

**Enclosure 2****GEOLOGICAL EVALUATION****1. Evaluation**

In this enclosure the applicant shall provide a detailed geological evaluation of the areas applied for.

The enclosure should include the following information:

- a) A review of the geological and geophysical data and database used in the application.
- b) A regional or semi-regional evaluation of relevance for the area applied for. The applicant shall place particular emphasis on, and document results, of regional studies, undertaken by the applicant, that highlight the exploration challenges in the application area.
- c) A petroleum geological analysis of the areas applied for. The analysis should include information concerning source rock potential, maturation and migration history, reservoir, the formation of traps, seal and retention of hydrocarbons. The analysis should emphasise those factors critical for the evaluation of identified prospects and leads.
- d) Interpreted geophysical, geological and geochemical data and maps that support the petroleum geological evaluation.
- e) An evaluation of each of the identified prospects applied for. The prospect evaluation should include e.g. the following:
  - Time and depth maps with method of depth determination, together with a prognosed geological column, in meters and twt.
  - Anticipated hydrocarbon type, gas/oil ratio, formation volume factor, recovery factor, rock volume, and rock-dependent reservoir parameters, etc.
  - Estimated recoverable hydrocarbon volumes in metric units. Ranges of uncertainty should be specified for all resource estimates (P90, P50, P10).
  - Probability of discovery (risk) together with an explanation of how this factor is determined.

For leads the evaluation should include similar information to the extent possible.

- f) A detailed description of exploration strategy and work program. If the application for any given area is based only on the identification and mapping of leads, the applicant shall give a detailed description of the data acquisition and investigation necessary to ascertain whether the lead may later be classified as a prospect.
- g) Additionally, the applicant shall describe how he plans to contribute to activities of relevance for the long-term effort with a view to future exploration in the Faroes area.

## 2. Definitions

- a) An *application area* may consist of prospects or leads. It is defined geographically by contiguous blocks or parts of blocks and their corresponding coordinates in whole minutes of latitude and longitude.
- b) A *prospect* is a possible hydrocarbon trap with a clearly defined and mappable rock volume.
- c) A *lead* is a possible hydrocarbon trap for which available data coverage and quality is not sufficient to permit the clear definition and mapping of the trap volume.

## 3. Dataformats and scales, etc.

- a) General:
    - Formats and scales, mentioned below, shall be considered as minimum requirements. In addition, the applicant may submit different products and/or use different formats and scales in order to illustrate specific points of relevance for the application.
    - All digital data should be supplied on clearly labelled RO CDs and in clearly labelled CD-cases. The CD's shall be easily readable in ordinary CD-drives.
    - All maps must be presented with clear coordinates and/or block outline.
    - All navigation and map projection shall be in ETRS89 (WGS84), UTM zone 30.
    - All written documents shall be included in a format easily readable by Microsoft Office 97.
    - The applicant shall name a contact individual that can aid with possible problems in reading the supplied electronic media, etc.
  - b) Maps:
    - Hardcopy:
      - Prospect or lead maps shall be included in scale 1:75,000.
      - Regional maps shall be included in scale 1:500,000.
    - Digital:
      - Prospects, leads and area applied for shall be included as ASCII files and in a format easily readable by MapInfo Professional, Version 5.0.
      - Other maps shall be included as TIF files.
  - c) Seismic data:
    - Seismic lines shall be displayed as wiggles with 40% positive fill.
    - Seismic *time* lines shall be included at:
      - 10 cm/sec, 1:25,000 (prospects and leads),
      - 5 cm/sec, 1:50,000 (others).
    - Seismic *depth* converted lines and geological cross sections shall be included at:
      - 1:25,000 (prospects and leads),
      - 1:50,000 (others).
    - The interpretation on enclosed seismic lines shall be included as ASCII files in a standard Landmark import/export format.
  - d) Expected drilled geological columns shall be included at 1:10,000 vertical scale.
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