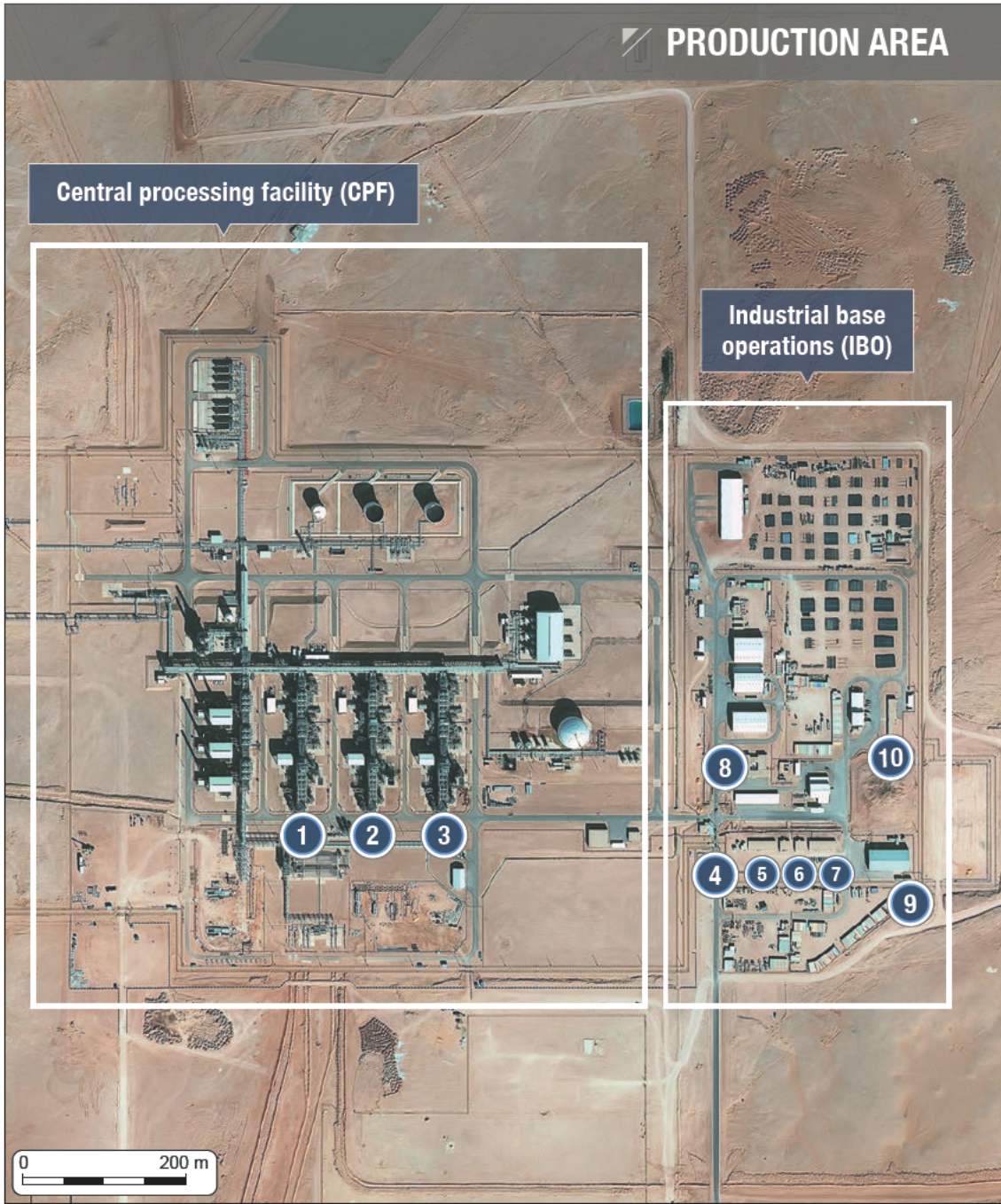


Figure 3.1 In Amenas site overview. Source: QuickBird Products © DigitalGlobeTM, 2013, Distributed and Processed by e-GEOS.



- |                          |                                      |                   |
|--------------------------|--------------------------------------|-------------------|
| 1 Gas processing Train 1 | 5 Technical support / Project office | 8 Main IBO office |
| 2 Gas processing Train 2 | 6 Construction office                | 9 Muster point    |
| 3 Gas processing Train 3 | 7 DEP (Division Exploitation Puits)  | 10 HSE building   |
| 4 IBO / CPF entrance     |                                      |                   |

Figure 3.2 In Amenas production area. Source: QuickBird Products © DigitalGlobeTM, 2013, Distributed and Processed by e-GEOS.



- |                 |                          |                |
|-----------------|--------------------------|----------------|
| 1 Entrance      | 5 Foyer                  | 9 JGC entrance |
| 2 50-man office | 6 Main Plaza             | 10 JGC canteen |
| 3 BdV main gate | 7 Canteen                |                |
| 4 Guard house   | 8 Accommodation building |                |

Figure 3.3 In Amenas living area. Source: QuickBird Products © DigitalGlobeTM, 2013, Distributed and Processed by e-GEOS.

### 3.1 LAYOUT OF THE SITE

The previous pages show the layout of the In Amenas site, which is a large industrial complex.

This chapter refers to three main locations within the In Amenas site: The **living area** and the **production area**, located about 3.5 km apart. The **gendarmes camp** housing the gendarmes dedicated to the protection of the site is located between them.

Where there is a need to be more specific in describing locations where events took place, different parts of the living area and production area are referred to by their specific names, such as the “Base de Vie”, “Gas processing trains” or “Industrial base operations (IBO)”. For the reader’s reference, all such areas or locations are marked on the images.

### 3.2 TUESDAY 15 JANUARY

Several managers from the different companies working at In Amenas arrived at the site for a planned management meeting.

A meeting between the drivers and the management on site was also held that day. During the second half of 2012, the site had been significantly affected by the strike described in chapter 6, and there were now concerns that a new strike might be imminent.

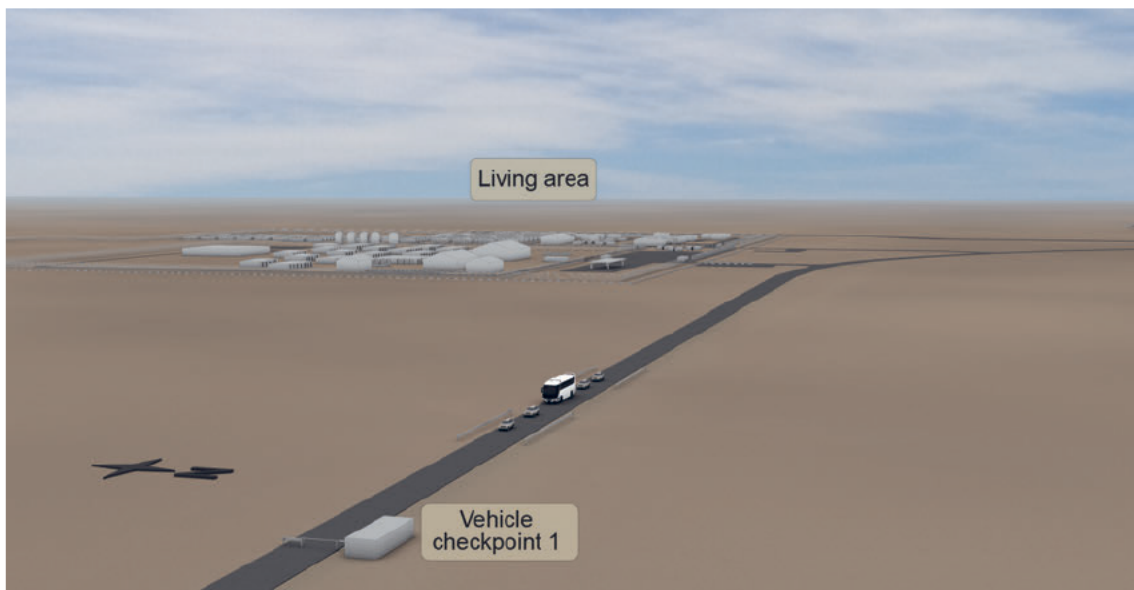
### 3.3 WEDNESDAY 16 JANUARY - MORNING

#### VEHICLE CHECKPOINT 1

##### 3.3.1 The attack on the bus

**Approximately 05:30** It was still dark outside when a group of employees at In Amenas and two airline pilots boarded a bus that was waiting outside the living area. On 4 January the bus departure time had been brought forward from 06:00 to 05:30 to allow more time to board the flight at In Amenas airport (located outside In Amenas town). The passengers were from seven different companies, four of them were Statoil employees. Some were going to the airport, others were going to renew their documents in town.

The bus was joined by escort vehicles, as is standard procedure when expatriates are moving outside the site. A gendarmes vehicle followed by a security liaison vehicle were in front of the bus. Behind the bus were two more vehicles with armed gendarmes on board.



**Figure 3.4** Approximate position of the bus at vehicle checkpoint 1 at the time of the attack, with the living area in the background.

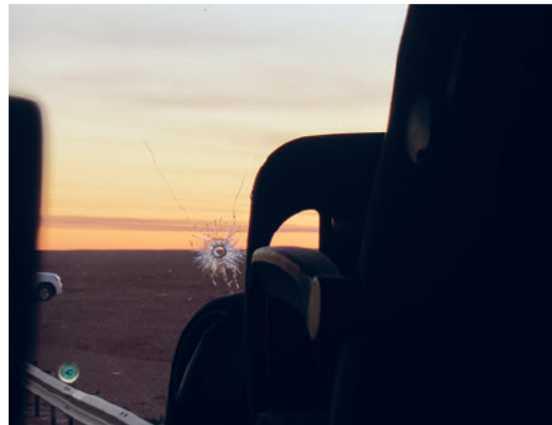


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**05:40** Just before the bus reached vehicle checkpoint 1 – some 300 metres from the living area – witnesses report that the convoy came under fire. Passengers saw attackers on foot shooting at the bus and escort vehicles, and several other vehicles driving past the bus towards the living area and production area. Inside the bus, people threw themselves to the floor as the bullets struck and penetrated the bus. Two of the passengers were injured, one of them a Statoil employee. The gendarmes began to return fire and a fire fight ensued. A security liaison riding in the vehicle in front of the bus and the security guard at the vehicle checkpoint were both shot and killed. Before he was shot the security guard was able to radio his colleague at the guardhouse inside the Base de Vie to warn him of the attack. The guard that took the radio call activated the security alarm in the living area to alert the people there to the danger.



Pictures taken from inside the bus. Left: Gendarmes outside the bus with vehicle checkpoint 1 in the background, to the right of the image. The smoke is from the flare at the central processing facility. Right: Bullet hole in the bus windscreen. Source: Witnesses.

One group of attackers stayed on to fight the gendarmes at the bus. The rest of the terrorists quickly split and launched near-simultaneous and parallel attacks on the living area and the production area.

At the bus, fighting continued with varying intensity for at least an hour and a half. At around **06:40** the passengers on the bus saw an injured gendarme being helped into a Land Cruiser. Around 40 minutes later, a gendarme broke open one of the windows on the bus and instructed the passengers to carefully creep out one by one. They crawled to a nearby ditch and from there to the checkpoint close by.

**07:20** Shortly after escaping they were taken into a rescue bus and given first aid by the Algerian military who had arrived from the In Amenas town military base 50 km away. They were evacuated to safety in the military base where they arrived just after **08:00**. The wounded were sent to the hospital in In Amenas town for further treatment.

Two and a half hours after the first shooting started, the passengers on the bus were safe. For those still at the site, the ordeal was just beginning.





## LIVING AREA

### 3.3.2 Attack on the Base de Vie

**05:40** Witnesses report that the attackers reached the living area, and others remember hearing shooting. At this time, several people were on their way to have breakfast in the canteen. Liaison had given a security briefing to a small group the previous Saturday, informing the expatriates that the Algerian military would be conducting exercises in the area over the coming days, and that this could involve shooting. When hearing the shots, the immediate perception among some people who had attended the liaison briefing, therefore, was that this was a military exercise.

The attackers crashed through the gates at the main entrance to the living area. The guard at the guardhouse had already set off the security alarm, which sounded in the Base de Vie, alerting those in this part of the living area. The security alarm at the Base de Vie is a single, intermittent tone and is designed to be audible within a radius of 500 metres. According to security procedures this means that people should stay in their rooms, or if in the open, they should go and hide.

At **05:45**, one of Statoil's employees was leaving the canteen after breakfast when he was hit by two gunshots. He was able to crawl back into the canteen, where colleagues administered first aid and hid him in a storage room. These colleagues then tried to hide by climbing into the roof space of the canteen. Three were helped up to safety before the terrorists burst into the room and captured the two who had not been able to hide. Other people heard shooting and ran for cover.

According to eyewitness accounts there were 15-20 terrorists in the Base de Vie at this time and two terrorist vehicles.

### 3.3.3 Search for foreigners

**07:45** The security alarm stopped in the Base de Vie. The terrorists spent the morning searching through the living area and rounded up several hundred people. Many people hid in their rooms, including those from the Statoil Algiers country office who were visiting for the management meeting that day. Like many others, they stayed as silent as possible and communicated by text messages explaining their positions

#### Power loss and shutdown

**During the attack, power was lost and the plant shut down. Analysis of technical logs explains how this happened.**

At **05:49** a bullet hit a high voltage transformer in the living area, causing an earth fault and short circuit. This caused a power blackout in the Base de Vie.

The fault led to activation of a protective relay associated with the main power generators located at the central processing facility. These generators shut down, and caused a power blackout across the In Amenas facility.

The plant was designed to shut down automatically when such a loss of power occurred. According to the technical logs there was no deliberate manual shutdown or blowdown of the facility.

An emergency generator designed to maintain power to essential services started up automatically. However, during this process the supply voltage to the control and monitoring system dropped due to a malfunction in the battery system. The voltage available was no longer sufficient to support the control and monitoring system.

In this situation, the fire detection system was designed to go into fail safe mode, a process which shut down the emergency generator. This also triggered the fire alarm in the central processing facility and adjacent offices in the production area.

Without electrical power, the air compressors were no longer available, and instrument air pressure was lost. After the automated shutdown, gas had been locked in the system by valves that relied on this air pressure. When pressure dropped, they began to drift open and gas was fed to the flare system, depressurising sections of the plant.

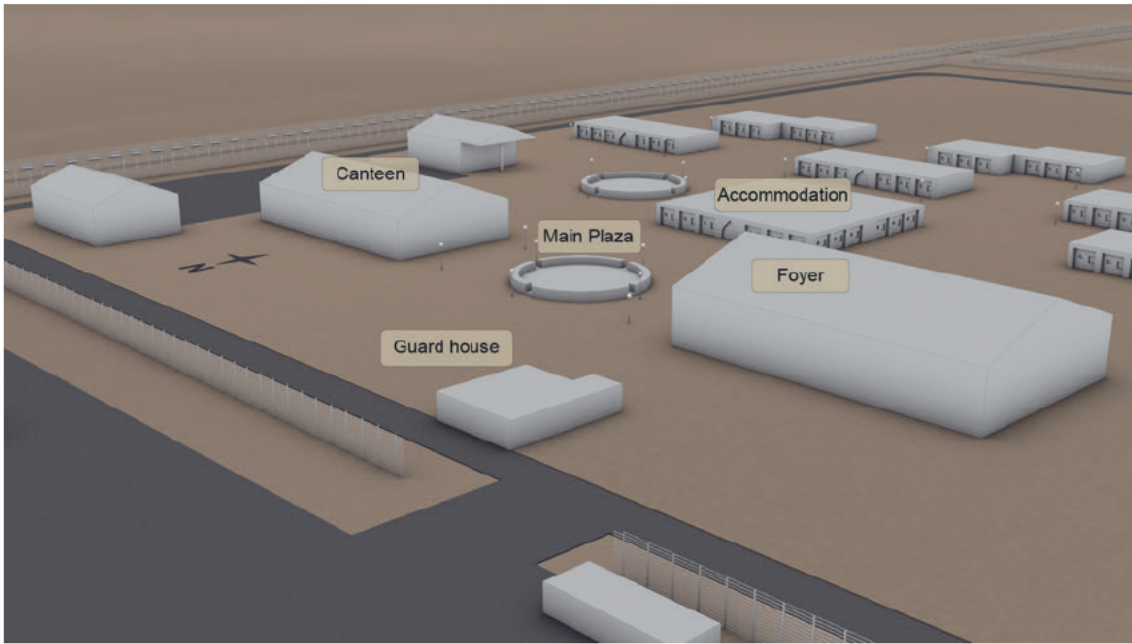
The only power available at the site following the generator shutdown was from the uninterruptible power supply (UPS) designed to provide a short-term supply to the main plant control and safety systems via battery banks. These systems, which included fire detection and telecommunications, gradually expired as the batteries discharged.



wednesday a.m.

and sharing what information they had with each other and the outside world. For most of those in hiding, the sounds of the terrorists searching in the buildings was their only way of telling what danger they faced. Some could take a quick look through the windows but risked being seen and captured when they did so.

In their search of the living area the terrorists specifically asked for several senior managers by name. Algerian employees were told they had nothing to fear, as the attackers were only looking for foreigners. Eyewitnesses reported the terrorists were of different nationalities, including westerners, speaking in French, English and Arabic with dialects from different parts of North Africa. The terrorists maintained control, but did not take people's mobile phones away.



**Figure 3.5** Overview of the Base de Vie and the Main Plaza.



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At 09:00 a large group of Algerian employees were told they could leave the living area through the main gate. When the terrorists discovered an expatriate among them, they stopped the release and brought them all back inside the living area. The expatriates were gathered in two groups during the day: one in a space surrounded by concrete seating, known as the Main Plaza, and another against the wall outside one of the accommodation buildings. The terrorists bound their hands with cable ties, wrapped detonating cord around them in groups, and kept watch over them to prevent escape. They also checked the hostages' passports and took some back to their rooms to collect their documents. Later, based on this information, the terrorists provided a list of the hostages in calls to the companies involved.



Left: A view of weapons seized by the Algerian authorities following the attack shown to journalists in the town of In Amenas, 20 January 2013. Source: EPA/STR/NTB scanpix. Right: One of the terrorists during the attack. Source: AFP PHOTO/KYODO/NTB scanpix.

#### The terrorists

Witnesses described the terrorists in the living area as dressed in military-style camouflage uniforms and that several covered their faces with scarves and balaclavas during the attack. At least one witness remarked that the terrorists did not look as if they had been living in the desert for days. Witnesses noted that their conduct seemed to be planned and there were clear leaders to whom others deferred. An older man, referred to as 'Tahar', appeared to be leading the group and a terrorist later identified as Canadian was particularly active in the Base de Vie. The recovered terrorist equipment shown by the Algerian authorities included automatic weapons, machine guns, and explosives as well as communications equipment.

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The Algerian employees were not actively targeted by the terrorists but were not free to leave either, so they had to wait the day out. The terrorists asked for employees who could operate the control room and restart the plant and power generators. Some tried to help the expatriates by providing them with food and water. Many of them took pictures and videos with their mobile phones during this time. At about midday, the female employees were released together with other Algerian workers and they walked to vehicle checkpoint 1 from where Algerian military personnel transported them away by bus.

During the day intermittent gunfire continued, both from the terrorists inside the living area and from the military who had deployed outside. Algerian military helicopters circled overhead and the terrorists set up a rocket launcher in front of the hostages and fired rockets from the Main Plaza.



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### 3.3.4 Escapes from the Base de Vie

An expatriate manager at the Base de Vie hid in one of the offices together with a small group of Algerian colleagues when the attack started. During the morning they succeeded in making contact with the gendarmes and informed them of their location. One gendarme crawled forward across the open ground outside the living area and cut a hole in the double fence to create an escape route. An Algerian employee went out to locate the hole, shortly followed by the rest of the group in hiding who dived through it and sprinted for cover. They were met by four gendarmes concealed some distance from the perimeter fence. The gendarmes searched their clothing to check that they were not wearing any explosives before they were taken to the gendarmes camp.

A group of about 20 Algerian employees also escaped the terrorists and went through a hole in the fence of the Base de Vie and gathered together behind some containers in the In Amenas compression project camp. They spoke to the Algerian military by phone and were advised to stay where they were, but after about an hour and a half of hiding the group moved again and were seen by the terrorists. They were brought back into the Base de Vie and joined the other Algerians gathered there.

### 3.3.5 Company camp: Hiding and waiting

When the attack started the security alarm and the shooting in the Base de Vie were also heard by a Statoil employee and fellow Algerian colleagues who were staying in the company camp. The Statoil employee first went to the emergency room in the 50-man office, but no one else was there. He then walked to the canteen south of the office, where he met other Algerian colleagues. After a short time he was warned by Algerians that there were terrorists nearby and that he should hide.

The Statoil employee and another expatriate hid in a room in the northern section of the company camp, rationing their water to last a week and taking care to be quiet. From their room they saw helicopters circling and heard shooting and explosions outside.

With no information, yet knowing the terrorists were still active, they had no option but to stay where they were and hide.

### 3.3.6 JGC fly camp: Attack on the bus and camp

The JGC Corporation, one of the main contractors at In Amenas, has a camp that is part of the living area, known as the “JGC fly camp”. The camp has its own vehicle entrance connected to a road along the eastern perimeter of the living area.

**05:40** Four JGC employees were on a shuttle bus that had left through the entrance and was on the road heading north when they saw shooting in the darkness at vehicle checkpoint 1.

They quickly realised what was happening and tried to turn the bus around to return to their camp. As it manoeuvred the bus got stuck, and the passengers got off to run back to their camp. The terrorists opened fire on them, killing three. The fourth made it back to the camp.

Another JGC employee was waiting in a second bus in a parking space outside the JGC fly camp entrance from where he saw the shooting break out at a distance. He ran back into the camp and, despite later being captured, he survived the attack.

One of the terrorist vehicles drove down the road and through the entrance to the JGC fly camp. This vehicle had a blue light on the roof similar to those on the vehicles used by JGC’s security contractors. Once inside the camp, the terrorists conducted a room-to-room search as they did elsewhere in the living area.

The HSE personnel in the JGC fly camp responded to the attack and sounded the security alarm in the JGC fly camp causing many people to lock their accommodation doors and hide. The terrorists shot through the doors and fired into rooms during their search and it is believed two employees were killed as a result near to the JGC canteen. As in the rest of the living area the Algerian employees were not targeted, and where possible they warned the JGC employees and helped them to hide.

A group of 11 employees had already gone to work before the attack started. They were in the JGC offices at the In Amenas compression project site, a compound adjacent to the production area. At **05:52** the Security personnel in the JGC fly camp telephoned to inform them they were under attack and they should close the gate and hide, which they did.



wednesday a.m.

At 09:00 four hostages were loaded onto a shuttle bus and the terrorists attempted to drive the bus around to join the main group in the living area. The hostages were by now tied with cable ties and forced to hold hand grenades. They were positioned as human shields by the windows of the bus to protect their captors. This bus was fired on by the Algerian military to prevent it from leaving and, although the bus was hit, hostages were not killed at this time. The bus did not reach the living area and was later found in the JGC fly camp. The hostages were then held with others from the JGC camp.

In the JGC fly camp the terrorists took a total of 16 hostages who were tied up, grouped together and then positioned to protect the terrorists from the gunfire by the military who were outside the perimeter fence. During the morning the hostages were taken through a hole in the fence between the Base de Vie and the In Amenas compression project camp and they were placed with the other expatriate hostages in the living area. Some of them were grouped outside the accommodation and others were made to sit in a half circle inside the Main Plaza with explosives in their midst. They were wrapped in detonating cord together with hostages from the Base de Vie and the company camp.



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## PRODUCTION AREA

### 3.3.7 Attack on the production area

05:45 The production area is located approximately 3.5 km from the living area in a separate double-fenced site, comprising one area with several office buildings and another with the gas processing trains.

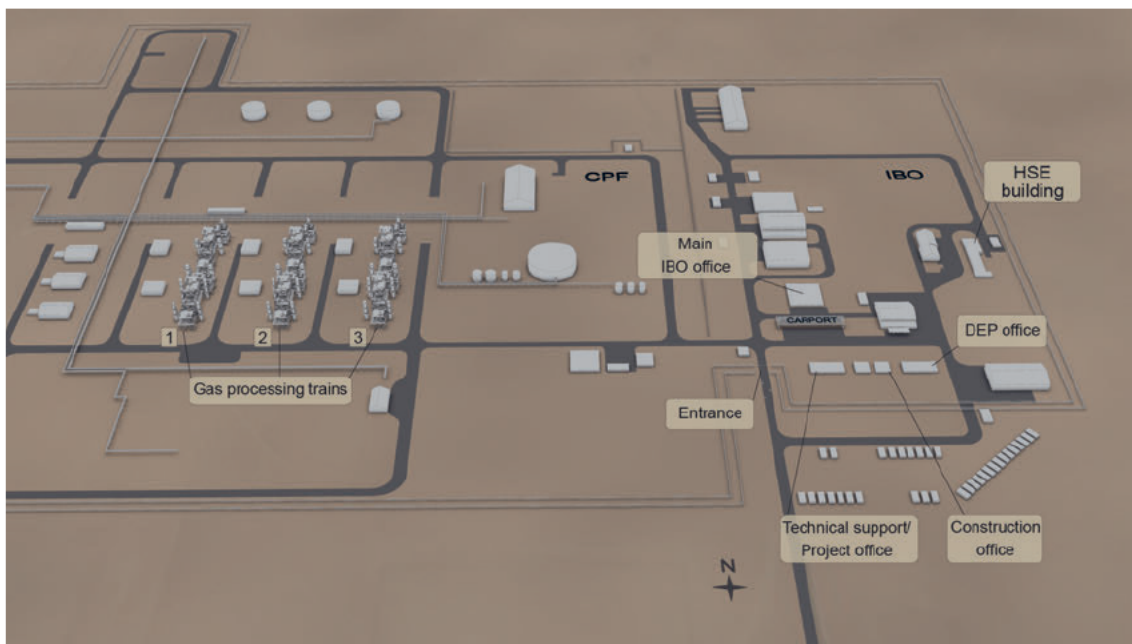


Figure 3.6 Overview of the production area (CPF and IBO).

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Four people from Statoil were gathered for their morning coffee in the main industrial base operations office when power disappeared, leaving them in a blackout, and they heard the fire alarm go off. One of them opened the door to look outside and heard loud bangs. He reports seeing “lights like fireworks” in the car park, but did not realise at the time that these were gunshots.

The group started moving inside the building to go towards the muster point, as was the procedure for fire alarms, when four terrorists appeared, pointing machine guns at them. The terrorists told them in English “You are hostages” and asked “why did you shut down the plant?” They were taken outside to the parking area where a pickup truck with the headlights on was waiting. The hostages were ordered down onto



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the ground and kicked when they tried to communicate between themselves. The terrorists tied their hands behind their backs with cable ties. Three of them were put onto the flatbed of the pickup truck on top of what a witness suspected to be a heavy load of explosives, while the fourth hostage was placed in the back seat of a Land Cruiser.

Three terrorists guarded the hostages on the back of the pickup truck and two sat in the front seats. Four terrorists were seated in the Land Cruiser with the fourth hostage as they started driving west towards the processing area where the three gas processing trains are located.

It was still dark and difficult to see details, but these events were witnessed by one of the groups of expatriates hiding in the technical support offices. They saw two vehicles approach the entrance to the production area as the guard attempted to close the gates. The terrorists inside the vehicle shot at the guard, injuring him in the legs, before opening the gates and driving through towards the offices. The guard crawled into a ditch to hide and managed to escape two days later.

The terrorists stormed into the technical support offices, shouting in Arabic and searching room by room, trying to open every door. The group hiding there used a filing cabinet and other heavy items to barricade the door. Despite several hard attempts, the terrorists did not manage to break through.

A group in the *Division Exploitation Puits* (DEP- hereafter referred to as the “drilling and well offices”) were considering what to do as the events unfolded. The expatriates went first to the emergency muster point but as soon as they realised that a terrorist attack was underway they scattered to hide in the offices. Four expatriates managed to hide, but two were captured when the terrorists came to search the building. Their Algerian colleagues tried to argue with the terrorists, but they were not deterred and took the two captured expatriates away with them. Another group of Algerian employees cut a hole in the fence to escape the production area and then sent a text message informing the expatriates of its location.

### 3.3.8 Attempts to restart the plant and an early morning escape

The vehicles carrying terrorists and hostages moved to the central control room only to find it empty. Two of the control room operators had barricaded themselves into a back office when the attack started, where they stayed hidden for three days before escaping. Another group of three hid in a room in the control building from where they managed to escape later in the day.

The terrorists forced one of the hostages, a senior operations manager, into the control room and ordered him to restart the plant. He did not; it was not possible for him alone to restart the plant from the control room. The terrorists tried again with second hostage, but the result was the same.

After the failed attempt to restart the plant, the terrorists loaded the hostages back onto the two vehicles and drove up to the east side of gas processing train 3 where they were offloaded and ordered to lie face down on a concrete floor with the terrorists surrounding them. One of the Statoil employees had noticed that the cable ties used to tie him up were loose. He took care not to reveal this when he was ordered back onto his feet and asked about some of the nearby electric motors. The terrorists wanted to know if they were natural gas pumps, but he told them he did not know.

When the Statoil employee was ordered to lie back down, he decided to run. He zigzagged between the many pipes, constructions, valves and vessels in train 3. One of the nine terrorists surrounding the hostages ran after him through the process train and out in the open between trains 2 and 3, shouting “*Stop – you know I will kill you*” several times. Since the Statoil employee the area in detail he could run quickly through it in the dark and the terrorist gave up the chase. He managed to get away unharmed and eventually found a place where it was possible to get over the barbed wire-topped double fences and into the desert on the north side of the process area.

#### Incident notification

**05:49** Liaison in the Base de Vie called the liaison manager in Hassi Messaoud.

**05:50** An employee in Statoil’s country office in Algiers was notified by a text message from a colleague at In Amenas.

**06:18** A Statoil employee hiding in the technical support office building called the corporate emergency centre at the Stavanger headquarters.

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This escape happened around **06:30** before sunrise, and it was cold. He remained in hiding until he heard helicopters arrive over the site. At around **09:30** he followed the fence to the front of the production area near the main gate, convinced that the crisis must have been resolved. He saw no one until he discovered a gendarme by the side of the main road who gave him a signal to turn around and go back to the east into the desert. An Algerian employee had also escaped over the fence and he moved south into the desert behind the sand dunes where he met a group of gendarmes. The Algerian told the gendarmes about the Statoil employee he had seen and both were then taken to the gendarmes camp. Here they met the expatriate manager and three Algerian colleagues who had escaped from the offices in the Base de Vie.

By the time of his escape, the plant had gone into a complete shutdown. According to the technical logs, at **07:22** the blowdown valves started opening, letting the gas that remained in the system out to be burned off in the flare.

### 3.3.9 Communication and demands

On 16 January there was extensive contact both by mobile and satellite phone between the terrorists and managers and members of the emergency response organisations in Statoil and BP. The terrorists told the hostages that they were from al-Qaeda, and instructed them to make phone calls to their companies, families and embassies. They made a number of demands, including:

- The release of high profile prisoners held by the American and Algerian authorities
- The military was to pull back
- They wanted an airplane to go to northern Mali.

They said failure to meet the demands would result in hostages being killed and the plant destroyed. Recordings and logs show that on the first day alone, almost 30 voice calls were made by the terrorists to BP and Statoil. (See box to the right).

The hostages were also videoed several times during the day, including under a makeshift terrorist banner. The terrorists tried to upload a video via a laptop to the internet, but when power went down the internet connection was lost so no video from the site was transmitted in this way.

There was radio communication between the terrorists, local notables and the Algerian military outside the living area but this did not lead to negotiations. A few hostages were also in touch with the Algerian military by phone and they were advised to stay in hiding.

#### A selection of phone calls on 16 January

**08:25** (from the living area) - First call from the terrorists to BP. The terrorists said they wanted to speak to the *"presidents of your companies"*.

**08:30** (from living area) - First call from terrorists to Statoil. Demand that Statoil put pressure on the Algerian government to pull out air and ground forces.

**10:30** (from living area) - Expatriate manager in the Base de Vie informed that he was handcuffed together with around 10 other hostages, strapped with explosives.

**12:15** (from production area) – Demand that the military back off. Safe passage to Mali was demanded.

**12:40** (from living area) – Terrorists demand a military escort to the border with northern Mali, said their boss was in Mali.

**14:15** (from living area) - Terrorists said that they wanted to move the hostages from the living area to the production area.

**14:39** (from living area) - Terrorists repeated their demands to clear the road and allow passage to the production area. They threatened to start killing hostages unless their demands were met.

**14:52** (from living area) - A terrorist gave the names of 13 hostages, and counted seven more Filipinos and 13 Japanese who were being held. He repeated that the army must withdraw – especially the helicopters. If they did not, the terrorist named the first person they would kill.

**15:30** (from production area) - The terrorist speaking said they had 30 hostages and demanded food, blankets and that the military move away.

**17:43** (from production area) – Terrorists wanted to move people from the living area to the production area due to lack of electricity. Said they wanted to drive out from the production area to pick up hostages in the living area before returning. If the military did not move back, they would start shooting hostages. This was the last call made to Statoil ending on Wednesday 16 January at **17:57**. A 15 minute deadline was given for the military to withdraw from the living area. The last call made by the terrorists was to BP on Thursday 17 January at **14:11** when one of the terrorists said that half of the hostages had been killed and the remainder would be killed if the military did not stop advancing.



### 3.4 WEDNESDAY 16 JANUARY - AFTERNOON

#### LIVING AREA

##### 3.4.1 More hostages captured

A group of five expatriates had hidden in the guard room at the entrance to the living area when the attack started. They remained undiscovered until early afternoon. They had seen the Algerian employees moving freely around the living area and had come into the open only to be captured. This group was made to join the other hostages by the Main Plaza. Four of the five were later killed.

At **13:00** on 16 January the terrorists demanded the keys for the vehicles in the living area from one of the managers. Between **14:00** and **17:00**, several attempts were made to restart the backup generators in the living area but without success. Around **15:00** the terrorists started constructing improvised explosive devices from plastic explosive, fire extinguishers and nuts and bolts gathered from the site.

##### 3.4.2 Preparing for the night

**16:45** The terrorists positioned several vehicles with their headlights on to light up the area outside the living area. A group of Algerian employees provided their expatriate colleagues with blankets and food before they were ordered to go inside the foyer for the night. The terrorists told them that if anyone was found outside, they would be shot.

**17:43** A terrorist made a call to Statoil stating that the terrorists wanted to move people from the living area to the production area due to lack of electricity. They said they wanted to drive out from the production area to pick up hostages in the living area before returning. If the military did not move back, they would start shooting hostages. This call finished at **17:57** and was the last contact Statoil had with the terrorists. Following the call Statoil notified the Norwegian government who were in communication with the Algerian government.

At around **18:00** military gunfire from outside the living area struck the walls where the hostages were sitting. The expatriates were split into two groups and kept outside during the night. One group stayed in the Main Plaza area while a second group was moved away to a similar adjacent plaza on the other side of the canteen. They were strapped with detonating cords, given fruit and water and told to rest for the night. Armed terrorists with detonators in their hands guarded them overnight. During the night, a couple of calls were made by the terrorists, and there was sporadic gun fire.

When power was initially lost in the living area, the three mobile networks switched to battery backup power supplies. During the afternoon, it was getting more difficult to get a signal in the living area, and one by one the networks went off line. This meant that by the end of 16 January the hostages were effectively cut off from any communication with the outside world. The terrorists still had access to satellite phones, and they used the vehicles to charge them.

The group of 11 in the JGC offices remained hidden throughout the day and were able to make it to the gendarmes camp along with an Algerian security guard at about **18:15** on 16 January. In addition, at least four others remained hidden in the JGC fly camp.



#### PRODUCTION AREA

##### 3.4.3 Escape and recapture

In the offices at the production area the hiding expatriates were assisted by Algerian employees. One group of Algerians went to cut a hole in the fence to escape and one of them then texted to an expatriate colleague warning him to stay hidden. Some acted as scouts to warn of terrorist movement and others ensured people stayed concealed. The expatriates in the technical support office communicated amongst themselves and found the best hiding places they could. Another group in the drilling and well offices did the same. It was very quiet in the afternoon and at least one of them went outside and looked around but saw no movement anywhere. There were no visible terrorists or military activity and the shooting had stopped.

In the afternoon one expatriate was able to walk from his hiding place in the central processing facility offices all the way to the Base de Vie. He entered the living area only to be captured by the terrorists. He told hostages that he had seen Algerian employees moving freely in the living area and thought the incident had been resolved and was isolated to the production area. He was later killed.





### 3.5 THURSDAY 17 JANUARY – MORNING

#### PRODUCTION AREA

##### 3.5.1 Escape from the production area

In the production area a group of Algerian employees had cut a hole in the fence by the HSE building. They went to the main industrial base operations office to inform four expatriates hiding there and at **06:30** four of the expatriates were able to escape into the desert together with the Algerians. Once freed the Algerian employees informed the authorities where people were hidden to direct their rescue. Some Algerians still stayed behind and continued to scout for the expatriates.



#### LIVING AREA

##### 3.5.2 Change in the mood of the terrorists

At least four workers were able to hide successfully in the JGC fly camp and on 17 January two were able to escape through the perimeter fence and reached another contractor camp on the north western edge of the living area from where they were rescued by the military.

Several hostages have reported a notable change in the mood among the terrorists in the living area that morning. They seemed more aggressive and agitated than the day before. Several of the hostages were told to contact their companies to let them know that if the military did not withdraw, the terrorists would start killing hostages.

**07:05** The terrorists in the living area telephoned BP and one of the hostages was put on the phone. He said that the terrorists were threatening to execute him if the military did not withdraw. An hour later, one of the terrorists called again with the same message and said the military were firing heavily on them. The terrorists said they would kill everyone by **12:00** if their demands were not met.

##### 3.5.3 Helicopter attack

At around **09:20** a military helicopter fired into the living area in what has subsequently been described as an attempt to kill the terrorist leader. The rounds hit some vehicles and buildings around the Main Plaza. This prompted a large group of Algerians that were still inside the foyer where they had spent the night to move outside and run for one of the gates in the living area fence to escape. When suddenly several hundred people appeared, the helicopter stopped shooting. The terrorist leader was injured in the attack. An expatriate hostage, who had previously given first aid to injured hostages, was forced to treat him. This hostage was handcuffed to the terrorist leader to act as a human shield and was later killed.

The military helicopters kept circling over the living area, and the terrorists gathered the expatriates as human shields, regrouping them in the Main Plaza. At around **12:00** the hostages were told that they would be moved to the production area.



### 3.6 THURSDAY 17 JANUARY – AFTERNOON

#### LIVING AREA AND ROAD

##### 3.6.1 Vehicle convoy and helicopter attack

Witnesses report that at around midday vehicles were gathered by the terrorists in the area of the Main Plaza. The terrorists grouped the hostages roughly by nationality and loaded them into the vehicles. There was a lot of commotion and noise at this time.

Inside at least two of the vehicles a terrorist held an improvised explosive device. One of these devices was described as an old-looking circular mine with a plug of plastic explosive and a length of detonating cord stuffed into the core of it. The terrorists drove the vehicles and in at least one vehicle the hostages were positioned next to the doors, on either side of a terrorist. In the same vehicle, two more hostages were made to sit in the luggage space along with a terrorist who smashed out the back window so he could fire a machine gun out of it. The hostages were told to put their arms out of the windows to signal to the military that hostages were in the vehicles.



thursday p.m.

One of the Statoil hostages who had been shot and injured when the attack started was loaded into the back of a vehicle. This vehicle was left in the living area when the others headed for the production area. Despite his injuries, he crawled back into the canteen building and was later found and treated by the military.

There are differing accounts as to how many vehicles actually left the living area. The evidence and reporting available to the investigation team indicate that six vehicles drove out through the gates. They were heavily loaded, drove fast and split onto different routes, some cross-country, some on the road, but all apparently heading for the production area. The military responded with fire from the helicopters and from soldiers on the ground. The terrorists returned fire from the vehicles.

**Vehicle 1** drove across the open ground outside the living area and was reported by a witness to have crashed and rolled over two or three times very shortly after leaving the gates. It was destroyed by an explosion.

Vehicles 2, 3 and 4 made it to within a few hundred metres of the production area.

**Vehicle 2** drove on the tarmac road for most of the distance to the production area before leaving the road and continuing at speed on the piste road running parallel to one side. The hostages could feel it bouncing and one of them shouted at the driver to avoid the concrete bollards they were fast approaching. The vehicle swerved and then rolled before coming to rest on its side within 200 metres of the production area. A terrorist tried to detonate an improvised explosive device, but it only partially functioned. One hostage got out through the rear window and ran back towards the living area. Above him the helicopters were still firing and he saw terrorists running away from him towards the production area.

Three hostages from vehicle 2 ran 300 metres to **vehicle 3**, which had been blown up. There they found two injured hostages in the wreckage and saw **vehicle 4**, 100 metres away on the road. It had also been blown up and there was an injured hostage standing in the wreckage. The men from vehicle 2 brought this man to vehicle 3 where they gave first aid to their injured colleagues.

At this time a fourth hostage from vehicle 2 caught up with them. They ran towards the living area to get help, and were fired upon by terrorists in the production area. They were approached by gendarmes and took cover in a depression in the ground as the terrorists fired at them. Before being evacuated to safety the survivors asked the gendarmes to go back and rescue the three other injured survivors that had been left behind, but communication was difficult and these men were not picked up by the gendarmes. Two of them later managed to walk to the production area, the third died of his injuries.

**Algerian Prime Minister  
21 January 2013**

*“A great number of workers were put in the cars; they wanted to use them as human shields...There was a strong response from the army, and three cars exploded.”*

Source: Press conference quoted by New York Times 21 January 2013

The positions of these four vehicles are visible on satellite images.

**Vehicle 5** was hit by small arms fire and reportedly stopped on the road outside the entrance to the gendarmes camp

**Vehicle 6** is reported to have crashed, overturned and exploded in the same area. It contained the terrorist leader from the Base de Vie who died, and at least one other terrorist who was detained by the military.

The investigation team has talked to several survivors from the vehicle convoy, has had access to forensic reports and examined photographs of the damage done to the vehicles. According to some of the survivors, at least one vehicle was struck by helicopter fire. Another survivor was hit by small arms fire shortly after leaving the Base de Vie. Photographs show vehicles hit by multiple gunshots.

Photographs show that four of the six vehicles were destroyed by explosions. Survivors report that the detonating cord in vehicle 2 was triggered, but the plastic explosive attached to it failed to detonate. What triggered the explosions in vehicle 1, 3, 4 and 6 is not known to the investigation team.

Based on the information available, the investigation team believes that as a result of this series of events 26 hostages were killed and 10 survived. Two of the 10 survivors walked to the production area but were later killed there.

thursday p.m.



Left: Six vehicles used during the convoy from living area to production area gathered after the incident. Source: Ryad Kramdi/POLARIS/NTB scanpix Right: Smoke from vehicle 2 as photographed from the technical support offices. Helicopter is circled. Source: Witness.



**Figure 3.7** Location of the six vehicles from the convoy following the military attack, based upon a satellite picture taken on 20 January. Source satellite image: QuickBird Products © DigitalGlobeTM, 2013, Distributed and Processed by e-GEOS. Sources pictures: vehicle 2 AP Photo/Algerie TV via Associated Press TV/NTB scanpix. Other pictures: Witnesses.



thursday p.m.

## PRODUCTION AREA

### 3.6.2 Survivors from the convoy

The attack against the convoy could be heard from the production area and the group hiding in the technical support offices observed parts of it unfold. The group in the technical support offices telephoned those in the drilling and well offices on an internal landline and informed them what had happened.

Around 30 minutes after the attack on the convoy started, the group hiding in the technical support office saw two men who had survived vehicle explosions approach the production area.

They were badly injured, and were helped into the technical support offices. The group from the drilling and well offices were called across to help administer first aid. As two terrorists were seen approaching the building, the injured men were hidden in a partitioned area. The others had no choice but to leave them and scrambled to get back into hiding. The terrorists did not find any of the men at this time.

Two of the men from the drilling and well offices went back to their original hiding place, where they discovered that the terrorists had been there searching for personnel. Another colleague had remained in hiding as the search had taken place, but had not been found. The two went back to the technical support offices to warn their colleagues, but were seen by two terrorists. The terrorists started running towards them, and they had to take cover in the technical support offices again, together with the group already hiding there.

The terrorists came into the building and this time the terrorists found the injured men. The terrorists beat them and demanded they tell them where the people that had helped them were hidden.

The group of expatriates had barricaded themselves into an office and from their hiding place they could again hear the terrorists searching through the offices. The terrorists made repeated attempts to force their way into the office where the group was hidden and they shot through the door but could not break through. Eventually they gave up and took the two injured men away with them outside. Two shots were heard by those in hiding. Evidence indicates they were killed at this time.

In the production area offices, the people in hiding were not sure about what was going on around them so they stayed hidden for the remainder of the day.

#### Final communications Thursday 17 January

**14:11** A final call from the terrorists was recorded on the voicemail of one of the employees in London. The message said half the hostages had been killed and that the remainder of the hostages would be killed if the military did not stop advancing.



friday a.m.

## 3.7 FRIDAY 18 JANUARY

### PRODUCTION AREA

#### 3.7.1 Escape and trek through the desert

There was a group of eight who remained in hiding in the technical support offices, until they decided to make an escape at around **02:00** on Friday morning.

They knew the layout of the site well, and found a place to climb the fence by using a compressor as a step and placing jackets on top of the fence to protect them from the barbed wire.

They decided to go in the direction of a burn-pit they knew, expecting it to take them 2-3 hours to walk there. When the sun rose, they realised they had been heading in the wrong direction. While they were walking they noted military helicopter activity above them but the helicopters gave no indication that they would come to their rescue. After a total of 15 hours in the desert, with very scarce supplies of food and water, they finally reached well "Tg 343" 10 km east of the production area. There the group agreed to split; four of them were exhausted after walking for so many hours in the desert, and therefore decided to wait. Despite his exhaustion, an Algerian decided to join the group who would go for help, since it would be useful to have somebody speaking Arabic with them.



The group that went on were able to make contact with the gendarmes, who assured them that they would go back and get the group of colleagues that had stayed behind. That did not happen. After waiting for several hours without getting retrieved, those who stayed behind at the well decided to move out on their own, and were eventually able to make contact with the military on the main road.

**07:30** In the drilling and well office the expatriate who had remained in hiding throughout the events of the previous day was contacted by another expatriate and an Algerian colleague who had spent the night in hiding and had not left with the group at **02:00**. They decided they had to escape and used a hole in the fence previously created by their Algerian colleagues to get out into the desert. There they were met by gendarmes lined out in the desert approximately 300 metres from the production area, who took them to safety. By **12:30** they were at vehicle checkpoint 1 and they heard a lot of shooting coming from the production area.

### 3.7.2 Explosion in production area

At around **14:00** on Friday 18 January, the military was seen moving into the east side of the processing facility compound, by the offices. At about **16:00** an explosion occurred in the central processing facility. The group still in the desert 10 km away described it as so large it made the ground tremble under their feet. It triggered a fire in processing train 3 of the facility that burned for several hours, sending thick black smoke into the sky.

The investigation team has heard no accounts of what happened in the production area on 18 January. After the incident the wreckage of a vehicle was found where it appeared to have been positioned inside the structure of train 3 and detonated. It was the centre of the explosion that caused extensive damage to train 3 and triggered the large fire that followed. This is where the bodies of five hostages were discovered, three of them were from Statoil.



Left: Picture taken at 18:17 on 18 January, showing the fire in the central processing facility following the explosion. The flame to the left in the picture is the flare at the site, the heavy smoke in the middle is from the fire in process train 3. Right: Damage to process train 3 from fire. Source: Witnesses.

### 3.8 MILITARY SECURE THE SITE

By around 15:00 on Thursday 17 January, the military had taken control of the living area.

Two JGC employees hid in the JGC fly camp throughout the attack and were rescued from there by the Algerian military on 18 January.

By the morning of 19 January the fire in train 3 had subsided and the Algerian authorities declared the military operation over.

At around midday on 19 January, the Statoil employee and colleagues that were hiding in the company camp were found by the military. They had remained in hiding as they could not tell when the terrorists stopped searching and when the military started.

As the military searched through the production area numerous explosive devices were found and the clearance operation to make the site safe took several days.

Of the 32 terrorists in the attack, 29 were killed. Two were detained during the military operation and a third, who had been injured in the convoy, was found hiding in the production area on 21 January.

### 3.9 VICTIMS

40 innocent people lost their lives during the attack; five of them were employed by Statoil. The information available to the investigation team indicates that two died at vehicle checkpoint 1, five died in the living area, 26 died in the vehicle convoy between the living area and the production area, and seven died in the production area.

Victor Sneberg and Alf Vik were among the hostages held in the Base de Vie. They were last seen alive in the Base de Vie before the hostages were loaded into the vehicles that left the living area on Thursday 17 January. The investigation team believes that they were placed into vehicles with the other hostages and they died in that convoy.

Tore Bech, Hans M. Bjone and Thomas Snekkevik were among the hostages held in the production area. They were last seen alive on the morning of Wednesday 16 January. The evidence found by the investigation team strongly indicates that they died in the explosion that took place on Friday 18 January.

## 4. THE ROAD TO IN AMENAS

This chapter looks at how Statoil came to establish a business in Algeria and the circumstances and motives that led Algerian terrorist Mokhtar Belmokhtar to attack In Amenas.

The first part begins by explaining Statoil's country entry in 2003, and gives a brief overview of the security risks that were identified at the time, and how the company considered them.

The second part looks at Mokhtar Belmokhtar and his terrorist network. The story of Belmokhtar is in many ways also representative of broader developments in regional and global threats and terrorist operational tactics.

### Milestones at In Amenas

1998	Amoco enters into In Amenas production-sharing contract with Sonatrach
1998	BP and Amoco merge – BP take on the Amoco contract with Sonatrach for In Amenas
1998 - 2003	BP and Sonatrach establish the In Amenas project
2003	BP sells 50 per cent of its initial interest in the project to Statoil
2004	Statoil's participation became effective in August 2004 after approval by the Algerian authorities
2006	First production

### 4.1 ABOUT IN AMENAS

In Amenas is one of Algeria's largest gas developments, and started production in 2006. It is located approximately 1,300 km from the capital city of Algiers, and 50 km from the border to Libya. The contract area covers 2,750 km<sup>2</sup>, an area the size of Luxembourg, and the majority of reserves are contained in the Tiguentourine gas condensate field.

In Amenas is operated as a joint venture between the Algerian national oil company Sonatrach, BP and Statoil. BP is an experienced global operator with activities in Algeria since the mid-1950s and signed the production sharing contract for the In Amenas joint venture in 1998 (originally signed by Amoco). Statoil entered Algeria and the In Amenas project when the company bought 50 per cent of BP's interest in 2003.

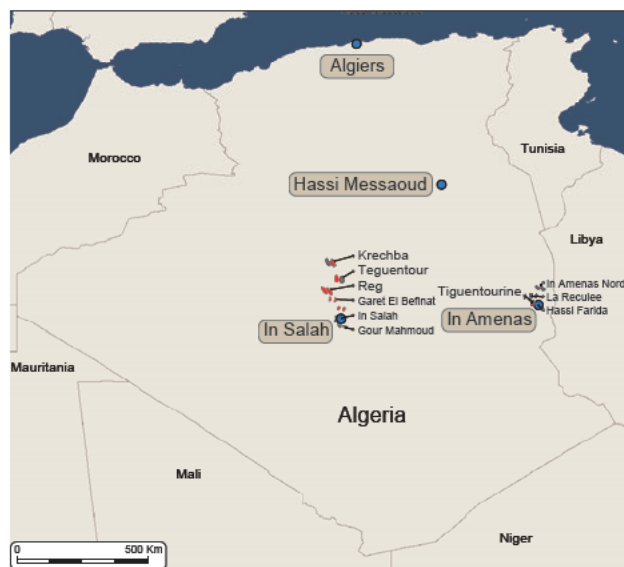


Figure 4.1 Map of Algeria.

### 4.2 STATOIL ENTRY TO ALGERIA

Statoil first considered entering Algeria in 2002. Algeria offered a good fit with Statoil's international gas strategy and was also to be the company's first major move into onshore operations. At this time, Statoil's international footprint was small. Only four per cent of the company's employees worked in the international division, which contributed just eight per cent of total production. Outside the Norwegian continental shelf, Statoil only operated a relatively marginal field in China.

### A strategic industry

To a geologist or petroleum engineer, the underground geology in Algeria may look familiar, and know-how and technology from the Norwegian continental shelf can relatively easily be applied. Above the ground, the situation in the two countries is very different.

Oil and gas companies have limited choice about where they operate. Their opportunities are shaped by geology. Often countries with abundant oil and gas reserves are also areas where there are particular security challenges. Where other industries could potentially move operations and locate away from these, oil and gas companies must go where the resources are located. That is why managing 'non-technical risks' is an integral part of the oil and gas business.

Oil and gas projects are also capital intensive, and typically require sustained investment over decades. The industry has therefore adopted business models where they share risk and reward with other international oil companies, and often with the national oil companies of host nations. Joint ventures are a common way of doing this.

Oil and gas is considered to be a strategic industry due to the economic contribution it makes to national economies. In the case of Algeria, the sector comprises 97 per cent of overall export revenues, 70 per cent of budget receipts and on average 37 per cent of GDP. In Amenas alone contributes 20 per cent of Algerian total gas production. The Algerian government has therefore always seen the security of the industry as a national priority and taken special measures to ensure this.

#### 4.2.1 A major international step for Statoil

Statoil joined the In Amenas licence in 2003 and Statoil's participation became effective in 2004 after approval by the Algerian authorities. The exploration and development phase of the project ran until the end of 2006 and operations started with first gas export in June 2006. The Tiguentourine field is operated by the In Amenas joint venture consisting of Sonatrach, BP and Statoil.

Algeria constituted a new country entry for Statoil and the investment decision, including country entry, was taken by the board of directors in June 2003. Statoil opened a country office in the capital Algiers in September 2004 to run its Algerian operations. The Statoil board of directors visited Algiers, Hassi Messaoud and In Salah in connection with the office opening.

Joining BP in In Amenas was seen as a major move for Statoil. Gaining international experience in operating facilities in Algeria fitted with Statoil's international growth ambitions. Statoil and BP agreed that Statoil would acquire half of BP's share in the Algerian In Amenas and In Salah projects. The joint operation with Sonatrach and BP is an equally shared operatorship including proportionate distribution of the key management positions between BP and Statoil. This was reflected in the configuration of the In Amenas joint venture.

Statoil had limited involvement in the construction project for In Amenas between 2003 and 2006. The investigation team has learned from personnel involved at the time that it initially was challenging for Statoil to get people to take on assignments in Algeria. Operation of the plant was seen as the area where Statoil could contribute. It was also identified as the area where the company could prove its credentials as a new and equal partner in the joint venture. The company was gradually able to recruit capable and experienced personnel for the In Amenas operations.

#### 4.2.2 Assessment of security risk in Algeria

The security challenges in Algeria were highlighted throughout Statoil's internal decision process for the acquisition from BP. The main concern at the time was related to the security situation in the north of Algeria, and to the establishment of the country office in Algiers.

The country and security risk assessments were discussed in Statoil's executive committee and board of directors during the first half of 2003. The documents and minutes from this period show that security for company and contractor personnel was identified as the main operational risk, including that:

- Algeria was still in a state of emergency following a decade of violence. The Algerian government was dependent upon a stable oil and gas industry to enable reforms within its economy and the general society.



- Terrorist groups were active, particularly in the north of the country, and could present a threat for foreigners and travellers in and around Algiers. Islamist extremists had been unable to directly attack the Saharan oil and gas zones, as these were well administered and protected by the army, but armed groups operated in the Sahara and precautions had to be taken.

Statoil was reassured by having partners in BP and Sonatrach that had global and local experience, and by the presence of the Algerian army in the oil and gas producing regions. In a memo to the Statoil board of directors in June 2003, it was stated that: *“Entry into Algeria entails a new and high security risk for Statoil. These risks are nevertheless possible to handle with the view to secure the health and security of personnel and to protect infrastructure and facilities. Statoil will cooperate with the authorities in Algeria and use the military to protect persons whilst in transportation and at the facilities which we operate.”*

The Statoil executive committee discussed and presented to the board further mitigation measures to reduce the security risk. These included adopting an offshore operational model with workers flying in and out of the oil and gas sites, and the adoption of the appropriate procedures and training.

Statoil established a security team for its operations in the capital Algiers, but did not dedicate security resources for overseeing security at the In Amenas joint venture. Interviewees have highlighted three main reasons for this: First, in 2003, Statoil considered that security management was well taken care of between BP and Sonatrach, who had the global and local experience that Statoil had not. Second, Statoil did not have professional security resources with the capacity or competence to do so. Third, safety performance was a major concern, which led Statoil to focus its resources and attention on this aspect.<sup>2</sup>

#### 4.3 MOKHTAR BELMOKHTAR AND THE ROAD TO IN AMENAS

In 2003, as Statoil was negotiating its entry to Algeria, Mokhtar Belmokhtar, who 10 years later would claim responsibility for the attack on In Amenas, was increasing and consolidating his influence across the deserts of southern Algeria.

Information on Belmokhtar has to be treated with caution: it relies either on purported statements and interviews by Belmokhtar himself, whose authenticity it is often difficult to verify, or on media articles drawing on unnamed intelligence sources. Nonetheless it is possible to compile a plausible account of his terrorist career over the past 20 years, a career that has both shaped and been shaped by the evolution of terrorism in Algeria and the wider region, from the early 1990s to the present day.

##### 4.3.1 Belmokhtar's early years

The widely reported version of Belmokhtar's background suggests that he trained in Afghanistan in the early 1990s, before returning to Algeria in 1993 and joining the “Armed Islamic Group” (most commonly referred to by its French acronym, “GIA”) in its terrorist campaign to establish an Islamist state in Algeria.

When the GIA split in the late 1990s Belmokhtar joined the “Salafist Group for Preaching and Combat” (most commonly referred to by its French acronym, “GSPC”), becoming a leading figure in the group's southern region. From there he supplied weapons to support the GSPC's terrorist campaign in the north of the country. At the same time he is believed to have developed a lucrative trade, smuggling contraband cigarettes, earning him his nickname, ‘Mr Marlboro’.

In 2003 Belmokhtar failed in his attempt to become leader of the GSPC. This appears to have reinforced his focus on developing his networks and influence in the southern deserts, establishing particular ties, sometimes by marriage, in northern Mali and Mauritania.

##### 4.3.2 Al-Qaeda in the Islamic Maghreb

By 2005 the GSPC terrorist campaign in the north of Algeria had been defeated in its goal to establish an Islamist state. Increasingly it aligned its campaign and rhetoric with al-Qaeda's wider global jihad.

In January 2007 this move from a domestic Algerian agenda to participation in a global terrorist campaign, as an al-Qaeda franchise, resulted in the GSPC changing its name to al-Qaeda in the Islamic Maghreb (AQIM). It was reflected, too, in a change of tactics. The first suicide attacks in Algeria took place in April 2007, with

<sup>2</sup> In 2006, Statoil assisted Sonatrach in establishing an Algerian version of the “Safe behaviour programme” that was originally launched in Norway in 2003. The programme provided training aimed at building safety culture and awareness. Sonatrach ran the programme between 2007 and 2010. During this period nearly 50,000 Sonatrach employees participated in the training.

car bombs against the *Palais du Gouvernement* in central Algiers and a police facility in the *Bab Ezzouar* district of Algiers, followed by two more high profile suicide attacks in December, against the United Nations office and the Constitutional Court, again both in Algiers.

For a further four years AQIM mounted a steady terrorist campaign against targets, mainly in the north of Algeria, from its stronghold to the east of Algiers. In 2012 developments in Libya and Mali reshaped the regional security environment.

#### 4.3.3 Belmokhtar in the south

While AQIM focused its terrorist campaign in the north, between 2005 and 2012 AQIM's southern wing - in which Belmokhtar was a leading player - significantly expanded its activities beyond Algeria's borders. Belmokhtar continued to pledge allegiance to AQIM but his relationship with the leadership appears to have been uneasy. His *al Mulathamini* brigade (The Masked Ones) operated under AQIM's banner but its contribution to the terrorist campaign in the north is uncertain.

Belmokhtar was involved in and profited from the upsurge in kidnapping for ransom that took place across the southern deserts of Algeria, the Tunisian Sahara, Mali, Niger and Mauritania between 2007 and 2012. A precedent was set in 2003 when a GSPC group kidnapped 32 European tourists in southern Algeria and released them some months later in northern Mali. Between February 2008 when two Austrian tourists were abducted and December 2012, 43 western nationals were taken, of whom 24 were released, most likely in return for significant ransom payments. Belmokhtar played a role in many of the releases.

In late 2011 former AQIM members from Mauritania, the Western Sahara and northern Mali set up the "Movement for Monotheism and Jihad in West Africa" (most commonly referred to by its French acronym "MUJAO"), whose field of operation spanned Mauritania, Mali, Niger and southern Algeria. Belmokhtar appears to have had a particularly close relationship with this group, which was also active in kidnapping hostages for ransom.

#### 4.3.4 State Collapse in Libya, conflict in Mali

There is a direct link between kidnap-for-ransom and the growth of extremist groups in northern Mali. By mid-2012 the funds generated from the payment of ransom enabled AQIM, MUJAO and Belmokhtar to buy political influence, attract new recruits from across the region and establish an effective safe haven in northern Mali.

Belmokhtar and MUJAO based themselves in Gao, north-eastern Mali, from where MUJAO mounted attacks in Algeria; in March 2012 a suicide car bombing of a gendarme base in Tamanrasset and in June a suicide car bomb against the gendarme base at Ouargla. These attacks were unprecedented in southern Algeria.

The establishment of a safe haven in northern Mali in 2012 coincided with the easy availability of weaponry from Libya. With little or no Libyan government control over large parts of the country, particularly in the south, following the collapse of Qaddafi's regime, smuggling networks had expanded across the country. Weapons from Libyan army arsenals proliferated across the region. Border controls were weak. In January 2012 an armed group of Algerians was able to kidnap the *Wali* (governor) of Illizi province (in which In Amenas is situated) and take him to Libya. The group was captured and the *Wali* freed within 24 hours, but the ease with which they could cross the border was indicative of the state of border security in the region.

Belmokhtar was perhaps uniquely well placed to exploit this combination of circumstances. He had good contacts and a secure base in Gao; and in Libya he could benefit from his well-established smuggling links. Media reports place him in the area of Benghazi, eastern Libya, buying weapons, in March 2012. The investigation team judges these reports to be credible.

In April 2012 he formally allied himself with MUJAO. The same month MUJAO kidnapped seven diplomatic employees from the Algerian consulate in Gao.

#### 4.3.5 The build-up to the In Amenas

In a letter dated 3 October 2012 the AQIM leadership wrote to Belmokhtar to criticize him for his lack of action:

*"Any observer of armed action in the Sahara will notice clearly the failure of the Masked Brigade to carry out spectacular operations, despite the region's vast possibilities: There are plenty of mujahedeen, funding*

*is available, weapons are widespread and strategic targets are within reach. Moreover, you have received multiple directives and instructions from the Emirate of the organization urging you to carry out these acts. Despite all that, your brigade did not achieve a single spectacular operation targeting the crusader alliance.”*

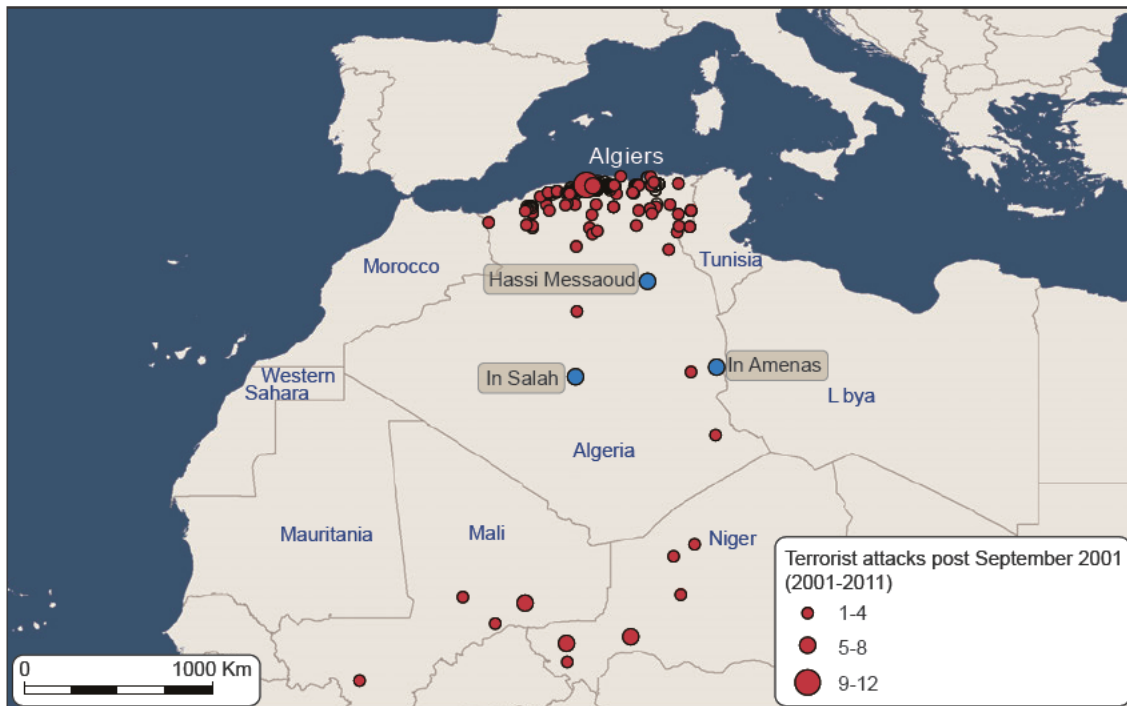
This letter was later found in northern Mali following the French intervention and published by Associated Press in May 2013.

The investigation team cannot say whether this criticism pushed Belmokhtar to act but judges that he must have begun planning for a spectacular attack at around this time, if not earlier, though he may not yet have settled on In Amenas as the target. This judgement is based on the complexity of the attack, the weapons deployed, and the number and diverse background of the terrorists involved. To have brought the various elements together to mount an attack of the kind that took place on the morning of 16 January would have taken months, rather than weeks, of preparation and planning.

In a public statement in December 2012 Belmokhtar announced his intention to strike western interests. He also announced that he had split from AQIM, perhaps angered by the October letter, and he renamed his brigade *al-Muwaqq'in bil-Damm* (Those who sign with blood). The investigation team does not have evidence but judges that by this time, a matter of weeks before the attack, he must have decided that In Amenas would be his target.

Historically, Belmokhtar, AQIM and MUJAO have not targeted major oil and gas installations in Algeria, but government security forces and Westerners have been consistent targets. Even during the height of the terrorist campaign no attack took place in Algeria of the kind al-Qaeda in the Arabian Peninsula launched on the Abqaiq oil facility in Saudi Arabia in February 2006. In Algeria the authorities have a strong record in safeguarding the oil and gas industry. While there have been innumerable attacks in the country between 2005 and 2011, just 11 are registered in the “Global Terrorism Database” to have been against the oil and gas industry with a further five against business interests, mainly in the north of the country.

In an Algerian context Belmokhtar’s decision to attack a major oil or gas facility was unprecedented. Having decided to attack an oil or gas facility it is likely that proximity to the Libyan border was an important factor in his choice of In Amenas over other potential targets.



**Figure 4.2** Terrorist attacks in Algeria, Mali, Niger 2001-2011.

Source data: Global Terrorism Database (<http://www.start.umd.edu/gtd/>).

#### 4.3.6 A diverse group of attackers

The In Amenas attack appears to have been the work of a diverse group with members of different backgrounds and motivations. Three main components are identifiable:

- Mokhtar Belmokhtar's network
- A southern Algerian rebel group known as the "Sons of the Sahara for Islamic Justice"
- Collaborators and facilitators in Libya.

These three core components were key to the organisation of the attack, although Egyptians and Tunisians are reported to have made up the bulk of the force. There were also two Canadian citizens among the attackers.

In the ungoverned zone in the south-west of Libya bordered by Niger and Algeria, the attack group was joined by other fighters from northern Mali when the final composition of the attacking group was established and the group equipped. The group is reported to have moved north and launched its attack overnight on 15-16 January, to arrive at the In Amenas gas plant in the darkness of the early morning of 16 January.

While Belmokhtar directed the In Amenas attack, the leader of the operation at the site itself is reported to have been Lamine Bencheneb, an Algerian from the local Djanet/Illizi province and the leader of Sons of the Sahara for Islamic Justice. Several witnesses of the attack have reported hearing the leader of the terrorists being referred to as "Tahar", which may be an interpretation of another name used by Bencheneb, Tahir Abou Aicha.

His involvement points to a southern Algerian component in the group that attacked In Amenas. With their extensive local connections and intimate knowledge of Illizi province, the participation of Bencheneb's group would have been of central importance to the In Amenas attack.

#### 4.3.7 Possible objectives and motivations

The investigation team is not in a position to arrive at firm conclusions about the terrorists' motivations or objectives. It is likely that the attack on In Amenas served several different purposes, which motivated various groups and individuals to come together in the planning and execution of the attack.

From the way the terrorists carried out the attack, it is likely that they had at least two main objectives:

- Take hostages and escape back across the border. Smuggling activities and kidnap-for-ransom have been Belmokhtar's core business for years, and hostage-taking has been a recurring objective in other AQIM actions.
- Blow up the gas plant. A spectacular explosion would have made a strong, symbolic statement to jihadist sympathisers around the world. It would also have created a degree of chaos conducive to getting out of the facility alive, with hostages.

The investigation team judges that attacking the escorted bus was probably not part of the original plan, but that the bus caught the terrorists by surprise as they were waiting by vehicle checkpoint 1.

Similarly, rather than a single motivation behind the attack, there were most likely several factors:

- The attack struck a blow to the Algerian state – in the south – against its most strategic industry and most important source of revenue.
- It allowed Mokhtar Belmokhtar to reassert himself *vis-à-vis* the AQIM leadership who had ridiculed and taunted him as a failure.
- It enabled ideologically-motivated jihadists to promote “the cause” through a spectacular attack that promoted global publicity and recruitment.
- Money. For Belmokhtar, kidnap-for-ransom provided valuable finance for his activities. It is also common that the “muscle” in attacks is provided by paid fighters with economic motivations and not necessarily any clear idea of the intent, scope, or rationale for action.

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▀ / **PART II** / **PREPAREDNESS AND  
CAPABILITIES**

## 5. SECURITY AND EMERGENCY RESPONSE CAPABILITIES

Previous plots and attacks against oil and gas infrastructure in the Middle East have demonstrated al-Qaeda's capability and intent. While there is debate on tactics, the movement is still committed to violence and to its religious ideology. It has become harder to counter and anticipate and is not considered to be near strategic defeat. This makes security risk management for the oil and gas industry increasingly demanding.

Security risk management aims to reduce the risk of harm to people, operations and assets while an emergency response capability manages the consequences once an incident has materialised. Although closely related, the two capabilities are not necessarily dependent on each other. Emergency preparedness and response capabilities are designed and dimensioned to respond to both security and safety incidents.

This chapter examines security and emergency response capability and preparedness in the In Amenas joint venture and Statoil in the period before the attack to understand how both were prepared to deal with threats to their people and assets.

The chapter is structured in two main parts, dealing first with the In Amenas joint venture, then with Statoil.

### 5.1 THE IN AMENAS SECURITY SYSTEM: GOVERNMENT AND COMPANY RESPONSIBILITIES

**Governments** have the responsibility to maintain law and order and security for their people. Prevention of and protection against acts of terrorism are state responsibilities. It is therefore a host government's responsibility to prevent, investigate and prosecute acts of terrorism or other criminal activity against commercial interests.

**Companies** have the responsibility to evaluate security risk for its employees and shareholder's assets before investing in an area and commencing operations, and to provide the consequential level of security required.

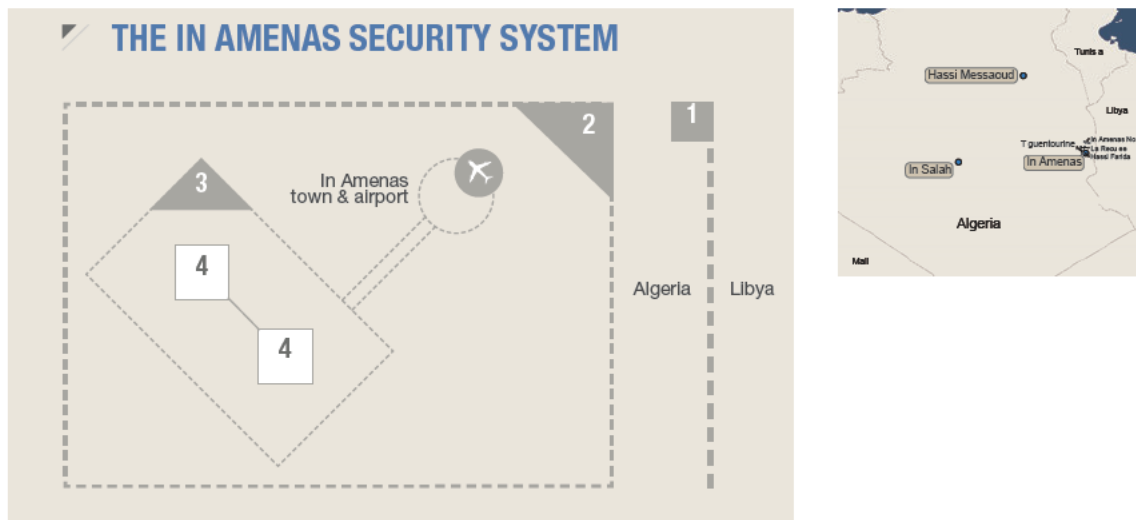
Companies operate within the laws and regulations of the countries where their activity is based, and must provide basic safeguards, such as against theft and vandalism. But there is a level of threat for which armed force is necessary to counter. Normally, the authorities of the state have the monopoly of being armed and therefore of providing armed security.

Both the state and businesses rely on a flow of information and assessment to inform their decisions. Governments have the means and legal privilege to gather covert intelligence in support of their activities. Publicly listed companies, like Statoil, operate independently of government and typically rely on open source information.

Achieving a clear division of roles between the responsibility of a host government and that of the company is of crucial importance to handle security risks effectively.



Security at In Amenas is based on the principle of layered protection.



### OUTER SECURITY

#### 1: Border protection

Libyan borders guarded by military border guards.

#### 2: Military zone

Military protected zone around hydrocarbon region.

#### 3: Site zone protection

Gendarmes protection of the area around site and drilling rigs, escorts for all expatriate movement outside facility.

### INNER SECURITY

#### 4: Perimeter security and guards

Protective barriers and access control of living and production areas at In Amenas site.

Figure 5.1 Schematic representation of layered security system at In Amenas.

**Outer security** is the responsibility of the Algerian government, and governed by national legislation. Prevention of, and protection against, terrorism are state responsibilities. Intelligence gathering, area surveillance, and border control are sovereign responsibilities of the Algerian authorities.

Outer security for In Amenas is provided by the army and the gendarmes. The 1,000 km border with Libya, running to the east of the In Amenas facility, is guarded by gendarme border guards, with reinforcements from the army when necessary.

The army is responsible for security in the wider desert area around In Amenas. To restrict unauthorised movement, the Algerian government has established a military zone around the oil and gas facilities. The outer layer of military protection is provided by the army units garrisoned in In Amenas town. The relationship between the In Amenas joint venture and the army is maintained through meetings with the military region second in command (*sous chef de secteur*) and the *Wali* (governor) of Illizi.

The gendarmes are responsible for the desert zone immediately surrounding the facility. They are also responsible for providing security for transportation of personnel, and mobile drilling rigs, as well as manning vehicle check points on access roads to the facilities.

Together these measures were designed to **deter** terrorists from attacking the facility, **detect** unauthorised movements in the area, and **stop and respond** to such threats. Simply put, the purpose and intention of these measures were to **prevent** a terrorist attack from happening.

The joint venture is responsible for **inner security** measures at In Amenas.

Inner security includes physical protective barriers, unarmed civilian guards, access controls, threat assessments, contingency plans, training and other measures to protect the joint venture's people and assets from security threats.

The security originally constructed for the In Amenas site was designed on the basis of the security risks faced in the early 2000s, and was upgraded following a security review in 2009. The main elements in January 2013 were:

- Double fences around the living quarters and process facility, with a ring of concrete vehicle barriers outside them.
- Unarmed civilian guards, manning pedestrian and vehicle gates to control entry to the facility. These men were locally employed by the joint venture and were trained for duties including site surveillance, patrolling, identity checking, bag-searching and access control.
- Chicanes and road blocks to slow down the speed of vehicles approaching the site.
- CCTV surveillance and alarm systems.

## 5.2 SECURITY IN THE JOINT VENTURE

### 5.2.1 General governance structure

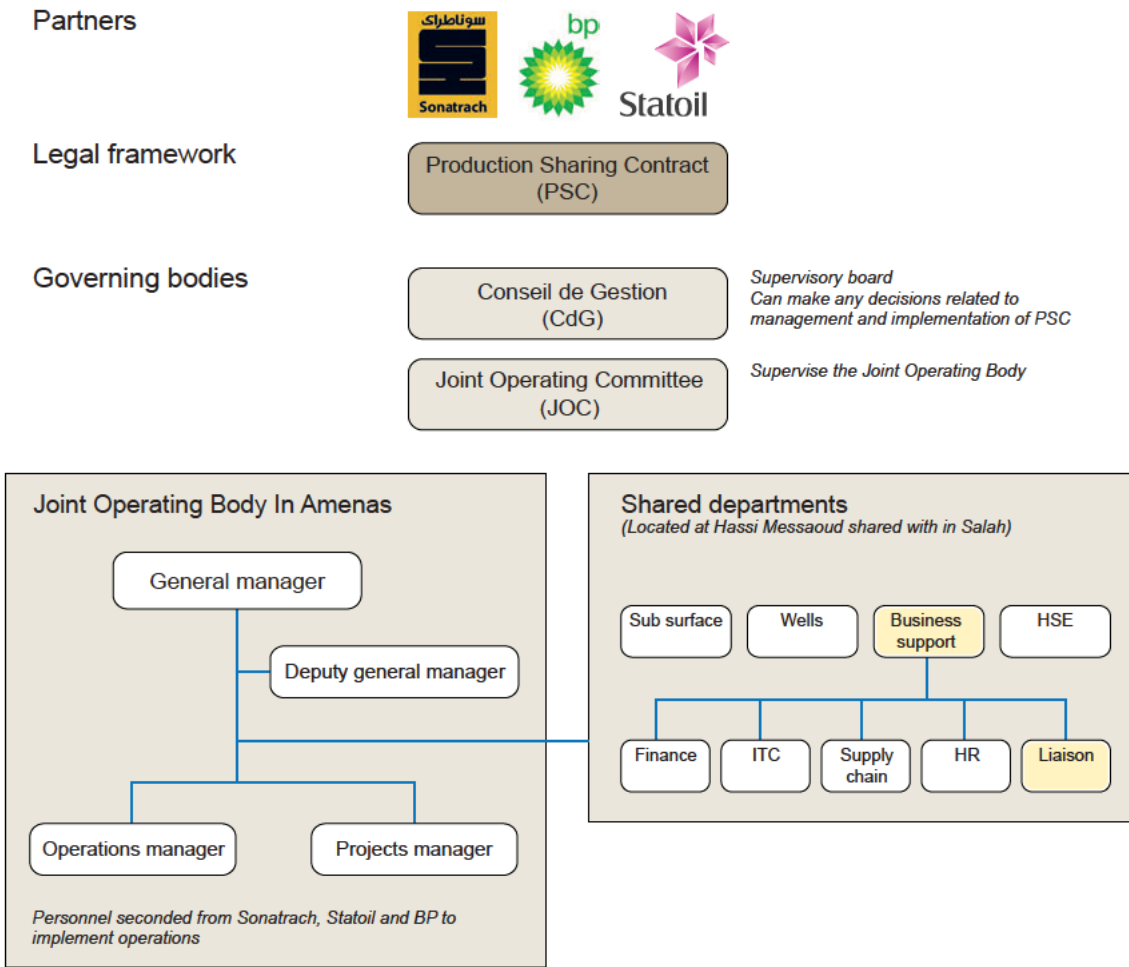
At In Amenas, Sonatrach, BP and Statoil cooperated in a joint venture, which is a common arrangement in the oil and gas industry. The main legal document governing operation of the joint venture is the production sharing contract between Sonatrach as one party and jointly BP/Statoil as the other.

In referring to the daily operations of the joint venture, they are normally described as being carried out by the **Joint Operating Body**, which is the term used for the structure into which the different companies have seconded their employees.

The main governing bodies in the In Amenas joint venture are:

- **The Conseil de Gestion**, (supervisory board). Sonatrach has half the members in this board, and BP / Statoil share the other half. It operates on the basis of unanimity.
- **The Joint Operating Committee**, (operating committee). This is the senior management forum for operations at In Amenas. In the operating committee, the companies are represented according to the positions they hold in the joint venture.

The In Amenas joint venture shares certain departments and functions, including security, with the In Salah joint venture, where the same three companies are partners. These shared departments are located in Hassi Messaoud.



**Figure 5.2** Schematic and illustrative overview of the governance structure in the In Amenas joint venture.

The positions of general manager, deputy manager and operations manager together constitute the senior leadership at In Amenas. These positions rotate between the companies on a two year basis. This is organised in a way that ensures that all three companies always have one representative in the senior management. At the time of the attack, Sonatrach held the position as general manager, BP the deputy manager and Statoil the operations manager.

Most management roles, including the operations manager, are shared between the companies on a “back-to-back” shift rotation. This means that the roles are shared between two people who travel in and out of the site on a replacement basis. The general manager and deputy manager are not back-to-back positions.

The In Amenas joint venture has adopted its own management system and is set up to be autonomous from its owners.

**5.2.2 Organisation of security at In Amenas**

The general manager is responsible for all aspects of operations at In Amenas including security.

Until the summer of 2012, security at In Amenas was part of the remit for the business support unit, located in Hassi Messaoud. Day to day supervision of security operations was carried out by a contractor who filled

what was known as the liaison role. The liaison reported to the business support manager, and had expatriate personnel deployed at In Amenas.

At the start of the project, the liaison contract was held by the British company Stirling Facilities Management (“Stirling”). Stirling later formed a partnership with the Algerian company RedMed, creating the Algerian Facilities Management Company (“AFMC”). AFMC was awarded the liaison contract in 2011.

Before July 2012, liaison’s contracted role included contact with the local military on behalf of the In Amenas joint venture, provision of security advice to management and coordination of site security plans and threat assessments. Liaison was also responsible for organising the transportation escort and civilian guards, as well as providing training.

In July 2012, this arrangement changed. Sonatrach informed the joint venture partners that Sonatrach’s own security organisation, *le Service de Sûreté Interne* (hereafter referred to as “SSI”), would take over responsibility for internal security and contact with the military. A new SSI position as internal security assistant (*Assistant Sûreté interne* “ASI”) at In Amenas was established. This would be the most senior security position at the site, and the intention was for liaison to report to the ASI. The ASI would report to Sonatrach management in the In Amenas joint venture and to Sonatrach’s security organisation.

In December 2012, citing instructions from local and military authorities, Sonatrach reminded the joint ventures by letter that *“Internal security is to be handled exclusively by Sonatrach”*. The letter explained that liaison should not interfere with the ASI, who would exclusively be responsible for contact with *“The authorities and security services, including the service responsible for protecting and escorting foreigners working in the association.”*

From interviews the investigation team has learned that expatriates in the In Amenas joint venture were not comfortable with this change. At the time of the attack transitional arrangements had been agreed, under which the expatriate management and workers continued to rely on liaison for quality assurance, security assessment and advice. SSI assumed greater responsibility for internal security, including management of the unarmed civilian guards. It also had primary responsibility for high level contact with the Algerian military and security forces.

This arrangement was being made to work, but responsibility for security was divided as a consequence.

### 5.2.3 Security risk management process

The In Amenas joint venture had an established security risk management process, which was administered by the liaison on site. This provided a set of security risk management plans, risk assessments and review documents, including mitigations to reduce the risk to acceptable levels.

As a petroleum site of strategic national importance, In Amenas was required by law to submit an internal security plan for approval to the local authorities, the *Wilaya* of Illizi. In addition the joint venture also had:

- A **security management plan**, updated twice per year.
- A **civil crisis plan**, describing the joint venture’s response to a range of security and safety contingencies.
- An **annual risk assessment and action plan**, covering security and other non-technical risks.

The **security management plan** reviewed the regional security environment, identified and assessed the main security threats faced by the joint venture. In doing so, the plan highlighted the critical role of the military in zone protection, but detailed knowledge of army deployments and activities were generally not available to the joint venture, which relied on the military’s ability to carry out their responsibilities effectively. Terrorism, kidnap-for-ransom and bandit activity were among the security risks that consistently featured in the security management plan. The generic terrorist threat was not broken down into concrete scenarios, against which protective measures could be planned and designed.

The **civil crisis plan** described the joint venture’s response to a range of security and safety contingencies, including natural disasters, civil unrest, and isolated terrorist attacks. The plan established a framework for business continuity, and provided management guidelines to ensure that risks were appropriately managed.

The plan defined the alert levels as “low”, “medium”, “high” and “very high”, and provided a formal process to assess the security risk and to raise the protection to meet an increasing threat. It included indicators to watch and actions to be taken at each level.

The alert levels were reviewed weekly at In Amenas. The operating committee had the authority to change alert levels, based in principle on recommendations from the business support manager. In practice, alert levels were set outside this committee forum. Those involved used their best judgement, but did not systematically use the threat level system as a management tool, nor were the different alert levels commonly understood. This weakened their effectiveness as a contribution to proactive security risk management.

The In Amenas joint venture **risk assessment and action plan** was updated twice a year, and used standard methodology to assess security and non-technical risks before and after risk reduction measures. Terrorism was one of the areas with the highest risk score.

#### 5.2.4 Evolution of physical security measures

Security measures should be dynamic and continuously adjusted according to the assessment of the threats and risks affecting a site or project. They should also be designed to provide deterrence, detection and delay of potential attackers for sufficient time for an armed response force to arrive.

In 2009, following an increase in suicide and vehicle bombs in Algeria, the In Amenas joint venture decided to strengthen protection of the site. This led among other measures to the concrete vehicle barriers outside the perimeter fence. Liaison recommended security standards and measures to increase protection against the threat of armed attackers, forced vehicle penetration of gates or the perimeter, or a vehicle bomb. One of the stated aims of these measures was to delay armed attackers from entering the site sufficiently long for the military to be able to intercept them. The measures included all the elements of internal security within the In Amenas joint venture’s control: fences, entrances, lights, vehicle barriers, CCTV, access control and the civilian unarmed guards.

The full range of security measures recommended at this time was not designed to withstand an attack of the scale and complexity that took place on 16 January.

There were a number of delays in installing these security upgrades ranging from six months to several years. Some security improvements were promptly executed, such as erection of fences and lighting. Others were delivered, yet not installed and then shelved altogether, such as electronic access control, and some were repeatedly delayed, such as completion of the concrete vehicle barriers.

The investigation team has learned that a combination of factors created delays: the time for procurement processes, equipment lead times and getting contractors to site in the austere and remote environment.

These factors are not particular to security issues. Several expatriates have noted that it is difficult to get things done in a setting that is often felt to be bureaucratic. Successful execution requires a high degree of persistence in the face of many competing priorities. In the light of the prevailing threat assessments, these recommendations were not given the same level of priority as technical safety issues. The In Amenas joint venture considered that the security measures in place were adequate.

#### 5.2.5 Civilian armed guards

If a host government is unable or unwilling to provide sufficient protection, civilian armed guards may offer additional security for an operation or facility. The use of such guards, however, also comes with a set of risks that must be properly evaluated and requires a commitment to professionalism and training.

The Algerian authorities allow the use of civilian armed guards, but do not allow arming of foreign nationals. Such guards may supplement the armed protection provided by the military. There is, however, no consistent requirement, and the arrangements vary between different oil and gas sites in Algeria. The main reason for this appears to be that the military authorities and *Wilayas* have different preferences. The local *Wilayas* exercise autonomy when approving the required internal security plans for the different sites, including the power to impose civilian armed guards if the threat picture suggests they are required.

In Algeria both Statoil and BP have consistently applied the principle that where armed security is necessary, it should be provided by the military. Statoil has judged that the risks posed by deploying civilian armed

guards outweigh the benefits. Human rights concerns, the risk of having two different armed bodies in the same area and difficulties with providing training and conducting background checks have led Statoil to conclude against arming civilian guards. A further concern has been the perceived risk that the deployment of civilian armed guards might lead to the reduction of military forces around the facilities.

No formal proposal to introduce civilian armed guards was put forward for consideration at In Amenas. This, however, has been a recurring issue in the In Salah joint venture, based on requests from the military in the area, most recently in 2011. After initial discussions with the military commanders no requirement was placed on the company to provide armed guards at In Salah.

#### 5.2.6 Oversight and monitoring of security

The mechanisms for oversight and monitoring of security in the In Amenas joint venture have been provided through a combination of management representation at meetings in the joint venture, where security has been on the agenda, and through joint venture reviews and audits as part of the quality assurance plan.

The most recent audit by a partner company the investigation team has been able to find was performed by Sonatrach, which audited the security arrangements in 2010. The report has not been shared outside Sonatrach but is reportedly positive and surpassing their expectations.

The BP business security manager regularly visited the site to maintain the link with the In Amenas security team. Statoil security professionals last visited the In Amenas site in 2009, and have only exercised external monitoring or oversight of the security system in the joint venture in an ad hoc manner.

#### 5.2.7 Emergency preparedness

Responsibility for responding to health, safety and industrial incidents at the In Amenas facility lies with the joint venture. In the case of terrorist or criminal incidents responsibility is shared with the Algerian authorities.

According to the emergency response plans, a local incident management team at the site of the incident leads the immediate response, with any necessary resourcing, logistics and other support provided by the incident management team at Hassi Messaoud. In the case of significant crises the joint venture parties, Sonatrach, BP and Statoil are informed and consulted.

When individuals are at risk it is the responsibility of the joint venture to ensure their safety and the responsibility of the owner companies (and contractor companies) to take care of their own people once the joint venture has secured them from immediate harm. It is also the responsibility of the owners to support next-of-kin and manage media and internal company communications.

High level agreements, captured in a bridging document in 2004, envisaged that emergency communication lines between the joint venture and the owner companies should pass through the Statoil and BP country offices in Algiers, who in turn would liaise with Stavanger and London. However, by 2012 joint venture plans show the main line of notification running back to the BP business support team in Sunbury, west London, and in parallel to shareholders.

In 2012 plans were in place to respond to a range of incidents, including the requirement for evacuation, though not a mass evacuation, and the joint venture management regularly exercised the response to a range of health, safety, and technical incidents. Security scenarios were not frequently exercised, and predominantly focused on small scale attack against convoys and the kidnap-for-ransom of a small number of hostages.

No exercise scenario envisaged a terrorist attack on the In Amenas site and certainly not an attack of the scale that took place on 16 January in which the collective capacity of the local incident management team was lost at the outset. Site induction briefings included instruction that in the event of a security incident people should hide in their rooms when they heard the security alarm and await further instructions. This instruction was posted on the doors in the living area. Several of those interviewed have referred to these instructions.

Although in 2010, one emergency scenario exercised by the In Amenas joint venture involved the Statoil country office in Algiers, this was not standard practice. In late 2012 the country office recognised this gap and asked to be included in relevant joint venture exercises but this had not happened by the time of the attack.

5.3 SECURITY IN STATOIL

5.3.1 Organisational overview and principles

Statoil is organised as a matrix organisation, with seven business areas, each of which is accountable for the security of its operations. In Amenas belongs to the business area called “Development and Production International” (the Business Area). The executive vice president for the Business Area is a member of the corporate executive committee in Statoil and reports to the chief executive officer.

The Business Area has senior vice presidents with responsibility for different regions. In January 2013, Algeria belonged to the region Middle East and North Africa region (MENA region).

Statoil’s country office in Algeria which is located in Algiers (the country office) is responsible for follow up of In Amenas, on behalf of the Business Area. The country manager in Algeria reports to the senior vice president for the MENA region in the Business Area.

Personnel in Statoil’s corporate functions support the business areas and are responsible for functional strategy, oversight and monitoring. These functions set standards and requirements and drive functional performance across the group, and should ensure that necessary competence and capacity is available in the organisation.

Security belongs to the corporate safety function, where it is managed together with the broader health, safety, and environment issues in Statoil. It is headed by a senior vice president for safety, reporting to the chief executive officer. At the time of the attack, a vice president responsible for safety and security reported to the head of Corporate Safety. We will refer to this as “corporate safety and security” in this report.

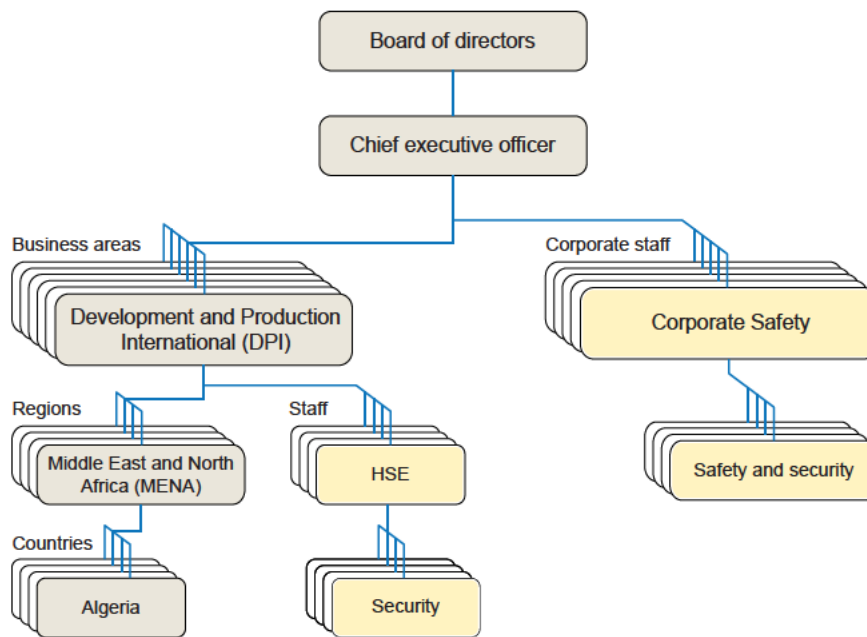


Figure 5.3 Schematic and illustrative overview of organisational principles and reporting lines in Statoil.

### 5.3.2 Security in country offices

In Statoil country managers are responsible for all aspects of the activities in the country. The country manager in Algeria is advised and supported on security matters by a manager responsible for health, safety, environment and security (“HSES”). At the time of the attack, the Algeria country office did not have a dedicated senior management position for security as some other Statoil country offices do.

The HSES unit in the country office consists both of an expatriate employee on rotation and Algerian personnel in security roles related to the Algiers office. Security is a prominent part of the office activities in Algiers, and an area where considerable time and effort is spent to ensure the security of expatriates, family members and visitors while in the capital. The security team at Statoil’s country office is responsible for movement of personnel in the capital and monitoring the security situation. It is not responsible for security in the joint ventures.

Security issues were frequently discussed in management meetings at the country office, and the management team involved both the Business Area and corporate security in several of these discussions.

The country office’s general emergency response plan employed a methodology where mitigation and response measures are based on an evaluation of risk levels. Five different alert levels are defined, from green (“*business as normal*”) to red (“*Evacuate. Stop operations, secure commodities and classified documents*”), and specific indicators and actions are outlined for each of them. This provides a fit-for-purpose system for security risk management if used correctly with the correct threat information inputs.

Security risk analyses for the capital of Algiers were conducted by the country office with support from the security department in the Business Area. The joint venture was responsible for its own risk assessments, to which the country office had access.

### 5.3.3 Security in the Business Area

The Business Area is responsible for implementation of physical security measures at Statoil operated facilities, and for follow up of security in joint ventures and partner operated sites.

The Business Area has a dedicated security unit. The leader of this unit reports to the vice president for health, safety and environment in the Business Area.

The security unit employs expert security advisors with relevant background and training. They have a wide area of responsibility and cover the regions Sub-Saharan Africa, South America, Middle East and North Africa, and Europe and Asia. This unit also offers services to other business areas with global operations, which do not have dedicated security professionals.

At regional level, the MENA region did not have dedicated security professionals.

### 5.3.4 Corporate safety and security

Corporate safety and security has the overall responsibility for security in Statoil, but security is split into three areas: physical security, cyber security and personnel security. The latter two are the responsibility of Information technology and People and organisation.

This division of responsibilities between functions can potentially hinder security from being addressed holistically. To work successfully it places a large emphasis on cooperation and coordination between the different security communities across organisational units, levels and disciplines. The investigation team has found that these interfaces have not worked as intended.

### 5.3.5 Internal service and input providers

In addition to the units described above, which have a clear security mandate, Statoil has several other units that perform roles either as internal service providers within security or deliver input to security risk management processes. Among these are:

**The facilities management unit**, responsible for delivering actual physical security measures at Statoil offices.

**The political risk analysis unit**, responsible for delivering advice to corporate management and the business areas on country risk assessments.



### 5.3.6 Security and risk management processes

Statoil's management system contains several processes and procedures within the security area that are intended to bring rigour and standardisation to the way in which the issue is managed. The system relies on corporate safety to set the requirements and the business areas, country offices and projects to apply the systems and procedures.

Broadly speaking, assessments are made both before a decision to enter a country or project, and as part of on-going risk management.

Statoil has a comprehensive process for evaluating projects and investments known as the Capital Value Process. Central to this is the concept of decision gates, at which a project may either be stopped or allowed to be matured further, up until a final investment decision is made and the company commits itself to developing it. Chapter 4 describes in further detail how security featured as one of the concerns before making the decision to enter Algeria.

Statoil categorises countries as "low", "medium" and "high" risk based on a number of factors, including political stability and security. Entry into high-risk countries requires approval from the Statoil board of directors.

The political risk analysis unit is responsible for preparing country risk assessments. Their method is qualitative and includes security as one of 12 other indicators, although at a relatively aggregated level. They only occasionally engaged with security professionals in Statoil when making their assessments.

For projects in operations, Statoil's management system requires continuous follow up of risks and application of appropriate security measures. The professional capacity and competence available to effectively run such processes have been limited.

Statoil's corporate risk management unit is responsible for the company's overall risk management process and has developed a standardised tool for assessment and communication of risks that is used on the corporate level and in the business areas. The corporate risk management unit is responsible for aggregating the risks from all business units to a top 10 risk map that is communicated to the corporate executive committee and to the Statoil board of directors on a quarterly basis. Staff units, like corporate safety and security, are consulted on the assessment of relevant risks.

In Statoil, a few selected risks are managed on corporate level (e.g. price and market risks). Security risks are among those owned and managed by the business line. Most risks are managed where they arise, in the business line, governed by corporate requirements and methodologies. Risks in the business areas are mainly managed by the business areas, risks in the joint ventures are mainly managed by the joint ventures.

Although large accidents were among the top 10 corporate risks communicated to the corporate executive committee and the board of directors in Statoil, security risks were assessed to be lower, and did not figure in the top 10 corporate risk map, it did however figure among the top 10 HSE risks, which were also communicated to the corporate executive committee and to the board of directors by corporate safety and security.

Security risks such as terrorism are typical "low probability, high impact" type of events. Proper management attention, vigilance and prioritisation of these types of events require an organisation with strong security culture and capability.

### 5.3.7 Relationship to the joint venture

A company's degree of control and influence vary with the governance structure of the projects in which it participates. Statoil has defined its follow up of joint ventures and partnerships in the following way:

- Where Statoil is the operator, its own management system applies.
- Where there is a joint operating body, it decides its governance.
- Significant differences between Statoil's management system and that of the joint venture shall be identified and appropriate actions implemented.

When Statoil is not the operator, the business areas are responsible for Statoil's follow up of the activity in the joint venture. In the case of In Amenas this took the form of an asset management strategy prepared by the country office, the purpose of which was to protect Statoil's interests and ensure partner alignment. This document also referenced security and emergency response as areas for attention. For the emergency

response plan this interface was covered by a “bridging document”, which addressed how the plan in the In Amenas joint venture linked to the country office and Statoil. There was no specific document defining the interaction between the country office and the Algerian joint ventures on security.

### 5.3.8 Improvement initiatives

The investigation team has learned that Statoil launched a review of its security capabilities following the terrorist attacks in Norway on 22 July 2011. A project team submitted their recommendations in October 2011, and made several recommendations for improvements. An internal audit was also initiated on security in the supply chain in Norwegian operations.

Other reviews also followed after the internal 22 July report including external and internal reviews of physical security. The Norwegian Defence Estate Agency (Forsvarsbygg) conducted a security review of Statoil’s offices and onshore facilities in Norway. Submitted in August 2012, this report noted: *“Statoil is a high profile company with activities in several international hotspots, and may be considered a legitimate target by violent extremist for several reasons.”*

In December 2012, Statoil’s corporate executive committee decided a new corporate security policy, which established security as one of 10 corporate policies in the company’s management system.

In sum, these initiatives set out an improvement agenda for the company’s competence, capacity and processes. The reviews pointed to the need for formal training and competence requirements for all security personnel, and recognised the need for additional analytical resources. This improvement agenda has not been implemented with sufficient urgency.

### 5.3.9 Emergency response

Statoil’s emergency preparedness organisation is borne of the company’s safety experience in Norway and offshore, on the Norwegian continental shelf.

Immediate responsibility for managing an incident rests with the team on site – known as “Line 1” (equivalent to the joint venture’s local incident management team), supported by the relevant business area team – “Line 2” – who provide tactical guidance and access to additional resources. In the case of international operations Line 2 would usually be the Statoil country office, in this case in Algiers.

In major crises, strategic guidance, deployment of group resources, liaison with government, communications and media relations are the responsibility of the group emergency response team, “Line 3”, at Statoil’s headquarters in Stavanger. In 2012 the company took the initiative to establish a specialist hostage incident response team to lead the response to hostage, kidnap-for-ransom and piracy incidents from Line 3. Relatively new to the task, the team members did not have live experience of hostage negotiations and had started on a development programme to improve its skills. It was by chance that early on the morning of 16 January they were already in the emergency response room in Stavanger about to begin the second day of a three day training programme in hostage incident response.

Emergency preparedness in Statoil is supported by the leadership and embedded in a strong safety culture. Training is broad-based and accessible. There are regular exercises, although few of these test and prepare for security incidents. The great majority deal with safety and technical incidents. However, in 2012 there was an increase in exercises related to the risk of kidnap-for-ransom and hostage taking in anticipation of Statoil’s increasing offshore commitments in Tanzania. The decision to establish the specialist hostage incident response team, noted above, was also indicative of increasing awareness of these risks. Of the four exercises the chief executive officer took part in during 2012, one included a kidnap-for-ransom scenario.

Prior to 16 January Statoil did not exercise for a major international terrorist attack on its people or assets outside Norway although a small number of people from Statoil had taken part in the annual Norwegian Government counter terrorism exercise (“Gemini”) on occasions when the scenario envisaged an attack on a Statoil asset in Norway or on the Norwegian continental shelf. Statoil did not regularly train or exercise with those Norwegian government departments, principally the Ministry of Foreign Affairs, the Ministry of Defence, the Ministry of Justice and the Norwegian police who would usually become involved in a major international terrorist attack against the group. A small number of military specialists have taken part in Statoil hostage exercises.

The country office in Algiers was alert to the kidnap-for-ransom threat to Statoil employees working in Algeria. In December 2012 they had hostage incident training with the hostage incident response team. As a result of this experience, they scheduled three further exercises for 2013.

▀ / **PART III** / **SECURITY RISK  
ASSESSMENTS AND  
EMERGENCY RESPONSE**

## 6. RISK ASSESSMENTS AND ACTIONS BEFORE THE ATTACK

The previous section of this report describes the capabilities that the In Amenas joint venture and Statoil had in place to enable them to provide security and respond in the case of emergency. This chapter and the following examine how those capabilities were put to the test.

By the summer of 2012, the civil war and ensuing collapse of central authority in Libya, aggravated by the break-out of armed conflict in northern Mali, had created a very challenging security environment in southern Algeria.

In addition to the changing external environment, the summer of 2012 saw the start of an extended strike among technical support personnel and drivers, which the investigation team judges to have had an impact on internal security at In Amenas.

This chapter sets out the relevant developments and assessments in Statoil and the In Amenas joint venture in the period leading up to the attack. The chapter is largely descriptive, and aims to establish the basis for the investigation team's observations, which we will return to in chapter eight.

### 6.1 REGIONAL SECURITY DEVELOPMENTS

Neither the joint venture, nor its owners, were aware of any specific threats or actionable warnings of the attack against In Amenas.

Providing clear tactical warning, with specific information about where, when and how a potential adversary may attack will in most cases be beyond the capabilities of companies. Security management will in most cases have to interpret strategic warnings, which are derived from important changes in the security environment that may influence the character or level of security threats. In an effective security risk management system, this should trigger re-evaluation of security measures. The following section examines whether there were strategic warnings of the attack.

In the period preceding the attack against In Amenas, several events suggested a changing external security environment:

- The civil war and breakdown of central authority in Libya.
- Conflict and Islamist control in northern Mali.
- Increased access to weaponry and availability of militants across the Sahel.
- New terrorists attacks in southern Algeria.
- Mokhtar Belmokhtar's internet video threatening western interests in December 2012.

These changes were also highlighted in several risk assessments of the region, including third-party reports commissioned by Statoil to increase the company's understanding of the regional environment.

### 6.2 SECURITY RISK ASSESSMENTS IN STATOIL

#### 6.2.1 High level risk assessments

From the start of the Arab Spring in late 2010, Statoil followed events in North Africa and the Middle East closely. The wave of protests and demonstrations that rapidly spread throughout the region was significant to the company, which at the time had regional offices in Algeria, Libya, Egypt, United Arab Emirates, Iraq and Iran. Of particular concern were the prospects for civil unrest and discontinuity of government that could represent risks to Statoil's people and assets. As a result, in January 2011, Statoil decided to temporarily close its Cairo office in Egypt and a month later its office in Tripoli, Libya. Expatriate personnel and families were evacuated for reasons of precaution and security.

In September 2011, the management committee in the Business Area discussed the plan for "asset protection in Algeria". This plan included the protection of people, Statoil's economic interests, facilities and information

in the event of an emergency. For Statoil's Algiers office, the emergency response plans were updated based on the learning and experiences from Egypt and Libya, and detailed plans were made for a scenario with severe civil unrest. A terrorist attack was not addressed in this plan. The plan included a section on the Algerian joint ventures, where it was stated that the joint venture in principle had the full responsibility for managing deterioration in the security situation.

Instability in North Africa consistently featured on the risk maps throughout 2011 and 2012. On the risk map for April 2012, the potential impact for In Amenas due to instability along the Algerian-Libyan border was highlighted for the first time. The mitigating actions listed were emergency response training, commissioning of an external assessment of the Algerian security situation and to engage with BP to exchange information concerning the Algerian-Libyan border.

A number of workshops and reviews were held in Statoil that examined regional developments and the implications of the Arab Spring for security and political stability. In March 2011, following evacuations in Egypt and Libya, an Algeria workshop was held in London with external experts that concluded social unrest was the norm and the regime strength would prevent any widespread uprising in Algeria. The Business Area reviewed its MENA businesses twice in the six months before the attack.

In September 2012 the health, security and environment review recognised the security challenge in Algiers and in southern Algeria, and referred directly to the threat from terrorism and kidnap-for-ransom.

The December 2012 review acknowledged social dissatisfaction in Algeria but did not foresee further Arab Spring-type unrest.

Statoil's risk assessments during 2011 and 2012 were primarily concerned with the prospects for broader domestic destabilisation in the countries where Statoil operated. The company developed a good understanding of the Arab Spring and its broader implications. During 2012 the Statoil management in Algeria had a regular dialogue with management in Norway on the Arab Spring and stability concerns emanating from the Sahel.

The assessments and conclusions made were not of a kind that caused Statoil to proactively engage or influence joint venture security on specific security actions. The risk highlighted most frequently was the safety and security risks associated with the transportation of personnel. This issue was considered by Statoil management to be among the most serious faced by the In Amenas joint venture.

### 6.2.2 Potential threat to charter flight in 2011

U.S. authorities are required by law to pass on any threat warnings they receive. In mid-September 2011, the U.S. Embassy in Algeria distributed a message warning against the possibility of a missile threat against aircraft flying people in and out of Algerian oil and gas installations. This warning caused unease among joint venture personnel, reinforced by the fact that some companies decided not to allow their personnel to use the regular charter flight between Gatwick and Hassi Messaoud.

This potential threat was assessed in the joint ventures, in BP, and in Statoil, also drawing upon external assessments and networks. The decision to continue using the charter was based in part on the view of the British Embassy in Algiers, which concluded that *"the UK does not believe that this new threat from AQIM to target aircraft poses either an imminent or credible threat."*

The threat and the assessment were communicated to some of Statoil's joint venture personnel but did not reach all. Several interviewees have stated that they have only recently been made aware of this threat, which they would have expected to be communicated more widely and in a timely manner. The investigation team shares the view that threats or changes to the security situation should be communicated to all affected staff.

### 6.2.3 Reports on security in Algeria

In response to the unrest and instability in the region, Statoil's country office in Algiers commissioned a risk consultancy report that was delivered in July 2012. The report noted that:

*"[The] security threats from weapons proliferation and weak state capacity will be difficult for governments and investors to predict and manage, with clear indications that the security forces' capabilities are being placed under strain. The ability of the security forces to manage threats in the far south resulting from regional*

*dynamics should be monitored closely, given the limited but credible prospect of a spill over into the southern oil-producing regions and Algiers. Regional political and security dynamics give rise to the credible threat of a one-off high-impact terrorist incident in the oil-producing provinces, including in the areas in which Statoil operates, but this would be unlikely to presage a sustained campaign.”*

The report went on to state that:

*“Algeria’s southern oil-producing regions previously faced routine and manageable threats. However, the discovery in February of a weapons cache near the town of In Amenas, a suicide bombing in March in the city of Tamanrasset and a suicide bombing in June in Quargla indicate that this is no longer the case. Security conditions in the far south are expected to deteriorate, but this should not lead to a significant deterioration in security in the southern oil-producing regions, despite the potential for a one-off high-impact attack”.*

Several other reports from this period made similar points. Two articles from Exclusive Analysis have been referenced in the public domain as particularly relevant:

An article published on **2 July 2012** referred to the suicide attack (vehicle bomb) by the Mali-based jihadist group MUJAO on gendarmerie headquarters in Ouargla, 75 km from Hassi Messaoud. The article noted that: “[p]enetration into Algeria of a large assault force needed to break through perimeter security would be much more problematic than the single vehicle reportedly used in this attack”. The article concluded that “MUJAO is unlikely to be able to infiltrate a large attack force needed to cause mass property damage against well-guarded targets. While the Algerian government is its primary target, the oil sector in south-west Algeria is a potential target.”

Another article, from **25 September 2012**, noted the increased kidnap-for-ransom risk in south Algeria and goes further to conclude that “[f]oreign workers such as employees at BP’s In Amenas facilities would be at risk especially while travelling by road. Risks within compounds are likely to be lower.”

In August 2012 the UK Foreign and Commonwealth Office issued a travel advice recommending against essential travel to areas within 450 km of the Mali and Niger borders and within 50 km of the Libya and Tunisia borders, “due to the increasing threat from terrorism in southern Algeria”.

In hindsight some have interpreted these and similar analyses as ‘indicators’ or even ‘predictions’ of an attack on oil and gas facilities like In Amenas. The investigation team judges, that these analyses presented strategic warnings but they did not constitute tactical warnings of an attack at In Amenas. Consistent thematic reporting in the joint venture suggested that the security environment had deteriorated and warranted increased security vigilance in the joint venture and in Statoil.

Statoil recognised that the situation in southern Algeria was becoming more challenging, as these reports identified. The assessment in the company in late 2012 was that the military continued to offer adequate protection for In Amenas. Statoil’s main concern about the border situation with Libya was the risk that Algerian military forces would be redeployed from zone protection in the hydrocarbon-producing areas to boost border security.

#### **6.2.4 Statoil’s interaction with the In Amenas joint venture on security**

Security issues were regularly discussed in the joint venture and on occasion would be included on the agenda in the joint venture governing bodies but Statoil’s security professionals were only occasionally involved. The risk of reduced military presence around In Amenas, the strike, the Mali and Libya situation, and the potential missile threat to the Gatwick-Hassi Messaoud flight (as described earlier) are the only examples the investigation team has heard of where security issues were elevated from the joint venture through the country office to the Business Area.

There was no established process for how operational security issues should be communicated from the joint venture to the Statoil security organisation. Security was part of a broader health, safety and environment agenda in Statoil where operational safety and technical integrity issues were more prominent. Security specialist involvement was less systematic and more driven by emerging issues than proactive. Complexities inherent in the way security was governed at site – including the numerous stakeholders involved – further contributed to a situation where Statoil in practice had very limited insight into, and influence over, how actual security measures implemented at the site corresponded to the risk assessments.

While Statoil could immediately and unilaterally implement changes and improvements to security at the country office in Algiers, it was the joint venture that would have to do so for the In Amenas site. The need for all partners to align and agree on all major decisions added to the execution challenge. Statoil recognised the changed security situation, but did not actively seek to be involved or to independently verify that security measures at In Amenas were still appropriate.

### 6.3 SECURITY RISK AND THREAT ASSESSMENTS IN THE IN AMENAS JOINT VENTURE

At In Amenas liaison provided the joint venture with a “*weekly meeting and procedure update*”. This recorded the threat level and security situation, including security incidents in Algeria and the region. It also noted any change to daily security procedures.

Among many other developments the weekly updates for 2012 and the period immediately leading up to the attack recorded the events described earlier in the chapter: the suicide bomb attack at Tamanrasset in March, the second attack at Ouargla in June, the change in UK Foreign and Commonwealth travel advice, developments in Libya and Mali. The updates also noted the deployment of 7,000 additional Algerian troops to the oil and gas zone in response to events in Libya. Against this background there was not assessed to be any increase in specific threat to In Amenas and the threat level remained constant, at “low alert level– working as medium threat level”. The investigation team could not find a consistent understanding in the joint venture of what this definition meant but it was lower than the alert level that was in place for the majority of 2011. Any decision to raise the alert level had to be taken by agreement between the partners in the joint operating committee.

As part of the recently updated annual “project risk assessment” liaison also produced a high level risk map, threat assessment and action plan addressing security risks. For 2012 this assessment rated terrorism, kidnap-for-ransom, and political risks as by some considerable measure the most serious risks the In Amenas joint venture was carrying. The terrorism threat was not broken down into defined scenarios.

In sum, the documentation provided by liaison repeatedly and consistently described the threat of terrorism in the region, drew attention to the risk of kidnap-for-ransom and recognised the intensifying influence of instability in Libya, and latterly in Mali, as factors potentially elevating the risk for the projects. In response the joint venture reinforced adherence to existing security procedures and protocols but took no additional action. The investigation team has not found that the joint venture’s threat level system was actively used as a security risk management tool during this period.

### 6.4 THE LABOUR STRIKE JUNE – DECEMBER 2012

The joint venture employed technical staff and local drivers through the manpower company BAAT. During 2011, they had come to understand that their contracts would be transferred to Sonatrach. This transfer happened for some of the employees at In Amenas and at other sites in Algeria, but in November 2011 the drivers at In Amenas were told that their contracts would not be transferred.

This led to industrial action that on 21 **June 2012** developed into a strike by parts of the technical staff and locally employed drivers. The drivers on strike demanded written assurance that they would receive new contracts. They reduced their days of work from six to two per week and delivered only a minimum service. This made management reduce the number of expatriates at the site as they could not evacuate effectively or conduct rotations.

The effect of the strike was soon felt at In Amenas, including potential risks to operations, safety and security. The main impact on operations was to halt the drilling activity, which had to be scaled back for safety and logistical reasons. An increasingly hostile environment developed.

In **October 2012** the technical support staff reached an agreement with Sonatrach and ended their strike. The drivers remained on strike, and in late **November** some of them went on hunger strike. In November some of the strikers’ families also came onto the site in breach of internal security protocols.

The industrial dispute was with Sonatrach so, despite efforts from both companies to influence Sonatrach to find a resolution, the situation remained outside Statoil’s or BP’s control making it difficult for the partners to handle.

Managing the reactions in the local communities was a consistent theme in dealing with the strike and the strikers drew the attention of the *Wali* (governor), In Amenas mayor and representatives from the labour inspectors. The expatriate joint venture management was actively engaged, and both Statoil and BP secondees maintained communication with the strikers. They met with the strikers weekly and were able to speak frankly with them about their demands and expectations.

The security concerns associated with the strike, such as civil unrest and the risk of violence were addressed daily by the liaison with In Amenas joint venture management, and the joint venture's incident management team made contingency plans in the event of an escalation. Town hall meetings were held with employees, and the liaison also kept the army and gendarmes updated.

In **December 2012** the drivers reached an agreement to postpone the strike for four months in return for a salary increase and extension to their BAAT contracts.

In **January 2013** a small group of drivers wanted to strike once more but they were not generally supported. On 15 January 2013, however, the joint venture management again met with the drivers and the management feared the strike action could soon resume.

## 6.5 INSIDER THREAT

The strike is closely related to the question of whether the terrorists benefited from insider knowledge. The investigation team has raised this issue with appropriate authorities in Algeria and other countries, as well as through its interviews.

Information from interviewees indicates that the terrorists exhibited some knowledge of both the site layout at In Amenas and names of senior managers – they knew which sites to drive to, which offices to target and they searched for a few people by name. They did not, however, exhibit any technical knowledge of the central processing facility or know in detail the internal layout of the different sites at In Amenas.

Since the attack the Algerian authorities have detained a man employed for a period in 2012 as a driver at the site. According to Algerian officials this man is suspected of providing inside knowledge to the terrorists. The investigation team has made several inquiries but not been able to confirm or disprove media reports that one of the Canadian terrorists had previously worked at In Amenas. Nor has the investigation team been able to find evidence in support of media claims that companies with links to known terrorists have been contracted for transportation services by the In Amenas joint venture.

The investigation team notes that given the high number of people regularly on the site and the continuous stream of legitimate visitors each day, the majority of whom are from the local community, the interchange of information between In Amenas and the local population must be assumed to be high. This is unavoidable and must be a planning assumption in the future for In Amenas and other Statoil projects that should be accounted for in security risk management and security measures. The In Amenas joint venture acknowledged the risk of potential insiders, and took precautions to mitigate this, such as limiting sharing of security related information.

Vetting of personnel seeking permanent employment at strategic sites falls under the responsibility of Algerian authorities, typically involving security and background checks. The investigation team has had very limited insight into principles and practices in this area, and is therefore not in a position to judge the quality of process or level of scrutiny. We are informed, however, that a higher level of scrutiny is applied to candidates for permanent employment, particularly in senior positions, than to sub-contractors.



## 7. EMERGENCY RESPONSE

In the early-morning darkness of 16 January the joint venture at Hassi Messaoud received a telephone call from a security liaison at In Amenas, 500 km to the south, to say that the facility was under attack. Gunshots could be heard in the background. This call signalled the start of an extensive effort by the Algerian authorities, the joint venture, its owners Statoil, BP and Sonatrach, contractor companies and governments across the world to respond to this unprecedented event.

Over the next four days, more than 2,000 people would be evacuated on 44 flights from the joint ventures' operations across Algeria. In Statoil alone, more than 350 people were mobilised as part of the emergency response effort.

This chapter describes the main features of the response. Given the mandate the investigation team pays more attention to Statoil's contribution than to the other actors involved. The general impression is of a well-trained organisation that delivered an effective and professional emergency response. The complexity and scale of the incident made it the most serious Statoil has ever faced internationally.

The investigation team also touches on the critical role of the incident management team in Hassi Messaoud, who led the joint venture response in Algeria.

The investigation team has identified areas where emergency response capabilities should be further strengthened to ensure Statoil is able to respond even more effectively to complex, long-running international incidents in the future. The areas identified for improvement would not have changed the outcome of this incident.

### 7.1 NOTIFICATION

Rapid and clear notification is an essential first step to turn preparedness in to response.

At **05:49** on 16 January, within minutes of terrorists firing the first shots at vehicle checkpoint 1 (VCP1), the security liaison at In Amenas called the joint venture in Hassi Messaoud to report that the facility was under attack. This triggered the response that would quickly build as people became aware of the extent of the incident. Members of the response teams began to muster additional resources, collect information and assess the scale of the challenge and the scope and nature of resources required to deal with it.

For most in Hassi Messaoud the working day had already begun. At **06:07** the incident management team met for the first time to begin their response. By **06:13** they had made contact with the Algerian military who confirmed that they were already aware of the attack and had initiated their response.

In Algiers, a member of Statoil's country office first learned of the incident when he received a text message at home at **05:50** from a colleague attending a meeting at In Amenas who had spent the night in the Base de Vie. By **07:10** the emergency response team – Line 2 – were gathering at the Statoil country office in the city centre. By **07:20** they had made contact with the Norwegian Embassy.

In Norway, first notification of the incident was received by Statoil's corporate emergency centre in Stavanger (company headquarters) at **06:18** in a telephone call from a Statoil secondee to the joint venture, who was hiding from the terrorists in an office building in the production area. A few minutes later in a telephone call from the incident management team at Hassi Messaoud, the company was formally notified of an attack, details and scale unclear, on the In Amenas facility. The Line 3 emergency response organisation gathered after struggling through the early morning Stavanger traffic, was fully mobilised at **07:25** and held its first update meeting with the Line 2 team in Algiers country office, two minutes later.

In the Far East, Statoil's chief executive officer was boarding a flight from Seoul to Tokyo when he received first news of a security incident in Algeria at **06:40** from his head of communications who was travelling with him. A few moments later, he took a call from Line 3. On arrival in Japan he received a further briefing and decided to return immediately to Norway, flying directly to Stavanger. At **00:20** on 17 January he entered the Stavanger emergency response room.

## 7.2 IN AMENAS

The fact that the terrorists rapidly took control of the living area and the production area removed any opportunity to mobilise the local incident management team at In Amenas but this did not mean that individuals remained passive. Many Algerian employees of the joint venture supported their expatriate colleagues, acting selflessly, putting themselves at risk. The terrorists made it clear that they were not seeking Algerian hostages. There were many opportunities for the Algerian employees to leave, yet a significant number chose to stay and help their expatriate colleagues.

## 7.3 EARLY PRIORITIES

### 7.3.1 Joint venture

With no local incident management capacity at site, responsibility for the joint venture response on the ground fell to the incident management team in Hassi Messaoud. As the investigation team have noted, this was a situation which they had not foreseen and for which they had not prepared but their response was prompt and their early priorities clear: to ensure the safety of all joint venture employees, find out what was happening at the living area and the production area, establish Person-on-board (POB) lists<sup>3</sup>, secure other joint venture sites and put in place medical and logistical support.

Finding out what exactly was happening at In Amenas was far from easy, with a mass of fragmentary information coming in from different locations, from those who had escaped, those in hiding and those taken hostage.

### 7.3.2 Statoil

From the outset the priority for Statoil, as for the joint venture, was to save the lives and ensure the safety of its people at In Amenas. This was also the priority of the Norwegian government and was communicated clearly to the Algerian authorities over the coming days, through all available channels including by the Norwegian Prime Minister.

In the first few hours the country office Line 2 team in Algiers and the Line 3 team in Stavanger faced the same challenge as the joint venture in Hassi Messaoud to understand the scale and nature of what was happening. Information in phone calls or text messages from Statoil colleagues on site could provide only a partial picture. To add to the uncertainty news from London that a helicopter that morning had crashed into a high-rise building by the River Thames suggested to the team in Stavanger the possibility of a wider series of international attacks. But from 08:30, as calls from the terrorists and hostages came in, it became clear that this was a large-scale hostage situation isolated to In Amenas. At 09:30 authority for the response in the Line 3 emergency response room was transferred to the hostage incident response team.

## 7.4 CONTACT WITH THE TERRORISTS

Until the moment on 17 January when they forced the hostages at the living area into vehicles and attempted to reach the production area the terrorists were in frequent contact by telephone with the joint venture, Statoil and BP. The fact that the terrorists' calls were directed to people in a wide range of locations in Algeria, Norway and the United Kingdom made it particularly challenging to coordinate a consistent response.

Issues of training and experience also arose. In Stavanger the hostage incident response team was able to deploy a trained and dedicated communicator, who could draw on the support of specialist advisors sitting alongside him. In London the business support team could also call on specialist advice. But at the country office in Algiers or at Hassi Messaoud individuals found themselves in a situation of which they had never conceived and for which they had no training, as they received calls from terrorists and hostages. It is to their credit that they handled these as they did.

In directing their calls primarily to the foreign owner companies and to the families of the hostages the terrorists' aim was to force these companies and governments in Norway and United Kingdom to put pressure on the Algerian government. A situation like this poses dilemmas for all involved. The decisions that have to be made are of the most difficult kind. The pressures on those who receive the calls and those who have to act on them are great. It is not for the investigation team to second-guess those decisions. Nor is it for the investigation team to second-guess the decisions that the Algerian military took on the ground

<sup>3</sup> POB or 'Persons-on-board' lists provide an accurate statement of individuals on an aircraft or at a given oil or gas facility whether on land or offshore.

at any given moment. We were not there, and cannot know and see what they knew or saw. But from the moment that the terrorists set off with the hostages from the living area, heading for the production area, on 17 January, any theoretical possibility of winning time through dialogue came to an end.

#### 7.5 COORDINATION

The difficulty of coordinating a common response to threats and demands from the terrorists was one part of a wider challenge, that of building a shared understanding of events at In Amenas and a coordinated plan of action in response to those events between several actors in different locations. No one involved had planned or exercised for an event of the scale or complexity of the attack on In Amenas. There were nonetheless plans for incidents of a different nature and scale on which to build. There was also a sufficient pool of experienced and trained people at key locations to provide reinforcement and to adapt these plans in the face of events.

At Hassi Messaoud, the incident commander quickly reinforced his core team with security liaison advisors and Statoil secondees from within the joint venture. In Algiers the small Statoil country office team was rapidly supplemented by visiting police staff from the Norwegian Embassy, and across Statoil people with knowledge and experience from all business areas stepped up to support the response.



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|--|--|--|
| <ul style="list-style-type: none"> <li>● <b>Bergen</b> <ul style="list-style-type: none"> <li>• Next-of-kin centre</li> <li>• Evacuation logistics</li> </ul> </li> <li>● <b>Stavanger</b> <ul style="list-style-type: none"> <li>• Statoil hostage incident response team</li> <li>• Line 3 centre</li> </ul> </li> <li>● <b>Oslo</b> <ul style="list-style-type: none"> <li>• Norwegian authorities</li> <li>• HR support</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>● <b>London</b> <ul style="list-style-type: none"> <li>• BP business support team</li> <li>• BP executive support team</li> <li>• Evacuee reception centre</li> <li>• UK authorities</li> </ul> </li> <li>● <b>Palma</b> <ul style="list-style-type: none"> <li>• Layover location for many evacuees</li> </ul> </li> <li>● <b>Algiers</b> <ul style="list-style-type: none"> <li>• Algerian authorities</li> <li>• Sonatrach</li> <li>• Statoil local incident response team</li> <li>• Embassies</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>● <b>Hassi Messaoud</b> <ul style="list-style-type: none"> <li>• Joint venture incident management team</li> <li>• Evacuation of all joint venture employees</li> </ul> </li> <li>● <b>In Salah</b> <ul style="list-style-type: none"> <li>• All joint venture employees evacuated</li> </ul> </li> <li>● <b>In Amenas</b> <ul style="list-style-type: none"> <li>• Rescue and evacuation of joint venture employees</li> </ul> </li> </ul> |
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**Figure 7.1** Key emergency response and evacuation locations.

The main communication line went between the joint venture incident commander in Hassi Messaoud and the business support team in London.

A number of Statoil secondees to the joint venture were members of local incident management teams at In Amenas and other joint venture locations, but none was a standing member of the incident management team at Hassi Messaoud. A small number of competent and experienced Statoil secondees were, however, brought in to reinforce the incident management team on 16 January and the days following.

Within the incident management team a senior Statoil secondee to the joint venture was nominated to be the communication link to and from Statoil via the country office in Algiers. This meant that the Line 3 emergency response team in Stavanger had two principal communication channels to and from the joint venture: one from the country office and the other from the business support team in Sunbury, outside London. Statoil sent a liaison from its London office to facilitate communication with the Sunbury team from early afternoon on 16 January. The business support team did not send a liaison to Stavanger.

These channels were supplemented by a wealth of other links: text messages and telephone calls to Stavanger, Algiers and London made within the first 24 hours from individuals held hostage or in hiding at In Amenas, communication between teams organising flights, in Hassi Messaoud, Algiers, Gatwick airport, and Bergen, and direct contact between chief executives and the wider leadership in Statoil and BP.

## 7.6 EVACUATION

By 15:00 on 16 January it had become clear that the attack on In Amenas would absorb the full response capacity of the incident management team at Hassi Messaoud for an extended period. Since the team was responsible for emergency response of any kind across all joint venture locations, this meant there was no capacity to deal with a further emergency, whether safety or security related, at another site. This was assessed by the incident management team to be an unacceptable risk. As a consequence they began to plan for the evacuation of all joint venture sites in Algeria.

This was a significant undertaking, requiring people to be moved from widely dispersed sites at In Salah and across the southern gas fields in addition to survivors from In Amenas and all but the incident management team from Hassi Messaoud. A second incident management team was established at Hassi Messaoud to focus exclusively on this task, allowing the first team to focus on events at In Amenas. On the back of their planning the decision to evacuate was taken at 20:00 Wednesday evening 16 January.

The logistics of evacuation were shaped by a set of practical issues: availability of aircraft, landing clearances, runway lengths, pilot hours and accurate POB lists. Expatriates were to be moved to London Gatwick airport, where BP had set up a reception centre. Statoil had a reception team from their London office in place at the centre by the afternoon of 17 January to meet and look after all Statoil employees returning from Algeria.

Onward flights from Gatwick were arranged by Statoil's flight logistic team in Bergen. By agreement BP would look after joint venture contractors up to the point of their arrival at Gatwick, after which the contracting companies would be responsible for onward arrangements. JGC chose to evacuate their survivors to Algiers where they were retrieved by a flight organised by the Japanese government.

Moving this number of people at short notice from remote sites in an uncertain environment is challenging. There will be delays and confusion. In this instance the most significant source of disruption was the simple fact that airports and passenger handling facilities were not designed to deal with this number of people in so short a time. These practical difficulties were compounded by the inaccuracy of POB lists for contractors working in the southern fields, which delayed flight departures, due to inaccurate manifests. As a result pilots on some flights ran out of flying hours and were unable to reach Gatwick. These flights landed at Palma, Spain, adding hours to the journey home. In other cases survivors from In Amenas were left waiting for a seat on an aircraft while flights took off with evacuees from In Salah and the southern fields in Algeria.

Nonetheless it is a credit to the professionalism and work of those planning and executing the evacuation that by 20 January over 2,000 people had been successfully evacuated on 44 flights from multiple locations across the desert.

### 7.7 ALGIERS COUNTRY OFFICE

As described earlier Statoil's Algiers country office became the principal communication channel between the incident management team in Hassi Messaoud and the Line 3 response team in Stavanger. For a small office this was a major challenge, made more difficult by the fact that their country manager was among the hostages and three experienced Algerian colleagues were trapped at the site. They were fortunate to have an experienced emergency response manager to lead the team and to have all remaining senior managers on hand. As it was they were stretched to the limit by the volume of work and the emotional pressure of knowing that the lives of close colleagues were at risk.

The country office established contact with the Norwegian Embassy at **07:20** on the first morning of the attack. This was an important relationship. For the country office the Norwegian embassy provided a channel to the Norwegian and Algerian authorities and a source of information and specialist advice. Neither embassy nor country office had planned or exercised for a terrorist attack of this scale and like the country office the embassy itself had few staff. Good will and personal relations provided a basis for an effective working relationship. By late afternoon on 16 January two Norwegian police officers, who were at the embassy on other business, had joined the country office Line 2 team. Further reinforcement arrived over the following days. The Norwegian Foreign Ministry Rapid Deployment Unit (*URE*-after its Norwegian abbreviation) arrived with a multidisciplinary team on 17 January. Statoil reinforcements from Norway, including a stand-in country manager, arrived in Algiers in the afternoon of 18 January.

### 7.8 LINE 3 IN STAVANGER

From the outset the emergency response organisation in Stavanger prepared and planned for the worst, a key lesson reinforced by an internal Statoil review the previous year of the Deepwater Horizon disaster in the U.S. Gulf of Mexico. Even before the full extent of the attack was clear they assumed that the emergency would not be short lived and that there would be casualties and possibly fatalities. Statoil took three decisions on 16 January that shaped the response for the days ahead. First, as the investigation team has learned, by **09:30** authority was transferred to the hostage incident response team. Secondly, they quickly established contact with key partners, bringing in advisors from the Norwegian police, Ministry of Foreign Affairs and the armed forces, and sending Statoil liaisons to both the Foreign Ministry and the Government Crisis Committee in Oslo and to the business support team in London. Thirdly, they decided to set up a next-of-kin centre in Bergen.

The investigation team looks at partnerships, support for the next-of-kin and communications below. Here the investigation team considers the role and work of the hostage incident response team at Line 3 in response to events at In Amenas.

The priority for Line 3 was to understand what was happening and do all they could to save the lives of Statoil colleagues. For the first 24 hours their main source of information for the situation on the ground came from the country office, the business support team in London and from text messages received directly from hostages or those in hiding. The Algerian authorities and Sonatrach provided little information during the first 48 hours. Collating these inputs, by the morning of 17 January Line 3 was able to account for all Statoil people on site.

In response to terrorist threats to kill the hostages, Statoil made it clear through the Norwegian Ministry of Foreign Affairs and in messages from the chief executive officer to Sonatrach that saving life was the priority. Advice given to those in hiding, in the absence of reliable information on the location of the terrorists or on the disposition of Algerian military forces, was to stay hidden.

Early on 16 January the team received reliable information that at least one person from Statoil had been wounded.

Access to information on events at In Amenas became more difficult after the mobile telephone network stopped working. This brought to an end a valuable source of insight and meant that Line 3 had a limited understanding of events surrounding the terrorists' attempt to move the hostages from the living area to the production area. During that afternoon reports of a military action and casualties came from the Norwegian Ministry of Foreign Affairs and the incident management team at Hassi Messaoud, via London and Algiers. The details were unclear and would remain so for some time. But given the strong possibility of further

casualties the team put every effort in to locating possible survivors in local hospitals or with the Algerian military. The search for survivors widened in scope over the following days to include hospitals in Algiers. Line 3, to the very last, continued to look for Statoil colleagues, either at an Algerian hospital or awaiting rescue in the desert.

On 19 January the Algerian military announced that they had retaken the production area. In the absence of hard information from the site it took a further 24 hours before Line 3 could be sure that 12 of the 17 missing Statoil employees were confirmed safe. The names of the five still missing were made public late that evening, after the next of kin had been informed.

## 7.9 BUSINESS CONTINUITY

With all Statoil colleagues accounted for and the military action at In Amenas over, the Line 3 emergency response team at Stavanger headquarters stood down at 14:00 on 22 January and handed responsibility for business continuity and the remaining personnel issues back to the Business Area. The joint venture incident management team at Hassi Messaoud stood down on the same day and the three Statoil members of the team returned to Norway. The emergency response teams were worn out and emotionally drained.

The investigation team has learned from many people that the handover from Line 3 back to the Business Area led to a reduced capability to manage the significant consequences of the attack. Communication channels that had been established across the group and with partners over the preceding five days were disrupted.

## 7.10 SUPPORT TO NEXT-OF-KIN

Support for the next-of-kin of those at In Amenas was a high level priority for Statoil from the outset and particularly for its chief executive officer. Early warning of stories before they break in the media, advice on contact with journalists, accurate and verified information in the face of rumour and speculation are all essential elements of next-of-kin support. There is therefore a strong link between caring for the welfare of the next-of-kin and Statoil's communication and media handling during the incident.

By 09:49 on 16 January Statoil had established a dedicated telephone number for next-of-kin and was able to inform them of the basic facts, as far as they were known at the time, before the story broke in the media later in the day. By 14:00, as the scale of the attack and the number of people affected became clearer, it was decided to establish a next-of-kin centre at Scandic Airport Hotel in Bergen. The hotel was ready within one hour, and the first family members arrived around 16:00. The following day Statoil exercised the option of taking over all capacity at the hotel, and the centre remained in operation until Thursday 24 January.

During this time around 100 people used the centre. Family members of 12 Statoil employees stayed at the hotel for shorter or longer periods. The number of next-of-kin in each family at the centre varied between four and 20, spread over four generations. The centre also received 31 Statoil employees from In Amenas, In Salah, Hassi Messaoud and Algiers. Around 90 Statoil employees, from executive leadership down, were involved in manning the centre. Updated and verified information was provided through hourly briefings. Each family had access to dedicated personnel, and teams of medical doctors, nurses, crisis psychologists and North Sea chaplains were established. In addition to Statoil's own resources, health care professionals from the Centre for Crisis Psychology, local police and National Criminal police (Kripos) were present at the centre. Statoil also cooperated with the Norwegian Directorate of Health, the Norwegian Centre for Violence and Traumatic Stress Studies and the local health services of those involved.

Norway's Minister of Health and Care Services and Norway's Prime Minister visited the centre on 18 and 19 January, respectively. On 21 January, Her Majesty Queen Sonja of Norway and His Royal Highness Crown Prince Haakon of Norway visited.

Each of the families of the five Statoil employees that lost their lives was assigned two designated human resources (HR) contacts to provide support, and coordinate and simplify contact with Statoil. This will remain in place until one year after the incident. The survivors all received HR contact support. Statoil benefited greatly from the experience and advice of the Norwegian police in mobilising this arrangement.

### 7.11 COMMUNICATION AND MEDIA HANDLING

The scale of the crisis quickly moved it into global news headlines. With no news organisations or journalists at the scene of the attack, eyewitness accounts competed with terrorist propaganda, rumours and speculation, providing conflicting information about what was going on.

Statoil quickly established some fundamental principles for communication during this crisis. This meant only communicating verified information, always informing the next-of-kin about any significant developments before informing the media, and aligning information closely with the Norwegian government and BP.

Statoil issued its first press release about the incident at **12:16** on 16 January, which stated that *“On Wednesday morning Norwegian time Statoil was notified of a serious situation involving an attack on the In Amenas gas production facility in Algeria. Statoil will provide additional information when it is available”* and also that *“Statoil has just under 20 employees at the facility, and more than 10 of these are Norwegian”*.

During the next six days of the incident, Statoil hosted nine press conferences in addition to responding almost continuously to a large number of requests from media in Norway and internationally. Over the same period the incident generated approximately 9000 articles in Norwegian media alone.



**▀ / PART IV / OBSERVATIONS AND  
RECOMMENDATIONS**

## 8. MAIN OBSERVATIONS

The first part of this report tells the story about what happened at In Amenas, and in the days, months and years before the attack. It also explains the context in which decisions, often difficult, were made. It attempts to explain **what happened**.

In this final part of the report, the investigation team offers its main observations and evaluations. The purpose is not to look back and second guess, but to look forward and try to establish a platform for learning and future improvement. Risk and security assessments, security arrangements, emergency preparedness and response, as well as organisational capabilities in Statoil are all addressed in this chapter. The premises and foundations for the observations in this chapter are found in the previous chapters of the report. Assessing both what worked well and what did not is crucial to understand how security can be managed better in the future, and to answer the most important question in this report, **what can Statoil learn to improve its security and emergency preparedness for the future?**

Everyone asked by the investigation team about their reaction to the attack expressed the same feeling: Disbelief. There was a profound belief among everyone involved that the military would protect against the threat of a large terrorist attack.

Drawing a straight line back from what happened to actions that should have been taken can seem easy. Knowing what happened, it is tempting to construct alternative scenarios where different choices lead to different outcomes in a perfectly logical and neatly rearranged narrative. Reality is always more complicated. The information available at the time to decision makers is always incomplete, often contradictory and sometimes wrong.

The investigation team has also been conscious of the risks inherent in passing judgement on individual decisions and actions outside the wider context in which they were made. There are instances where the investigation team has considered the question of “what if?” What if the barriers had been stronger? What if the joint venture or its owners had reduced the number of expatriate personnel before the attack? What if the civilian guards had been armed? What if the plant hadn’t shut down? What if the terrorists had succeeded in moving the hostages?

On these and other issues, the investigation team has considered whether different decisions or courses of action would clearly have led to another outcome. While after many incidents it may be possible to identify a clear chain of cause and effect, the investigation team does not believe this to be the case here. Pointing to a single factor or variable does not appropriately acknowledge the complexity of the incident, nor the circumstances under which those responsible had to make their decisions. Therefore this report does not speculate on alternative scenarios or outcomes.

When the terrorists attacked on the morning of 16 January it was too late to make changes to the security system. In assessing the quality of the judgements made, systems installed and protection in place, it is therefore necessary to ask what the world looked like in the period prior to the attack, and how the information available in the time before the attack was acted upon.

### 8.1 PREDICTION OF THE ATTACK

The investigation team has not found evidence to suggest that Statoil or the In Amenas joint venture were aware of any specific threat to, or had actionable warning of the attack on In Amenas. Nor should companies expect to have so in the future. Therefore, it is important to consider and think through the implications of scenarios where a surprise attack takes place and outer security layers break down.

### 8.2 RELIANCE ON MILITARY PREVENTION AND PROTECTION

The security system at In Amenas consisted of outer and inner security layers provided by the Algerian military and the joint venture respectively. Under Algerian law, the military responsibility for the outer layer is mandated for all infrastructure of strategic national importance such as In Amenas.

It was the combination of outer and inner security layers that was supposed to offer protection against a terrorist attack. The different elements were there as parts of an integrated system and to reinforce each other, not to operate in isolation.

In practice, design of the inner security layer was based on the assumption that the military would prevent and protect the facility from armed attack. Statoil and the joint venture trusted that the army would deter, or detect and respond to any terrorist threat, and thus prevent it from getting close to In Amenas. For this particular attack, this could have happened at the border, in the military zone or in the inner protected zone provided by the gendarmes. Given this reliance on, and trust in, the military, it was only the Algerian armed forces that could have prevented the attack on 16 January.

### 8.3 FAILURE OF IMAGINATION

The joint venture's reliance on the military protection is understandable, given the historic context in Algeria and the fact that over the life of the In Amenas project, there had been no major security incidents. Even during the violence of the 1990s, the Algerian authorities managed to safeguard the oil and gas installations in the south of the country, although there have been attacks on oil and gas workers and pipelines. There were strong economic incentives for the Algerian military to protect this critical national infrastructure.

All of this contributed to the joint venture placing a high degree of trust in the military. However, the investigation team considers that it also stood in the way of the joint venture's ability to imagine or plan for a scenario where the outer security layers did not work as intended.

Although unforeseen and unprecedented, an attack on In Amenas should not have been entirely inconceivable. Elsewhere in the world, determined and heavily armed terrorists have demonstrated the ability successfully to attack even well-fortified military bases. No military force can guarantee complete protection against determined terrorists for a licence area the size of Luxembourg, situated close to a porous border.

### 8.4 RELATIONSHIP WITH THE MILITARY

The joint venture had incomplete information about the capabilities of the military providing the outer security layer. It had an established working relationship with the gendarmes based at In Amenas, who were an integrated part of the security risk management plans. There was, however, only a limited exchange of information with the army. The joint venture was not therefore in a position to test its own planning assumptions. Furthermore, there has not been any high level strategic security dialogue with Algerian authorities involving the companies.

The investigation team recognises that questions of military capability and national security are areas outside the control of private enterprises, where they cannot expect to be privy to classified information. Still, a system so reliant on the combined effect of inner and outer security layers requires that the companies and military find mutually effective ways of coordination, planning and exercising. This would have increased the joint venture's ability to understand military priorities and planning assumptions.

### 8.5 INNER SECURITY MEASURES

Physical barriers alone are insufficient to stop an attack, but the inner security layer should be designed to provide a degree of resilience and protection that will make it possible for a military response force to arrive. This means investing in security measures, which may rarely, if ever, be needed, but in the view of the investigation team are necessary to provide redundancy against low-probability, high impact risk. Such an approach is familiar to the oil and gas industry from the safety domain where it is common practice to build in multiple safety barriers. It is equally relevant to operations in areas with high security risk.

At In Amenas inner physical security measures were not constructed to withstand or delay an armed assault, and certainly not an attack of this scale. In 2009, based on increased concerns over the threat from vehicle bombs in Algeria, the In Amenas joint venture decided to make some upgrades to inner security. The purpose was to reduce vulnerability and improve protection against vehicle bombs. While some of these improvements had been implemented at the time of the attack, others had not. These planned upgrades to physical security would not have been able to stop this attack.

Moreover the simultaneous attack on the living area and the production area exposed the limitations of a single gendarmes camp located between the two sites which are 3.5 km apart. The distance from the camp to the living area and the production area did not allow for a rapid response.

Civilian armed guards are an element of inner security that was considered in the In Salah joint venture but not at In Amenas. If a host government is unable or unwilling to provide sufficient protection, civilian armed guards may offer additional security for an operation or facility. The use of such guards, however, also comes with a set of risks that must be properly evaluated and requires a commitment to professionalism and training.

## 8.6 SECURITY RISK MANAGEMENT

The security system at In Amenas was established in a period of regional stability in the context of a well understood domestic threat environment. Over time the system evolved, and became more complex, with changing roles and responsibilities, set in an increasingly volatile and uncertain regional threat environment.

During 2011 and 2012, the regional security situation deteriorated. The civil war and ensuing chaos in Libya turned a relatively stable neighbouring country into a large ungoverned space, with freedom of movement for criminals and militants. In parallel northern Mali developed into a safe-haven for jihadists and terrorists.

It is precisely in such complex and volatile situations that there is a need for a systematic security risk management process that enables scrutiny of long held beliefs and assumptions.

An effective security risk management process enables an organisation to decide how much risk it is prepared to accept.

The hallmarks of such a process are that it should be:

- **Transparent;** so that risks and mitigations are openly debated between those who are responsible for security, and their judgements and decisions recorded.
- **Inclusive;** engaging and exploiting a diverse range of internal and external networks for expertise, insight and challenge.
- **Active;** so that mitigating actions are taken in good time and threats pre-empted before they materialise.
- **Authoritative;** so that those engaged in risk management at different levels in the organisation are empowered to follow through on their conclusions.

The In Amenas joint venture was responsible for its own security and could draw on resources and expertise from the owner companies as and when required. In practice this happened only to a limited extent, and security was planned and continued to be handled by an external security contractor. There were no systematic, independent assessment and quality assurance of systems and actions put forward by the contracted security advisers.

Despite the turmoil in the region, the In Amenas joint venture operated on an unchanged threat level from February 2012 until the attack. While the In Amenas joint venture identified many of the individual security events, which contributed to strategic warning, they did not have the means to build a coherent threat picture that could have triggered a discussion about a change in their security posture.

Managers in the In Amenas joint venture could only base their decisions on the assessments and information available to them. The investigation team is of the opinion that more regular and systematic interaction between the joint venture and its owner companies on security issues would have benefited the security vigilance and resilience at In Amenas.

Combining the regional perspective with local and operational insights would have broadened the debate on security issues and increased the situational awareness. This would have enabled more rigorous consideration of a wider range of options to mitigate the security risk.

During the strike, the In Amenas joint venture reduced the number of expatriate secondees in response to the restricted movement of personnel. The In Amenas joint venture did not judge that the changes to the security environment warranted similar measures. They operated on the widely held belief that while security in the region was deteriorating, the military had reinforced its presence in the area and would continue successfully to protect strategically important oil and gas facilities from external threats.

Security was a recurring topic in governing bodies and committees. However, it was challenging to achieve the consensus between partners on priorities and resourcing needed to make decisions, and recommendations for improvements were not always acted upon.

The investigation team has learned from interviews with expatriate personnel that security in the joint venture was not an area where people's views, input and feedback were actively invited. There are several examples of important In Amenas joint venture security and crisis response plans not being shared even with personnel who had a role in their implementation. The investigation team recognises that security is an area that has to be based on a need-to-know principle regarding certain security measures. Too often, however, this principle appears to have been cited as a reason for not sharing information and closing off security related discussions that would have contributed to building a stronger security awareness and culture.

The transfer of responsibility for internal security from liaison to SSI, Sonatrach's own security organisation, divided and added complexity to the security organisation at In Amenas, while creating uncertainty over responsibilities. In effect it meant that there were two parallel security organisations operating at the site, not always with a high degree of mutual respect, trust and collaboration.

The investigation team considers the lack of rigour in the implementation of security improvements as a symptom of the approach towards enforcement of and compliance with joint venture internal security protocols. This is supported by reports of unauthorised access to the facility, inaccurate Persons-on-board lists and token search procedures.

Terrorism in general, kidnap-for-ransom and bandit activity were among the security risks that consistently featured in the security management plan. The generic terrorist threat was not broken down into concrete scenarios, against which protective measures could be planned, designed and evaluated. The investigation team believes that this weakened the In Amenas joint venture's ability to assess the adequacy of their security measures.

## 8.7 STRIKE AND INSIDER THREAT

The investigation team has taken a particular interest in the period from the start of the Arab Spring until the attack. Against the backdrop of a changing external security environment, management time and attention at In Amenas were absorbed by an internal crisis.

The strike starting in June 2012 was disruptive and stressful, and weighed heavily on managers who had to spend time and effort in managing a situation whose cause and resolution were beyond their direct influence. The investigation team has learned that there were also direct threats from the strikers towards expatriate employees in the In Amenas joint venture in this period.

The investigation team has not found evidence to suggest any direct link between the strike and the attack. However, the extended strike reduced internal security resilience, eroded loyalty and morale among some of the employees, and likely had a negative impact also in the local community. This created circumstances in which there was an increased threat of information breaches from workers.

The investigation team considers it likely that the terrorists benefited from some insider knowledge in their planning of the attack. Whether or not there was insider participation in the execution of the attack is unknown.

Information from interviewees indicates that the terrorists exhibited some knowledge of both the site layout at In Amenas and names of senior managers – they knew which sites to drive to, which offices to target and they searched for a few people by name. They did not, however, exhibit any technical knowledge of the central processing facility or know in detail the internal layout of the different sites at In Amenas.

The investigation team has not found evidence that any employee on site at the time of the attack provided material support to the terrorists unless obliged to under duress. It notes, however, some eyewitnesses have perceived that a number of the employees at times appeared forthcoming towards the terrorists during the first day of the attack.

According to the Algerian authorities, the attackers made use of insider information in the planning of the attack. At the time of publication of this report, at least one suspect is under investigation for providing the attackers with information.

The In Amenas joint venture acknowledged the risk of potential insiders, and took precautions to mitigate this, such as limiting the sharing of security related information.

The threat of potential insiders will always be present, especially in countries with higher security risk. While background checks may mitigate the risk to a certain extent, companies must operate on the assumption that their operations are or may be compromised from within.

#### 8.8 STATOIL'S FOLLOW UP OF THE IN AMENAS JOINT VENTURE

The In Amenas joint venture is responsible for its own security and for implementing inner security measures at In Amenas. It is set up to operate as an autonomous entity under the oversight of its owners.

Given the governance structure and culture of the In Amenas joint venture, follow up on security, from Statoil's perspective, was not always straightforward. Statoil recognised that Algeria was a high-risk security environment and implemented appropriate security measures related to its activities in Algiers. Furthermore, individuals from Statoil in the joint venture took an active interest in local joint venture security issues.

As an owner, however, Statoil's oversight, insight and influence over security at In Amenas were very limited. Statoil did not take the initiative to independently quality assure or verify the security standards to which the joint venture operated.

#### 8.9 SECURITY CAPABILITY IN STATOIL

Between Statoil's entry to Algeria in 2003 and today, the company's international production has increased sevenfold. In the same period the company has taken the step from partner to operator, increasingly also in high-risk security environments. Statoil has increased its capacity to manage security risks, but the company's overall capabilities and culture must be strengthened to respond to the security risks associated with operations in volatile and complex environments. Statoil is yet to develop a culture where it is generally recognised that security is everybody's responsibility.

Statoil's governing documentation for security is extensive, but while a security framework is established, methodologies and practices are not consistent across the company. Statoil's security risk management processes do not follow effectively through from risk identification to action.

Statoil does not have a holistic approach to the organisation and management of security. Security is not established as a corporate function independent of safety, recognised for its distinct characteristics and requirements. In most cases security is a small part of broader health, safety and environment positions, and one for which few people in those roles have particular experience and expertise. As a consequence Statoil overall has insufficient full-time specialist resources dedicated to security. While in-house security expertise clearly exists, it is dispersed and not effectively utilised. In the absence of an effective security network, collaboration and coordination across units, disciplines and levels have been occasional rather than systematic.

Security is generally not well understood within Statoil's leadership ranks, and as a result has not been prioritised, resourced or managed appropriately. Internal reviews and audits have made similar observations as those found in this report, in the response to which the company launched an extensive improvement agenda, but this agenda has not been implemented with sufficient urgency.

The investigation team has been briefed on Statoil's cyber security work, and is of the impression that this is an area of relative strength.

## 8.10 EMERGENCY RESPONSE TO THE ATTACK

The civilian emergency response to the attack involved the combined efforts of multiple governments and companies. The military response was directed solely by the Algerian authorities. During the attack it was a main priority both for Statoil and the Norwegian government to make clear to the Algerians at every level that they attached the highest importance to saving the lives of the hostages.

In Algeria the joint venture incident management team played the critical role in driving the civilian response, supported by Sonatrach and many other agencies. The investigation team pays tribute to their professional performance and commitment.

The attack presented Statoil with an unprecedented set of challenges, but the fact that the emergency response organisation had not trained or exercised for an incident of this magnitude and complexity did not mean that they were unprepared. An ability to improvise, take effective decisions on the basis of imperfect knowledge and adapt existing plans and practice in the face of rapidly evolving events are the signs of a mature emergency response capability. The Statoil organisation demonstrated these qualities.

Statoil's contribution to the overall emergency response was effective and professional. Notification followed established procedures and extensive resources were made available. Statoil leadership set firm priorities, to support those directly involved and affected, and gave the teams involved freedom to act. This was backed up with clear and honest communications. The whole organisation mobilised around the company's priorities.

Survivors and next-of-kin have given positive feedback of the support and follow-up that Statoil has provided after the incident. The investigation team considers that the systematic approach and resources made available to support those involved in the incident and their next-of-kin should be embedded in the company's plans for the future.

Relations with the Norwegian government worked well. Statoil established a close dialogue with the Prime Minister's Office, the Ministry of Foreign Affairs, the armed forces, and the police. There was a similarly close coordination and alignment with BP, from the two respective chief executive officers down. For the most part these relationships worked on the basis of trust and personal contacts rather than as a result of preparation and planning. Sonatrach mobilised resources in support of the joint venture and evacuation in Algeria.

The investigation team has learned from Statoil interviewees that there were moments of confusion and frustration. This is not unique to this crisis, and to be expected when people who have never worked or trained together are challenged under pressure to deal with difficult issues. It can also be a symptom of a lack of capacity. There are two areas where the investigation team judges this to have been particularly relevant. The Algiers country office had to operate under difficult circumstances, and they were stretched to the limit. Similarly there were insufficient resources available to the Business Area at the handover from the emergency response organisation on 22 January. Neither the Business Area nor the response organisation had a good understanding of the extent of the remaining tasks as they moved to business continuity.

These observations should not detract from our main conclusion that Statoil's response demonstrated a fundamentally sound capability based on leadership commitment, a strong safety culture, accessible training and a core body of people with many years experience of operations in Norway. This provides a solid platform from which the company's emergency preparedness can further develop to keep pace with international growth and changes in the company's risk profile.

## 9. RECOMMENDATIONS

Companies today are faced with a growing number of interconnected and diverse threats. Terrorism is ever-evolving and, as demonstrated by the In Amenas attack, local and regional events often have global implications. A company such as Statoil needs to build resilience against a range of threats, from cyber-attacks to industrial espionage and terrorism. Increasingly, a strong security capability is also important for a company to maintain its licence-to-operate in often turbulent and insecure environments. It is therefore critical that low-probability, high-impact events are envisioned, analysed, addressed and managed, and that they are endowed with adequate resources and management attention.

This chapter captures the investigation team's recommendations and advice to Statoil. They are given with the intent of inspiring learning and further improvement in the areas of security and emergency preparedness. The aim of the investigation is to provide advice and guidance on **what** to do, rather than prescribing in detail **how** these improvements can best be achieved.

Lessons from accidents and safety incidents have been regrettable but critical contributions to instil safety in the "DNA" and operating culture of any prudent oil and gas operator. The investigation team's ambition is that lessons from the In Amenas attack will similarly drive the development of a stronger security capability and culture throughout Statoil.

Some of the recommendations cannot be made public because they deal with specific future protection measures at In Amenas. These recommendations have been communicated directly to the Statoil board of directors.

The investigation team has engaged widely with international security expertise in the private and public sector. The first part of this chapter captures insight and guidance that the investigation team believes to be relevant for Statoil. The second part makes concrete recommendations.

### 9.1 MANAGING SECURITY RISKS

#### 9.1.1 Safety and security

While there are similarities between safety and security, there are also some important differences. Security risks are inherently different from the traditional safety risks that oil and gas companies manage onshore and offshore every day.

Given the nature and scope of their core business, oil and gas companies remain more exposed to safety hazards than security threats. No company can, however, entirely eliminate risk or provide guarantees that neither accidents nor attacks could occur.

**Safety** has to do with the protection against hazards, and companies generally control the means to manage them prudently, as reflected in Statoil's safety philosophy, which states that "*accidents can be prevented.*"

**Security**, on the other hand, is about protection against threats. The origin of those threats and the likelihood of their arising in specific circumstances are usually beyond the control of companies. The most that can normally be done is to mitigate through reducing vulnerability and building resilience so that potential attackers can be discouraged, and incidents can be rapidly responded to and periods of disruption minimised. This is as true of cyber security as of terrorist attacks.

#### 9.1.2 Security risk management process

Understanding security risk is a cornerstone of effective security management. Security risks stem from threats that could harm the people, assets or operations of an organisation. Behind these security threats are people with malicious intent and the ability to adapt and respond to protective measures. A proper understanding of their intent and capability cannot be derived from hard data only. Security risks can therefore be difficult to predict and involve a high degree of uncertainty.

A security risk management system should follow some generic steps, similar to those in a regular risk management process. Typically this means:



**Establishing the context** - Robust security risk management depends on a good understanding of the context in which a company operates. National laws and regulations will set minimum standards and requirements. Together with local practices, customs and culture, they will also influence the range of options available to mitigate and manage risks.

**Identifying and assessing risks** - By developing scenarios and assessing threats, security risks can be assessed in terms of likelihood, vulnerability, initial scale of impact and possible duration of disruption. This is an effective way to transform abstract concepts to understandable risks against which specific mitigation can be designed and tested. Imagination, strategic information and local intelligence should all come together in developing such scenarios. As the attack on In Amenas demonstrates, low probability events should be included in scenarios if their potential impact is high.

**Managing the risks** - Based on a proper understanding of the security risks a company faces, measures can be adopted to reduce them. In most cases it will not be possible to eliminate security risks, and a company therefore needs to have a clear understanding of the residual risk, and whether it is prepared to accept this. Security plans to reduce the risk to an acceptable level need to be monitored, reviewed and updated on a regular basis.

In the case of terrorist threats, it is outside the scope of action for a company to directly stop the threat at source. Since this is an area only state authorities can address, it is crucial that there is alignment between actions taken by the state and protective measures adopted by the company, so that a reasonable level of protection can be established.

### 9.1.3 Capability and culture

Organisations with a strong security capability and culture often share the following characteristics:

- Hands-on security leadership with access to top management, and ability to drive the security agenda throughout the business.
- High and clearly articulated ambitions for their security capability, which is treated as a discipline distinct from safety, and with clear objectives and dedicated professionals.
- Sufficient capacity and competence to identify and match the security challenges faced by the business.
- An holistic approach to the management of security risks as an integrated part of core business processes and deliveries.
- Transparent, inclusive, active and authoritative security risk management processes<sup>4</sup>, run by an organisation capable of identifying and acting on potential threats.

The investigation team has kept these qualities in mind when making its recommendations.

## 9.2 RECOMMENDATIONS

The investigation team's recommendations cover five main areas:

### Specific to Algeria

- Security at In Amenas and other sites in Algeria

### General to Statoil

- Organisation and capabilities
- Risk management systems
- Emergency preparedness and response
- Collaboration and networks

<sup>4</sup> For a further description, see chapter 8 (Security risk management)

Taken together, the recommendations are intended to support the development of an enduring organisational capability that will enable Statoil to achieve its corporate goals while safeguarding its people, assets and operations from deliberate acts of harm. They will also foster the necessary security culture where security is everybody's responsibility that is essential for such a capability to be truly effective.

### 9.2.1 Security at In Amenas

- (1) **Improve the joint venture's ability to deter, detect, delay and stop potential attacks by reinforcing electronic and physical protective measures, enhancing its security risk management capability and developing a coherent program of security training and exercising.** For security reasons we do not give a detailed description of enhanced security measures here. They have been passed directly to the Statoil board of directors.
- (2) **Strengthen the joint venture's overall security capability by appointing a joint venture head of security, and establishing a dedicated security committee.** This will enable a more dynamic system for managing threats.
- (3) **Seek to establish mutually effective ways of coordinating, planning and exercising between the joint venture and the military.** This will increase their understanding of each other's priorities and planning assumptions for security and crisis management.

### 9.2.2 Security organisation and capabilities

- (4) **Develop a clearly defined ambition for the company's security capability.** Statoil should have as high ambitions for its capability in the security area as it has in the domain of safety. Leadership awareness and engagement at all levels are vital.
- (5) **Strengthen security leadership.** The head of security should be given organisational visibility, direct and continuous access to the chief executive officer, and be empowered to set and drive the company's security agenda.
- (6) **Reinforce the total security organisation.** Capacity and competence both on corporate level and in the business areas should be increased, together with the security organisation's remit, visibility, and prominence. It should be positioned and resourced as a distinct discipline with clearly defined requirements and capabilities, and dedicated security professionals. The company should regularly review its security capabilities in light of the development of the company's overall risk profile.
- (7) **Ensure an holistic approach to security.** Integrate physical, cyber security, and personnel security either organisationally or through a strong cross-disciplinary network. While different, the security disciplines must be consistent in methodology and execution to increase collaboration and exploit synergies.
- (8) **Provide security training to all employees and managers.** Provide basic security training to all employees and targeted security training to managers and international assignees, particularly those working in countries with higher security risks. Training is not a one-time event. The training must be maintained at a sufficient frequency.
- (9) **Openly and clearly communicate potential security risks to employees.** This should include the levels of protection and residual risk, and clarify mutual expectations between the company and its people.

### 9.2.3 Security risk management systems

- (10) **Develop a security risk management system that is dynamic, fit-for-purpose and geared towards action.** It should be an embedded and routine part of the company's regular core business, project planning, and Statoil's decision process for investment projects. A standardised, open and well-defined security risk management methodology will allow both experts and management to have a common understanding of risks, threats and scenarios, and evaluations of these. The objective should be to enable effective and action-oriented discussions, resulting in measures that address the risks at hand.

- (11) **Systematically develop and maintain security risk management plans.** They should be based on security risk analyses, and include defined security related scenarios.
- (12) **Build effective relationships with host nations to support mutual understanding, joint planning and exercising.** The aim should be a strategic partnership with host nations to enable full use of their capabilities and effective integration with company protective measures. Host nation policies and capabilities must be taken into account in assessing risks and designing mitigation. Statoil must clarify expectations with governments, regarding protection and support of critical national infrastructure, and their posture and resources in an emergency response situation.

#### 9.2.4 Emergency preparedness and response

- (13) **Coordinate and standardise emergency response planning.** This includes systematic training and assessment to common standards, and monitoring and assurance across all business areas. Learning points and existing best practices should be disseminated systematically across the group, and the company should develop a wider pool of people to deploy in large scale and long running emergencies. These standards should be consistent with the principles of the Incident command system (“ICS”) to facilitate working with other companies, governments and agencies, while not losing the best of Statoil’s current approach.
- (14) **Increase the frequency of security-related exercises.** Statoil should invite governments and partners to join also on an international level.
- (15) **Embed the best practice demonstrated in the next-of-kin arrangements.** They should be integrated in Statoil’s plans and training for all international as well as Norwegian operations, while recognising the need to adapt to local cultural norms.
- (16) **Review and assure existing joint venture emergency response plans.** This includes bridging documents and next-of-kin plans for all locations outside Norway. Systematically review plans, resources and capabilities of likely emergency response partners in industry and governments with the purpose of educating each other, and clarify expectations about mutual support and contributions in an emergency situation.

#### 9.2.5 Collaboration and networks

- (17) **Broaden and deepen cooperation with relevant government agencies and organisations.** Initiate a high-level strategic dialogue on potential measures to improve cooperation between the industry and government agencies on access and use of information related to threats and security.
- (18) **Reinforce networks and institutional relationships.** Statoil should consider joining and establishing a presence in organisations that have a clear security purpose (e.g. Overseas Security Advisory Council, International Security Management Association).
- (19) **Establish standards for security management and engagement in joint ventures and partnerships.** Contractually and practically seek ways to ensure that the company has appropriate insight, influence and impact through monitoring and follow-up activities, including by filling security and emergency response roles also in joint ventures and partnerships.

### 9.3 THE WAY FORWARD

The investigation team recognises that security improvement initiatives are already underway aimed at closing gaps Statoil itself has identified, including the reinforcement of security measures at In Amenas and other sites in Algeria. Some of the ongoing improvement initiatives in Statoil were started before the attack at In Amenas; others have followed as a consequence. There is bound to be some overlap between the recommendations in this chapter and actions already under way.

What happened at In Amenas will remain a tragic part of Statoil’s history. It is the investigation team’s objective that by setting clearer goals and inspiring higher ambitions, Statoil will develop its security capability for the future in a way that leaves a lasting legacy, and in an uncertain global environment reduces the risk to its people in Norway and across the world.

## The In Amenas terror attack

### MANDATE

#### 1. Background

The Board of Directors of Statoil ASA ("Board") has decided to conduct an investigation as further described in this mandate following the terrorist attack against the In Amenas gas plant in Algeria.

On Wednesday 16 January 2013, a terrible tragedy started with the terrorist attack against the In Amenas gas plant. The attack lasted until 19 January when Algerian authorities confirmed that the military response was concluded and the attack was over. 40 persons were killed in the attack. Statoil lost five of its employees. 12 saved and evacuated Statoil employees have experienced an extremely dramatic event. Extensive efforts were made by Statoil's emergency response team both in Algeria and in Norway, our partners and contractors, governments, authorities and governmental entities.

It is important from the outset to make it clear that it is the terrorists, and no one else, who have the responsibility for the vicious, violent and tragic attack that took place against the In Amenas gas plant.

#### 2. Purpose

The main objectives for the investigation are to;

- Determine the relevant chain of events before, during and after the In Amenas terror attack, and
- Enable Statoil to further improve within the areas of security, risk assessment, and emergency preparedness.

#### 3. Scope of the investigation

An Investigation team has been appointed by the Board in order to as far as possible clarify and evaluate all relevant facts related to the terror attack from Statoil's perspective. This includes facts and evaluation concerning:

- Risk and security assessments, security arrangements and emergency preparedness and their implementation directly related to the In Amenas gas plant prior to the terrorist attack
- The notification of, and emergency response to, the terrorist attack including interaction with government authorities and entities and partners

Based on the facts and evaluations related to the In Amenas attack, also identify:

- Potential non-conformities with and areas of improvement in Statoil's existing system and procedures, or use of the systems, within the areas of security and emergency preparedness
- Potential areas of improvement related to organisational capabilities, including competencies, roles and responsibilities, training, culture and capacity within the areas of security and emergency preparedness.

The Investigation team shall have the authority to do the necessary research and clarifications. This includes right to inspect relevant installations and premises, access to all relevant personnel and information in order to comply with its mandate. Further the Investigation team shall have the possibility to commission external expert opinions within defined areas of security and emergency preparedness in its work.

The investigation will be conducted in accordance with Statoil’s governing documentation for investigations of HSE accidents<sup>1</sup> with the required adaptations as set out in this mandate or as agreed amended between the Board and the Investigation team. Accident investigation of actual or potential accidents is a formal process intended to clarify the sequences of events, causes and consequences, and identify effective preventive measures based on proven methodologies which will be applied in this investigation as well.

Should the Investigation team during its work uncover technical, operational, organisational or other shortcomings or deficiencies which are critical in safety (including both security and emergency preparedness) terms, such matters shall be communicated immediately to the Board and the CEO.

To the extent possible the investigation should be aligned and coordinated with similar reviews conducted by other companies involved at the In Amenas facilities or relevant governments or governmental entities.

The Investigation team shall give regular updates to the Board.

A secretariat is established to support the Investigation team with administrative tasks, advice and assistance in all relevant areas. The secretariat will work under the direction and instructions of the Investigation team, and be responsible for drafting of the report. The Investigation team shall deliver its final investigation report to the Board within 15 September 2013. However, the report deadline may be extended in the event additional time is necessary for the investigation to meet the expected quality requirements.

**4. Investigation team**

The Board has appointed the following members of the Investigation team:

**Torgeir Hagen, chair**

Hagen is a retired Lieutenant General and was the head of the Norwegian Intelligence Service from 2002 until 2010. He has broad international experience and was a member of the 22nd July Commission

**Randi Grung-Olsen, deputy chair**

Grung-Olsen is senior vice president for Corporate Audit and Internal investigation in Statoil

**Adrian Fulcher**

Fulcher is a former director of counter terrorism, with nearly 30 years of experience, in the British Diplomatic Service.

**Leif D. Riis**

Riis is head of the Analysis and Security Department at the The Norwegian Defence Estates Agency.

**James Bunn**

Statoil’s internal investigation unit

**Erling Kristian Handal**

Statoil’s internal investigation unit

**5. Supporting activities**

To support the process of clarifying and evaluating all relevant facts related to the terror attack, the Board has decided to establish an advisory expert group and an internal resource group:

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<sup>1</sup> The Statoil definition of an “accident” refers to a sudden and undesired event which occurs unexpectedly and unintentionally.

External Advisory expert group

As a resource for the Investigation team and the Board, the Board has appointed an Advisory expert group comprising renowned and relevant experts with international experience. The Advisory expert group shall advise the Investigation team during the investigation and subsequently engage in a dialogue with the Board regarding Statoil’s learnings and actions.

The Board has appointed the following members to the Advisory expert group:

**John Hamre, Ph.D**

Hamre was deputy defence minister in the US from 1997 until 2000. Today he is president of the Center for Strategic and International Studies (CSIS).

**John E. McLaughlin**

McLaughlin is a former acting director of the CIA. Today he is professor at the School of Advanced International Studies at the Johns Hopkins University.

**Thorstein Skiaker**

Skiaker is a retired Lieutenant General and former head of the Norwegian Military’s Joint Headquarters, NATO’s headquarters in Norway and KFOR in Kosovo.

**Thomas Hegghammer**

Hegghammer is a director/scientist on terrorism at the Norwegian Defence Research Establishment. He is currently at the Center for International Security and Cooperation at Stanford University.

**Wolfram Lacher**

Lacher is a researcher at the German Institute for International and Security Affairs (Stiftung Wissenschaft und Politik) in Berlin and an expert on Libya, Algeria and security dynamics in the Sahel and Sahara region.

Internal Resource group

In support of the Investigation team, the Board has appointed a Resource group consisting of representatives from the employees and management with the following tasks:

- Represent and bring forward Statoil’s institutional knowledge and experience;
- Provide support and advice to the investigation team with special focus on learning points;

The Resource group will receive regular status reports and be included in the hearing of the draft investigation report. The investigation team decides which comments to accept.

The Board has appointed the following members to the Resource group:

**Arne Sigve Nylund**, chair, senior vice president for processing and manufacturing in Marketing, Production and Renewables

**Torgeir Kydland**, senior vice president for Europe and Asia in Development and Production International

**Tove Stuhr Sjøblom**, senior vice president for Africa south of Sahara in Development and Production International

**Arild Litlekalsøy**, employee representative from Development and Production International.

**Morten Lorentzen**, employee representative from Development and Production International.

**Kjetil Gjerstad**, employee representative and coordinating head safety delegate onshore

#### **6. Internal audit – overall processes and systems**

In addition to, and in parallel with, the investigation, the Board has instructed Statoil's Corporate Audit ("COA") to conduct an audit to review and assess Statoil's overall processes and systems related to security and emergency preparedness, including the status in select international locations.

The purpose of the internal audit is to give the Board a wider basis from which to consider learnings, actions and plans within the areas of security and emergency preparedness following the conclusion of the investigation.

During the audit, COA may make use of the Advisory expert group. COA shall deliver its final report to the Board within 15 September 2013.

#### **7. Limitations**

The circumstances of the terrorist attack will set a number of limitations for the investigation, and as such the facts will have to be based upon the information available.

The investigation is not undertaken to assign personal responsibility or liability. Nor is it related to Statoil's future international or commercial strategy. The investigation should not interfere with business continuity within the areas of security and emergency preparedness.

#### **8. Final report and post review**

The investigation report will be made public by Statoil ASA. Information which cannot be made public, due to safety considerations, applicable law or contains information subject to confidentiality, will not be included in the investigation report, such information will be conveyed to the Board and the management in a suitable manner.

The final report will provide the foundation for further work related to learning and sharing for relevant target groups both within and outside of Statoil.

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Any changes in this mandate shall be made in writing and subject to agreement between the Board and the Investigation team.

[ ] February 2013

Statoil ASA

## ✓ THE IN AMENAS ATTACK

Report of the investigation into the terrorist attack on In Amenas. Prepared for Statoil ASA's board of directors.

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