



REPUBLIC OF MOZAMBIQUE
MINISTRY OF MINERAL RESOURCES AND ENERGY

APPENDIX B

TECHNICAL SUBMISSION

All the technical documentation from the Applicant to be given here:

Completed Applications should be sent to:

Please send / deliver your
application to:

(See Guidance Notes)



NATIONAL PETROLEUM INSTITUTE

**Rua dos Desportistas, Parcela 259-Aterro Maxaquene
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Cell: +258 839511000
Maputo – Moçambique**

IMPORTANT NOTE:

The technical submission shall contain the information requested on the following pages for *each* of the areas applied for.

Attached to the technical submission, the Applicant is requested to present brief and relevant documentation for each area of G&G studies and analyses focusing on aspects that are considered critical for an evaluation of the prospectivity of the area, such as:

- a brief and focused petroleum geological analysis, describing the prospectivity in the area applied for, critical factors, etc.
- a brief description of the seismic interpretation, well ties, depth conversion velocity model etc, including attached interpreted seismic sections.
- time and depth structure maps for prospective horizons, showing all identified prospects and leads.
- brief description of the prospect/lead evaluation to include source/migration/timing of hydrocarbon charge.
- description of the work programme and exploration strategy.

The technical submission should also be provided on a separate USB Drive which should have adequate resolution of all the figures in order to show relevant details.

SECTIONS TO BE COMPLETED

B1 Applicant Regional Database Summary

B2 Individual Prospect / Lead Summary Sheets

B1 APPLICANTS REGIONAL DATABASE SUMMARY

SUMMARY OF APPLICANTS REGIONAL GEOTECHNICAL DATABASE

| |
|-------------------------------------|
| Reports: |
| Seismic Data: |
| Well Data: |
| Non-Exclusive Multi Client Reports: |
| Gravity & Magnetic Data: |
| Other Data: |

B2. INDIVIDUAL PROSPECT / LEAD EVALUATION SHEETS

As much information as possible should be filled in (leads are not expected to have a complete volume and parameter data set). The map with prospect/lead outline must have coordinates.

(Please Note: Valid for EPC application)

| | | | | | | |
|---|------------------------------|---|----------------------------------|--------------------------------------|---------------------------------|-------------------------------|
| Prospect /Lead name | | Reference to seismic line(s)/seismic coverage: | | | | |
| Prospect / Lead | | Reported by (company & report reference / date) | | | Structural element | |
| Play | | | | | Ground level elev (m) | |
| CALCULATED HYDROCARBON VOLUMES | | | | | | |
| Gas / Oil case | ORIGINALLY IN PLACE | | | RECOVERABLE | | |
| | Low | Base | High | Low | Base | High |
| Gas Bcf | | | | | | |
| Condensate / Oil MMbbls | | | | | | |
| Comments Calculate Volumes | | | | | | |
| PROSPECT RISK ASSESSMENT | | | | | | |
| Trap | | Reservoir | | Source | | Result |
| Probability of structure | Probability of seal | Presence of Target fm | Probability of Reservoir Quality | Probability of Source | Probability of maturity /charge | Geol. probability of success: |
| | | | | | | |
| Comments, Prospect Risk Assessment | | | | | | |
| TRAP TYPE, RESERVOIR ROCK, SOURCE ROCK, CAP ROCK (SEAL) | | | | | | |
| Type of trap (structural, stratigraphic, etc) | | Reservoir level (Chronostrat./age) | | Reservoir level (Lithostrat./fm) | | |
| | | | | | | |
| Source Rock (Chronostrat. / age) | Source Rock (Lithostrat./fm) | Seal (Chronostratigraphy /age) | | Seal (Lithostratigraphy / formation) | | |
| | | | | | | |
| Comments: | | | | | | |
| PARAMETRES USED IN VOLUME CALCULATIONS | | | | | | |
| | Low | Base case (most likely value) | High | | | |
| Depth to top of prospect (m) (below Ground level) | | | | | | |
| Depth to base of prospect (m) (closing contour) | | | | | | |
| Milliseconds to top of prospect (ms) | | | | | | |
| Milliseconds to base of prospect (ms) | | | | | | |
| Area of closure (km ²) | | | | | | |
| Gross rock volume (10 ⁹ m ³) | | | | | | |
| Hydrocarbon column in prospect (m) | | | | | | |
| Reservoir thickness (m) | | | | | | |
| Net / Gross (N/G) | | | | | | |
| Porosity (φ) | | | | | | |
| Water Saturation (Sw) | | | | | | |
| Formation Volume Factor (FVF) | Bg | | | | | |
| | Bo | | | | | |
| Recovery factor | | | | | | |
| Gas Oil Ratio (GOR), free gas (Sm ³ /Sm ³) | | | | | | |
| GOR, oil (Sm ³ /Sm ³) | | | | | | |

MAP – LEADS & PROSPECTS

PROSPECT / LEAD NAME:

BLOCK:(S)

SEISMIC LINE – SHOWING LEADS & PROSPECTS

PROSPECT / LEAD NAME:

BLOCK:(S)

WELL PROGNOSIS / STRATIGRAPHIC COLUMN / GEOLOGIC CROSS SECTION

PROSPECT / LEAD NAME:

BLOCK:(S)

PETROLEUM GEOLOGICAL ANALYSES AND PROSPECTIVITY IN THE AREA APPLIED FOR

[Empty box for content]

SEISMIC INTERPRETATION AND PROSPECT EVALUATION

[Empty box for content]

SUMMARY OF PROPOSED WORK PROGRAM (EPCC APPLICATION)

(Please complete the appropriate boxes and provide expected cost)

| | | | | |
|---|-------------|-------------------------|-------------------------|----------------------------|
| First Exploration Period: __ months | Other: | 2D Seismic Acquisition: | 3D Seismic Acquisition: | Drill Expl. Well: |
| | Size: _____ | Size: _____ | Size: _____ | Depth: _____ |
| | USD: _____ | USD: _____ | USD: _____ | Target _____ USD: _____ |

| | | | | |
|--|-------------|-------------------------|-------------------------|----------------------------|
| Second Exploration Period: __ months | Other: | 2D Seismic Acquisition: | 3D Seismic Acquisition: | Drill Expl. Well: |
| | Size: _____ | Size: _____ | Size: _____ | Depth: _____ |
| | USD: _____ | USD: _____ | USD: _____ | Target _____ USD: _____ |

| | | | | |
|---|-------------|-------------------------|-------------------------|----------------------------|
| Third Exploration Period: __ months | Other: | 2D Seismic Acquisition: | 3D Seismic Acquisition: | Drill Expl. Well: |
| | Size: _____ | Size: _____ | Size: _____ | Depth: _____ |
| | USD: _____ | USD: _____ | USD: _____ | Target _____ USD: _____ |

RE-PROCESSING AND RE-INTERPRETATION OF EXISTING GEOTECHNICAL DATA (SEISMIC/WELL)

(Please Note: Valid for EPCC application)

| | Line / sq. km Within the area applied for | Line / sq.km Within Region |
|-------------------------|--|-------------------------------|
| Reprocessing | | |
| New Interpretation | | |
| Other (special studies) | | |

| % Relinquishment | | Ren % |
|------------------|--|-------|
| Relinquishment | Beginning of 2 nd Exploration Subperiod | 50 |
| | Beginning of 3 rd Exploration Subperiod | 25 |

WORK PROGRAM AND EXPLORATION STRATEGY

(Please Note: Valid for all application)



