### Comments Jean-Paul Couput 1st October 2022

#### **Chapter 3. Terms and definitions**

a) allocation, process for determining what volume quantity of petroleum of a total production as well as other relevant streams like fuel gas from the entire production system shall be assigned to an individual fields

May be Net oil should be defined in Chapter 3

# **Chapter 5. Requirements relating to chemical laboratory analyses**

Measurands and target uncertainties for delivery measurements (\*)

(\*) uncertainty of chemical analysis used for allocation like gas and / or liquid composition used for allocation are set by licencees

# **Chapter 6. Allocation requirements**

### § 23. Allocation system

- (1) The licensee shall have an allocation system designed in a manner that ensures fair allocation of produced petroleum between licensees. Licensees shall be able to quality-assure and revise allocated volumes quantity of petroleum and other relevant streams. The allocation shall have an audit trail.
- (2) Potential sources of inaccuracies (systematic errors) and uncertainty shall be assessed when designing the allocation system, including by evaluating the allocation method, measuring system, allocation method, measuring system, chemical analysis, equation of state for determining PVT properties as well as , calculations and procedures
- (3) The choice of allocation method and equations of state for determining PVT properties when used in allocation must be documented.
- (4) The full allocation system including allocation method, measuring system, chemical analysis, equation of state for determining PVT properties when needed, calculations and procedures shall be documented

#### Chapter 8. Special requirements relating to measuring systems for dynamic measurement of oil

§ 37. Components of the oil measuring system

- (1) The measuring system for dynamic oil volume measurement shall include meters, associated instruments, valves, computer system, manual sampling equipment and other equipment included in delivery and allocation measurement of volumes (volume and mass) of oil (crude oil, condensate and NGL, including LPG).
- (2) The delivery measuring system shall also include a stationary prover and automatic sampler

Potential use of on line measuring systems for water & density is not mentioned

# **Chapter 13. Requirements for operations and maintenance of measuring systems**

- § 87. Operation and maintenance of multiphase meters
- (1) A multiphase meter shall be used in the working range under operating conditions corresponding with set rated operating conditions for the meter. Maintenance and calibration shall be carried out pursuant to the maintenance programme and calibration programme.
- (2) The flow regime shall be monitored. A control diagram for basic parameters, including differential pressure and density, shall be established and maintained. The diagram shall have expedient control limits for the parameters.
- (3) The built-in diagnostics of the meter when available or any other external system for meter validation shall be used for verification.
- (4) Where practicable, the maintenance plan shall comprise verification of flow calculations, maintenance of PVT data and inspection of the instrument pipes, sensors and instruments that are an integrated part of the multiphase meter.