

OTM Challenges

- OTM-001: Identifying effect of fault reactivation
- OTM-002: Tracking fluid migration in the subsurface
- OTM-003: Subsidence from reservoir draw-down
- OTM-004: Regulatory verification relating to injection of fracking fluids
- OTM-005: Monitoring natural fault movement
- OTM-006: Technical verification relation to injection of fracking fluids
- OTM-007: Identify communication between producing zones
- OTM-008: Determine historical ground movement for infrastructure planning
- OTM-009: Determine historical ground movement for pipeline routing
- OTM-010: Monitoring ground movement along pipelines
- OTM-011: Surface infrastructure movement relative to sub-surface
- OTM-012: Identifying conflicting sources of seismic signals
- OTM-013: Flagging environmentally sensitive areas prior to seismic surveys
- OTM-014: Forecasting sand dune migration
- OTM-015: Geological and terrain base maps for development of environmental baseline
- OTM-016: Identification of seasonal obstructions to logistics activity
- OTM-017: Identification of seasonal environment changes e.g. migration patterns
- OTM-018: Identifying existing O&G infrastructure for facility site selection
- OTM-019: Reconnaissance survey for EIA
- OTM-020: Tracking groundwater tables
- OTM-021: Air quality (emissions) monitoring
- OTM-022: Detecting hydrocarbon leaks
- OTM-023: Enabling survey to understand structural properties of the sub-surface for infrastructure planning
- OTM-024: Urban encroachment on O&G assets
- OTM-025: Early identification of potential hydrocarbon basins
- OTM-026: Identifying potential hydrocarbon seepage
- OTM-028: Land use mapping to detect the social impact of O&G developments
- OTM-029: Prelicensing site selection
- OTM-030: Ecosystem valuation of potential site
- OTM-031: Creating an ecosystem inventory prior to exploration
- OTM-032: Detecting ecosystem damages
- OTM-033: Mapping of environmental degradation (change)
- OTM-034: Monitoring hydrocarbon leaks
- OTM-035: Assessing the social impact of construction work
- OTM-036: Geohazard exposure analysis
- OTM-037: Identification of road or track for logistics planning
- OTM-038: Planning secondary surveys
- OTM-039: Selection of development sites
- OTM-040: Security of pipelines
- OTM-041: Vegetation encroachment on O&G asset
- OTM-042: Identifying seasonal terrain changes e.g. for access
- OTM-043: Anticipating areas of high seismic impedance
- OTM-044: Identifying steep terrain for seismic vehicles
- OTM-045: Identifying soft ground for seismic vehicles
- OTM-046: Identifying variations in trafficability for seismic vehicle
- OTM-047: Logistics planning for emergency events (emergency response planning)
- OTM-048: Identifying munitions debris (UXO, mines, etc.)
- OTM-049: Identifying unregulated overhead power cables
- OTM-050: Identifying near surface infrastructure
- OTM-051: Identification of fault lines
- OTM-052: Identify the cause of geological movement
- OTM-053: Understanding the near-surface for explosive charge placement
- OTM-054: Understanding the near-surface for anticipating seismic signal absorption properties
- OTM-055: Obtaining detailed terrain mapping for DEM construction
- OTM-056: Locating repeater stations for communications infrastructure
- OTM-057: Firemapping
- OTM-058: Identifying ground conditions susceptible to poor coupling
- OTM-059: Understanding outcrop mineralogy
- OTM-060: Forecasting landslide locations
- OTM-061: Forecasting river migration patterns
- OTM-062: Monitoring revegetation
- OTM-063: Resettlement assessment
- OTM-064: Avoiding aerial mapping restrictions
- OTM-065: Floodplain mapping
- OTM-066: Tracking volumes of oil stored
- OTM-067: Change detection of coastline migration
- OTM-068: Water quality monitoring
- OTM-069: Change detection for competitor intelligence
- OTM-070: Understanding security situations
- OTM-071: Planning around protected sites
- OTM-072: Monitoring flash floods
- OTM-073: Identifying sources of building resources
- OTM-074: Estimating ground bearing capacity
- OTM-075: Creating basemaps in politically challenging regions
- OTM-076: Understanding activity beneath the tree canopy
- OTM-077: Validating co-ordinates of old wells

- OTM-078: Remote supervision of operations
- OTM-079: Identification of archaeological or burial sites