

# **TPTI APPROVED STANDARDS**

**Basic Onshore Safety Training  
(BOnST)**

**and**

**Further Onshore Training  
(FOnT)**



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## GLOSSARY

ABC	Airway Breathing Circulation
ALARP	As low as reasonably practical
ACOP	Approved Code of Practice
BOnST	Basic Onshore Safety Training
BOP	Blow-out Preventer
CAA	Civil Aviation Authority
COSHH	Control of Substances Hazardous to Health
CO2	Carbon Dioxide
CPR	Cardio Pulmonary Resuscitation
CR	Central Register
EBS	Emergency Breathing System
ESD	Emergency shutdown
DMF	Department of Minerals Fuels
FOnT	Further Onshore Training
GPA	General Platform Alarm
HASAWA	Health & Safety at Work Act
HELP	Heat Escape Lessening Position
HSE	Health & Safety Executive
HS&E	Health, safety and environment
H2S	Hydrogen Sulphide
IADC	International Association of Drilling Contractors
MHSWR	Management of Health & Safety at Work Regulations
MSDS	Material Safety Data Sheet
OIM	Onshore Installation Manager
OPITO	Standards & Approvals function of Cogent Sector Services Limited (sets international standards)
PFEER	Prevention of Fire, Explosion and Emergency Response Regulations
POB	Personnel onboard
PRfS	Personal responsibility for safety
PPE	Personal Protective Equipment
PTW	Permit to Work
SMS	Safety Management System
TOFS	Time Out for Safety

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<b>BASIC ONSHORE SAFETY TRAINING</b>
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## **Introduction**

This standard was developed by TPTI in conjunction with a workgroup representing the interests of the onshore oil & gas industry in Thailand

The rationale behind this development was the need for a “fit for purpose” standard to meet the requirements for basic onshore safety training in Thailand. The key objective was to establish a basic competency based training standard, appropriate Thailand.

This Document introduces and describes the core competence and safety training requirements relative to the onshore Oil & Gas Industry in Thailand. It is envisaged that by achieving the core competence requirements within the TPTI structure of approved training providers and central recording system, personnel will only require additional training when operating outwith Thai waters and no duplication of previous training will occur.

It is recognised that a major objective is to prevent incidents occurring and if they do occur to be able to respond effectively to them. The training establishment should recognise that this is only part of a broader training programme. There will also be company and installation specific inductions and emergency response training of which most will be conducted onshore on a regular basis as onshore drills and exercises.

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<b>BASIC ONSHORE SAFETY TRAINING</b>
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## **A.1 Target Group**

This programme is designed to assist in meeting the initial onshore safety and emergency response training and assessment requirements for personnel new to the onshore oil and gas industry in Thailand.

### **This BOnST Standard contains:**

Learning Outcomes  
Training Programme Content  
Statements on:  
Assessment  
Further Training/Assessment

### **The standard consists of the following modules:**

Safety Induction  
Basic first Aids  
Firefighting and Self Rescue

## **A.2 Delegate Prior Achievement**

No prior achievement required

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## Basic Onshore Safety Training

**The responsibility for delivering and assessing this programme rests with TPTI Approved Training Providers.**

### A.3 Learning Outcomes

During the BOnST programme delegates will gain a basic level of understanding and an awareness of safety and emergency response on onshore installations.

They will be required to demonstrate their skills and the level of knowledge and understanding of the following key areas.

#### SAFETY INDUCTION

**Delegates will explain/identify:  
(testing knowledge)**

1. Onshore hazards, their control and consequences.
2. Waste disposal/environmental awareness.
3. How onshore safety is regulated.
4. How onshore safety is managed.
5. Procedures for prescribed medicines onshore.
6. Alcohol and substance abuse policy.
7. PPE requirements.
8. Procedure for reporting incidents, accidents and near misses.
9. The role of the Medic.

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## Basic Onshore Safety Training

### A.3 Learning Outcomes (continued)

#### BASIC FIRST AIDS

**Delegates will demonstrate practically: (testing knowledge)**

**Give an explanation and demonstration of:**

- a. First aids overview.
- b. Raising the alarm.
- c. Appropriate behaviour at the first aid scene.
- d. Immediate first aid actions suitable for use prior to the arrival of the medic / first-aider.
- e. How to carry patients with the stretcher

**Delegates to demonstrate and practise:**

- f. Immediate first aid actions including ABC.
- g. How to carry patients with the stretcher.
- h. How to use SCBA.

#### FIREFIGHTING AND SELF RESCUE

**Delegates will demonstrate practically:  
(testing skills and knowledge)**

1. Use of appropriate hand held portable fire extinguishers.
2. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
3. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
4. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

\* smoke hoods to be used in cosmetic smoke only

\*\*This may be achieved by conducting exercises in darkness or by using “blacked out” smoke hoods

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## Basic Onshore Safety Training

### A.4 Training Programme

The training programme outlined below will assist delegates to meet the stated training outcomes.

In order to make efficient use of time and ensure effective learning, the three phases of explanation, demonstration and practice should be integrated wherever practicable.

Full use should be made of visual/audio-visual aids and course handout materials.

**Practical exercises should be designed and delivered solely to meet these standards, and must not place on delegates any physical or mental demands other than those required to meet the standard.**

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## Basic Onshore Safety Training

### A.4 Training Programme (continued)

#### SAFETY INDUCTION

##### 1. Industry Overview and Installation Overview

###### Give an overview of:

- a. Onshore oil and gas activities.
- b. Formation, finding and exploitation of oil and gas.
- c. Types of installations
  - drilling
  - production - oil and gas/gas
  - construction
  - accommodation
  - specialist vessels.
- d. The onshore environment.

##### 2. Onshore Hazards

###### Give an explanation of:

Onshore hazards and comparative risk levels

e.g.

- pressure hazards
- motion hazards
- chemical hazards
- electrical hazards
- gravity hazards.

##### 3. Managing Onshore Safety

###### Give an explanation of:

The multiple barriers model and systems in place to prevent hazards from contacting targets including:

- safe systems of work
- personal responsibility for safety
- safety observation programmes.

##### 4. Controlling Onshore Hazards

###### Give an explanation of:

The hierarchy of control and how control measures are implemented onshore; discuss the consequences of failure to control the risks.

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## Basic Onshore Safety Training

### A.4 Training Programme (continued)

#### SAFETY INDUCTION (continued)

#### 5. Regulating Onshore Safety

##### Give an explanation of:

How onshore safety is regulated e.g.

- legislation applicable
- legislative requirements
- legal responsibilities
- role of DMF and other safety control Government agencies
- documenting the SMS

#### Industry Safety Aims and Visions

##### Give an explanation of:

Industry's expectations of personal safety behaviour e.g.

- Industry vision in safety aspects and manners
- Expected Thailand standards for safety
- Behavioural safety tools

**\*The Trainer's Guide for Basic Onshore Safety Training in Appendix 1 includes further information relevant to this topic.**

#### 6. Living and Working Onshore

##### Give an explanation of:

Fitness requirements and medical standards

The procedure for taking prescribed medicines onshore.

Alcohol and substance abuse policies.

##### Onshore routines:

reporting in  
installation induction  
cabin/laundry/bond  
recreation /smoking  
getting on with others

##### Working routines:

procedures  
work authorisation  
maintaining a safe workplace  
personal protective equipment  
waste disposal  
the right to stop unsafe work

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## Basic Onshore Safety Training

### A.4 Training Programme (continued)

#### SAFETY INDUCTION (continued)

#### 6. Living and Working Onshore (continued)

##### Give an explanation of:

Involvement in safety e.g.

- observation systems
- Permit to Work (PTW)
- toolbox talks
- safety meetings
- drills & exercises
- additional duties

Communicating safety, including:

- lines of communication

Injuries and illness:

- reporting incidents, accidents near misses and illnesses
- the role of the medic
- investigation
- preventing a recurrence
- support available to relatives in the event of illness/injury/major incident/evacuation

**A Trainer's Guide for Basic Onshore Safety Training is shown in Appendix 1**

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## Basic Onshore Safety Training

### A.4 Training Programme (continued)

#### Basic First Aids

##### 1. Emergency First Aid

###### Give an explanation and demonstration of:

- a. Raising the alarm.
- b. Appropriate behaviour at the first aid scene.
- c. Immediate first aid actions suitable for use prior to the arrival of the medic / first-aider.
- d. How to carry patients with the stretcher.

###### Delegates to demonstrate and practise:

- e. Immediate first aid actions including ABC.
- f. How to carry patients with the stretcher.
- g. How to use SCBA.

**A Trainer's Guide for Basic Onshore Safety Training is shown in Appendix 1.**

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## Basic Onshore Safety Training

### A.4 Training Programme (continued)

#### FIREFIGHTING AND SELF RESCUE

##### 1. Firefighting Onshore

###### Give an overview of:

- a. The common causes and nature of fires onboard onshore oil and gas installations.
- b. Raising the fire and emergency alarm.
- c. The purpose of fixed fire and gas detection and firefighting systems; the actions to take in areas where these systems are deployed.
- d. Hydrogen Sulphide; the hazards, methods of detection and the actions to take in the event of discovery.

**This is in advance of the information detailed during installation safety briefings**

###### Give an explanation and demonstration of:

- e. The actions on discovering a fire.
- f. The operation of hand held portable fire extinguishers, small bore fire hose reels, fire blankets and their use against Class A and B fires.

###### Each delegates to practise and demonstrate:

- g. Raising the alarm on discovery of a fire.
- h. The operation of water (or foam), dry chemical and CO2 hand held portable fire extinguishers in extinguishing Class A and Class B fires as appropriate.

**Note: Delegates may practice operation of small bore fire hose reel and/or fire blanket if requested and if sufficient time is available.**

##### 2. Self Rescue

###### Give an explanation and demonstration of:

- a. Self rescue techniques with and without respiratory protection from areas which are being subjected to smoke and heat.

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## Basic Onshore Safety Training

### A.4 Training Programme (continued)

#### FIREFIGHTING AND SELF RESCUE (continued)

##### 2. Self Rescue (continued)

- b. Small group escape techniques with respiratory protection from an area which is being subjected to smoke and heat.

##### Delegates to practise and demonstrate:

- c. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
- d. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
- e. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

\* smoke hoods to be used in cosmetic smoke only

\*\*This may be achieved by conducting exercises in darkness or by using “blacked out” smoke hoods

**A Trainer’s Guide for Basic Onshore Safety Training is shown in Appendix 1**

### A.5 Duration of Training

**The optimum ‘contact time’ for this training and assessment is seen as 10 hours 45 minutes.**

The Safety Induction part of this module is 100% theory.

It is suggested that the ratio of 60% theory to 40% practical is appropriate for the remaining parts of the module.

Where this training is part of a programme of longer duration:

- the total contact time per day shall not exceed 8 hours.
- the total training day shall not exceed 10 hours

The total training day includes

- contact time
- refreshment and meal breaks
- travel between training sites where applicable.

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## **A.6 Assessment**

Delegates will be judged against the learning outcomes using direct observation and oral and/or written questions as appropriate.

Training Providers should have a policy and procedure in place for dealing with persons not meeting the stated learning outcomes.

## **A.7 Further Training/Assessment**

The initial BOnST certificate is valid for a period of three years. Thereafter, further training should be undertaken. The Further Onshore Training (FOnT) is conducted at TPTI Approved Training Centres and is undertaken by all onshore workers and should be completed every three years.

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## Further Onshore Training

**The responsibility for delivering and assessing this programme rests with TPTI Approved Training Providers.**

### Further Onshore Training

The information in this section is for Trainers. It provides the requirements, outcomes, content and guidance for further training. This programme will enable those being trained to acquire the necessary knowledge and skills that underpin the tasks to be performed.

## B.1 Target Group

This programme is designed to meet the further onshore safety and emergency response training and assessment requirements for personnel working in the onshore oil and gas industry.

### This FOnT Standard contains:

Learning Outcomes  
 Training Programme Content  
 Statements on:  
     Assessment  
     Further Training/Assessment

### The programme consists of the following parts:

Safety Induction  
 Basic first Aids  
 Firefighting and Self Rescue

## B.2 Delegate Prior Achievement

Persons who have previously attended a TPTI approved BOST, FOT, BOnST or FOnT and hold a current certificate; alternatively holders of a current OPITO approved T-BOSIET, T-FOET, BOSIET or FOET certificate.

In the case that, persons who hold a current certificate of BOST, FOT, BOnST, FOnT, T-BOSIET, T-FOET, BOSIET or FOET want to work for onshore oil and gas industry in Thailand, they shall be deemed to further study on uncovering issues on SAFETY INDUCTION over those certificates and also finish the paper examination with the minimum of 70% screening criteria.

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## Further Onshore Training

### B.3 Learning Outcomes

During the FOnT programme delegates will have an opportunity to practice and demonstrate skills which it is not possible to practice onshore during drills, exercises and onshore training. They will be required to demonstrate their skills and the level of knowledge and understanding of the following key areas.

#### SAFETY INDUCTION

**Delegates will explain/identify:  
(testing knowledge)**

1. Onshore hazards, their control and consequences.
2. Waste disposal/environmental awareness.
3. How onshore safety is regulated.
4. How onshore safety is managed.
5. Procedures for prescribed medicines onshore.
6. Alcohol and substance abuse policy.
7. PPE requirements.
8. Procedure for reporting incidents, accidents and near misses.
9. The role of the Medic.

#### BASIC FIRST AIDS

**Delegates will demonstrate practically:  
(testing knowledge)**

1. Raising the first aids alarm
2. Carrying of the patients using the stretcher
3. How to identify and use all ingredients of the first aids kit
4. Understanding of ABC

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## Further Onshore Training

### B.3 Learning Outcomes

#### FIREFIGHTING AND SELF RESCUE

**Delegates will demonstrate practically:  
(testing skills and knowledge)**

1. Use of appropriate hand held portable fire extinguishers.
2. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
3. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
4. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

\* smoke hoods to be used in cosmetic smoke only

\*\*This may be achieved by conducting exercises in darkness or by using “blacked out” smoke hoods

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## Further Onshore Training

### B.4 Training Programme

The training programme outlined below will assist delegates to meet the stated training outcomes.

In order to make efficient use of time and ensure effective learning, the three phases of explanation, demonstration and practice should be integrated wherever practicable.

Full use should be made of visual/audio-visual aids and course handout materials.

**Practical exercises should be designed and delivered solely to meet these standards, and must not place on delegates any physical or mental demands other than those required to meet the standard.**

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## Further Onshore Training

### B.4 Training Programme (continued)

#### SAFETY INDUCTION

##### 1. Industry Overview and Installation Overview

**Give an overview of:**

- a. Onshore oil and gas activities.
- b. Formation, finding and exploitation of oil and gas.
- c. Types of installations
  - drilling
  - production - oil and gas/gas
  - construction
  - accommodation
  - specialist vessels.
- d. The onshore environment.

##### 2. Onshore Hazards

**Give an explanation of:**

Onshore hazards and comparative risk levels

e.g.

- pressure hazards
- motion hazards
- chemical hazards
- electrical hazards
- gravity hazards.

##### 3. Managing Onshore Safety

**Give an explanation of:**

The multiple barriers model and systems in place to prevent hazards from contacting targets including:

- safe systems of work
- personal responsibility for safety
- safety observation programmes.

##### 4. Controlling Onshore Hazards

**Give an explanation of:**

The hierarchy of control and how control measures are implemented onshore; discuss the consequences of failure to control the risks.

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## Further Onshore Training

### B.4 Training Programme (continued)

#### SAFETY INDUCTION (continued)

##### 5. Regulating Onshore Safety

###### Give an explanation of:

How onshore safety is regulated e.g.

- legislation applicable
- legislative requirements
- legal responsibilities
- role of DMF and other safety control Government agencies
- documenting the SMS

###### Industry Safety Aims and Visions

###### Give an explanation of:

Industry's expectations of personal safety behaviour e.g.

- Industry vision in safety aspects and manners
- Expected Thailand standards for safety
- Behavioural safety tools

**\*The Trainer's Guide for Further Onshore Training in Appendix 2 includes further information relevant to this topic.**

##### 6. Living and Working Onshore

###### Give an explanation of:

Fitness requirements and medical standards

The procedure for taking prescribed medicines onshore.

Alcohol and substance abuse policies.

###### Onshore routines:

reporting in  
installation induction  
cabin/laundry/bond  
recreation /smoking  
getting on with others

###### Working routines:

procedures  
work authorisation  
maintaining a safe workplace  
personal protective equipment  
waste disposal  
the right to stop unsafe work

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## Further Onshore Training

### B.4 Training Programme (continued)

#### SAFETY INDUCTION (continued)

#### 6. Living and Working Onshore (continued)

##### Give an explanation of:

Involvement in safety e.g.

- observation systems
- Permit to Work (PTW)
- toolbox talks
- safety meetings
- drills & exercises
- additional duties

Communicating safety, including:

- lines of communication

Injuries and illness:

- reporting incidents, accidents near misses and illnesses
- the role of the medic
- investigation
- preventing a recurrence
- support available to relatives in the event of illness/injury/major incident/evacuation

**A Trainer's Guide for Further Onshore Training is shown in Appendix 1**

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## Further Onshore Training

### B.4 Training Programme (continued)

#### Basic First Aids

##### 1. Emergency First Aid

###### Give an explanation and demonstration of:

- a. First aids overview.
- b. Raising the alarm.
- c. Appropriate behaviour at the first aid scene.
- d. Immediate first aid actions suitable for use prior to the arrival of the medic / first-aider.
- e. How to carry patients with the stretcher

###### Delegates to demonstrate and practise:

- f. Immediate first aid actions including ABC.
- g. How to carry patients with the stretcher.
- h. How to use SCBA.

**A Trainer's Guide for Further Onshore Training is shown in Appendix 1.**

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## Further Onshore Training

### B.4 Training Programme (continued)

#### FIREFIGHTING AND SELF RESCUE

##### 1. Firefighting Onshore

###### Give an overview of:

- a. The common causes and nature of fires onboard onshore oil and gas installations.
- b. Raising the fire and emergency alarm.
- c. The purpose of fixed fire and gas detection and firefighting systems; the actions to take in areas where these systems are deployed.
- d. Hydrogen Sulphide; the hazards, methods of detection and the actions to take in the event of discovery.

**This is in advance of the information detailed during installation safety briefings**

###### Give an explanation and demonstration of:

- e. The actions on discovering a fire.
- f. The operation of hand held portable fire extinguishers, small bore fire hose reels, fire blankets and their use against Class A and B fires.

###### Each delegates to practise and demonstrate:

- g. Raising the alarm on discovery of a fire.
- h. The operation of water (or foam), dry chemical and CO2 hand held portable fire extinguishers in extinguishing Class A and Class B fires as appropriate.

**Note: Delegates may practice operation of small bore fire hose reel and/or fire blanket if requested and if sufficient time is available.**

##### 2. Self Rescue

###### Give an explanation and demonstration of:

- a. Self rescue techniques with and without respiratory protection from areas which are being subjected to smoke and heat.

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## Further Onshore Training

### B.4 Training Programme (continued)

#### FIREFIGHTING AND SELF RESCUE (continued)

##### 2. Self Rescue (continued)

- b. Small group escape techniques with respiratory protection from an area which is being subjected to smoke and heat.

##### Delegates to practise and demonstrate:

- c. Self-rescue techniques with a smoke hood from areas where visibility is reduced due to smoke\*.
- d. Self-rescue techniques with a smoke hood from areas where visibility is completely obscured\*\*.
- e. Small group escape techniques with a smoke hood from areas where visibility is completely obscured.

\* smoke hoods to be used in cosmetic smoke only

\*\*This may be achieved by conducting exercises in darkness or by using “blacked out” smoke hoods

**A Trainer’s Guide for Further Onshore Training is shown in Appendix 1**

### B.5 Duration of Training

**The optimum ‘contact time’ for this training and assessment is seen as 6 hours 30 minutes**

Where this training is part of a programme of longer duration:

- the total contact time per day shall not exceed 8 hours.
- the total training day shall not exceed 10 hours

The total training day includes

- contact time
- refreshment and meal breaks
- travel between training sites where applicable.

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## Further Onshore Training

### **B.6 Assessment**

Delegates will be judged against the learning outcomes using direct observation.

Training Providers should have a policy and procedure in place for dealing with persons not meeting the stated learning outcomes.

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## RESOURCES

### C.1 Staff

In order for a competence programme to be delivered successfully it is necessary to have appropriate persons in presenting and supporting roles.

TPTI Approved Training Providers will deliver and carry out assessment of the programme.

1. Trainer will be :
  - full time staff or contractor, working with the training providers. For the training assistance, the freelances can be allowed.
  - trained in instructional/lecture techniques and/or have proven instructing /teaching experience.
  - graduated from the university, vocational school, school, institute, or any organisation that are accredited by the government.
  - included in an ongoing training programme, which includes visits to onshore oil and gas installations, to enable them to maintain and update skills.
  - Able to clearly communicate and teach in English language.
2. Assessors will be:
  - discipline experts and will hold a recognised formal assessor award
  - knowledgeable of the areas being assessed.
3. All staff will have the appropriate competencies to conduct/assist with the element of training being undertaken.
4. All Training staff will be trained in the causes and consequences of stress/anxiety, coping skills and how to manage delegates who are suffering from anxiety.

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## RESOURCES

### C.2 Trainer/Delegate Ratio

1. The ratio shown for theory sessions indicates the maximum number of delegates attending the course.
2. Other ratios indicate the maximum number of delegates to be supervised by an Instructor at any one time during each activity.

#### Safety Induction

Theory 1 : 16

#### 3. Emergency First Aid

Theory 1 : 16

Demonstration 1 : 16

Practical on :

- first aid actions of ABC 1 : 8
- with SCBA 1 : 8
- practical with a stretcher 1 : 8

#### Fire fighting & Self Rescue

Theory 1: 16

Extinguishers

- Theory & Demonstration 1 : 16
- Practical Extinguishers 1 : 4

Practical self rescue

- Group escape exercise 1 : 4
- Self-rescue in cosmetic smoke 1 : 4

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## RESOURCES

### C.3 Facilities

**Administration** arrangements appropriate for enrolment and certification of delegates and all aspects of the delivery of training in accordance with this standard.

**Theory** training area(s) so designed to enable each delegate view, to hear and participate fully in the subject matter being taught.

**Practical** training areas so designed to enable each delegate, to individually or as part of a team to view, hear and practise the following;

- (a) The boarding at the muster station after the alarm has been raised.
- (b) Practice with a stretcher
- (c) Practice with SCBA
- (d) The use of portable fire extinguishers against the following:
  - Class B contained spill
  - Class A fire
- (e) The donning and wearing of a smoke hood in an area which can be smoke logged using cosmetic smoke.

**All facilities must be maintained where appropriate, inspected and tested in accordance with current standards/legislation, guidance and manufacturers recommendations.**

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## RESOURCES

### C.4 Equipment

1. Equipment, of a type found on onshore oil and gas installations that are required to meet the needs of the training programme.
  - (a) SCBA
  - (b) Stretcher
  - (c) Portable Extinguishers - water, foam CO<sub>2</sub> and dry chemical
  - (d) H<sub>2</sub>S detectors
  - (e) Water fire hose reel
  - (f) Fire blanket
  - (g) Smoke hoods
  
2. Safety Equipment appropriate to training being delivered.
  - (a) Personal Protective Equipment (PPE)
  - (b) First Aid Equipment
  - (c) Fire Fighting Equipment

**All equipment must be maintained where appropriate, inspected and tested in accordance with current standards/legislation, guidance and manufacturers recommendations.**

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## GENERAL GUIDANCE & REQUIREMENTS

### C.5 Certification and Recording

#### Registration of BOnST & FOnT Modules

Training Establishments are responsible for the following:

- (a) The issuing of certificates direct to the delegate completing the programme and to the sponsoring company (when required). Each certificate must indicate that the delegate has been assessed against the agreed training outcomes and must contain the following:

Establishment name

Full TPTI course title stating that it is TPTI approved

TPTI course identification code

Delegate's name

Course dates

Expiry date (will be the day before the course completion date)

Unique Certificate Number

Establishment Signatory

- (b) Each individual attending any TPTI approved programme must be registered with the Central Register (CR) operated by TPTI. Registration must be made by the training establishment to TPTI on a daily basis.
- (c) All Joining Instructions contain information which indicate certain aspects of the course are of a physical nature. The responsibility for the individual completing the course without any adverse effects to their present state of health lies with the delegate and/or the company sponsoring the delegate.
- (d) Prior to each course commencing, delegates must sign a declaration indicating they have read and understood a written statement regarding the physical nature of the programme and the need for delegates to be in good health. Instructional staff should also read out a statement indicating this at the time.
- (e) Where doubt exists regarding the medical fitness of any delegate the establishment should seek the advice of a medical officer.
- (f) A medical officer, familiar with the nature and extent of the training is "on call".

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## **GENERAL GUIDANCE & REQUIREMENTS (cont)**

- (g) Risk assessment of all training areas and provision of all appropriate safety equipment.
- (h) Written statements of organisation for all sessions, which clearly define responsibilities and relationships for all staff either directly or indirectly involved.
- (i) All training and supporting activities are carried out in accordance with current legislation.

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## GENERAL GUIDANCE & REQUIREMENTS (cont)

### C.6 Medical and Health Requirements

Emergency response training contains physically demanding and stressful elements. All personnel who participate in such training should be medically fit and capable of participating fully.

Training Establishments are required to ensure that prior to participating in practical exercises the delegate either;

- a) Possess a valid, current medical certificate from the hospital, clinic, or clinical agents registered under Thai government, and :
- b) Undergoes an appropriate screening by the trainer or medical officer inside the training establishment area.

It is recommended that this information is given to delegates along with pre-course joining instructions

#### **Guidance and advice on this standard is available by contacting:**

Technical Petroleum Training Institute (TPTI)  
Energy Complex Building B  
555/2, 11<sup>th</sup> Floor, Vibhavadi-Rangisit,  
Chatuchak, Bangkok 10900 Thailand

Tel: 66 29365184  
Fax: 66 29365187  
E-mail: admin@tpti.org

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## Appendix 1.

### GUIDANCE TO THE TRAINER

#### Basic Onshore Safety Training

#### Trainer's Guide

It is the intention that the following trainer's guide be used as a reference tool by training staff in the development and provision of theory and practical lessons. Resources and key topics listed should not be seen as lists that are either definitive or exhaustive when being used for lesson preparation.

**The optimum 'contact time' for this training is seen as 10 hours 45 minutes.**

The times indicated for individual lessons are flexible within this overall optimum time. However instructional staff should see these times as indicators to the amount of detail required for the delivery of the topic.

The training 'contact time' should not exceed 8 hours per day and except in unusual circumstances the total training day should not exceed 10 hours.

<u>Content</u>	<u>Optimum Contact Time (hrs)</u>
1. Registration and Safety	Not included
2. Safety Induction	3 hrs
3. Basic First Aids	2 hrs 50 min
5. Firefighting & Self-Rescue	4 hrs 25 min
6. Assessment of Safety Induction	30 min
	_____
<b>Total Optimum Contact Time</b>	<b>10 hours 45 mins (645 mins)</b>
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**Instructor's Guide – BOnST (Registration & Safety)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Registration</b>	<ul style="list-style-type: none"> <li>• Medical Fitness</li> <li>• CR (refer to TPTI 'Personal Record')</li> <li>• Training Provider Registration</li> <li>• Certification</li> </ul>	E			Visual Aids Medical Statement CR Registration Forms Training Provider documentation	Not included in course training time total
	<b>Safety</b>	<ul style="list-style-type: none"> <li>• Training Provider Health &amp; Safety Policy</li> <li>• Fire Alarm/Emergency Actions</li> <li>• First Aid</li> <li>• Accident reporting</li> <li>• Site Plan of training facility</li> </ul>	E				

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – BOnST (Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Session Introduction</b>	<ul style="list-style-type: none"> <li>• Aim (what the session is designed to do)</li> <li>• Training Outcomes (what is expected of delegates)</li> <li>• Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>• Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aids	10 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – BOnST (Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Safety Induction 1 Pg. 10	<b>Industry &amp; Installation Overview</b>	<ul style="list-style-type: none"> <li>• Overview of onshore oil and gas activities.</li> <li>• Formation, finding and exploitation of oil and gas                             <ul style="list-style-type: none"> <li>- how hydrocarbons are formed, found and produced.</li> </ul> </li> <li>• Types of installations and specialist vessels and their main functions and features.                             <ul style="list-style-type: none"> <li>- drilling</li> <li>- production oil &amp; gas/ gas</li> <li>- construction - heavy lift, pipe laying</li> <li>- accommodation</li> <li>- specialist vessels - standby, support, transportation support.</li> </ul> </li> <li>• The onshore environment                             <ul style="list-style-type: none"> <li>- remote nature</li> <li>- harsh conditions</li> <li>- proximity of working/living environments</li> </ul> </li> </ul>	E			Visual Aids	30 mins

E - Explanation (by training staff)      D - Demonstration (by training staff)      P - Practice (by delegate)

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**Instructor's Guide – BOnST (Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Safety Induction 2 Pg. 10	<b>Onshore Hazards Introduction</b>	<ul style="list-style-type: none"> <li>• Definitions                             <ul style="list-style-type: none"> <li>- hazard</li> <li>- risk</li> <li>- control measure</li> </ul> </li> <li>• Accident Statistics                             <ul style="list-style-type: none"> <li>- comparison with other industries</li> </ul> </li> <li>• Environmental impact / statistics</li> </ul>	E		Safety Induction 1	Visual Aids	10 mins
	<b>Onshore Hazards</b>	<ul style="list-style-type: none"> <li>• Pressure Hazards                             <ul style="list-style-type: none"> <li>- oil/gas reservoir</li> <li>- process/drilling pipework</li> <li>- water / gas injection</li> <li>- gas compression</li> <li>- noise</li> </ul> </li> <li>• Motion Hazards                             <ul style="list-style-type: none"> <li>- drilling tubulars</li> <li>- exposed machinery parts</li> <li>- moving heavy equipment</li> <li>- manual handling</li> </ul> </li> </ul>			Safety Induction 2		
					Safety Induction 1		20 mins

E - Explanation (by training staff)      D - Demonstration (by training staff)      P - Practice (by delegate)



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## Instructor's Guide – BOnST (Safety Induction)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Safety Induction 3 Pg. 10	<b>Managing onshore safety</b>	<ul style="list-style-type: none"> <li>• Concepts of hazards contacting targets &amp; barriers to the contact being made</li> <li>- risk assessments</li> <li>- procedures</li> <li>- training</li> <li>- competency assurance</li> <li>- communications</li> <li>- permit to work</li> <li>• Behavioural safety programmes</li> <li>- the 9 elements of PRfS</li> <li>- safety observation programmes</li> </ul>	E		Safety Induction 4	Multiple barriers model  <ul style="list-style-type: none"> <li>• Step change products</li> <li>- task risk assessment</li> <li>- lifting and mechanical handling</li> <li>- personal responsibility for safety</li> <li>- look this way</li> <li>• OIAC “Guidelines to PTW Systems in the Petroleum Industry”</li> </ul>	20 mins
A.4 Safety Induction 4 Pg. 10	<b>Controlling Onshore Hazards</b>	<ul style="list-style-type: none"> <li>• Hierarchy of control</li> <li>• Determining risks (inc. to environment) and implementing control measures e.g.</li> <li>- reservoir/ pipe work isolation</li> <li>- B.O.P.</li> <li>- training on handling tubulars</li> <li>- guarding of machinery</li> <li>- MSDS's / chemical &amp; dust protection</li> <li>- electrical isolation</li> <li>- fall protection etc.</li> </ul>			Safety Induction 1		

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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### Instructor's Guide – BOnST (Safety Induction)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Safety Induction 5 Pg. 11	<b>Regulating Onshore Safety</b>	<ul style="list-style-type: none"> <li>• Hierarchy of legislation                             <ul style="list-style-type: none"> <li>- directives</li> <li>- Acts / regulations / ACOP's etc.</li> <li>- Acts supported by regulations</li> <li>- goal setting rather than prescriptive</li> </ul> </li>   <li>• Specific Acts and Labour Laws                             <ul style="list-style-type: none"> <li>- duties of employer &amp; employees</li> <li>- concept of ALARP</li> </ul> </li>   <li>• Regulations and guidance                             <ul style="list-style-type: none"> <li>- mostly risk assessment based</li> <li>- MHSW</li> <li>- COSHH</li> <li>- noise</li> <li>- environmental</li> </ul> </li>   <li>• Use of ISO standards e.g. ISO 14001</li>   <li>• Safety Regulations                             <ul style="list-style-type: none"> <li>- identification of major hazards, risks and control measures</li> <li>- demonstration of how safety is managed (SMS)</li> </ul> </li> </ul>	E		Safety Induction 3		15 mins

E - Explanation (by training staff)    D - Demonstration (by training staff)    P - Practice (by delegate)





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## Instructor's Guide – BOnST (Safety Induction)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Living and Working Onshore (cont.)</b>	<ul style="list-style-type: none"> <li>• Working routine                             <ul style="list-style-type: none"> <li>- procedures</li> <li>- work authorisation</li> <li>- personal protective equipment (PPE)</li> <li>- maintaining a safe place of work</li> <li>- waste disposal</li> <li>- right to stop unsafe work</li> </ul> </li>   <li>• Your involvement in safety                             <ul style="list-style-type: none"> <li>- safety observation systems</li> <li>- PTW</li> <li>- toolbox talks</li> <li>- safety meetings</li> <li>- emergency drills &amp; exercises</li> <li>- additional emergency response duties</li> <li>- getting involved</li> </ul> </li>   <li>- what to do when not satisfied e.g.                             <ul style="list-style-type: none"> <li>immediate supervisor</li> <li>OIM</li> </ul> </li> </ul>	E		Safety Induction 7	Examples of common PPE	10 mins
STOP/START/TOFS etc. Examples of permits						30 mins	
						Installation emergency organisation chart	

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – BOnST\_(Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Living and Working Onshore (cont.)</b>	<ul style="list-style-type: none"> <li>• Reporting injuries &amp; illness</li> <li>- the role of the medic</li> <li>- first aid arrangements onshore</li> <li>- reporting incidents, accidents &amp; near misses</li> <li>- investigation</li> <li>- preventing a recurrence</li> <li>- support available to relatives</li> </ul>	E		Safety Induction 8&9		10 mins
	<b>Summary</b>						
	<b>Assessment</b>	Assessment of Safety Induction				Question papers/ question bank	30mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

**Total 3 hours 30 min**

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**Instructor's Guide – BOnST (Basic First Aids)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Session Introduction</b>	<ul style="list-style-type: none"> <li>• Aim (what the session is designed to do)</li> <li>• Learning Outcomes (what is expected of delegates)</li> <li>• Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>• Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aids	15 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – BOnST (Basic First Aids)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Basic First Aids 1 Pg. 13	<p><b>First Aids Overview</b></p> <p><b>Raising the alarm</b></p> <p><b>First Aids Kit</b></p>	<ul style="list-style-type: none"> <li>• Overview of onshore first aids precedent.</li> <li>• causes of injuries and how to protect .</li> <li>• Levels of the serious injurious and their handling methodology.</li> <li>• Appropriate behaviour at the first aid scene.</li> <li>• Raising the alarm for coping with the first aids requirement</li> <li>• Introduction of the first aids kit</li> <li>• How to identify and use all ingredients of the first aids kit.</li> </ul>	E		<p>Basic First Aids a.</p> <p>Basic First Aids b.</p>	Visual Aids	50 mins

E - Explanation (by training staff)      D - Demonstration (by training staff)      P - Practice (by delegate)

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**Instructor's Guide – BOnST (Basic First Aids)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Basic First Aids 1 Pg. 13	<b>Immediate first aid actions</b>	<ul style="list-style-type: none"> <li>• Understanding of ABC.</li> <li>• How to use SCBA.</li> <li>• How to carry patients with the stretcher.</li> <li>• Wounded and Bleeding.</li> <li>• Bondages.</li> <li>• Thermal Stress and Epilepsy.</li> </ul>	E,D	P	Basic First Aids d., e.,f.,g.,h.	Visual Aids	1 hr. 45 min.
			E,D	P			
			E,D	P			
			E				
			E,D	P			
			E				

E - Explanation (by training staff)      D - Demonstration (by training staff)      P - Practice (by delegate)

**Total 2 hours 50 mins**

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**Instructor's Guide – BOnST (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Session Introduction</b>	<ul style="list-style-type: none"> <li>• Aim (what the session is designed to do)</li> <li>• Learning Outcomes (what is expected of delegates)</li> <li>• Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>• Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aids	15 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – BOnST (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Firefighting & Self Rescue a) Pg. 14	<b>Fire onboard an onshore installation</b>	<ul style="list-style-type: none"> <li>Triangle of combustion</li> <li>Fire spread relate - conduction, directly to convection, triangle of radiation combustion</li> </ul>	E			Visual Aids	25 mins
	Common causes of fire onboard	<p>Extinguishing media</p> <ul style="list-style-type: none"> <li>- water, dry powder, foam, CO<sub>2</sub>,</li> </ul> <ul style="list-style-type: none"> <li>Processes and Activities</li> <li>- emphasis on electrical, domestic and welding related fires.</li> </ul>	E				

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide - BOnST(Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	Fixed Systems Onboard	<ul style="list-style-type: none"> <li>Purpose of fixed fire and gas detection and firefighting systems.</li> </ul>	E			Visual aids	
	Response	<ul style="list-style-type: none"> <li>Actions to take in areas where these systems are deployed in respect of those having an effect on a persons health and safety (ie, deluge, halon, CO<sub>2</sub>, and the urgent need to evacuate the area.)</li> <li>Action on discovering a fire ( as Installation Emergency Procedures) with emphasis on                             <ul style="list-style-type: none"> <li>- raising the alarm (methods)</li> <li>- location of portable hand held firefighting equipment (types to be used during practical session)</li> <li>- evacuate to designated area.</li> </ul> </li> </ul>	E&D			<p><b>Note:</b> More detailed information on fire equipment and procedures specific to an installation will be included in installation safety briefings.</p>	
	Hydrogen Sulphide	<ul style="list-style-type: none"> <li>The hazards of H<sub>2</sub>S, methods of detection and the actions to take if it is discovered</li> </ul>				Visual aids H <sub>2</sub> S detectors	10 min

E - Explanation (by training staff)

P - Practice (by delegate)

D - Demonstration (by training staff)

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## Instructor's Guide - BOnST (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>PPE</b> Issue PPE to delegates	<ul style="list-style-type: none"> <li>Protection offered</li> <li>Correct method of wearing/fit</li> <li>Condition of PPE</li> </ul>		D&P		PPE as appropriate	15 mins
	<b>Portable hand held firefighting equipment</b> Fire Extinguishers	<ul style="list-style-type: none"> <li>Raising the alarm.</li> <li>Recognition of the different types of fire extinguisher (water, dry chemical, foam, CO<sub>2</sub> - not halon)</li> <li>Operate and use of each type of extinguisher on appropriate fire (class A and B) <ul style="list-style-type: none"> <li>- position of user</li> <li>- techniques</li> </ul> </li> <li>Delegates to practice operation and use of the range of extinguishers</li> </ul>	E E	D&P D	Firefighting & Self Rescue 1	Extinguishers (Water, Dry Powder, Foam, CO <sub>2</sub> - not halon) Hose Reel Fire Blanket Fuel (Class A & B fires) Props (appropriate to practical training requirements) First Aid	65 mins
	Small bore fire hose reels	<ul style="list-style-type: none"> <li>Operation and use on class A fire by training staff</li> </ul>	E	D			
	Fire Blanket	<ul style="list-style-type: none"> <li>Use on class B fire by training staff</li> </ul>	E	D			

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – BOnST (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
		<p><b><u>Notes:-</u></b></p> <ol style="list-style-type: none"> <li>1. All practical sessions involving the use of the above equipment should include the appropriate procedure on discovering a fire with emphasis on raising the alarm.</li> <li>2. The TPTI Standard will be satisfied if each trainee practises the operation and use of each of the following types of fire extinguisher:                             <ul style="list-style-type: none"> <li>- water or foam</li> <li>- CO2</li> <li>- dry chemical</li> </ul> </li> <li>3. Although not a requirement of the standard, delegates may operate a small bore hose reel and/or fire blanket if sufficient time is available.</li> </ol>					

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide - BOnST (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
A.4 Firefighting & Self Rescue 2 Pg. 14	<b>Self Rescue</b> Self rescue techniques	<ul style="list-style-type: none"> <li>Self rescue, - without smoke hood - with smoke hood</li> </ul> <p>To include correct methods and procedures for escape when exposed to smoke and heat e.g. movement in corridors, on stairs with consideration of heat &amp; visibility levels</p>	E&D			Visual Aids	20 mins
	Smoke hoods	<ul style="list-style-type: none"> <li>Donning and use of smoke hood</li> <li>Explanation &amp; demonstration of a selection of smoke hood types to delegates.</li> </ul>	E&D			Selection of smoke hoods for demonstration	15 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide - BOnST (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Self Rescue</b>						
	Practical Self Rescue	<ul style="list-style-type: none"> <li>Brief for practical session.</li> <li>Delegates to practise self rescue using smoke hood when,                             <ul style="list-style-type: none"> <li>- operating in restricted visibility (cosmetic smoke)</li> <li>- visibility is completely obscured.</li> </ul> </li> <li>Delegates to practise small group escape using smoke hood when visibility is completely obscured</li> </ul>	E	D&P	Firefighting & Self Rescue 2 Firefighting & Self Rescue 3 Firefighting & Self Rescue 4	Cosmetic smoke generator Smoke hoods Facility/Prop Torches First Aid/Resuscitation equipment	10 mins  80 mins
	Summary	<p><b>Note:</b>                      More detailed information on escape equipment and procedures specific to an installation will be included in installation safety briefings.</p>					10 mins

E - Explanation (by training staff)    D - Demonstration (by training staff)    P - Practice (by delegate)

**Total 4hrs 25min**  
(265 minutes)

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## Appendix 2.

### GUIDANCE TO THE TRAINER

#### Further Onshore Training

The intention of the following guidance is that it be used as a reference tool by training staff in the development and provision of the exercises indicated on pages 32-33. Resources and key topics listed should not be seen as either definitive or exhaustive when being used for lesson preparation.

**The optimum 'contact time' for this training is seen as 6 hours 5 minutes.**

The times indicated for individual lessons are flexible within this overall optimum time. However instructional staff should see these times as indicators to the amount of detail required for the delivery of the topic.

When this module is part of a longer training programme the training 'contact time' should not exceed 8 hours per day and except in unusual circumstances the total training day should not exceed 10 hours.

#### Content

#### Optimum Contact Time

1. Registration and Safety	Not included
2. Safety induction	1 hrs 40 min
3. Basic First Aids	2 hrs
4. Fire fighting & Self Rescue	3 hr 15 min
5. Assessment of Safety Induction	20 min

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**Total Optimum Contact Time    7 hours 15 minutes (435 minutes)**

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**Instructor's Guide – FOnT (Registration & Safety)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Registration</b>	<ul style="list-style-type: none"> <li>• Medical Fitness</li> <li>• CR (refer to TPTI 'Personal Record')</li> <li>• Training Provider Registration</li> <li>• Certification</li> </ul>	E			Visual Aids Medical Statement CR Registration Forms Training Provider documentation	Not included in course training time total
	<b>Safety</b>	<ul style="list-style-type: none"> <li>• Training Provider Health &amp; Safety Policy</li> <li>• Fire Alarm/Emergency Actions</li> <li>• First Aid</li> <li>• Accident reporting</li> <li>• Site Plan of training facility</li> </ul>	E				

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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## Instructor's Guide – FOnT (Course Introduction)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Course Introduction</b>	<ul style="list-style-type: none"> <li>• Aim (what the session is designed to do)</li> <li>• Training Outcomes (what is expected of delegates)</li> <li>• Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>• Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aids	10 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – FOnT (Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Safety Induction 1 Pg. 21	<b>Industry &amp; Installation Overview</b>	<ul style="list-style-type: none"> <li>• Overview of onshore oil and gas activities.</li> </ul>	E			Visual Aids	5 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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## Instructor's Guide – FOnT (Safety Induction)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Safety Induction 2 Pg. 21	<b>Onshore Hazards Introduction</b>	<ul style="list-style-type: none"> <li>• Definitions                             <ul style="list-style-type: none"> <li>- hazard</li> <li>- risk</li> <li>- control measure</li> </ul> </li> <li>• Accident Statistics                             <ul style="list-style-type: none"> <li>- comparison with other industries</li> </ul> </li> <li>• Environmental impact / statistics</li> </ul>	E		Safety Induction 1	Visual Aids	10 mins
	<b>Onshore Hazards</b>	<ul style="list-style-type: none"> <li>• Pressure Hazards                             <ul style="list-style-type: none"> <li>- oil/gas reservoir</li> <li>- process/drilling pipework</li> <li>- water / gas injection</li> <li>- gas compression</li> <li>- noise</li> </ul> </li> <li>• Motion Hazards                             <ul style="list-style-type: none"> <li>- drilling tubulars</li> <li>- exposed machinery parts</li> <li>- moving heavy equipment</li> <li>- manual handling</li> </ul> </li> </ul>			Safety Induction 2		
					Safety Induction 1		20 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)



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## Instructor's Guide – FOnT (Safety Induction)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Safety Induction 3 Pg. 21	<b>Managing onshore safety</b>  <b>Controlling Onshore Hazards</b>	<ul style="list-style-type: none"> <li>• Concepts of hazards contacting targets &amp; barriers to the contact being made</li> <li>- risk assessments</li> <li>- procedures</li> <li>• Behavioural safety programmes</li> <li>- the 9 elements of PRfS</li> <li>- safety observation programmes</li> </ul>	E		Safety Induction 4	Multiple barriers model  <ul style="list-style-type: none"> <li>• Step change products</li> <li>- task risk assessment</li> <li>- lifting and mechanical handling</li> <li>- personal responsibility for safety</li> <li>- look this way</li> <li>• OIAC “Guidelines to PTW Systems in the Petroleum Industry”</li> </ul>	10 mins
B.4 Safety Induction 4 Pg. 21		<ul style="list-style-type: none"> <li>• Hierarchy of control</li> <li>• Determining risks (inc. to environment) and implementing control measures e.g.</li> <li>- reservoir/ pipe work isolation</li> <li>- B.O.P.</li> <li>- training on handling tubulars</li> <li>- guarding of machinery</li> <li>- MSDS's / chemical &amp; dust protection</li> <li>- electrical isolation</li> <li>- fall protection etc.</li> </ul>			Safety Induction 1		

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – FOnT (Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Safety Induction 5 Pg. 22	<b>Regulating Onshore Safety</b>	<ul style="list-style-type: none"> <li>• Hierarchy of legislation                             <ul style="list-style-type: none"> <li>- directives</li> <li>- Acts / regulations / ACOP's etc.</li> <li>- Acts supported by regulations</li> <li>- goal setting rather than prescriptive</li> </ul> </li>   <li>• Specific Acts and Labour Laws                             <ul style="list-style-type: none"> <li>- duties of employer &amp; employees</li> <li>- concept of ALARP</li> </ul> </li>   <li>• Regulations and guidance                             <ul style="list-style-type: none"> <li>- mostly risk assessment based</li> <li>- MHSW</li> <li>- COSHH</li> <li>- noise</li> <li>- environmental</li> </ul> </li>   <li>• Use of ISO standards e.g. ISO 14001</li>   <li>• Safety Regulations                             <ul style="list-style-type: none"> <li>- identification of major hazards, risks and control measures</li> <li>- demonstration of how safety is managed (SMS)</li> </ul> </li> </ul>	E		Safety Induction 3		15 mins

E - Explanation (by training staff)    D - Demonstration (by training staff)    P - Practice (by delegate)



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**Instructor's Guide – FOnT (Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Safety Induction 6 Pg. 22	<b>Living and Working Onshore</b>	<ul style="list-style-type: none"> <li>• Personal Standards</li> <li>- fitness</li> <li>- medical standards</li> <li>- medicines</li> <li>- substance abuse policies</li> </ul>	E		Safety Induction 5 Safety Induction 6		5 mins
		<ul style="list-style-type: none"> <li>• Responsibilities of employer / employee</li> <li>- line of reporting</li> </ul>					5 mins

E - Explanation (by training staff)

D- Demonstration (by training staff)

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**Instructor's Guide – FOnT\_(Safety Induction)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Living and Working Onshore (cont.)</b>	<ul style="list-style-type: none"> <li>• Reporting injuries &amp; illness</li> <li>- the role of the medic</li> <li>- first aid arrangements onshore</li> <li>- reporting incidents, accidents &amp; near misses</li> <li>- investigation</li> <li>- preventing a recurrence</li> <li>- support available to relatives</li> </ul>	E		Safety Induction 8&9		5 mins
	<b>Summary</b>						
	<b>Assessment</b>	Assessment of Safety Induction				Question papers/ question bank	20 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

**Total 2 hours**

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## Instructor's Guide – FOnT (Basic First Aids)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Session Introduction</b>	<ul style="list-style-type: none"> <li>• Aim (what the session is designed to do)</li> <li>• Learning Outcomes (what is expected of delegates)</li> <li>• Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>• Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aids	15 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – FOnT (Basic First Aids)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Basic First Aids 1 Pg. 24	<p><b>First Aids Overview</b></p> <p><b>Raising the alarm</b></p> <p><b>First Aids Kit</b></p>	<ul style="list-style-type: none"> <li>• Overview of onshore first aids precedent.</li> <li>• causes of injuries and how to protect .</li> <li>• Levels of the serious injurious and their handling methodology.</li> <li>• Appropriate behaviour at the first aid scene.</li> <li>• Raising the alarm for coping with the first aids requirement</li> <li>• Introduction of the first aids kit</li> <li>• How to identify and use all ingredients of the first aids kit.</li> </ul>	E		<p>Basic First Aids a.</p> <p>Basic First Aids b.</p>	Visual Aids	30 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – FOnT (Basic First Aids)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Basic First Aids 1 Pg. 24	<b>Immediate first aid actions</b>	<ul style="list-style-type: none"> <li>• Understanding of ABC.</li> <li>• How to use SCBA.</li> <li>• How to carry patients with the stretcher.</li> <li>• Wounded and Bleeding.</li> <li>• Bondages.</li> <li>• Thermal Stress and Epilepsy.</li> </ul>	E,D	P	Basic First Aids d., e.,f.,g.,h.	Visual Aids	1 hr. 15 min.
			E,D	P			
			E,D	P			
			E				
			E,D	P			
			E				

E - Explanation (by training staff)      D - Demonstration (by training staff)      P - Practice (by delegate)

**Total 2 hours**

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**Instructor's Guide – FOnT (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>Session Introduction</b>	<ul style="list-style-type: none"> <li>• Aim (what the session is designed to do)</li> <li>• Learning Outcomes (what is expected of delegates)</li> <li>• Timetable/Programme (how delegates can achieve what is expected of them)</li> <li>• Staff (who will be involved with the delegates)</li> </ul>	E			Visual Aids	15 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – FOnT (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Firefighting & Self Rescue 1 Pg. 25	<p><b>Fire onboard an onshore installation</b></p> <p>Nature of Fire</p> <p>Common causes of fire onboard</p>	<ul style="list-style-type: none"> <li>Triangle of combustion</li> <li>Fire spread relate - conduction, directly to convection, triangle of radiation combustion</li> </ul> <p>Extinguishing media - water, dry powder, foam, CO<sub>2</sub>,</p> <ul style="list-style-type: none"> <li>Processes and Activities - emphasis on electrical, domestic and welding related fires.</li> </ul>	E			Visual Aids	20 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)



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## Instructor's Guide - FOnT (Firefighting & Self Rescue)

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
	<b>PPE</b> Issue PPE to delegates	<ul style="list-style-type: none"> <li>Protection offered</li> <li>Correct method of wearing/fit</li> <li>Condition of PPE</li> </ul>		D&P		PPE as appropriate	15 mins
	<b>Portable hand held firefighting equipment</b> Fire Extinguishers	<ul style="list-style-type: none"> <li>Raising the alarm.</li> <li>Recognition of the different types of fire extinguisher (water, dry chemical, foam, CO<sub>2</sub> - not halon)</li> <li>Operate and use of each type of extinguisher on appropriate fire (class A and B)                             <ul style="list-style-type: none"> <li>- position of user</li> <li>- techniques</li> </ul> </li> <li>Delegates to practice operation and use of the range of extinguishers</li> </ul>	E E	D&P D	Firefighting & Self Rescue 1	Extinguishers (Water, Dry Powder, Foam, CO <sub>2</sub> - not halon) Hose Reel Fire Blanket Fuel (Class A & B fires) Props (appropriate to practical training requirements) First Aid	50 mins
	Small bore fire hose reels	<ul style="list-style-type: none"> <li>Operation and use on class A fire by training staff</li> </ul>	E	D			
	Fire Blanket	<ul style="list-style-type: none"> <li>Use on class B fire by training staff</li> </ul>	E	D			

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide – FOnT (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
		<p><b><u>Notes:-</u></b></p> <ol style="list-style-type: none"> <li>1. All practical sessions involving the use of the above equipment should include the appropriate procedure on discovering a fire with emphasis on raising the alarm.</li> <li>2. The TPTI Standard will be satisfied if each trainee practises the operation and use of each of the following types of fire extinguisher:                             <ul style="list-style-type: none"> <li>- water or foam</li> <li>- CO2</li> <li>- dry chemical</li> </ul> </li> <li>3. Although not a requirement of the standard, delegates may operate a small bore hose reel and/or fire blanket if sufficient time is available.</li> </ol>					

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)

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**Instructor's Guide - FOnST (Firefighting & Self Rescue)**

Ref TPTI Std	Subject	Key Topics	Th	P	Learning Outcome	Resource	Time
B.4 Firefighting & Self Rescue 2 Pg. 25	<b>Self Rescue</b> Self rescue techniques	<ul style="list-style-type: none"> <li>Self rescue,                             <ul style="list-style-type: none"> <li>- without smoke hood</li> <li>- with smoke hood</li> </ul> </li> </ul> <p>To include correct methods and procedures for escape when exposed to smoke and heat e.g. movement in corridors, on stairs with consideration of heat &amp; visibility levels</p>	E&D			Visual Aids	10 mins
	Smoke hoods	<ul style="list-style-type: none"> <li>Donning and use of smoke hood</li> <li>Explanation &amp; demonstration of a selection of smoke hood types to delegates.</li> </ul>	E&D			Selection of smoke hoods for demonstration	5 mins

E - Explanation (by training staff)

D - Demonstration (by training staff)

P - Practice (by delegate)



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