OTM-037: Identification of road or track for logistics planning

Identification of road or track for logistics planning

Challenge

| | Challenge ID | OTM:037 |
|----------------------------|---|--|
| 1 | Title | Identification of road or track for logistics planning |
| 2 | Theme ID | ON 5.1: Logistics planning and operations - Baseline mapping of terrain and infrastructure |
| 3 | Originator of Challenge | Onshore: OTM |
| 4 | Challenge Reviewer / initiator | PEMEX, Ramani, Shell, Eni, Exxon |
| | General description | Overview of Challenge |
| 5 | What is the nature of the challenge? (What is not adequately addressed at present?) | Planning the logistics arrangement to get plant and equipment such as rigs, drill pipe, topside handling facilities to remote locations is challenging. Identifying road networks suitable for HGVs and estimating travel time for operations is difficult and often inaccurate. |
| 6 | Thematic information requirements | 4. Obtain detailed land-use information, 5. Identify location and condition of transport infrastructure, |
| 7 | Nature of the challenge - What effect does this challenge have on operations? | Planning can be inefficient and overly time consuming. Planning can be inefficient and overly tie-consuming. Selected routes could be inappropriate for certain vehicle types. Route choice may also affect convoy speed and thus have a knock on delay of s |
| 8 | What do you currently do to address this challenge?/ How is this challenge conventionally addressed? | Crude satellite imagery data and ground truthing |
| 9 | What kind of solution do you envisage could address this challenge? | Very high to high resolution EO data to derive land use information. Resolution depends on covered area and size of analysis objective. |
| 10 | What is your view on the capability of technology to meet this need? – are you currently using EO tech? If not, why not? | EO could be a useful complimentary technology |
| | Challenge classification | |
| 11 | Lifecycle stage | Pre license Exp. Dev. Prod. Decom. |
| | Score from impact quantification [1] | 1 2 4 1 2 |
| | | |
| 12 | Climate classification | NOT CLIMATE SPECIFIC |
| 13 | Geographic context/restrictions | Generic onshore (Unspecified) |
| 14 | Topographic classification / Offshore classification | Generic onshore (Unspecified) |
| 15 | Seasonal variations | Any season |
| 16 | Impact Area | Reduced capital expenditure |
| 17 | Technology Urgency | Immediately (0-2 years) |
| | /II | |
| | (How quickly does the user need the solution) | |
| | Information requirements | |
| 18 | | depending on sensor and application |
| 18 19 | Information requirements | depending on sensor and application |
| | Information requirements Update frequency | depending on sensor and application |
| 19 | Information requirements Update frequency Data Currently used | depending on sensor and application 80-90% |
| 19 20 | Information requirements Update frequency Data Currently used Spatial resolution | |
| 19 20 21 | Information requirements Update frequency Data Currently used Spatial resolution Thematic accuracy | 80-90% |
| 19 20 21 22 | Information requirements Update frequency Data Currently used Spatial resolution Thematic accuracy Example formats | 80-90% Standardized geo-spatial formats (e.g. shapefile, geotiff or KML) |
| 19 20 21 22 23 | Information requirements Update frequency Data Currently used Spatial resolution Thematic accuracy Example formats Timeliness | 80-90% Standardized geo-spatial formats (e.g. shapefile, geotiff or KML) |

^[1] Impact quantification scores: 4 - Critical/enabling; 3 - Significant/competitive advantage; 2 - Important but non-essential; 1 - Nice to have; 0 - No impact, need satisfied with existing technology

Relevant products

Content by label

There is no content with the specified labels