

| <b>P30: Satellite-derived bathymetry for port and coastal monitoring</b>  |                  |
|---|------------------|
| <b>Maturity score</b>   |                  |
| <b>Mean:</b> 2.2  | <b>STD:</b> 0.40 |
| <b><u>Constraints and limitations</u></b>   |                  |
| <ul style="list-style-type: none"> <li>• Cloud presence</li> <li>• Proximity with effluents can make the task more complex.</li> <li>• Limited to estimate water depth up to max 20 m</li> </ul>  |                  |
| <b><u>Relevant user needs</u></b>   |                  |
| UN12: Analysis of potential risks in specific regions.  |                  |
| <b><u>R&amp;D gaps</u></b>  |                  |
| <ul style="list-style-type: none"> <li>• Lack of local in-situ data like LIDAR or Echo-Sounder data</li> <li>• The optical-based products depend on the turbidity and the specificities of the location, meaning that worldwide coverage is difficult.</li> </ul>           |                  |
| <b><u>Potential improvements drivers</u></b>  |                  |
| <ul style="list-style-type: none"> <li>• Fusion, with in-situ sensors, long time series of data to model the specificities of the location, combination with other satellite sensors, hyperspectral, SAR, but they need to be acquired at exactly the same time!</li> </ul> |                  |
| <b>Utilisation level review</b>   |                  |
| <b>Utilisation score</b>  |                  |
| <b>Mean:</b> 2.50   | <b>STD:</b> 0.87 |
| <b><u>No utilisation</u></b>  |                  |
| <b><u>Low utilisation</u></b>   |                  |
| <ul style="list-style-type: none"> <li>• Higher cost of using the commercial EO product.</li> <li>• Unawareness of the existence of commercial EO products with better specifications.</li> </ul>   |                  |
| <b><u>Medium utilisation</u></b>  |                  |
| <b><u>High utilisation</u></b>  |                  |
| <ul style="list-style-type: none"> <li>• High importance and relatively accurate versus comparable methods of gathering this type of information.</li> </ul>  |                  |
| <b>Critical gaps related to relevant user needs</b>   |                  |
| <b>Utilisation gap</b>  |                  |
| UN12: Analysis of potential risks in specific regions   |                  |