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اءوتوريتي فيتروليوم نكارا بروني دارالسلام
PETROLEUM AUTHORITY OF BRUNEI DARUSSALAM

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This guideline sets out the approach the Authority is likely to take, taking into account that each application will be assessed on its fact, case-by-case.

This guideline will be reviewed by the Authority from time to time, and amended as appropriate in light of further development, changes in law or practice.

this guideline is supplemental to and not a substitute for any law or regulation, and does not constitute legal advice.

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Abbreviations

In this guideline, the following abbreviations are referred:

COMAH	Workplace Safety and Health (Facilities) (Control of Major Accident Hazards) Regulations
ESIA	Environmental and Social Impact Assessment
FAC	First Aid Case
HiPo	High Potential Case
HSSE	Health, Safety, Security and Environment
IAGC	International Association of Geophysical Contractors
IOGP	International Association of Oil & Gas Producers
JASTRE	Department of Environment, Parks and Recreation
LTI	Loss Time Injury
MOC	Management of Change
MTC	Medical Treatment Case
NMI	Near Miss Incident
PPV	Peak Particle Velocity
QA/QC	Quality Assurance/Quality Check
RWC	Restricted Work Case
SHENA	Safety, Health and Environment National Authority

Definitions

In this guideline, the following definitions are referred:

Commencement of Survey	This means the date of start of mobilisation of equipment and personnel to the survey location prior to survey, drilling & loading and recording activities.
Completion of Survey	This means the date of completion of full demobilisation of equipment and personnel subsequent to worksite restoration.
Significant MOC	This means any suspension, any changes when the MoC become <i>Material Change</i> according to ^[5] COMAH Regulations.
Multiclient Survey	This means a survey that is not acquired exclusively by the Operator and meant to be distributed among multiple clients.
Halal Food	This means food and beverages that are permissible or lawful in accordance with Brunei Darussalam’s Islamic law.
International Industrial Standards	This means to accepted standards such as [1] and [4] that adhere to all laws, rules and regulations in Brunei Darussalam.
Accumulated Contract Value (ACV)	This means the cost for the whole project throughout its life span that includes options and mitigations.

1 Introduction

1.1 Background

Geophysical acquisition survey operation is a method of acquiring data that will be used for building up geological understanding as well as mapping geological structures in the subsurface. In oil and gas exploration and production activities, geophysical acquisition surveys have been the main activities that require comprehensive planning, effective and efficient coordination and monitoring for both Operators and the regulator (“the Authority”).

Therefore, the Authority sees the importance of releasing general geophysical survey guideline (“the Guideline”) as a reference for all Operators in Brunei Darussalam in order to standardise and clarify the administrative process on the Survey Program.

This guideline provides guidance to the oil and gas Operators in Brunei Darussalam on the geophysical data acquisition in relation to the regulatory requirements before, throughout and after the execution of operation. Additionally, this guideline will assist the Operators to prepare the required documentation submissions to the Authority.

This guideline is required for the reasons below:

- The use of high technology
- Involves large numbers of workers and equipment
- Operational area exposure to different environments and direct interaction with the public
- Integration of different work disciplines
- High cost with high HSSE risk

All Operators are strongly advised to follow International Industrial Standards. Operators shall be fully responsible in executing the proposed survey program as agreed by the Authority.

1.2 Objectives

The main objectives of this guideline are as below:

- To standardise the guideline for undertaking geophysical acquisition surveys in Brunei Darussalam
- To provide guideline to the Operator in order to effectively plan, organise, monitor and report to the Authority what is required for undertaking a geophysical acquisition survey in Brunei Darussalam
- To ensure the optimum efficiency of operational activities
- To complete operational activities on time as per schedule
- To obtain good quality data and
- To achieve the highest HSSE performance

1.3 Roles and Responsibilities

Oil and gas Operators in Brunei are responsible for compliance with all applicable laws and Government directives, and obligations to the specific petroleum contracts or agreements.

1.4 Scope of Work

This guideline is not just limited to seismic survey activities, but is also applicable to other non-seismic survey activities to be conducted in Brunei Darussalam. Geophysical survey operations shall include marine, non-marine, terrestrial and air-borne surveys not limited to the following:

- 2D/3D/4D Seismic Survey
- Gravity Survey
- Magnetic Survey
- Electromagnetic Survey, including Controlled source Electro Magnetic Survey (CSEM) & Magnetotelluric Survey

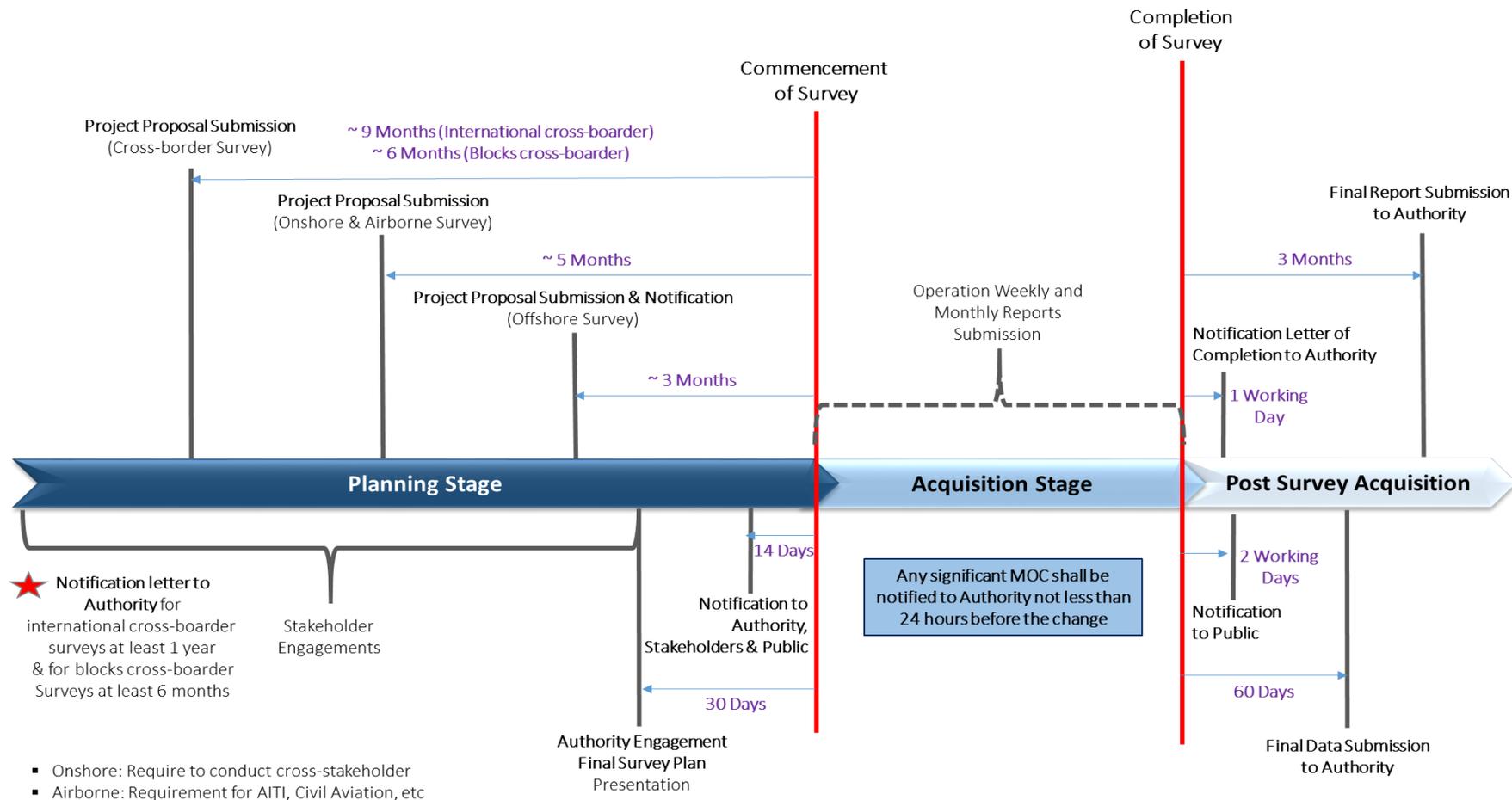
Shallow hazard surveys related to drilling activities are not covered in this guideline. Shallow hazard surveys shall adhere to [2] COMAH and be in alignment with [3] Volume 6: Drilling Guideline.

2 Operational Guideline

1. The Operator is advised to follow the timeline for engagements, submission of documents (including but not limited to reports and data)
2. The Operator shall conduct any geophysical survey in accordance with International Industrial Standards. The details shall follow the Operator's Standard Operating Procedure (SOP) with good industrial practices
3. The Operator shall comply with and adhere to all the laws of Negara Brunei Darussalam [including but not limited to any decree, resolution (including any United Nations resolutions), statute, act, ordinance, rule, directive (to the extent having the force of law), order, treaty, code, ministerial resolution or regulation as enacted or issued in Brunei Darussalam]
4. The Operator is required to provide certified Halal requirement for the food, food handling and any related procedures in accordance with the Islamic law of Negara Brunei Darussalam.
5. The Operator shall create a HSSE Bridging/Interface document between the Operator and contractor(s) before conducting the survey
6. The Operator shall conduct an Environmental and Social Impact Assessment (ESIA) in accordance with the laws of Negara Brunei Darussalam
7. The Operator shall ensure all contractors/sub-contractors are registered and all contractors/sub-contractors comply with all laws of Negara Brunei Darussalam
8. The Operator shall use a 'Coordinate Reference System and Map Projection Standards' set by the Authority for reference datum setup as further elaborated in Appendix A
9. The Operator shall be responsible to discuss liabilities with their contractors/sub-contractors on pre-commencement survey activities
10. The Operator shall ensure key personnel working for Con/Sub Con have the requisite industry standard certifications to perform their tasks competently
11. In the case of Multiclient survey, the permitting and other requirement shall be decided solely by the Authority. The right of the data shall be exclusively owned by the Authority

3 Survey Process Regulatory Requirement

Timeline of submission, engagement and notification for Operators:



3.1 Planning Stage

Operator shall submit notification letter on survey acquisition prior to commencement of survey:

- at least 1 calendar year for international cross-border surveys
- at least 6 calendar months for block cross-border surveys

Operator shall submit their project proposal on survey acquisition prior to commencement of survey:

- at least three calendar months for offshore survey
- at least five calendar months for onshore and airborne surveys
- at least 9 calendar months for international cross-border surveys
- at least 6 calendar months for blocks cross-border surveys

Operator shall ensure the contents of their project proposal include but not limited to the following:

- Location maps or Layout of Survey that shows the detailed boundaries of the area with maps and coordinates, that is subject to each interest covered by the operation
- Timeline and Accumulated Contract Value (ACV) of the Project, including stating proposed start date and survey duration
- Plan for Environmental and Social Impact Assessment (ESIA) that should consider environmental sensitive areas such as but not limited to reefs and protected forests and workers influx within the local communities
- Mobilisation Plan including number of workers and equipment
- Stakeholder Engagement Plan, including grievances mechanism
- Plan for any constructions (layout, capacity, etc.)
- Project organisation chart (responsibility, authority, communication)
- Project Risk Assessment, including mitigation plan
- Proposed timeline and submission arrangement for data delivery to the Authority that covers all requirements including logistic, media and estimated capacity

Operator shall conduct necessary stakeholder engagements with relevant stakeholders prior to survey operation commencement. This includes obtaining permissions from relevant stakeholders including application of permits to restricted area or non-permitted sites (Appendix B), permission or agreement to any affected private residential area, and resolve any related issues on fish trap/cage/Fish Aggregating Device (FAD) structure.

Operator shall obtain requisite ESIA approval prior to commencement of survey from relevant authority.

Operator shall present their Final Survey Plan to Authority at least 30 days prior to commencement of survey operation. Such presentation shall include but not limited to:

- Final survey design
- Final Timeline and Accumulated Contract Value (ACV)
- HSSE, including bridging document, Hazards and mitigation plan, etc.

- Permitting checklist
- Project Execution Plan

Any marine activities required notification as per EPMO and approval (3 months)

Operator shall notify the Authority and relevant stakeholders in writing at least 14 days prior to commencement of survey operation, including a notice to mariners. Such notification shall include but not limited to:

- type of survey
- area and location of survey
- the duration of operation
- information of vessel (such as name and chase/support vessels)
- hazard notice and any impediment of normal public activities (such as fishing)

Operator shall also notify public in national media or newspaper, and at relevant ports and jetties, in English and Malay, at least 14 days prior to commencement of survey operation. Such notification shall include but not limited to:

- type of survey
- area and location of survey
- the duration of operation
- contact details for public

In the event of crossing non-operated/operated blocks for data acquisition, the acquiring party shall obtain a written consent from the Operator of the Operated blocks or Gazetted Party in case of non-operated blocks prior to operation commencement and shall share such consent to Authority. In the event of boat turning to manoeuvre, there is provision for Operator to cross the block with the recording equipment switched off and notifying the other Operator prior to entering the other Block.

In the event of international cross border ingress, a written consent shall be obtained from Ministry of Foreign Affairs of the affected countries prior to operation commencement via the Authority. The information required to be submitted are the following:

- Maps and coordinates of:
 - Full acquisition survey area with border line
 - Cross border acquisition survey area
 - Cross border sail lines (in case of offshore survey)/cross border flight path (in case of airborne survey)
- Cross border ingress distance
- Timeline:
 - Expected date of survey
 - Expected number of days
 - Expected date of ingress to cross border

3.2 Acquisition Stage

Operator shall ensure that the survey operation is executed as per Final Survey Plan mentioned in item 3.1 Planning Stage.

Operator shall provide Operation weekly and monthly reports to the Authority but not limited to the following:

- Details on Personnel on Board, such as, quantity and manhours.
- HSSE highlights, lowlights, observations, incident summary (NMI, FAC, LTI, MTC, RWC, HiPo, Asset Damage, Fuel Usage, Black water usage, rubbish tonnage), Non-Productive Time
- Weekly and cumulative survey production, drilling & loading production (if applicable) and recording production.
- The progress of the survey, progress map, planning vs. actual activities, data quality
- Any variation on parameters design, lines, areas, and locations
- Next week Lookahead

Operator shall ensure safe distance, within or nearby sensitive premises or areas, as with International Industrial Standards. Where necessary an application of PPV meter shall be required to show safe distances from any infrastructure.

Operator shall protect and store any restricted items, such as explosive and radioactive materials, away from public residential area with the assistance from Law Enforcement Agency or any third party agreed with Authority and Royal Brunei Police Force.

Operator should store the recording data in safe storage with the backup stored in different places. The data delivery from the field to processing centre shall be done after getting approval from QA/QC representative and party chief.

Operator shall be responsible to record all compensation and fulfil fair compensation according to the law of Brunei Darussalam to losses and/or damages of (but not limited to) fish trap/cage/Fish Aggregating Device (FAD) structures, land, crops, trees and/or plantations, relocations of houses to owner affected by the Operation.

Operator shall remove all equipment and installations from the survey area, and perform all necessary site restoration activities in accordance with the applicable rules and regulates of the Government of Brunei Darussalam and in accordance with IAGC/IOGP standard practices.

Operator shall notify significant Management of Change (MOC) to the Authority not less than 24 hours before the change.

Operator shall submit the survey completion notification letter to Authority one (1) working day after completion of survey. Operator shall also publish notification to public on survey operation completion 2 working days after completion of survey.

3.3 Post-Acquisition Stage

Operator shall conduct After Action Review and close-out the project with relevant contractors/sub-contractors.

Operator shall conduct an appropriate incident investigation for any reports of damage or impact from affected parties. In the event that the investigation finds in favour of the affected party, Operator shall compensate accordingly. Any compensation shall be witnessed by relevant stakeholders or government officers.

Operator shall submit Final Report within 3 months after the completion of survey. The content of the report shall include but not limited to the following:

- Location maps or Layout of Survey that shows the detailed boundaries of the area that is subject to each interest covered by the operation
- Detail of actual timeline and cost of the Project
- Scouting and mobilization work
- Summary of significant dates, number of members of geophysical crew, the type and quantity of each type of equipment used, the production data, the total actual distance or actual area of survey, the downtime per day, and the length of data in kilometre of data recorded
- Summary of the weather, sea, topographic conditions and their effect on the operation
- General description of the operation including the instrument type, the navigation, positioning and survey systems, the parameters for the energy source and recording system and the field configuration of the source lines and the receiver lines
- A detailed description of the geophysical data on-site processing method
- Depending on the surveys:
 - Shotpoint location data and maps, track plots, flight lines with numbered fiducial points, gravity station maps and, for seabed surveys, locations map for core holes, grab samples and seabed photographs
 - A high-resolution section for each line recorded in a well-site seabed survey or a pipeline route survey
 - Seismic line recorded and, in the case of a 3-D survey, each line generated from the 3-D data set
 - Bathymetric and topographic maps that are compiled from the data collected;
 - A series of gravity and magnetic profiles across all gravimetric and magnetic surveys for which interpretative maps have not been made
- Restoration and demobilisation work
- Compensation work

- Challenges, lesson learnt and recommendation in the context of technical, organisational, political and social during the operation

Operator shall submit Final Survey Data as per item 4 Data Submission Requirement within 60 days after the completion of survey.

4 Data Submission Requirement

Minimum requirements for data submission for the purposes of This guideline, by Operators to the Authority shall be the following: -

- The Operator shall provide one (1) original and one (1) copy of each data type, both on tapes and an external hard drive, within 60 days after the end of survey operations.
- The Operator shall provide one (1) original and one (1) copy of a full acquisition report, both in softcopy and hardcopy, within 3 months after the end of survey operations.
- The Operator shall provide guidelines on data configuration for the purpose of accessing or reading the data, e.g. tar listing.
- In case of data submission in batches, the Operator shall provide a clear listing of data.
- In the case of seismic survey, the data submitted to the Authority shall include but not limited to the following:
 - Survey sail line (in case of offshore)/flight path (in case of airborne) and full-fold acquired
 - Processed navigation data
 - Bathymetric data (in case of offshore)/topographic data (in case of onshore and airborne)
 - Seismic data field tapes (in either SEG-D or SEG-Y format)
 - Acquisition Report
 - Field Data (SEG-D and SEG-Y), static data and Report
 - Pre-processed seismic data, associated data processing and QA/QC reports
- Seismic data files in SEG-Y format, the headers should be in accordance to Appendix C.

Note: The ownership and right for all the data shall be exclusively owned by the Authority.

References

In this guideline, the following references are referred:

Reference 1	International Association Geophysical Contractors (IAGC): https://www.iagc.org
Reference 2	Workplace Safety and Health (Facilities) Control of Major Accidents Hazards Regulations 2013 and Workplace Safety and Health (Facilities) Control of Major Accident Hazards (Amendment) Regulations 2017
Reference 3	Volume 6: Drilling Guideline
Reference 4	International Association of Oil and Gas Producers: https://www.iogp.org/
Reference 5	<p>In COMAH Regulation, "Material change" means any change in design or operations that is significant to require a re- submission of the notification or Safety Case, and includes:</p> <ul style="list-style-type: none"> a) Physical changes to the plant; b) Changes to operational parameters; c) Organisational or staff changes; or d) Change in risk profile

Appendices

In this guideline, the following appendices are referred:

Appendix A	Coordinate Reference System and Map Projection Standards
Appendix B	Stakeholders and Government agencies engagement
Appendix C	Format

Appendix A

Coordinate Reference System and Map Projection Standards

- Geographic Coordinate System

Parameter	Value
Name	Timbalai 1948
Ellipsoid Name	Everest 1830 (1967 Definition)
Semi-Major Axis	6377298.5559999999
Semi-Minor Axis	6356097.5503008962
Inverse Flattening	300.80169999999998
Angular Unit	Degree
Radians per unit	0.017453292519943295

- Projected Coordinate System

Parameter	Value
Name	Rectified Skew Orthomorphic Projection Grid
Unit Measurement	Meters
Origin	4° 00' N
	115° 00' E
Scale Factor	0.99984
False Northing	442857.654 N
False Easting	590476.872 E
Azimuth	53° 18' 56.9543"

- Transformation Parameters
WGS84 to Timbalai 1948 (Molodensky Badekas 10-Parameter)

Parameter	Value
Dx	678.3179
Dy	-665.4152
Dz	48.1784
Rx	1.64470
Ry	1.51250
Rz	2.82300
Scale Factor	-6.9788
x0	-2678448.9483
y0	5762777.8188
z0	543962.5088

Appendix B

The Operator shall engage all relevant stakeholders and government agencies for the purposes of this guideline, including but not limited to the following:

<i>Generic</i>	
Item	Stakeholders
Cultural Data/Survey Data	Survey Department, Ministry of Development.
Employee/Workers Crew Change	<ul style="list-style-type: none"> • Department of Labour, Ministry of Home Affairs for work permit and visa • Department of Immigration, Ministry of Home Affairs for work permit and visa • Local Business Development (LBD) Division, Department of Energy for work visa • Department of Civil Aviation for crew change across border via Chopper
Telecommunications	Authority for the Info-communications Technology industry (AITI)
Halal Certification	Ministry of Religious Affairs (KHEU)
Clearance of Medicines for Clinics	Department of Pharmaceutical Services, Ministry of Health
Emergency Cases	<ul style="list-style-type: none"> • Ambulance/Hospitals • Royal Brunei Police Force • Brunei Fire Department • Search & Rescue
International Border Crossing	<ul style="list-style-type: none"> • Ministry of Foreign Affairs • Ministry of Defense
Survey Equipment Clearance	<ul style="list-style-type: none"> • Department of Royal Customs and Excise Department, Ministry of Finance and Economy (MOFE) • Marine Ports Authority
<i>Onshore Survey</i>	
Item	Stakeholders
Basecamp Construction	<ul style="list-style-type: none"> • Land Department, Ministry of Development • Public Works Department, Ministry of Development
Bunker Construction	<ul style="list-style-type: none"> • Land Department, under Ministry of Development • Ministry of Defense
Explosives Handling and Storage	Royal Brunei Police Force
Restricted or Non-permitted Sites	<ul style="list-style-type: none"> • Ministry of Defense for 'not permitted' or 'restricted' military area • Istana Asset Maintenance for Palace area • Ministry of Primary Resources and Tourism for forest reserve area • Town and Country Planning, Ministry of Development • Prison Department for prison restricted area • Owner of private residential area
Usage of Public Lightworks	Department of Electrical Services (DES), Department of Energy

Usage of Public Road and Infrastructure	Public Works Department, Ministry of Development
Agricultural/Farm Area, Crop Compensation	Agriculture and Agri-food Department, Ministry of Primary Resources and Tourism
Environmental	<ul style="list-style-type: none"> • Safety, Health and Environment National Authority (SHENA) • Ministry of Health for water quality
Community	<ul style="list-style-type: none"> • Local communities and relevant agencies
<i>Offshore Survey</i>	
Item	Stakeholders
Vessel	<ul style="list-style-type: none"> • Marine Ports Authority • Marine Police, Royal Brunei Police Force • Royal Brunei Navy • Department of Fisheries, under Ministry of Primary Resources and Tourism
Environmental	<ul style="list-style-type: none"> • Safety, Health and Environment National Authority (SHENA) • Department of Fisheries, under Ministry of Primary Resources and Tourism
<i>Airborne Survey</i>	
Item	Stakeholders
Usage of Airplane	<ul style="list-style-type: none"> • Royal Brunei Air Force • Department of Civil Aviation

Appendix C

EBCDIC Header format:

Lines	Content	Lines	Content
1-3	Project information	31-36	Data ranges
4-20	Acquisition information	37-39	Polarity, bin grid definition, coordinate reference system
21-30	Processing information	40	'END TEXTUAL HEADER' or 'END EBCDIC'

Example:

TEXT 01 CLIENT: NAME:
 TEXT 02 PROJECT: AREA:
 TEXT 03 TYPE OF DATA: PRESTM, FULL STACK, TIME DOMAIN PHASE: ZERO
 TEXT 04 SURVEY :
 TEXT 05 ACQUIRED BY :
 TEXT 06 VESSEL :
 TEXT 07 FOLD : 96
 TEXT 08 SP INTERVAL : 6.25 M
 TEXT 09 SOURCE TYPE : AIRGUN
 TEXT 10 SOURCE DEPTH : 1.5 M
 TEXT 11 NO. OF CABLE : 1
 TEXT 12 CABLE LENGTH : 1200 M
 TEXT 13 GROUP INT : 12.5 M
 TEXT 14 CABLE DEPTH : 2 M +/-0.5 M
 TEXT 15 REC. LENGTH : 2048 MS
 TEXT 16 NEAR TRACE OFFSET : 26.0 M
 TEXT 17 SAMPLE RATE : 1 MS
 TEXT 18 SHOTPOINT RANGE : 1000 - 1440 (INC 1)
 TEXT 19
 TEXT 20
 TEXT 21 PROCESSING DONE BY :
 TEXT 22 IDENTING, SWELL NOISE EDITING, 8 HZ/18 DB/OCTAVE HIGH-PASS FILTER,
 TEXT 23 SPHERICAL SPREADING CORRECTION, -28 MS SYSTEM DELAY,
 TEXT 24 +2 MS GUN & CABLE CORRECTION, TAUP DEMULTIPLE, DECON & MUTE,
 TEXT 25 ZERO-PHASING, VELOCITY ANALYSIS EVERY 500 METRES
 TEXT 26 KIRCHHOFF PRESTACK TIME MIGRATION,
 TEXT 27 STACKED USING FINAL STACKING VELOCITY EVERY 500 METRES
 TEXT 28 6 DB/SEC GAIN, CONVERT TO SEG Y IBM FLOATING POINT
 TEXT 29
 TEXT 30
 TEXT 31 TRACE HEADER LOCATIONS:
 TEXT 32 BYTE 9 - 12: SHT; 21 - 24: SSP
 TEXT 33 BYTE 73 - 76: XSHT; 77 - 80: YSHT
 TEXT 34 SHT = (SSP-96)+1000
 TEXT 35

TEXT 36

TEXT 37 GEODETIC DATUM: TIMBALAI 1948

TEXT 38 PROJECTION: RECTIFIED SKEWED ORTHOMORPHIC

TEXT 39 SPHEROID: EVERSET 1830B CENTR. MERID: 109.7 DEG

TEXT 40 END EBCDIC

Binary Header format:

Byte No.	Description
3201-3204	Job identification number
3205-3208	Line number
3209-3212	Reel number
3213-3214	Number of data traces per ensemble (gather, record)
3215-3216	Number of auxiliary traces per record
3217-3218	Sample interval in microseconds
3219-3220	Sample interval in microseconds for original data
3221-3222	Number of samples per trace
3223-3224	Number of samples per trace for original data
3225-3226	Dara sample format code
3227-3228	Ensemble fold. Data sample format
3229-3230	Trace sorting code
3255-3256	Measurement system
3501-3502	SEGY format revision number
3503-3504	Fixed length trace flag
3505-3506	Number of 3200-byte, extended textual file header records following the binary header.

Trace Header Format for both Land and Marine Data:

Byte No.	Description for Land	Description for Marine
1-4	Trace sequence number within line	
5-8	Trace sequence number within reel	
9-12	Original field record number	
13-16	Trace number within original field record	
17-20	SP (set it as source stick to match with field)	
21-24	CMP	
25-28	Trace number within CDP ensemble	
29-30	Trace identification code	
31-32	Number of vertically summed traces yielding this one	
33-34	Fold	
35-36	Data use	
37-40	Offset (only suitable for pre-stack data)	
41-44	Receiver elevation (not real value as it in different domain just for reference)	Tidal static correction
45-48	Shot elevation (not real value as it in different domain just for reference)	
53-56	Datum elevation at receiver	Receiver depth

57-60	Datum elevation at source	Seabed reflection time (TWT) at CDP
61-64	Surface elevation at CDP	Water depth at source
65-68	Source sequence number	Water depth at receiver group
69-70	Scaler to all elevation	
71-72	Scaler to all coordinates	
73-76	X coordinate of source centre	
77-80	Y coordinate of source centre	
81-84	X coordinate of receiver centre	
85-88	Y coordinate of receiver centre	
89-90	Coordinate units	
91-92	Weathering velocity	Near surface water velocity
93-94	Subweather velocity	Average velocity over the water layer
95-96	Uphole time at source	-
97-98	Uphole time at receiver	-
99-100	Source residual reflection static correction	
101-102	Receiver residual reflection static correction	
103-104	Total statics applied	
105-106	Lag time A in milliseconds	
107-108	Lag time B in milliseconds	
109-110	Delay recording time in milliseconds	
111-112	Mute time -start	
113-114	Mute time -end	
115-116	Number of samples in this trace	
117-118	Sample interval for this trace	
181-184	CMP X	
185-188	CMP Y	
189-192	Inline number	
193-196	Crossline number	

