TAP Project Health and Safety Plan
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1. INTRODUCTION

1.1 Purpose

This document has been developed for the TAP Project scope of work (including offshore). The purpose of the document is to specify the minimum health and safety standards to be applied at all project and office locations. It sets out the project Health and Safety requirements ensuring that all activities are organised and managed in a consistent manner in line with TAP values.

It provides information to the integrated Project Management Team (iPMT), Project Management Contractor Italy (PMCI) EPC/Main Contractors, Sub-Contractors and vendors to ensure that all necessary health and safety activities are planned, coordinated and executed to meet the project health and safety objectives throughout all stages of the project.

This document provides the Company requirements and overarching framework that contractor plans must meet as a minimum. The document is not intended to replace the legally required health and safety documents (dependent on specific country requirements health and safety documentation could include Health and Safety Plan, Health and Safety file as well as a diary of safety measures etc), prepared by each contractor for their specific scope of work.

This document shall be read in conjunction with Appendix M - Health and Safety Conditions of Contract, following each section the relevant section of Appendix M has been identified for ease of reference.

1.2 Scope

This Plan has been developed to define the minimum health and safety requirements for activities associated with the TAP Project of which all Contractors shall implement and incorporated in their specific scope HSE Plans and associated documentation.

1.3 Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>TAP</td>
<td>Trans Adriatic Pipeline AG – The Company</td>
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<tr>
<td>iPMT</td>
<td>Integrated Project Management Team (TAP, Technip, ETG, RSK)</td>
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<td>EPC</td>
<td>The Contractor(s)</td>
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<tr>
<td>CPI</td>
<td>Company Provided Items</td>
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<td>LLI</td>
<td>Long Lead Items</td>
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<td>FOC</td>
<td>Fibre Optic Cable</td>
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<td>H&amp;S</td>
<td>Health &amp; Safety</td>
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<tr>
<td>KO</td>
<td>Kick-Off (Meeting)</td>
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<tr>
<td>UXO/ERW</td>
<td>Unexploded Ordnance/Explosive Remnants of War</td>
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<td>KPI</td>
<td>Key Performance Indicators</td>
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<td>JMC</td>
<td>Journey Management Centre</td>
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<td>BBS</td>
<td>Behaviour Based Safety</td>
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<td>TBT</td>
<td>Tool-Box Talks</td>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>IVMS</td>
<td>In-Vehicle Monitoring System</td>
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<td>SIMOPS</td>
<td>Simultaneous Operations</td>
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<td>BBS</td>
<td>Behavioural Based Safety</td>
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<td>PMCI</td>
<td>Project Management Contractor Italy</td>
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<td>JSA</td>
<td>Job Safety Analysis</td>
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1.4 The Trans Adriatic Pipeline Project

The TAP pipeline begins at the Greek-Turkish border near Kipoi in Greece where it ties in with TANAP gas pipeline system. It will be routed through northern Greece and will enter Albania east of Korca. The pipeline will then continue through Albania and reach the Adriatic coastline near the city of Fier. The pipeline crosses the Adriatic Sea and terminates at the Pipeline Receiving Terminal (PRT) close to Lecce in Italy where the gas is tied into the SNAM Rete Gas (SRG) network. The total length of the TAP pipeline system will be approximately 871 km including the offshore pipeline section of 105 km.

The Project will be executed through a series of contracts with Suppliers, for the provision of certain equipment and materials, and with EPC Contractors for the execution in the host countries.

The following contracts are foreseen for the CPI Vendors:

- Large Diameter Valve (for Block Valve Stations);
- LLI Steel Pipe & Bends (onshore);
- LLI Steel Others;
- Turbo Compressors;
- Fibre Optic Cable (onshore);
- SCADA / Telecommunication; and
- Line Supply Offshore including Coating & Anodes.

The following contracts for EPC/Main Contractors:

- Access Roads & Bridges Albania;
- OPL Construction (Albania);
- OPL Construction (Greece);
- OPL Pipeline Construction (Italy);
- Compressor Stations (Albania & Italy);
- PRT Station;
- OPL Construction Italy;
- Offshore Pipeline Construction;
- Fibre Optic Cables (FOC);
- SCADA.

In February 2017 SNAM were appointed as Project Management Contractor Italy (PMCI) to support the iPMT and to manage all contracts that fall within the Italian scope, no further changes have been made to the iPMT structure for Albania & Greece.
2. LEADERSHIP AND ACCOUNTABILITY

2.1 Targets and Goals

The Project overall health and safety goal is to deliver world-class health and safety performance aligned with the following main Targets:

- Zero fatalities or serious injuries;
- Lost Time Incident Frequency Rate less than 0.75 (LTIFR)
- Total Recordable Frequency Rate less than 2.75 (TRIFR)

The above-mentioned Targets shall be annually reviewed by TAP and where the Targets are achieved shall be reduced to drive continuously improving safety performance. Where they are not achieved then targets will be agreed with the TAP leadership Team.

2.2 Health and Safety Objectives

Through visible leadership, assurance and proactive engagement of all staff, contractors and suppliers, TAP will strive to deliver world-class project health and safety performance. Driving continual improvement towards this objective will require all those involved to work as one team, one project, one TAP to continuously improve our safety performance.

In order to achieve this, the iPMT and its Contractors shall:

- Make health and safety a personal value that guides behaviour, actions and decisions;
- Meet legal and moral obligations to keep people safe and protect the environment and the community;
- Provide resources in terms of people, equipment, training and systems of work to ensure competent and knowledgeable project personnel prevent incidents and near misses in the workplace; and
- Learn from all incidents and near misses, taking action to prevent their recurrence.

The iPMT is committed to maintaining world-class health and safety performance and believes this will happen through:

- Top down leadership engagement (Sponsors and Senior Management to workforce)
- Leadership from ALL employees and contractors;
- Consistent application of documented processes and procedures; and
- Everyone consistently demonstrating the required behaviours.

TAP has developed an annually HSE activity Plan which sets out in detail the overall objectives. This plan is reviewed annually.

2.3 Health and Safety Charter

The project in conjunction with our EPC/main contractors have developed a Health and Safety Charter that forms the basis of the collaboration between all parties to ensure we have a terms of reference for health and safety expectations.

The charter focuses on the main areas;

- Demonstrating personal visible leadership
- Encouraging everyone to behave as HSE leaders promoting a just culture of no blame
- Committing to investing in adequate resource in training
- Empowering everyone to be accountable
- Promoting effective two-way communication keeping messages simple, consistent and clear
- Encouraging excellence through reward whilst not tolerating below the line behaviours

### 2.4 Health and Safety Policy

The TAP HSSE Policy is the principal health and safety document for all TAP activities. The policy is signed by TAP's Managing Director. This policy is supported by TAPs Golden Safety Rules (Section 10).

It is expected each EPC/Main Contractor and PMCI shall have their own equivalent Health and Safety Policy. In particular, the policy shall include engagement and support for all employees, sub-contractors and other stakeholders in the shared responsibility of achieving the policy objectives, for further details refer to Appendix M section; Health and Safety Policy.

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<th>References and supporting documents</th>
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3. HEALTH AND SAFETY MANAGEMENT SYSTEM

TAP has developed its Management Systems to align with the requirements of OHSAS 18001 which is an international management system specification for occupational health & safety.

OHSAS 18001 incorporates and reflects the “Plan-Do-Check-Act” model of systematic management. The key components of this model are shown in figure 3.1 below.

![Plan-Do-Check-Act Model](image)

(Figure 3.1 Plan-Do-Check-Act model)

It is expected that each contractor and the PMCI has a fully documented and effectively implemented health and safety system aligned with International Standard OHSAS 18001 that covers all areas of the work to be performed, for further details refer to Appendix M section; Health and Safety Management System
3.1 Health and Safety Document Structure

The iPMT health and safety document structure is shown in figure 3.2 below. It sets out the hierarchy of documents on the project.

This document fits within the suite of documents that make up the Health and Safety Management System Manual.

(Fig 3.2 IPMT health and safety document structure)
4. IPMT HEALTH AND SAFETY ORGANISATIONAL STRUCTURE

The iPMT Health and Safety Lead reports directly to the Project Director and is an active member of the iPMT Leadership team, ensuring health and safety matters are raised at the most senior level within the Project. The Health and Safety Lead manages a Health and Safety Coordinator and a Health and Safety Analyst.

The Country iPMT H&S Managers reporting directly to the Country Project Managers and are active members of the Country iPMT Leadership team ensuring health and safety matters are raised at the most senior level within the Country project management team. To ensure functional alignment the Country iPMT H&S Managers report to the iPMT Health and Safety Lead and the iPMT Health and Safety Lead has a functional reporting relationship with the TAP Senior Corporate Health, Safety and Environment Manager.

The iPMT Country H&S Lead(s) and Advisor(s) report directly to the iPMT location Senior Site Representatives and have a functional reporting relationship to the Country iPMT H&S Manager.

Where required by legislation TAP have enlisted the external services of health and safety coordinators, these roles are a legally required position. These appointments do not substitute or replace the requirements placed on Contractors to fulfil their legal obligations.

The organisational charts below show Greece, Albania and Italy Health and Safety operational reporting lines.

(Fig 4.1 Greece Health and Safety Organisational Structure)
• Health and Safety Manager Albania functionally reports to Health and Safety Lead Baar

• Albania Health and Safety Leads & Advisors functionally report to the Albanian Health and Safety Manager

(Fig 4.2 Albania Health and Safety Organisational Structure)

• Health and Safety Manager Italy functionally reports to Health and Safety Lead Baar

• Italy Health and Safety Leads & Advisors functionally report to the Italy Health and Safety Manager

• The Italy project manager undertakes the role of Client or Contractor

(Fig 4.3 Italy Health and Safety Organisational Structure)
Governance and Assurance

Figure 4.4 below represents how the iPMT Health and Safety organisation structure and accountabilities are organized across the contracting chain.

The iPMT Health and Safety Lead, in conjunction with his team will ensure consistency against the project health and safety requirements across all contracting organisations at iPMT level. This will be set out during the contractor KO meetings with representatives from both iPMT and contractor country teams. Governance and assurance will continue throughout the project with regular auditing and specific iPMT/contractor health and safety meetings.

The Country H&S Managers and the PMCI for the Italian scope will review and monitor the day-to-day performance for all contractors working in country against the requirements of the TAP Project Health and Safety Plan, Appendix M (Health and Safety Conditions of the Contract) and their health and safety plans and associated documentation. The iPMT Health and Safety Lead and team will ensure consistency across contractors who are working in multiple countries and will ensure a consistent approach is being taken within the iPMT Health and Safety function.

![Diagram of iPMT HSSE organisation structure and accountabilities](image)

Each contractor will provide a robust health and safety organisation to plan, execute and monitor their works. Key positions shall be approved by the iPMT prior to mobilisation to site for further details refer to Appendix M section; HSE Organisation.
4.1 Health and Safety Roles and Responsibilities

4.1.1 TAP Project Director

- Lead by example and never knowingly walk by an unsafe act or condition;
- Establish and sustain the project Health and Safety objectives;
- Ensure the iPMT and our Contractors, as one team share, learn from lessons and communicate best practice transfer;
- Establish an iPMT leadership team to sustain and support the project Health and Safety Plan, and in Country Leadership teams and Contractors as appropriate;
- Actively participate and promote the project BBS program;
- Demonstrate a visible and active personal commitment to;
  - personal well-being;
  - healthy and safe workplaces and activities; and
  - continuously improve the Project health and safety performance;
- Promote the implementation of TAP Golden Rules.

4.1.2 Country Project Managers

- Lead by example and never knowingly walk by an unsafe act or condition;
- Maintain health and safety focus for the project duration;
- Demonstrate behaviour and business practices commensurate with a culture of world’s best health and safety performance;
- Actively participate and promote the project BBS programme and engagement;
- Assist in developing, communicating, implementing and regularly review iPMT and Contractor systems, strategies, standards and processes that;
  - Minimise the actual and potential impact of work activities or work sites managed by our Contractors towards health and safety;
  - Support the management and recovery from any health and safety incidents;
- Promote safe and healthy workplaces and behaviour, including workplaces not managed by iPMT;
- Manage TAP employee’s workplace illness and injury;
- Acquire and maintain sufficient knowledge and awareness of the workplace environment to identify and manage work hazards and incidents;
- Demonstrate a visible and active personal commitment to:
  - Achieving world class safety performance;
  - Personal well-being;
  - Healthy and safe workplaces and activities; and
  - Continuously improve the Project health and safety performance.
- Promote the implementation of TAP Golden Rules;
- Be actively involved in all stages of engagement with our Contractor to include:
  - Contractor alignment and engagement;
  - Contractor KO meetings;
  - Contractor Mobilisation; and
  - Monthly / Weekly Contractor reviews;
- Recognise and reward individuals and teams;
- Actively participate in health and safety leadership meetings to include; review leading and lagging KPI reports, the status of Contractor performance, the country health and safety risk register;
- Participate in regular inspection and engagement;
- Review and report on the status of outstanding actions arising from incident investigations and audits.
4.1.3 Managers (General)

- Lead by example and never knowingly walk by an unsafe act or condition;
- Demonstrate behaviours and business practices commensurate with a culture of world’s best health, safety and environmental performance;
- Actively participate and promote the project BBS program;
- Actively participate in health and safety Leadership meetings to include; review lead and lag KPI reports, the status of Contractor performance, the country health and safety risk register;
- Participate in country H&S inspection/audit schedule across all Contractors and work locations;
- Where appropriate be involved in incident investigations;
- Demonstrate a visible and active personal commitment to:
  - Achieving world class safety performance;
  - Personal well-being;
  - Healthy and safe workplaces and activities; and
  - Continuously improve the Project health and safety performance.
- Promote the implementation of TAP Golden Rules;
- Review and report on the status of outstanding actions arising from incident investigations and audits;
- Recognise and reward individuals and teams;
- Promote TAP Golden Rules.

4.1.4 Engineer/Senior Site Reps (General)

- Lead by example and never knowingly walk by an unsafe act or condition;
- Demonstrate leadership in the application of the principles of Process Safety in Design;
- Demonstrate a visible and active personal commitment to:
  - Achieving world class safety performance;
  - Personal well-being;
  - Healthy and safe workplaces and activities; and
  - Continuously improve Project health and safety performance;
- Consider and be aware at all times of the TAP Golden Rules;
- Recognise and reward individuals and teams.

4.1.5 Health and Safety Lead

- Lead by example to embed a positive HSE culture.
- Provide positive H&S leadership across the iPMT and promote the adoption of H&S best practice ensuring compliance with TAP Policy.
- Functionally manage the Country HS Managers, iPMT Assurance Lead and iPMT Analyst.
- Report HSE Corporate info needed for weekly, monthly and annual reports.
- Oversee the collation of H&S statistical information across the project, review for accuracy.
- Support iPMT in ensuring they have established suitably trained emergency Response / Incident Management Team according to corporate standards.
- Review and analyse H&S statistical information from Country iPMT team and Contractors.
- Attend contractor H&S KO meetings.
- Prepare and maintain an iPMT audit and inspection schedule
- Undertake and record findings from regular inspections of contractors work locations against their health and safety plans and requirements of appendix M.
- Ensure for the iPMT Governance and Assurance against all contractors working in country.
- Prepare and update annual H&S targets aligned with Corporate HSE standards.
- Participate in weekly/monthly H&S reviews with iPMT and Contractors
- Chair weekly H&S Managers call
- Support the country Occupational Physician in ensuring contractors have suitable health programs in place
4.1.6 **Country Health and Safety Manager**

- Review IPMT contractor incident reports, identify any trends and ensure that there is an appropriate response to prevent future recurrence.
- Ensure incidents lessons learned are effectively disseminated across the Contractor Organizations.
- Where appropriate be involved in incident investigations.
- Review IPMT contractor H&S performance and make recommendations for improvement.
- Assist with the identification of IPMT H&S training needs, and monitor delivery of external facilitated training, ensure that the H&S Training Plan is in place that ensure that the project training requirements are met;
- Review contractor H&S Plans and other H&S documentation to ensure suitable
- Ensure all countries have suitable JMC’s
- Ensure actions from inspections, incidents and audits are tracked and closed out.
- Prepare and review for accuracy project H&S bulletins and other communication
- Promote the implementation of TAP Golden Rules in contractors.
- Day to day interface with Senior Corporate HSE Manager for H&S issues.
- Participate in all HSE network meetings and Committee.
- Member of ELT responsible for participating in TAP decisions
- Assist with the identification of H&S training needs, and monitor delivery of external facilitated training, ensure that an H&S Training Plan is in place that ensure that the project training requirements are met;
- Review contractor H&S Plans, risk assessments, method statements and other H&S documentation to ensure suitable;
- Responsible for all JMC activity;
- Ensure actions from inspections, incidents and audits are tracked and closed out;
- Prepare and review for accuracy project H&S bulletins and other communication;
- Promote the implementation of TAP Golden Rules;
- Recognise and reward individuals and teams.

### 4.1.7 Country Health and Safety Lead

- Provide positive H&S leadership within your Country of operation and promote the adoption of H&S best practice ensuring compliance with TAP Policy and Country health and safety legislation;
- Deputize for the Country Project H&S Manager where required;
- Participate and where required prepare weekly and monthly H&S reports;
- Assist in collating H&S statistical information from Country iPMT team and Contractors, review for accuracy;
- Participate in the Country H&S inspection/audit schedule across all Contractors and work locations;
- Undertake and record findings from regular inspections of contractors work locations against their health and safety plans and requirements of appendix M;
- Ensure for the iPMT Governance and Assurance against all contractors working in country;
- Input into the update of annual H&S improvement plans;
- Participate where required in weekly/monthly H&S reviews with iPMT and Contractors;
- Participate in country emergency response exercises reporting findings to Country H&S Manager;
- Promptly alert line and functional management to significant accidents and incidents in line with TAP procedures and Where appropriate be involved in incident investigations;
- Review contractor incident reports, identify any trends and ensure that there is an appropriate response to prevent future recurrence;
- Monitor and report on contractor H&S performance and make recommendations for improvement;
- Participate in country emergency response exercises reporting findings to line management;
- Audit the Contractor’s site security; to ensure that Contractor follows all security measures as per approved procedures;
- Assist with the entering of in Country BBS cards;
- Monitor contractor’s systems to accurately input BBS Cards;
- Assist with the identification of H&S training needs, and monitor delivery of external facilitated training;
- Undertake training and communication such as TBT etc;
- Review contractor H&S Plans, risk assessments, method statements and other H&S documentation to ensure suitable;
- Ensure actions from inspections, incidents and audits are tracked and closed out;
- Prepare project H&S bulletins and other H&S Communications;
- Promote the implementation of TAP Golden Rules;
- Recognise and reward individuals and teams;

### 4.1.8 Country Health and Safety Advisor

- Provide positive H&S leadership within your Country of operation and promote the adoption of H&S best practice ensuring compliance with TAP Policy and Country health and safety legislation;
- Where required prepare inputs to weekly and monthly H&S reports;
- Monitor all contractors work to ensure it is properly planned with systems in place to ensure activities are risk assessed and appropriate precautions are implemented prior to commencing work;
- Participate in the Country H&S inspection/audit schedule across all Contractors and work locations;
- Undertake and record findings from regular inspections of contractors work locations against their health and safety plans and requirements of appendix M;
- Ensure for the iPMT Governance and Assurance against all contractors working in country;
- Participate in country emergency response exercises reporting findings to Country H&S Manager;
- Promptly alert line and functional management to significant accidents and incidents in line with TAP procedures;
- Review contractor incident reports, identify any trends and ensure that there is an appropriate response to prevent future recurrence;
- Where appropriate be involved in incident investigations;
- Monitor and report on contractor H&S performance and make recommendations for improvement;
- Assist with the entering of in Country BBS cards;
- Monitor contractors training program;
- Undertake audits and inspection of camps and welfare facilities;
- Undertake training and communication such as TBT etc.;
- Ensure actions from inspections, incidents and audits are tracked and closed out;
- Prepare project H&S bulletins and other H&S Communications;
- Promote the implementation of TAP Golden Rules;
- Recognise and reward individuals and teams.

4.1.9 Health and Safety Coordinator

- Provide positive H&S leadership across all Countries of operation and promote the adoption of H&S best practice ensuring compliance with TAP Policy and Country health and safety legislation
- Delegate for the iPMT health and Safety Lead where required
- Prepare and assist in the facilitation of an iPMT audit schedule across all Countries and contractors
- Prepare formal audit report findings and track findings of audits to ensure suitable close out
- Assist with the preparation of weekly & monthly H&S reports and presentations
- Attend and actively participate in the weekly H&S Managers call
- Where appropriate be involved in incident investigations
- Review contractor incident reports, identify any trends and ensure that there is an appropriate response to prevent future recurrence.
- Ensure for the iPMT Governance and Assurance against all contractors working in country
- Assist in the preparation and update annual H&S improvement plans and targets
- Review H&S statistical information from Country iPMT team and Contractors, review for accuracy with the H&S Analyst (where required cover holiday and absence with overall project statistical reporting)
- Prepare and review for accuracy project H&S bulletins and other communication
- Participate in the Country H&S inspection/audit schedule across all Contractors and work locations
- Review contractor H&S performance and make recommendations for improvement.
- Ensure suitable H&S Plans, risk assessments, method statements and other H&S documentation
- Seek evidence from Contractors that actions from inspections, incidents and audits are tracked and closed out
- Prepare project H&S bulletins and other H&S Communications
- Promote the implementation of TAP Golden Rules

4.1.10 Health and Safety Analyst

- Provide positive H&S leadership across all Countries of operation and promote the adoption of H&S best practice ensuring compliance with TAP Policy and Country health and safety legislation;
- iPMT focal point responsible for the update, maintenance and interrogation of Synergi the incident data base:
  - Review contractor incident reports, identify any trends and ensure that there is an appropriate response to prevent future recurrence;
- Ensure actions from incidents are closed out in a timely manner;
- Where appropriate be involved in incident investigations;
- Manage the collation and interrogation of all iPMT and Contractor H&S statistical information to include leading and lagging indicators, training, man-hours, KM driven;
- Review for accuracy all statistical information preparing charts, graphs, tables etc;
- Produce detailed analysis for all leading and lagging indicators:
  - iPMT level;
  - Country level;
  - Contractor level;
- Assist with the preparation of weekly and monthly H&S reports and issue to the Health and Safety Lead within agreed timelines;
- Prepare ad-hoc reports as required;
- Provide input into the preparation and update of annual H&S improvement plans and KPI's;
- Participate where required in weekly/monthly H&S reviews with iPMT and Contractors;
- Attend and actively participate in the weekly H&S Managers call;
- Prepare safety bulletins, newsletters, posters, campaigns and general H&S communication;
- Monitor and review contractor H&S performance and make recommendations for improvement;
- Oversee the data entering of in Country BBS cards;
- Prepare detailed analysis of BBS cards identifying trends and concerns;
- Ensure contractors have systems and personnel to accurately input BBS Cards;
- Undertake audits and reviews of contractor management systems in line with H&S KO meeting and start up plans;
- Undertake H&S inspections and tours.

4.1.11 All Personnel (iPMT, PMCI, EPC Contractor, Vendors)

- Lead by example and never knowingly walk by an unsafe act or condition;
- Demonstrate a visible and active personal commitment to:
  - Achieving world class safety performance;
  - Personal well-being;
  - Healthy and safe workplaces and activities; and
  - Continuously improve the project health and safety performance;
- Consider and be aware at all times of the TAP Golden Rules;
- Actively participate in the BBS programme;
- Complete hazard cards to help identify any worksite issues;
- Report any incident.

4.1.12 EPC & Contractor Roles and Responsibilities

To ensure that the EPC Contractors (and its sub-contractors) meet the project world-class targets and strive to achieve a step change improvement in safety performance.

Contractors must as a minimum meet all requirements of Appendix M the Health and Safety Conditions of the Contract.

All contractors and sub-contractors comply with legal regulation and applicable health and safety requirements ensuring all their employees and sub-contractors adhere to their Company roles and responsibilities and if not already considered the following should be adopted

- Are aligned, engaged and trained to achieving this world class safety objective;
- Have received adequate PPE and the necessary training;
- Have been informed about the risks in the activity and are aware of the preventative measure in place;
- Have passed the necessary medical examination.
4.1.13 Health and Safety Roles and Responsibilities vendor personnel and premises

Responsibilities of Contractor or IPMT (Whoever is accountable for the vendor) to ensure they understand minimum rules at work in compliance of the requirements of Appendix M and the appropriate Health and safety Plan

As well as vendor specific roles and responsibilities they must also understand TAP project design and execution requirements that apply to their package(s), and to allocate and manage resources that are adequate to deliver against these requirements.

Ensure the health and safety of TAP Project personnel who may visit their works

Ensure that any of their own personnel who may visit or work at any TAP Project office or field location fully complies with all health and safety arrangements that are in place.
5. RISK ASSESSMENT AND MANAGEMENT

Structured risk assessments must be conducted for all project activities to ensure that hazards which pose potential health and safety risks are identified, assessed and controlled by elimination or reduction to be As Low as Reasonably Practicable (ALARP) and tolerable.

TAP has established a number of risk management procedures establishing the methodology to be used for the various types of risk on the project.

Risk management in this context means a range of activities:
- Hazard identification;
- Risk classification;
- Risk assessment in terms of severity and likelihood;
- Identification of control measures (to eliminate or mitigate the risk);
- Implementation of control measures;
- Assessment of residual risk.

The iPMT / PMCI and contractors shall identify H&S hazards, assess risks and implement appropriate control measures to maximise opportunities and minimise the potential for loss / damage.

These may be in the form of a JSA

Each contractor shall define and adopt a risk management system that meets all legal requirements in identifying, assessing and controlling health and safety hazards, for further details refer to Appendix M section; HSE Risk Management & Risk assessments and Planning activities.

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5.1 Health and Safety Hazards

In addition to the risks normally associated with onshore and offshore pipeline construction, compressor station and associated infrastructure work the following health and safety risks are considered particularly significant and should be considered where applicable by contractors:
- Mountainous terrain with steep slopes (the highest elevation is in the Potom area in the Albanian mountains reaching a height of approximately 1800 m above sea level and the pipeline will cross 9 mountain peaks that have heights exceeding 500 m);
- Remote locations with difficult access;
- Poor weather conditions and marked seasonality;
- Flooding, landslide and collapse caused by weather conditions and or earthquake;
- High levels of criminality in some areas, including organised crime, giving security risks such as theft, intimidation and corrupt business practices;
- Mountainous areas have intermittent telecommunication networks;
- Medical facilities of a suitable standard not easily available because of the remoteness of parts of the route;
- Unexploded explosive devices UXO/ERW may be found during ground disturbance activities;
- Poor road conditions;
- Roads and Bridges to be improved in order to access the pipeline right-of-way (Albania section);
- Numerous pipeline crossings of roads, highways, railway, rivers and existing underground facilities;
- Close proximity to local communities and the impact on their safety and social wellbeing;
- The need to protect numerous water supplies and water courses;
− Driving - Poor driving culture in host countries, local population unaccustomed to heavy traffic in rural areas, poor or dangerous road conditions and bad weather conditions;
− Managing waste in areas with limited facilities for proper disposal.

The above list is not exhaustive but provides indicative areas where health and safety hazards will need to be considered in detail with appropriate plans and mitigation put in place. It does not include general construction related hazards faced by contractor’s workforce such as working at height, excavations, confined space etc as these are more generic and will for part of the contractor’s task specific risk assessments.
6. HEALTH AND SAFETY COMPETENCY AND TRAINING

All project personnel (iPMT, PMCI, Contractor and Sub Contractors) shall be selected and trained and shall be assessed to ensure their ability to carry out their duties in a safe, secure, healthy and environmentally sound manner. All of these provisions will be managed via the respective companies Competency Management procedures.

It is a mandatory requirement that all iPMT personnel involved on the project are required to undergo any legally required training, TAP mandatory online Courses and the TAP Golden Rules training as a minimum.

TAP have developed an annual HSE training program which is applicable to all iPMT personnel

It is a mandatory requirement that all PMCI & Contractor personnel involved on the project are required to undergo any legally required training, and training as defined in their specific training matrix.

The Contractor will ensure all personnel who undertake health and safety critical roles during the execution phase are competent, this will include considerations to experience, knowledge and competency relative to the requirements of the role.

Contractors & PMCI shall ensure that all personnel are suitably trained and all training is recorded on a database which is to be audited by the iPMT as required. As a minimum all supervisory personnel must also have undertaken formal training in supervision, health and safety and intervention.

Trainees will only be allowed onto the worksite if permission is given by the company, are over the age of 18 and is supervised at all times.

All operatives must be qualified and or trained to operate the plant/equipment/machinery they are going to work on.

Contractor shall supply specific training / competence assurance programs for personnel involved in operating plant in particular, cranes, side booms, trenching machines and the like. This programs shall include, but not be limited to, for example specific requirements for those authorised to work on steep slopes e.g. years of previous experience.

For further details refer to Appendix M section; Competency and Training.

6.1 Health and Safety Induction/Mobilisation

It is a mandatory requirement that all personnel (iPMT/PMCI/Contractors/Sub Contractors) involved on the project are required to participate in the TAP project induction. All new starts to the project must have a project Induction within 4 weeks of starting work.

TAP require all personnel to undergo a refresher induction every two year

TAP have developed a contractor specific induction, which has been shared with the contractors training functions. It will be the responsibility of each Contractor to train their personnel – TAP will undertake governance and assurance over the induction delivery. Note; this induction does not replace the Contractors Induction it is to enhance the process.

The induction will include the following and will be regularly updated;

- Project overview;
- TAP Values;
- Code of Conduct;
- HSSE Overview;
- Safety- TAP's Golden Rules;
- Health;
- Emergency Response;
- Security;
- Environment;
- Land use;
- Social responsibilities;
- Unexploded Ordnance (UXO/ERW);
- Cultural Heritage;
- Communications Policy;
- Offshore Working.

Each Contractor will ensure they have developed a suitable induction program which will be approved by iPMT, it will include all applicable Health and Safety Legislation and Regulations, site rules, requirements, instruction and information which could be related to the site activities, further details refer to Appendix M section; Mobilisation / Start-up of the Work
7. COMMUNICATION AND DOCUMENTATION

7.1 Health and Safety Communication/language

The iPMT shall ensure there are systems in place that provide effective health and safety communication to all levels of the project organisation. Health and safety on site shall be performed with regard to linguistic capabilities such that there is always a sufficient mix of language capabilities to be able to communicate fluently in English and the language(s) spoken by the majority of the site personnel.

Published information, signage, and general printed communication to personnel shall be presented in English and all other major languages at the site, for further details refer to Appendix M section; Health and Safety Communication and Language

The iPMT/PMCI and Contractors shall ensure efficient and effective health and safety communication and consultation with all personnel. This will include, but not be limited to, toolbox talks prior to the start of work, site health and safety meetings, newsletters, noticeboards, posters, stand-downs etc.

Work teams shall attend pre-start meetings prior to the commencement of each shift. Pre-start meetings should involve ideally no more than 15 people to encourage open discussion. The content of the meeting shall vary but shall, as a minimum, address the nature of work being undertaken and the associated hazards and risk mitigation.

All personnel attending the Pre-Start meeting are required to sign an attendance sheet. At the pre-start meeting work crews shall also review and sign-on to the task specific JSA or risk assessment and any contractors Permits to Work required for the activity. They should also review and discuss any other Contractor required documentation at these meetings or prior to commencement of work.

The Contractor Project Health and Safety Manager and or Health and Safety Advisors are to attend pre start meetings each day and Contractor Project Management personnel shall attend and provide input.

For further details on communication, refer to Appendix M section; Health and Safety Communication and Language

7.2 Project Meeting Timetable

Structured health and safety meetings shall be held on a weekly, monthly or quarterly basis as detailed below. All structured meetings, with the exception of pre-start meetings, shall be minuted.

Project health and safety meetings are a two-way forum and active participation is expected from all personnel. All general project meetings are required to address health and safety matters as the first agenda item.

<table>
<thead>
<tr>
<th>H&amp;S Meeting description</th>
<th>Frequency</th>
<th>Estimated target duration</th>
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</thead>
<tbody>
<tr>
<td>Pre-start meeting</td>
<td>Daily/before starting new activity</td>
<td>15 – 30 minutes</td>
</tr>
<tr>
<td>Toolbox Talks</td>
<td>Daily</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Contractor H&amp;S and sub-contractor H&amp;S Meetings</td>
<td>Weekly</td>
<td>60 – 120 minutes</td>
</tr>
<tr>
<td>HSE Executive Forum</td>
<td>Quarterly</td>
<td>8 hours</td>
</tr>
<tr>
<td>H&amp;S Country review by Contractor</td>
<td>Monthly</td>
<td>60 – 120 minutes</td>
</tr>
<tr>
<td>Incident Review Panel</td>
<td>Monthly</td>
<td>60 minutes</td>
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</tbody>
</table>
7.3 Executive Team Forum

The project will undertake quarterly health and safety forums. The forums will be chaired by the Project Director or his deputy and will require attendance of executives from all EPC Contractors. The forum will discuss health and safety performance and determine strategy.

7.4 Documentation

TAP and all contractors shall ensure that there are systems in place to ensure provision of effective H&S documentation to all levels of the organisation. All H&S documentation (paper and electronic) shall be available, controlled and auditable.
8. HEALTH AND SAFETY LEGISLATION

The legal requirements and international standards governing Health and Safety at construction sites are summarised in the following sections.

8.1.1 National Legislation

In terms of health and safety, EU COUNCIL DIRECTIVE 92/57/EEC of 24 June 1992, on the implementation of minimum safety and health requirements at temporary or mobile constructions sites, has specific requirements which will be adhered to.

This includes the development and implementation of Health and Safety Plans and preparation of a Health and Safety File, by each EPC Contractor for their individual Scope of work.

This Directive is enacted in Greece and Italy as Member States and in Albania as a Candidate Country.

TAP requires their contractors to establish and maintain a register of TAP legal and other requirements (the “other” requirements include project standards and TAP commitments, TAP codes of conduct and HSSE and CSR policies requirements, etc.).

The contractors shall have processes to ensure that relevant competent individuals can identify, and are kept up to date on, legal and other requirements and that these are passed down through the project to their construction teams.

For further details refer to Appendix M section; Legislation

8.1.2 H&S during Project preparation

EU COUNCIL DIRECTIVE 92/57/EEC stipulates that before construction there must be demonstration of the principles of prevention within detailed design. This is a defined duty holder associated responsibility which TAP have undertaken prior to construction beginning to ensure that risks have been designed out prior to construction, thus minimising the potential risk to workers.

Examples of the activities undertaken on the project to ensure this are:

- Route selection surveys looking at:
  - Hazardous distances
  - Protection strips
  - Safety/Control zones
  - Distances to Residents and Buildings
  - Local rerouting
- HAZOP/HAZID
- Layers of Protection Analysis (LOPA)
- Noise and Acoustic Studies
- Quantitative Risk Assessments (QRA)
- Semi-Quantitative Risk Assessments (SQRA)
- Human Factors Analysis
9. HEALTH AND SAFETY STANDARDS FOR WORKSITE AND FACILITIES

The Contractor shall maintain the workplace in a safe condition and ensure that any areas not up to standard are rectified without delay. If defects which may involve a direct and major hazard are not rectified immediately, work may be suspended. The iPMT and or PMCI will regularly attend all project locations where health and safety standards will be assessed.

The following sections give high level guidance on expectations by all Contractors and further details can be found in Appendix M section; General HSE Standards for all Worksites and Facilities.

9.1 Routes and exits

Traffic routes, escape routes and emergency exits shall be kept constantly accessible so they can be used at all times. Escape and rescue plans shall be available at all locations and posted in prominent locations.

It is a requirement of the EPC Contractors that each temporary access road used on the project is thoroughly reviewed and assessed for safe entry / exit onto the public roads, the iPMT and or PMCI will undertake reviews to ensure this is being adhered too.

Contractor will ensure suitable measures are in place to segregate personnel from moving machinery/vehicles and equipment.

Regular exercises will be undertaken to ensure the effectiveness of the arrangements.

9.2 Protection of non-smokers

All necessary steps shall be taken to ensure that whilst at work non-smoking workers are effectively safeguarded against health hazards posed by smoking.

9.3 Substance abuse

The iPMT has a zero-tolerance policy for persons involved in the project. Zero tolerance applies to the use, possession, sale, manufacture or distribution, by any person involved in the project, of alcohol, illegal drugs, or any other intoxicants which cause impairment at any work site associated with the project.

This includes any work vehicle or equipment

The Project will adopt a for cause (including post incident) testing Policy

9.4 Welfare facilities

All employees shall have access to appropriate welfare facilities of an appropriate standard, these standards are prescribed in Appendix M section; General HSE Standards for all Worksites and Facilities

The iPMT shall undertake frequent formal inspections of facilities to ensure these standards are being maintained.
9.5 Accommodation

Accommodation must be equipped with the following in accordance with the number of people occupying them:

- A suitable living and sleeping area (bed, cupboard, tables and chairs);
- A suitable eating area;
- Suitable sanitary facilities.

Where male and female workers are using the same accommodation separate sanitary and sleeping areas will be provided.

All accommodation will be fit for purpose; the iPMT and or PMCI shall review it prior to occupation and will undertake frequent formal inspections of facilities to ensure standards prescribed above are being maintained to the standard of accommodation. Further details can be found in Appendix M section; General HSE Standards for all Worksites and Facilities.

9.6 Storage of materials and packaging

Materials shall be stored securely and correctly. Where dangerous products have to be stored the iPMT and or PMCI shall be notified in advance. All relevant statutory provisions and regulations are to be complied with including quantity limits.

The method of storing pipe must be agreed with the iPMT/PMCI. It must be stored safely and securely in line with industry best practice.

9.7 Manual Handling

The Contractor shall ensure recognised manual handling techniques are implemented and all individuals on the project are instructed in these techniques. Mechanical lifting and moving equipment i.e. forklifts cranes shall be provided to avoid repetitive lifting of heavy objects and injuries from over-exertion.

9.8 Safety Signage and Barricading

The contractor shall ensure barricading is used to prevent personnel from entering hazardous areas i.e. where persons are working above the area and or there is potential for falling objects or spillage. All barricades shall have an information tag attached or shall be colour coded to identify the nature of the hazard and the person erecting the signage / barricade.

As a minimum, the iPMT expects signage to be used to visually warn personnel of hazards or identify condition requirements i.e. no entry, confined space permit required, etc. Barriers should be appropriate to the risk.

Contractor shall make specific effort for signage covering the Golden rules for Safety. These shall be in pictogram form and be widely displayed especially at the “point of risk” i.e. worksite.

Contractor to ensure that signage is multilingual

9.9 Lone Work

Lone Work / Work in Remote Locations for this purpose shall be defined as any situation or area where a worker is required to undertake work activities where they are isolated from the assistance of others due to time, location or nature of the work.

It is the responsibility of the Contractor to ensure that systems and processes are in place to ensure that workers in these situations are able to:

- carry out all work activities safely without direct support or supervision;
- manage events that are likely to occur when working alone;
- have communication systems in place to obtain emergency assistance if required at any time during the defined task; and
- Establish regular contact with a nominated person.

If the above requirements cannot be adequately addressed the lone works activity shall not proceed.

9.10 Pressure Testing

Pressure testing is performed to verify mechanical integrity of pipeline, vessels, equipment, piping and joints. Testing shall be controlled by written work instructions and managed under the Contractor permit to work system.

During pressure testing, the work area is to be isolated in order to minimise potential exposure of non-involved personnel. Pressure testing using air or gas shall be avoided.

Where pressure testing using gas or air cannot be avoided the Contractor must seek authorisation from iPMT/PMCI in advance.

9.11 Knives

The Contractor shall formally risk assess each activity that traditionally involves the use of knives to perform the task in an attempt to alleviate the need to use knives on the Project. Where cutting can safely be performed with implements other than knives, this method shall be adopted.

- All fixed blade knives are banned across the TAP project and shall not be used.
- Where the use of a knife is necessary, the type of knife shall be governed by the task being performed.
- The use of ‘home made’ knives e.g. sharpened hacksaw blades is strictly prohibited.
- Only trained and competent personnel may use knives appropriate to their work task.
- Where possible, cutting actions shall be away from the body to avoid injury if the knife slips.
- Cut/slash resistant gloves shall be worn with any activities involving knives.

9.12 Use of Angle Grinders

The following standards apply with respect to the use of angle grinders on the project:

- All persons using angle grinders shall be trained and competent in the understanding and application;
- 9” Grinders are not permitted to be used on the project;
- An Angle Grinder - Safe Work Procedure shall be prepared for the project;
- Minimum eye protection for angle grinder use is medium impact resistant safety glasses and face shield or safety glasses and welding helmet if welding;
- Hearing protection shall be worn when using an angle grinder;
- Spark containment is a requirement while using a grinder. Screens, fire blankets etc are to be used
- Grinders are to be unplugged before changing discs;
- Grinders shall not be modified i.e. removal of handles or guards.

9.13 Order, cleanliness and hygiene

The contractor shall maintain his own assembly areas, store, warehouses and accommodation in a tidy and clean state. The iPMT and or PMCI will monitor the order and cleanliness of workplaces.

Housekeeping on site is the responsibility of the Contractor, further details can be found in Appendix M section; General HSE Standards for all Worksites and Facilities.
9.14 Lighting

The contractor shall provide lighting in work areas, a nominal luminance of 500 Lux shall be ensured for construction work carried out at dusk or at night. Further detail can be found in Appendix M section; Lighting Appendix M General HSE Standards for all Worksites and Facilities.

Fire Safety

The contractor shall develop a fire safety plan and suitable fire safety risk assessments for areas under his control. The fire safety plan shall include information such as named qualified fire safety officers, escape routes, emergency phone numbers, schedule for firefighting drills, controls for hot work firefighting equipment etc. For further details refer to Appendix M section; General HSE Standards for all Worksites and Facilities.

9.15 Firefighting equipment

All firefighting equipment used on the project shall be checked, tested and maintained. Records of these tests and inspections shall be kept on site and will be audited by the iPMT and or PMCI, further details can be found in Appendix M section; General HSE Standards for all Worksites and Facilities.

9.16 Medical care, first aid

Each EPC Contractor will provide adequate first aid care for his employees, sub-contractors etc. This will need to be regularly reviewed to ensure acceptable levels of first aid cover are provided.

An evaluation must be performed by a qualified medical expert and this shall form the basis of the site medical facilities plan. The iPMT and or PMCI will review contractor medical care and first aid provision to ensure its suitability.

9.17 Extreme weather conditions

The contractor will ensure suitable plans are in place to control the effects of extreme weather conditions, in particular for adverse weather and extremes faced during both the winter and summer periods.

9.18 Ionising radiation

The contractor must have a suitable management system in place to ensure personal exposure to ionising radiation is minimised and must, at all times be below statutory limits, for further detail relating to the system refer to Appendix M General HSE Standards for all Worksites and Facilities

9.19 Noise and vibration

Ambient noise and vibration levels in the workplace, as well as those as a direct result from work must be considered by the contractor. Statutory limits for noise exposure (generally weighted for an 8-hour exposure period) must not be exceeded. The following hierarchy must be followed:

- Eliminate/Reduction of the noise or vibration;
- Isolation and insulation of the work area from the source;
- Limiting the period of exposure;
- Use of hearing protection PPE.
Contractors will measure exposure of employees through a sampling program.

9.20 Working over water

Where any work that involves a risk of falling into water, the contractor shall reduce the risk with suitable control measures such as;
- The use of buoyancy aids for personnel;
- The provision of rapid rescue from the water;
- Suspension of work when weather and conditions could make falling more likely and/or delay rescue;
- The use of man riding baskets to transfer personnel will not be allowed on the project.

9.21 Heavy lifts, Lifting Equipment and accessories

Contractors shall develop lifting plans for all heavy lifts. The loading of pipe from pipe carriers to the lay barge shall avoid the transit of the load over vessel cabins and main vessel walkways. In particular, pipe loading and unloading in marshalling yards and along pipeline routes will be managed with detailed method statements and risk assessments all of which must be provided to the IPMT for review. Vacuum lifting shall be utilised for bulk line pipe handling further to a robust risk assessment.

The use of cable cars or cable cranes shall only be used after detailed engineering design by a competent body and independently certified.

Hands free lifting shall be the norm using push-pull sticks and tag lines.

For compressor stations, a generic lifting plan shall be required for all lifts, when the load to be lifted exceeds 10 tonnes, the load to be lifted exceeds 80% of rated load chart for crane, the load shall be lifted with two cranes. Notwithstanding the above the contractor shall develop a dedicated project lifting and rigging procedure in order to regulate such activities. The contractor shall have formal arrangements for controlling lifting equipment and accessories, for further details refer to Appendix M section; General HSE Standards for all Worksites and Facilities.

9.22 Pipe Conveyors and welding equipment

Moving machinery and equipment poses significant personnel risk during pipe handling, beveling and welding. Risk mitigation shall consider the following as a minimum;
- Training and competency of personnel;
- Clear line of site by machinery operators;
- Good illumination;
- Dedicated walkways;
- Barriers and signage;
- Lock out procedures during cleaning and maintenance of machinery;
- Specialist PPE.

9.23 Field Joint Coating

Risk assessments shall be undertaken for the field joint coating process. Particular attention shall be paid to the risks associated with accessing the welded pipe, uncontrolled pipe movement, manual handling and the exposure to hazardous chemicals during the mixing and application of the coating.
9.24 Personnel requirements

Everyone working on the project must be fit for work; it is the responsibility of TAP, PMCI and each EPC contractor to ensure for their respective personnel and personnel of their sub-contractors have been assessed as fit and any illness or medication that may affect performance have been declared.

These assessments will be reviewed and audited by iPMT medical professionals.

9.25 PPE requirements

The project has identified the minimum PPE standards below; the site may only be entered if PPE prescribed below is worn:
- Safety footwear (boots S3 type);
- Hard hat;
- High Visibility vest;
- Full length clothing;
- Light eye protection;
- Hearing protection (where required);
- Gloves - specialist gloves shall be provided based upon task / risk assessment;
- Life vest (where required).

Additional, or more specific PPE, shall be determined by each contractor following an assessment and the risks associated with the work activity.

9.26 Construction Machinery, tools and equipment

All equipment used on the project shall be fit for purpose, in good order mechanically. All tools shall be inspected before each use. A planned preventative maintenance program must be in place for machinery, equipment and tools. Pre-use inspections should also be undertaken and more thorough examinations must take place in line with legislative requirements (as a minimum). All damaged and defective equipment must be quarantined and removed from site or disabled immediately.

All construction machinery, tools and equipment shall be equipped with an inspection sticker showing the date of next inspection, equipment which has passed the date on the test sticker will be taken out of service until an inspection has been carried out and the equipment recertified.

The iPMT and or PMCI shall undertake frequent audits and inspections focusing on construction machinery, tools and equipment as part of an audit plan, for further details refer to Appendix M section; HSE Standards for Safe Work in Specific Areas.

9.27 Storage, handling, transporting of explosives

All blasting activities must be the subject of a thorough risk assessment following any specific Country legislative requirements.

The EPC Contractor is required to develop a robust procedure which explains in detail control measures they will put into place to manage the handling and storage of explosives.
9.28 Helicopter use on the Project

The Project has set the minimum requirement for TAP and its contractors to provide safe and effective aviation transport services via helicopter to include; personnel transportation, equipment transfer, aerial survey, emergency medevac, and cargo movements. These requirements shall be adhered too by all EPC contractors.

9.29 Mobile telephone use

Contractors must ensure that the use of mobile telephones is controlled across all project locations. The distraction posed by taking and receiving calls when on a construction site or ROW need to be addressed through suitable awareness programs.

Once the project moves into pre-commissioning and commissioning stages the use of mobile telephones in restricted areas will be prohibited, this could include the whole of the compressor station or other significant areas where the use of telephones may pose a risk.

9.30 Segregation of Personnel & Plant

The Contractor must ensure that suitable control measures are adopted to ensure that plant and personnel segregation is considered at all stages of construction. These control measures must be communicated to all personnel and the contractor must monitor these to ensure they are effective.

9.31 Line of Fire

The Contractor will use their tried and tested processes and systems to ensure line of fire incidents are controlled. Contractors will ensure that line of fire incidents and control measures are discussed frequently via toolbox talks and other literature to ensure they remain in the forefront of all activities.
10. TAP GOLDEN RULES FOR SAFETY

TAP has developed 8 Golden Rules for Safety; these have been identified as activities that historically have proven to be high risk activities resulting in significant incidents within the industry. At TAP we believe all incidents are preventable and our goal is zero harm. The TAP Golden Rules for Safety provide specific guidance as to how we can achieve this and are summarised below.

10.1 Permit to Work

Certain works such as (but not limited to) confined space entry, excavations, electrical isolations hot work or other hazardous operations and non-routine activities will require a permit to work.

The permit to work must:
- define the scope and location of the work;
- identify the duration of the work;
- confirm control measures required;
- identify links to other ongoing work (SIMOPS);
- be integral to managing work safely;
- signed and authorised by the responsible persons.

The Contractor shall ensure they operate a suitable permit to work system to ensure the works are carried out in a safe manner, for further details on the iPMIT requirements referring to permit to work can be found in Appendix M Permit to Work.

10.2 Ground Disturbance

Man-made earthworks such as trenches, cavities, depressions or excavations of any kind should not proceed unless:
- A hazard assessment has been conducted by a competent person;
- All underground utilities, cables and pipework have been identified;
- If the excavation is considered a confined space an appropriate permit must be issued;
- Ground movement is controlled in order to prevent slip or collapse;
- Access is controlled;
- A rescue plan exists;
- The excavation is monitored for change.

The Contractor shall ensure they manage ground disturbance with their tried and tested systems to ensure the works are carried out in a safe manner, further details on iPMIT requirements around ground disturbance can be found in Appendix M section; HSE Standards for Safe Work in Specific Areas.

10.3 Confined Space Entry

Any work inside an excavation deeper than 1.5m will be considered a confined space and regulated accordingly. The contractor shall ensure where possible and practicable, confined spaces shall be eliminated through design. Where this is not practicable entry into any confined space must not proceed unless:
- There are no practical alternatives to entry;
- All sources of energy to the space are isolated;
- The atmosphere is properly tested;
- A complete tool box talk is conducted;
- Rescue plans and equipment are available;
- A standby man is appointed;
A permit to work is issued;
Unauthorized entry is prevented.

Any activity supposed to be performed into the Pipeline shall be foreseen in advance, disciplined with specific safety precautions, authorised by TAP and strictly monitored.

Further details on IPMT requirements around confined space entry can be found in Appendix M section; HSE Standards for Safe Work in Specific Areas

10.4 Working at Height

Working at height is working in any place where a person may be exposed to a fall which could result in an injury to that person. The Contractor shall minimise the need to work at height; if the need cannot be eliminated the Contractor shall ensure that Safe Work Systems are established and implemented.

Working at heights above 2m (where no fixed platform or scaffold exists) must not proceed unless:

- A properly anchored fall arrest system is used;
- The system achieves 100% “tie off” at all times;
- A rescue plan and rescue equipment are available;
- Fall arrest equipment is properly inspected and certified;
- The risk of dropped objects has been fully assessed.

Further details on IPMT requirements around working at height can be found in Appendix M section; HSE Standards for Safe Work in Specific Areas

10.5 Energy Isolation

For all energy isolations, whether electrical, mechanical, or hydraulic the contractors shall ensure they have safe systems of work that incorporate the following:

- There is an approved method, to isolate and discharge the equipment and an approved method for re-energisation;
- Isolations are locked out and properly tagged;
- Only competent personnel perform isolations;
- A permit to work is in place;
- The isolation is tested and deemed effective;
- The isolation is regularly monitored;
- Particular attention should be paid to overhead power & telephone lines.

Further details on IPMT requirements around lifting operations can be found in Appendix M section; HSE Standards for Safe Work in Specific Areas

10.6 Lifting Operations

All lifting equipment and lifting gear (load suspension equipment and slings) shall meet the applicable standards and regulations Lifting operations using cranes, hoists or other mechanical methods of lifting must not proceed unless:

- A competent person has assessed the lift and determined the appropriate method and equipment;
- Everyone involved is fully competent in his or her tasks;
- Lifting devices are properly certified and inspected as required;
- All safety devices on lifting equipment are operational;
- Clear lines of communication exist;
- The area is properly barriered to prevent unauthorized access.
10.7 Driving

Driving has been identified as one of the most significant risks on the project. To ensure the safety of project personnel and members of the public the project has a requirement for all project vehicles that transport personnel to be fitted with IVMS.

The IPMT have developed an accountability program for breaches against the driving standards. This model is described as the Zero Tolerance Rules.

These rules are;

- Tampering with your IVMS key or swapping keys with someone else
- Driving under the influence of prohibited/illegal drugs or alcohol (BAC 0.00)
- Driving for more than 2 hours and 15 minutes without a rest break of a minimum of 15 continuous minutes
- Using your phone (including hands free) while your vehicle is in motion
- Not wearing a seatbelt while your vehicle is in motion
- Driving > 10km/hr over the legal speed limit

Non-compliance with the above may result in disciplinary procedures being followed following Investigation.

Each Contractor will prepare Weekly and Monthly reports relating to driver behaviours – these reports will identify drivers who frequently breach the Zero Tolerance rules and action taken.

The IPMT and PMCI will offer governance and assurance over these reports.

All project drivers shall have attended a recognised approved defensive driver-training programme and where required off-road training.

The standard of project vehicles to transport personnel shall, be agreed with the IPMT; they will follow OGP guidance set out in GN 14 Land transportation safety recommended practice Vehicle Specification and up fitting.

All categories of vehicle (inclusive of plant) shall not be operated or driven unless:

- Safety features are fitted and operational;
- The vehicle is properly maintained;
- The number of passengers does not exceed the manufacturers maximum;
- Loads are secure;
- All occupants wear seatbelts;
- Drivers are appropriately trained and licensed;
- Drivers are not under the influence of alcohol or drugs;
- The journey has been risk assessed, a journey management plan is in place and driver fatigue is considered;
- Operating mobile phones and satellite navigation systems is forbidden when driving, this includes making and receiving calls and any other function of the phone.

The Projects has put in place Journey Management Centres (JMC) where all driving associated with the Project shall be monitored. It is a project requirement that all journeys in excess of 2 hours are subject to an approved journey management plan, the journey management plan must be approved prior to travel.

All night journeys must be planned and the subject of a specific risk assessment, where these journeys are deemed an emergency then confirmation without a risk assessment can be sought from the
Further details on iPMT requirements around transport and traffic can be found in Appendix M section; HSE Standards for Safe Work in Specific Areas.

10.8 Hot Work

Hot work shall not proceed unless:

- All flammable or combustible materials have been isolated, removed or protected from sources of ignition;
- Atmospheric air testing shall take place when necessary;
- Emergency response plans and equipment are in place and available;
- The work is properly permitted.

Further details on iPMT requirements around hot work can be found in Appendix M section; HSE Standards for Safe Work in Specific Areas.

References and supporting documents:

<table>
<thead>
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<th>Reference</th>
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<tr>
<td>TAP-HSE-ST-0022</td>
<td>Golden Rules for Safety</td>
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<tr>
<td>TAP-HSE-PR-0016</td>
<td>Personal Protective Equipment (PPE) Standards</td>
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<tr>
<td>TAP-HSE-PR-0025</td>
<td>TAP Safe Driving Policy and Guidelines</td>
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<tr>
<td>CAL00-PMT-000-S-TPA-0004</td>
<td>Journey Management Plan</td>
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11. COMMISSIONING SAFETY

11.1 Transitional safety

The phase during which the main Construction activities are nearing completion through to the end of the commissioning phase is termed the Transitional Safety Phase. During this phase, the sites or pipeline sections will transition from a regime characterised by personal safety management through to a Major Hazard facility.

Careful and structured planning will be implemented to ensure that:

- All hot work is completed ahead of IoH
- All pressure envelopes are leak tested and certified to be leak free
- All SCE testing is completed and found to be functionally compliant with the design requirements
- Changes to emergency access and egress, including muster points have been evaluated in the context of transition into a Major Hazard Facility. Any changes have been communicated to all personnel and evacuation exercises have been completed.
- Remaining construction work including punch list clearance is quantified and deemed within limits to proceed into the Commissioning phase
- A SimOps management process is implemented and co-ordination between adjacent Commissioning Segments, Countries and the overall project is functional
- The TAP SSoW processed are developed and all personnel trained and deemed competent in their use
- All protocols providing co-ordination between TAP and Gas Suppliers are in place and understood by affected parties
- All License to Operate pre-requisites are in place
- Positive isolation between completed and non-completed segments is in place, tested and deemed to be effective
- Emergency response plans are in place, personnel trained and deemed competent
- All Internal Verification of Readiness and Pre-start-up safety reviews are completed and actions closed to allow IoH.

A Commissioning Safety Plan will be developed which provides a detailed account of how the Live site transition will be achieved.

During the construction and Precommissioning phase of the project (prior to energisation of any system) the Contractor SSoW processes are in use.

At the point of energisation of the first system on the facility, the Contractor SSoW remain in use but are enhanced to meet the standard of TAP SSoW. A gap analysis between Contractor and TAP SSoW will be conducted 4 months before planned commencement of the start of Precommissioning on any facility.

The Contractor SSoW will be reviewed against TAP SSoW Standards and approved for use no later than the commencement of Precommissioning activities on any facility.

Enhancements to the Contractor SSoW will primarily be focused in the following areas:

- Introduction of the requirement for one permit per activity per system
- Introduction of TAP Issuing Authorities to support the Contractor organisation
- Introduction of rules regarding re-validation requirements for permits
- Introduction of rules regarding local attendance of Issuing Authorities and the person supervising the activity prior to signing on to the permit
- Expansion of the 'Barrier management' system to include Commissioning activities
- Introduction of Livening Up Notification durations
- Introduction of daily SimOps meetings
- Enhancement of 'Gas Testing' processes to manage additional risks from energised systems
- Enhancement of the LOTO system to include commissioning isolations

At the point of 'Introduction of Hydrocarbons' the TAP SSoW will be used.

## 11.2 SimOps

SimOps is the systematic co-ordination and management of activities that have the potential to conflict creating an unplanned or unwanted outcome that impacts on safety or schedule. Processes will be developed to manage SimOps where a matrix of permissible combined operations will be prepared and will form the backbone of the Simops process.

The complexity of working with multiple contractor interfaces across three countries requires management and co-ordination of SimOps at three distinct levels as follows:

- Within a facility or pipeline section the Simops is coordinated at site level with the main focus being on conflicting activities within the site boundary or pipeline section. The Country Simops Co-ordinator will manage the day-to-day activities including pre-notification of energisation of systems or sub-systems (e.g. Livening Up Notices).

- Within a country where a single or multiple sections (facilities or Pipelines) may be in various stages of completion with potentially conflicting activities between the interfaces within the country. The Country SimOps Co-ordinator will manage the day to day activities ensuring the conflicts are managed in a safe and effective manner.

- Pan-project SimOps covers the scenarios where activities across countries require to be coordinated for safety reasons. The Project SimOps Co-ordinator has the responsibility of managing the overall implementation of SimOps across the entire scope, liaising with each country SimOps co-ordinator on a daily basis.

## 11.3 Commissioning Safety Management

### Pipeline sections

The responsibility for Commissioning of the pipeline sections transitions to TAP after the Contractor has successfully completed all Precommissioning activities and the pipeline section is clean and dry to a dew point of -20OC. At the point of transition from Contractor to TAP, the responsibility for Safety Management is with TAP. The Contractor SSoW will be utilised until Handover from Contractor to TAP, at which point the TAP SSoW is introduced.

### Stations

For Station scope, the Contractor has responsibility for safety management up to the point of Introduction of Hydrocarbons. During the Precommissioning phase of the Station, the Contractor will use their SSoW.

Figure 7. outlines the specific arrangements in place during the various stages of commissioning of the project.
Process Safety Management

Standards and procedures will be developed to manage the process safety aspects of Commissioning and early operations. These Standards and procedures will cover:

- Management of overrides
- Alarm management
- Equipment isolation procedures
- Barrier Effectiveness assessment and management

(Figure 11.1 Key Contractor/TAP transition arrangements)

### References and supporting documents

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<tr>
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<th>Commissioning Strategy Plan</th>
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12. CONTRACT MANAGEMENT

The iPMT shall be responsible for the selection of contractors, suppliers and services to ensure that they comply with TAP H&S requirements.

12.1 Alignment of Systems

A high-level KO meeting shall be held with each EPC contractor where health and safety performance objectives expectations are re-iterated. This will be followed by a further specific focused health and safety meeting where a full review of Appendix M and other H&S deliverables shall be undertaken with the EPC Contractor. At this meeting, any clarifications required will be addressed. All post mobilisation deliverables will be actioned and tracked against agreed timescales.

Weekly iPMT\EPC Contractor clarification meetings will be held.

If deemed necessary a gap analysis will be undertaken in conjunction with the EPC contractor and the iPMT to ensure the EPC Contractors Health and Safety Management System principles are aligned with the iPMT expectations and requirements as specified in Appendix M. This could take the form of a mini review or workshop.

The Contractor will present their health and safety plan for approval to TAP.

12.2 Management of Contractors

Each Contractor shall ensure that the requirements identified in Appendix M are communicated to all sub-contractors and suppliers appointed on the project. The iPMT have the right to participate in the evaluation of the contractor health and safety capabilities and approve any sub-contractor accordingly. For further details refer to Appendix M section; Sub Contractor Management.
13. CRISIS AND EMERGENCY MANAGEMENT

Each contractor and the PMCI shall ensure they maintain fit for purpose emergency response capability. This capability shall be established to ensure that there are effective responses to all credible emergencies and incidents for the protection of workers and the public.

The specific Emergency Response Plans will identify and document all training, equipment, resources/manpower and facilities. It will set out the need to respond to emergencies. The robustness of emergency response plans will be regularly tested through exercises. For further details refer to Appendix M section; Emergency Preparedness and Response.

Where required the contractor’s ERP will interface with the iPMT ERP.

Each TAP Country location (Albania, Greece & Italy) will prepare an Appendix to TAP- HSE-PL-0007 where Country Specific telephone numbers, responsibilities etc will be recorded.

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<th>References and supporting documents</th>
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<tr>
<td>TAP-HSE-ST-0011 Emergency Response Strategy</td>
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<tr>
<td>TAP-HSE-PL-0007 Emergency Response Plan</td>
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14. PERFORMANCE MEASURING AND MONITORING

14.1 Leading and Lagging Indicators

The iPMT have developed a suite of leading and lagging indicators which will be completed by each Contractor/PMCI and returned no later than 3 days after the last Sunday of each month for the month previous. This data will be reviewed by the Country H&S Manager or PMCI and issued to the iPMT Health and Safety Analyst to collate, for further details refer to Appendix M section; HSE Performance Reporting.

14.2 Health and Safety Management Inspections

The iPMT/PMCI will develop and implement across each Country location (including offshore) a Health and Safety Management Inspection schedule. This inspection/tour schedule will form one of the key measures of TAP’s management commitment to health and safety.

The inspections should be formally recorded and any corrective actions identified during the inspections tracked to ensure suitable close out.

Any shared learning that would affect how other areas manage health and safety must be communicated across the iPMT and our Contractors.

It is a requirement of each contractor and the PMCI to establish a similar inspection/tour schedule, for further details refer to Appendix M section; HSE Audits, Reviews and Inspections.
14.3 Behavioural Based Safety Program

The iPMT together with our Contractors and PMCI will implement a Behaviour Based Safety observation process for the purpose of ensuring that all Supervisors and Managers are competent in identifying and mitigating unsafe acts and conditions in the workplace and enforcing positive behaviours in the workforce.

It will be the responsibility of the Contractor to input their BBS cards into the EasyPlant system in a timely manner as this will form part of the monthly leading and lagging indicators.

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15. INCIDENT MANAGEMENT REPORTING AND ANALYSIS

Reporting, investigating, analysing, follow-up and sharing of information from incidents (including near misses, high potential incidents and first aid treatments) shall be conducted in accordance with the Incident Reporting, Investigation and Analysis Procedure for the project.

Findings from incident investigation shall be used to establish control measures to minimise impact and prevent recurrence.

Timeline for inputting into Synergi.
Within 24hrs – the contractor shall upload preliminary category 1 incidents directly into Synergi.
Within 12hrs – the contractor shall complete the Incident report template for preliminary categories 2, 3, 4 & 5 and issue to in-Country H&S Manager or ESMS Manager.

The in-Country Manager will review and confirm the actual and potential severity category and the incident classification (Medical treatment etc) and return the template to the contractor to upload/complete in Synergi.

Incidents category 1
Incidents category 1 and near misses shall be communicated via email to TAP H&S Country Managers within 24 hours of incident.

Incident category 2 or 3
Incident category 2 or 3 shall be reported immediately to the respective TAP Duty Manager via a call.
Within 24 hours, the Incident Management Team Leader /Country Manager will communicate to the TAP incident notification organisation via email address (email address intentionally blank).

Actual or Potential Incident severity category of 4 or 5
All recordable incidents with an incident severity category of 4 or 5 (or with the potential category 4 or 5) shall be notified immediately to TAP via call to the TAP Duty Manager.

Within 12 hours the Incident Management Team Leader /Country Manager will communicate to the TAP incident notification organisation via email address (email address intentionally blank).

The project will undertake Incident Review Panels (IRP) for selected incidents where learning can be taken; these will be scheduled as per the TAP Health and Safety Incident Review Panel procedure.

Lessons learned
For actual Category 3, 4 and 5 incidents and HIPO (4-5) a lesson learned report will be prepared and distributed no later than 28 days after the initial incident.

This will contain the key learnings from the incident and recommendations to prevent recurrence

Close out date for all investigations is 21 days

For further details refer to Appendix M section; HSE Incident Management.

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<td>TAP-HSE-PR-0011</td>
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<td>CAL00-PMT-000-S-TPA-0003</td>
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16. AUDIT

During the phases of Construction, Pre-commissioning and Commissioning each EPC’s health and safety activities shall be audited by the iPMT against the degree of effectiveness and efficiency of the System.

The System performance monitoring processes seek demonstration that:

- Standards, local and national legislation and contractual requirements have been established;
- Risks have been managed;
- Coordination, communication and monitoring of HSSE sensitive activities have been put in place;
- Resources have been assessed in the right timeframe;
- Responsibilities have been set up and compliance with appendix M and the contractors H&S plan is being adhered to.

There is a requirement for each iPMT Country H&S Manager to ensure an audit programme in place that reflects the project scope of work and risks.

The iPMT Leadership Team will be informed of major audit and inspection findings and status of mitigation measures.

The Audit schedule will be developed annually.

There is also a requirement for each EPC contractor to implement its own inspection/audit programme and specifies the schedule and responsibilities for performing the audits/inspections by the project site organization. For further details refer to Appendix M section; HSE Audits, Reviews and Inspections.
17. MANAGEMENT REVIEW

Periodic H&S Reviews shall be undertaken. Such reviews shall seek to determine the effectiveness of the project H&S Management Plan and how well it is being implemented on the project.

The IPMT shall arrange H&S Reviews of the project as appropriate to the project stage (but at least annually) to assess the effectiveness of the H&S Strategy and H&S Management Plan implementation.

The results from project H&S Reviews shall be included in the overall TAP HSSE Management Review which is conducted annually.