# NLAI–Seabed 2030 Online Survey Report

Results and findings of combined surveys

**Vol 2**

**June 2021**

**SEABED 2030 Online Survey Report**

**Introduction**

The Nippon Foundation-GEBCO Seabed 2030 Project's vision to map the world's oceans by 2030 is both insightful and ambitious. The project operates under the joint auspices of the International Hydrographic Organisation (IHO) and UNESCO's Intergovernmental Oceanographic Commission (IOC). At present 80% of the oceans have yet to be charted to the required resolution and with that a demanding timeline has been set to complete the exciting Seabed 2030 mission. The "Wind in the Sails" proposal supports the Seabed 2030 Project by providing empirical evidence to enable the development of a prioritised targeted survey strategy. The ultimate aim of this three-phase project is to unite the global hydrographic community and operators within the maritime domain around a global seabed mapping priority list, underpinned by a robust evidence base that articulates the true need and value of mapping the seabed in its entirety to a gridded depth variable resolution. In an endeavour to identify and understand the global needs, requirements, and priorities for seabed bathymetric data for those users and practitioners across every sector in the maritime domain it was imperative to collect and collate user needs.

An online survey was created to understand the global needs for bathymetric data. The survey questions themselves were broad and generic in nature so that they had applicability to all. It was imperative that no one was excluded and by doing so as wide an evidence set as possible could be collected, which truly reflected global maritime needs for the seabed to be mapped.

The first survey exceeded all expectations with 443 responses received across 65 countries and spanned every maritime sector. For the first time there was a body of evidence which provided an understanding of global needs for bathymetric data and seabed mapping. Such was the success of this first phase, it was decided that a second online survey be conducted to build on the evidence set gathered to date and to endeavour to reach out to those counties where little or no response had been received in the original survey. The second survey was initiated in January 2021 and will run until 31 July 2021. At this time with another 2 months until the survey concludes the second survey has received an additional 336 responses. The combined online surveys have been a huge success and at the time of this report 779 responses have been received across 89 countries worldwide.

**Overview**

The main body of this report provides an overview on the combined findings and results of the two online surveys. For reference and comparison, the headline findings for the second survey can be found at Annex A with the headline findings of the first survey at Annex B of this report. The complete survey responses (for first, second and combined surveys) with all respondents' comments will be issued to Seabed 2030 as standalone documents, which can be reviewed in detail by IHO Data Centres in slower time.

It was pleasing to see that the results from the second survey did not contravene the results from the first survey. By and large the second wave of responses confirmed and strengthened the results seen in the first round. The only positive major change seen was the increase and diversity of nations represented.

There was a deliberate strategy in the second survey to reach out to those regions and nations where little or no response was seen from the original survey. The methodology used for the second phase to promote the survey used the same avenues for the first survey with Seabed 2030 and NLAI websites as well as Facebook and Twitter social media sites being used. A more targeted approach was taken through LinkedIn (approaching 100 contacts per day), focussing on contacts within those countries/regions where there was little or no response in the first survey. In addition, global maritime bodies and agencies were formally approached requesting them to promote/advertise the Seabed 2030 survey. Positive offers of support were received from:

- BIMCO

- UKHO
- EmodNET
- International Committee on Pipelines and Cables (ICPC)

Over and above this, an article was written and published, primarily to the international shipping community on "*Harnessing the wisdom (and data) of the shipping crowd"* to crowd source bathymetric data in support of the Seabed 2030 project and for the global need of all. This article can be found at Annex C, it will be published in the Shipping Network Magazine in June and can be used and advertised wider from July onwards by Seabed 2030.

**Executive Summary**

**The Wind in the Sails (WITS) work conducted in support of Seabed 2030 has been a complete success. The results obtained from the online surveys have far exceeded expectations. The findings from 89 countries provides for the first time a comprehensive global evidence set outlining seabed mapping needs and priorities across every maritime sector. The data and views obtained from the surveys now need to be transposed into a prioritised list for seabed mapping and this needs to be shared with the world's hydrographic offices to get their individual views so that a substantiated priority list can be created.**

**Once a corroborated priority list has been developed it needs to be incorporated into a global weighted and prioritised seabed mapping model. When created then a combination of the data gathered from the surveys in conjunction with a priority list and global model will all provide a large proportion of the information, evidence, and justification to be incorporated into business cases to secure funding for seabed mapping.**

**In addition, the second online survey has identified a further 55 potential sources of bathymetric data which if not already doing so may contribute to the Seabed 2030 project.**

**The responses received via the two online surveys showed that there is complete admiration and unswerving support for IHO, IOC, GEBCO, the Nippon Foundation and the Seabed 2030 project.**

**Key findings from the combined survey include:**

- **People have contributed and given their views across 89 nations worldwide, this is an increase of 24 countries from the first survey (65 countries).**

- **The results of the second survey closely align with those of the first survey, providing a corroborated and richer body of evidence.**

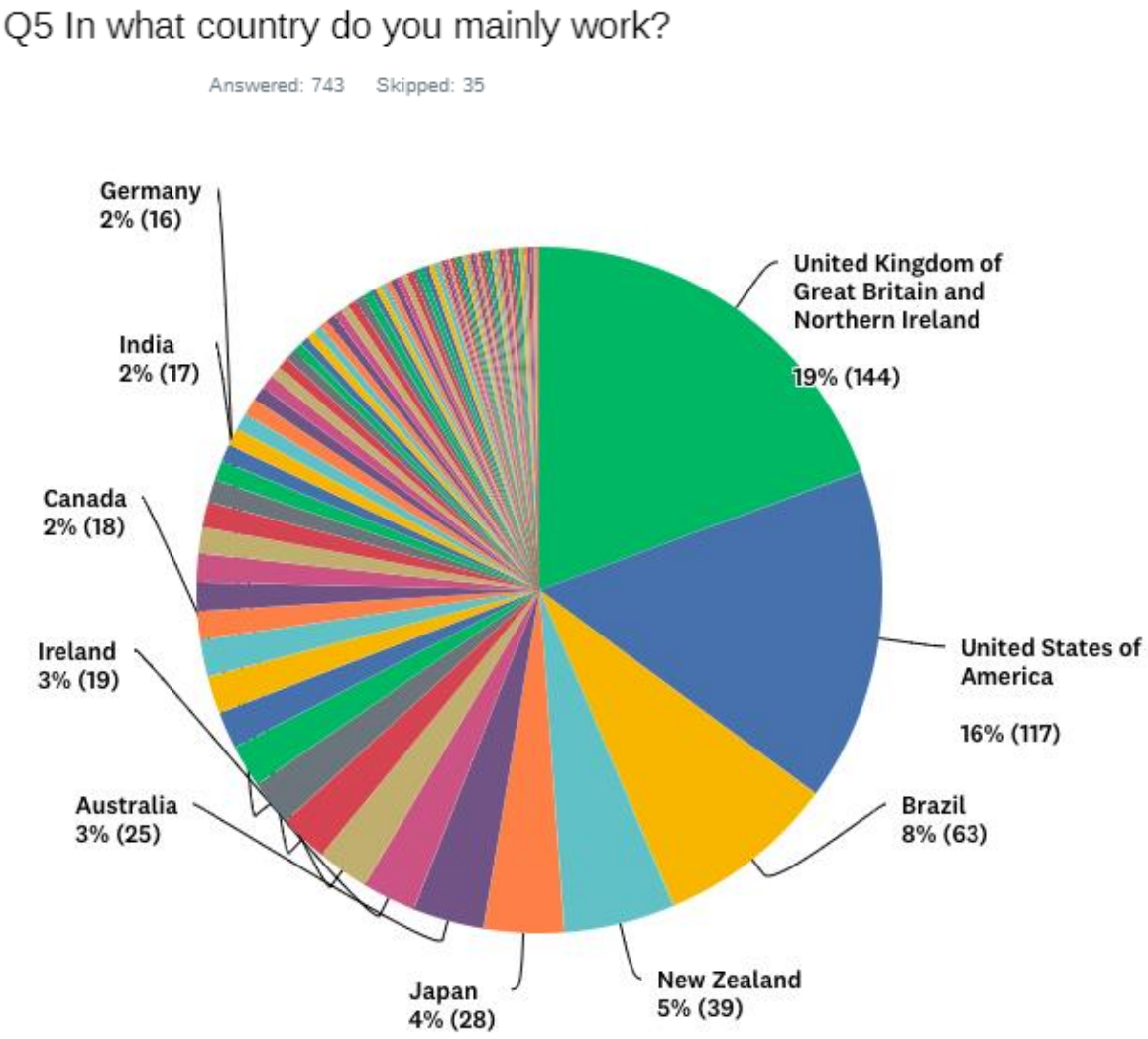
- **Countries and regions where there were little or no response in the first survey have made significant contributions to the second survey. Overall, the combined survey results now provide a comprehensive dataset, which reflects a global view and perspective.**

- **The second survey has identified 55 potential sources of bathymetric data which could contribute to the Seabed 2030 project.**

- **The key findings from the first online survey have all been reaffirmed in the results of the second survey.**

**Combined Survey Results**

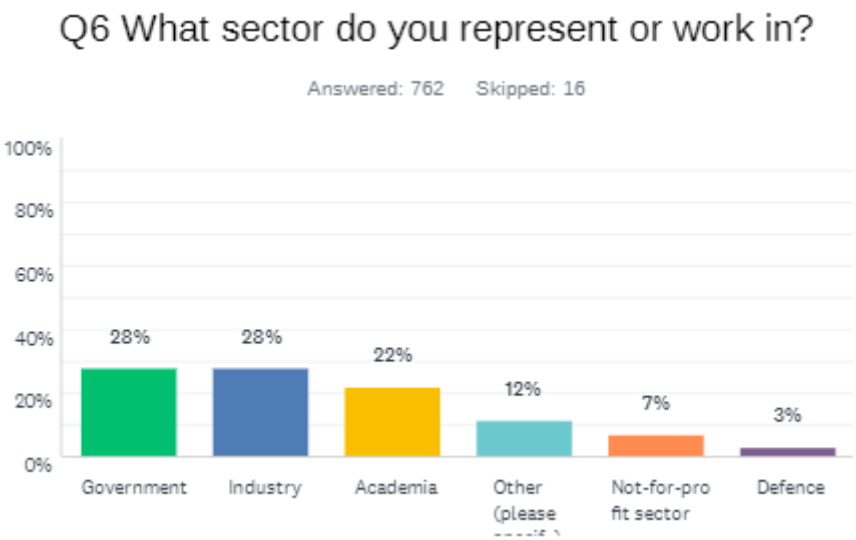
The results from survey 1 and survey 2 have been combined to provide a detailed and comprehensive dataset of evidence. In doing so, it provides a consolidated global view which has been substantiated and corroborated, providing consistency across the two surveys. This considerable and valuable weight of evidence can be used by Seabed 2030 to develop a prioritised global model for seabed mapping.



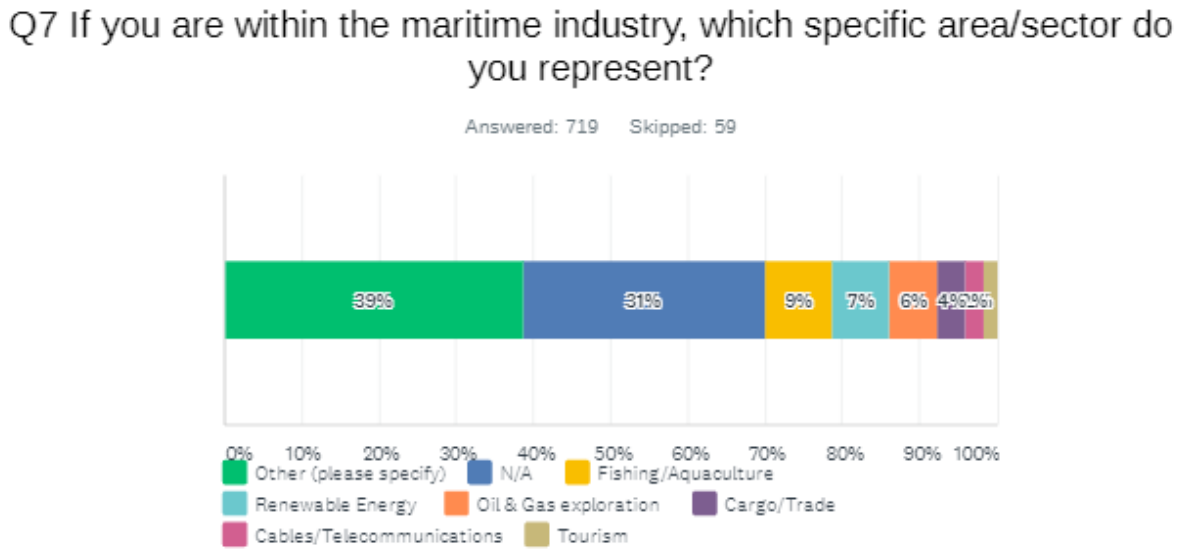

The responses of the top 10 countries by percentage level and total responses overall is as follows:

| | | |
|---|---|---|
| United Kingdom of Great Britain and Northern Ireland | 19% | 144 |
| United States of America | 16% | 117 |
| Brazil | 8% | 63 |
| New Zealand | 5% | 39 |
| Japan | 4% | 28 |
| Australia | 3% | 25 |
| Ireland | 3% | 19 |
| Canada | 2% | 18 |
| India | 2% | 17 |
| Germany | 2% | 16 |

The top 10 nations of responders in the first, second and combined surveys make-up 68%, 69% and 64% of the total respondents' accordingly. Whilst the United Kingdom, United States of America, Australia, Ireland and France figure in the top 10 of both surveys. It is reassuring to see at Annex A Brazil as top respondent at 18% and Japan fourth with 9%; both are regions and countries where few responses were seen in the first survey. This provides confirmation that the targeted promoting strategy of the second survey did succeed by providing wider global evidence and views.

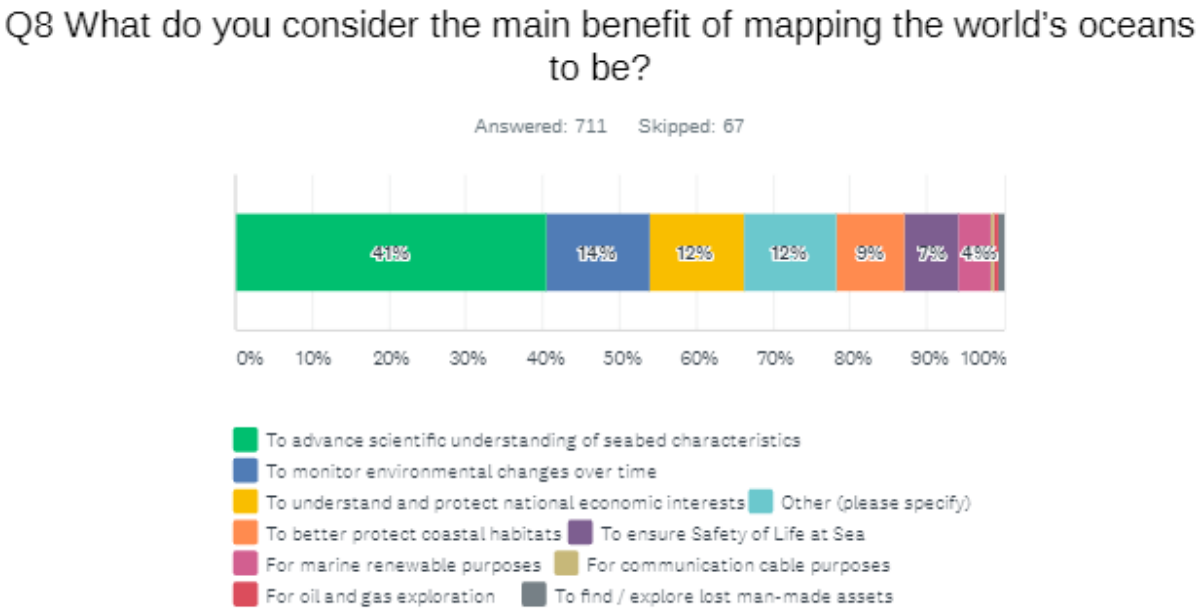



It was reassuring to see that the ranking of sectors and percentage levels by and large remained constant across first, second and combined surveys. Some 80% of respondents' sit within, Government, Industry and Academia and when a prioritisation strategy is developed it is recommended that it focuses on these three areas first.

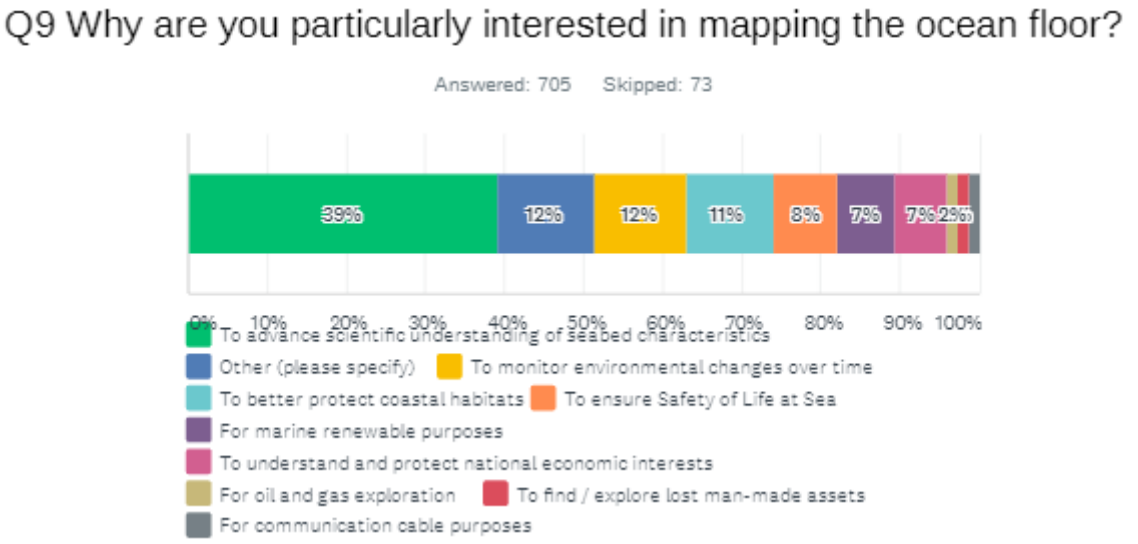



What is apparent in each of the surveys is that approximately 69% of respondents do not sit within one of the defined maritime industry sectors of; Fishing/Aquaculture, Renewables, Oil & Gas, Cargo/Trade, Tourism and Cables/Telecommunications. The individual comments of responders to this question need to

be reviewed and analysed closely so that their requirements are reflected when a global prioritisation is developed for seabed surveys.



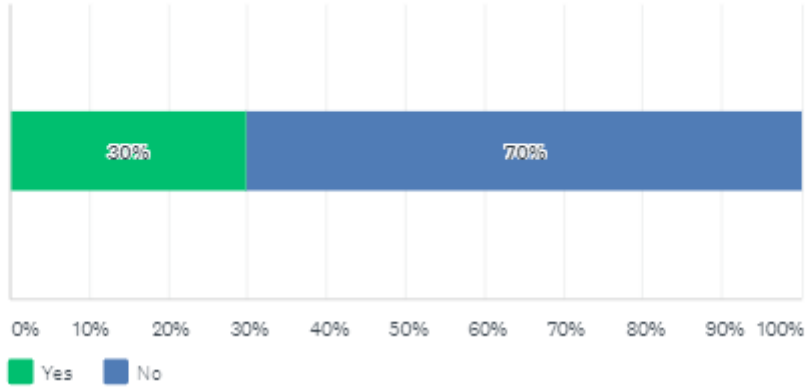

Whilst there were some slight changes in order and percentage levels across the surveys, it was consistent that 55% in each survey saw advancing scientific understanding and climate change as providing the highest benefits for seabed mapping.




It is not surprising to see that the results of Q9 align and corroborate with those of Q8 above.

Q10 Have you ever estimated the environmental, social and economic value of mapping the seabed of greatest interest to you?

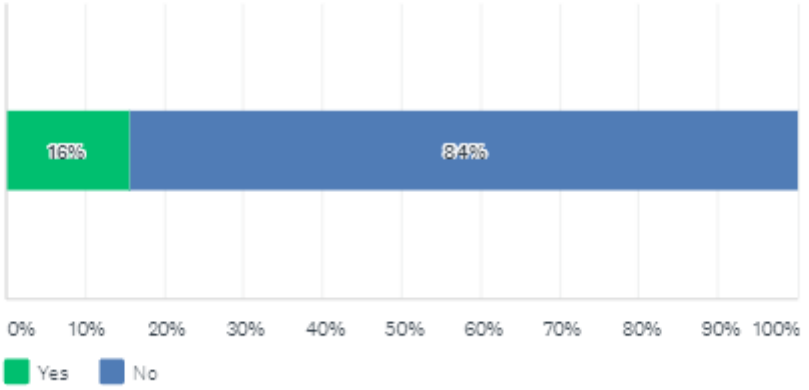
Answered: 707 Skipped: 71



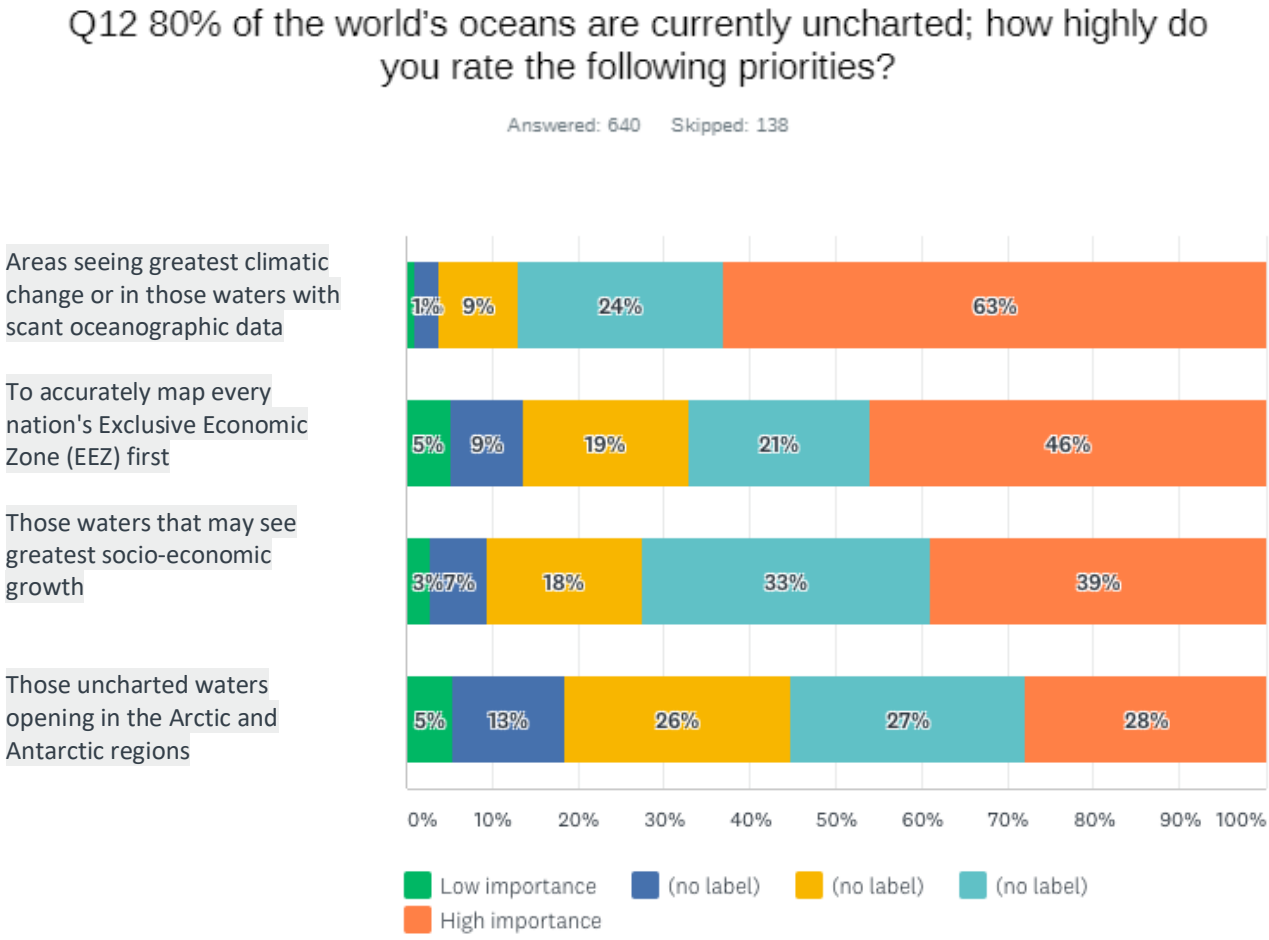

Again, the results across first, second and combined surveys showed that a large majority of respondents have not previously considered the value of mapping the seabed from an environmental, social or economic perspective.

Q11 Are you aware of any third-party models for estimating the environmental, social and economic value of mapping the seabed?

Answered: 704 Skipped: 74



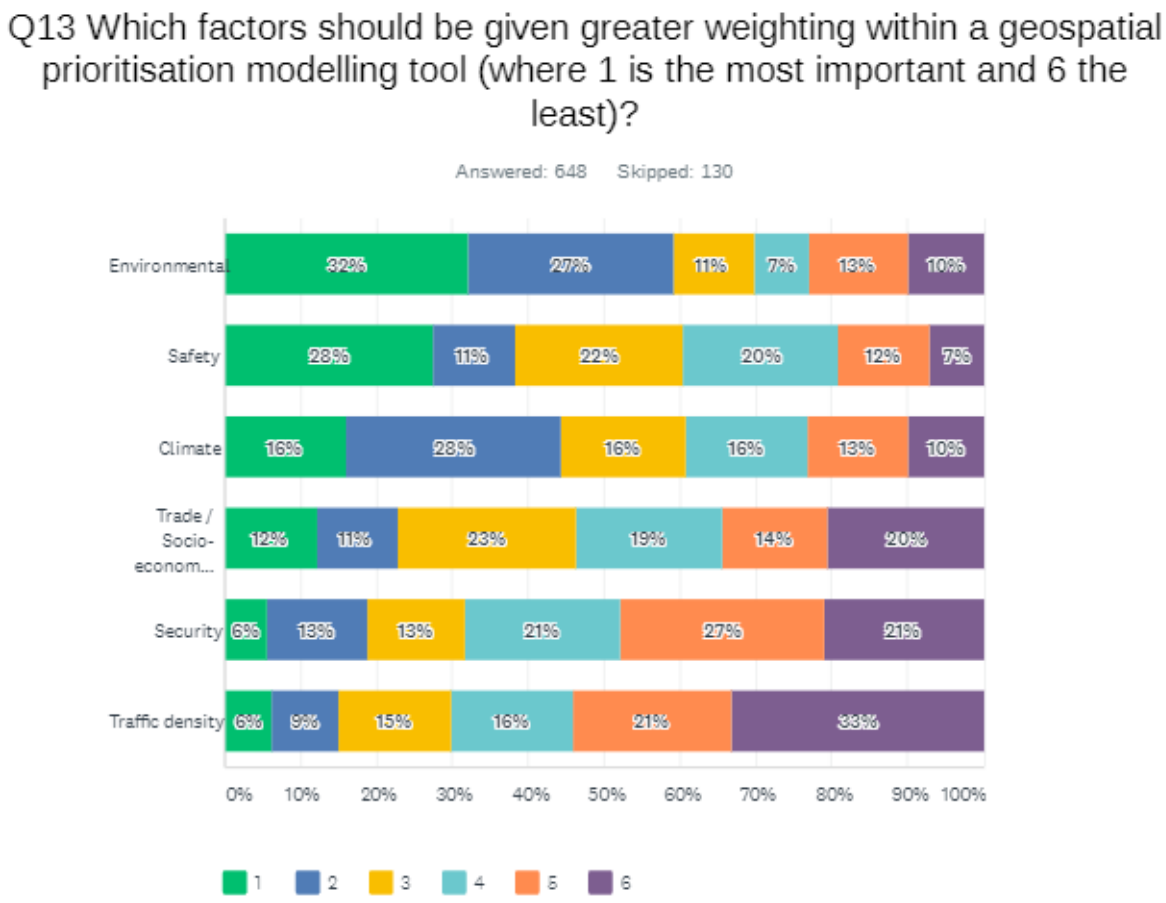

By and large the results to this question were consistent. As a global priority list for seabed survey is developed it is strongly recommended that those views of respondents' who know of models are studied in detail as Seabed 2030 seeks to develop a global model.




Aligned to Q8 and Q9, 63% of respondents see the highest priority for surveys in those areas seeing greatest climatic change and areas where little or no oceanographic data has been collected. Outside of this, there is a significant view that nations should prioritise the mapping of their own EEZs. By means of example two views of responders on this question are as follows:

> *"Mapping areas of maximum socio-economic growth should be a priority as these maritime areas represent sea areas where human activity and competition for resources exerts maximum pressure on the marine and coastal ecosystems. Mapping will support better planning and decision making in this context. Mapping targets for individual nation states EEZ gives individual nations a clear seabed mapping goal, however the discrepancy in effort required to map shelf and shallow coastal waters vs, deep waters which may occur within a nations EEZ should always be taken into account as water depth will be a major factor in estimating the costs of these activities."*

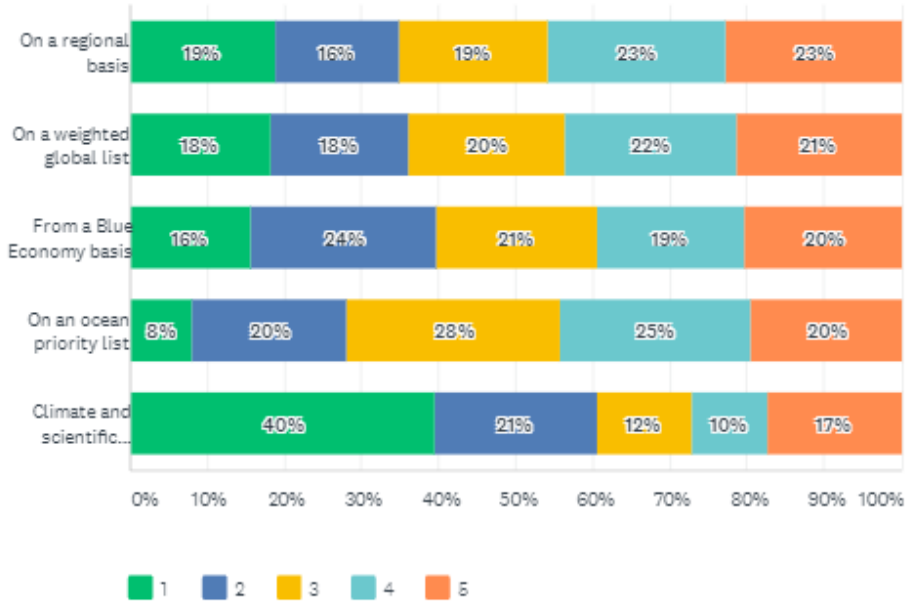
> *"Those island nations and developing coastal states that are most prone to effects of climate change and sea level rise are also often those with less wealth to mitigate. Long term planning backed by scientific evidence and linked to development banks investment should be considered a priority."*




The views of what sectors/aspects should be given greater weighting in a prioritisation model were consistent across survey 1, survey 2 and the combined survey. This consistency of evidence provides justification of both prioritisation and weighting when the global model is developed.

## Q14 How should we prioritise marine geospatial surveys (where 1 is the most important and 5 the least)?

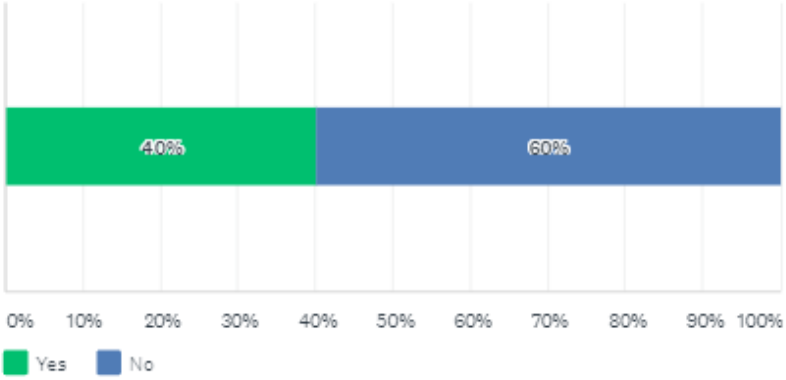
Answered: 632 Skipped: 146




Again, it can be seen across the surveys that when prioritising 40% say that climate change and scientific should take priority. There was also consistency on an equitable percentage level for global weighting, Blue Economy and regional and each of these need to be given equal weighting and priority in the Seabed 2030 survey model.

## Q15 Are there any particular areas of the seabed that you are currently trying to get mapped?

Answered: 638 Skipped: 140




A consistency of percentage levels can be seen across the surveys and the specific details of each respondent can be found in the full results which are appendices to this report.

## Q16 If you answered 'yes'...

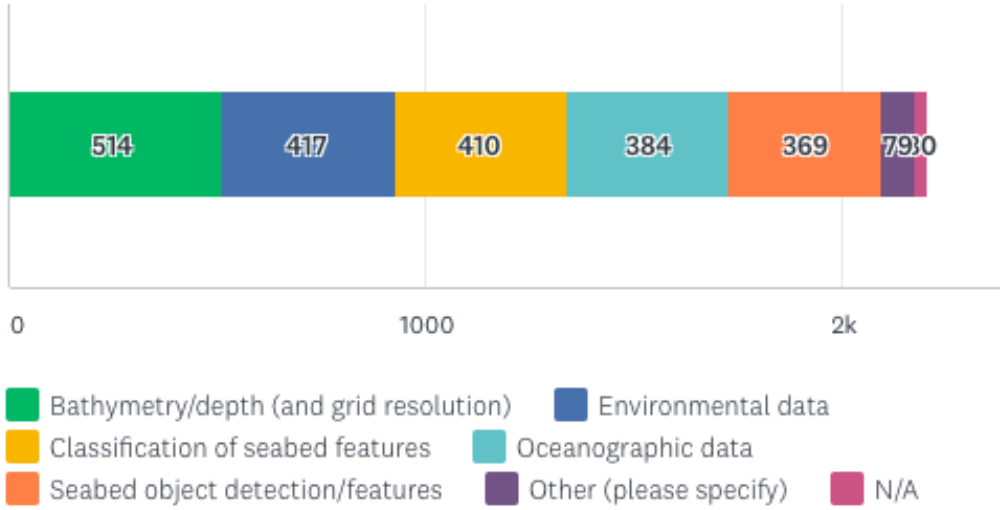
Answered: 256 Skipped: 522

| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| Have you applied for funding / resource to map this part of the seabed? | 98% | 251 |
| Have you articulated the environmental, social or economic value of mapping this area of the seabed? If yes, please give details / links. | 92% | 236 |
| Please share details of your area of interest | 100% | 255 |
| Why do you want to map this part of the seabed? | 99% | 253 |

Individual details and responses to this question can be viewed in the full results document.

## Q17 What marine geospatial information is needed by you? Please tick all that apply.

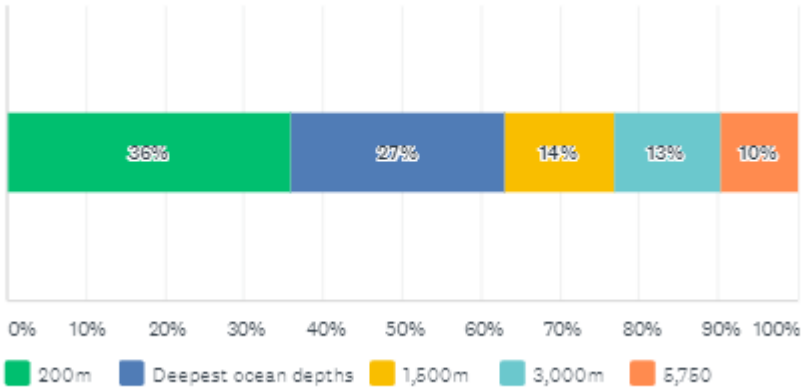
Answered: 617 Skipped: 161




Bathymetric data is the most sought-after data set, however the results consistently show that there is a significant and large demand for environmental data, oceanographic data and classification of seabed features. Should Seabed 2030 evolve then serious consideration should be given to widening the availability of other datasets.

## Q18 To what depths do you require marine geospatial information?

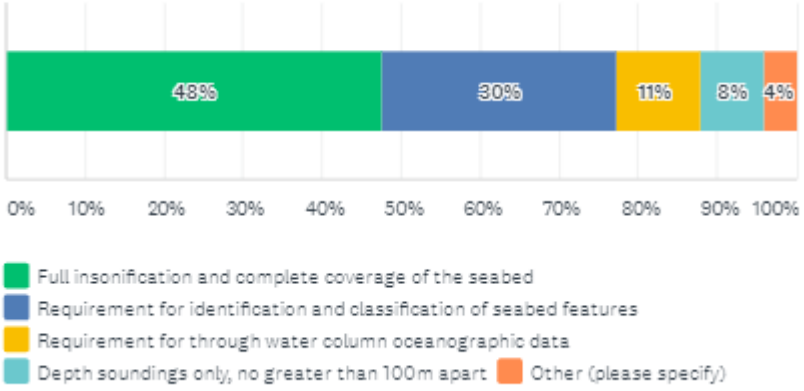
Answered: 598 Skipped: 180



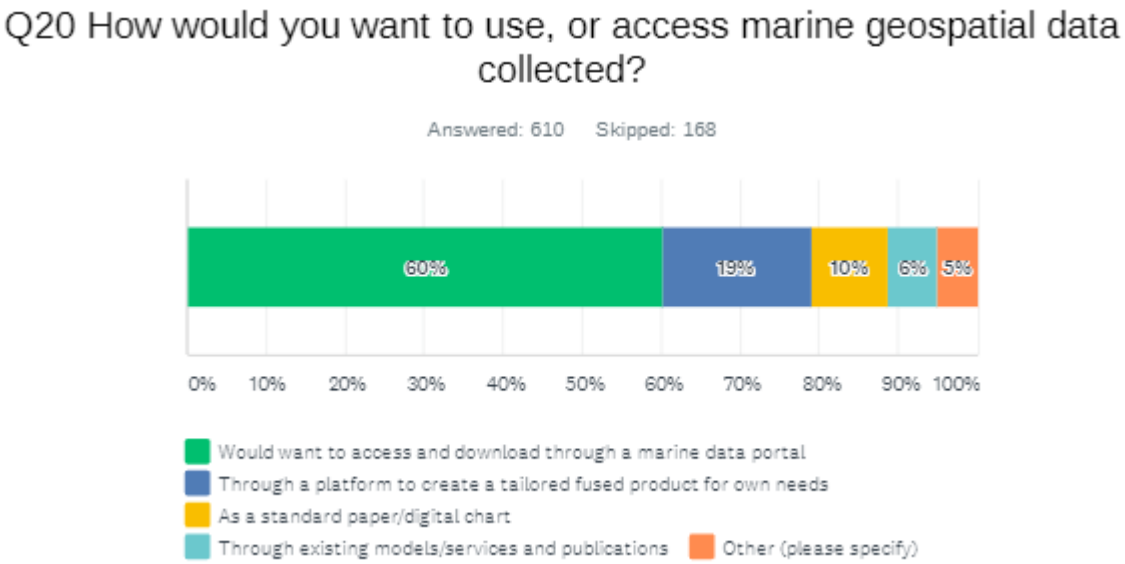

Consistency of percentage levels were seen across each of the surveys. Some 36% require data in the continental shelf depths down to 200m; the data collection technologies capable of surveying to this depth are numerous and differing collection methodologies can be used to collect this data. Whereas 27% require deepest ocean depth data which by its very nature is difficult to collect. The number of systems and technologies available are fewer in number and the cost to collect bathymetric data is significantly increased in comparison to shallow water depths.

## Q19 What level of detail and density of geospatial data is needed?

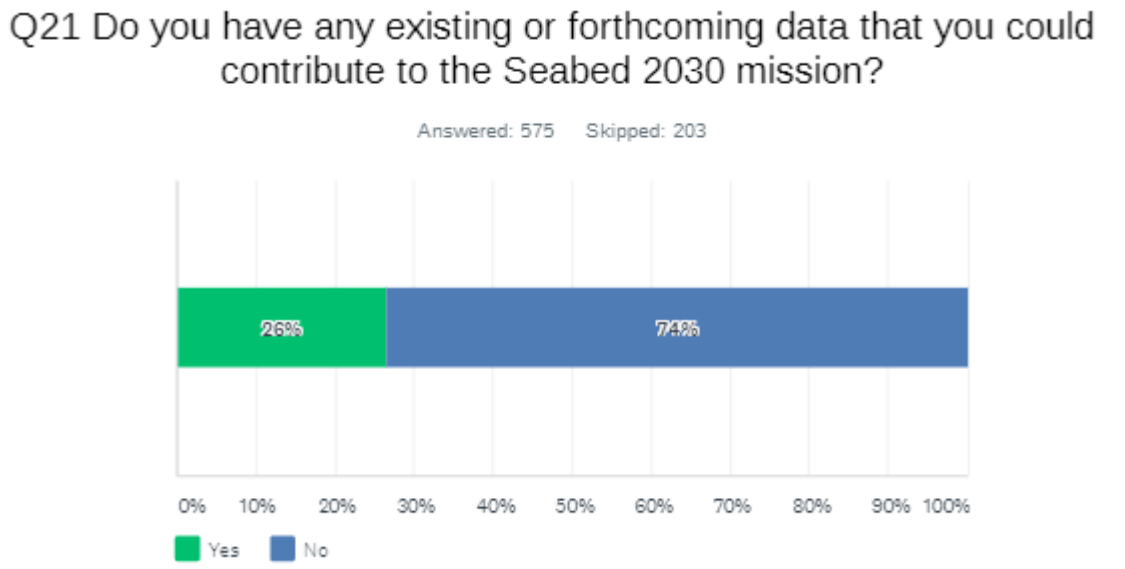
Answered: 602 Skipped: 176




The order of prioritisation and percentage levels for bathymetric data density were consistent across the surveys. Close to 50% would want full insonification of the seabed. The reasons and justifications for needing full insonfication should be carefully reviewed in the detailed survey results. What is well known is that the cost associated for multibeam (full insonification) surveys is far greater than those of singlebeam surveys. This will be a significant factor and will have bearing when determining the funding requirements needed to map the remaining 80% of the world's oceans.




The surveys all showed similar percentage levels and the same order of priority for access to marine geospatial data. 60% want to be able to access the data via a portal and 19% would wish to be able to merge different layers/datasets to create their own tailored product.




A significant and key success of the online survey has been the ability to identify pre-existing bathymetric data that has been collected and identifying future bathymetric data planned to be collected by respondents' organisations/companies. Several of the respondents are already supporting and contributing to the Seabed 2030 project, however new bathymetric data sources have been identified in each survey phase.

Like the first survey, a separate report has been created showing where these data sources are located and listing the organisations who maybe able to provide bathymetric data to Seabed 2030. For the second survey 59 respondents (some represented the same organisation (55 potential sources of data)) stated that they had access to data. This report will be submitted to the Regional Data Centres to approach those respondents in their area of responsibility.

## Q22 Please list any other sources of information you think we should explore.

Answered: 189 Skipped: 589

The specific details and answers given by each respondent to this question can be found in the full results report.

## Q23 Is there anything else you would like to add?

Answered: 243 Skipped: 535

The full reports list the detailed views of the respondents and they should be reviewed and considered when developing the seabed mapping priority list. Below is a selection of some of the responses; what is abundantly apparent is the universal praise, support and admiration for IHO, GEBCO, the Nippon Foundation and the Seabed 2030 project.

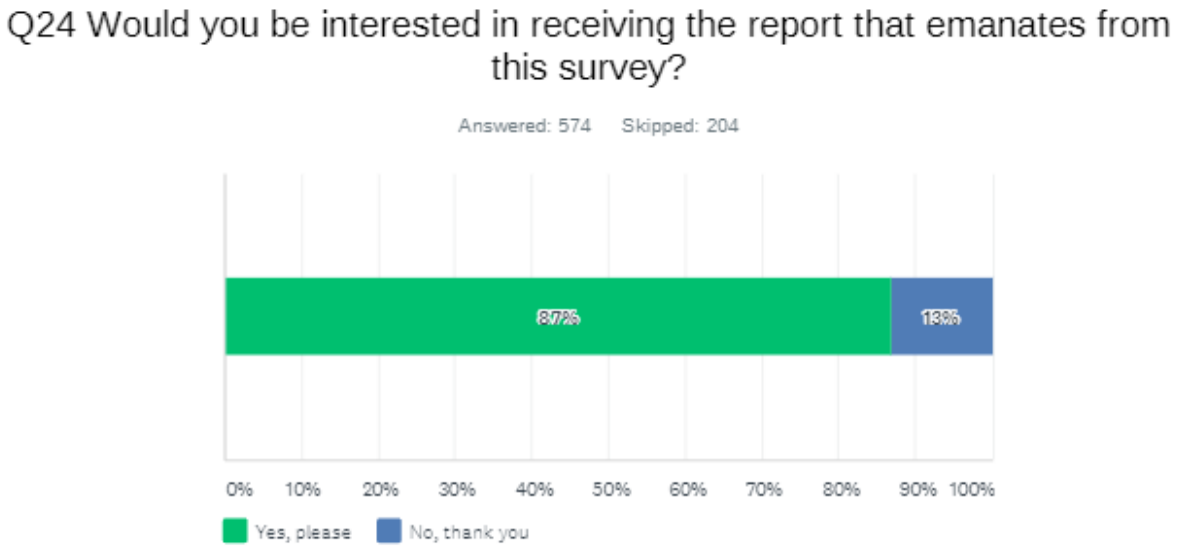
*"All shipping should provide data from their navigation for a big ocean data base big data conundrum. Similarly, all tugboats operating in harbour area should be contributing to this big data repository of ports and harbours."*

*"I wish to congratulate you for the excellent initiative of this project that seeks global cooperation and that will have multiple environmental, social and economic benefits from mapping the seabed. Thank you and we will be waiting to support you with such a beautiful activity."*

*"I would love to be part of Seabed 2030. Hope my company can give some support to this."*

*"I believe that the strengthening between institutions in different parts of the world will help in the mapping, mainly in the interaction with universities that have low economic power."*

*"Acknowledge this great contribution and efforts to The Nippon Foundation and GEBCO and give all my support to the working team."*




By and large most respondents would like to see the reports and findings generated from the surveys they contributed to. It is recommended that these are made available on the Seabed 2030 website for all to see.

**Conclusions and Recommendations**

The Seabed 2030 online surveys have been a complete success and the results obtained have far exceeded expectations. Some 65 countries contributed to the first survey and through a more focussed and targeted strategy this rose to 89 countries overall in the combined survey. In addition, those countries and regions where there was little or no response in the first survey made significant contributions to the second survey. Overall, the combined survey results now provide a comprehensive evidence and dataset, which reflects a global view and perspective across each maritime sector. Seabed 2030 now has a substantiated international view on survey mapping needs and requirements, the likes of which have never been seen before. It is strongly recommended that this is acted upon and leveraged to the maximum extent.

It is recommended that a survey priority list be generated based upon the collective views of the respondents to the online survey, which should then be passed to the world's hydrographic offices and agencies to gather their views. From this, and for the first time a validated global survey priority list can be created. This will then enable the development of a global weighted model to be developed for mapping the world's oceans. It should be noted that this work forms the next stage of the Wind in the Sails project supporting Seabed 2030 and subject to funding approval this work and activity will take place between October 2021 and March 2022.

A combination of the evidence from the online surveys along with a prioritised list and global model will provide a great deal of the information set needed to create the business cases for funding institutions to secure the necessary financial investment to map the uncharted seabed.

It is recommended that the stand-alone data report generated from the second online survey for potential sources of crowd sourced bathymetric data to contribute to Seabed 2030 be actively progressed.

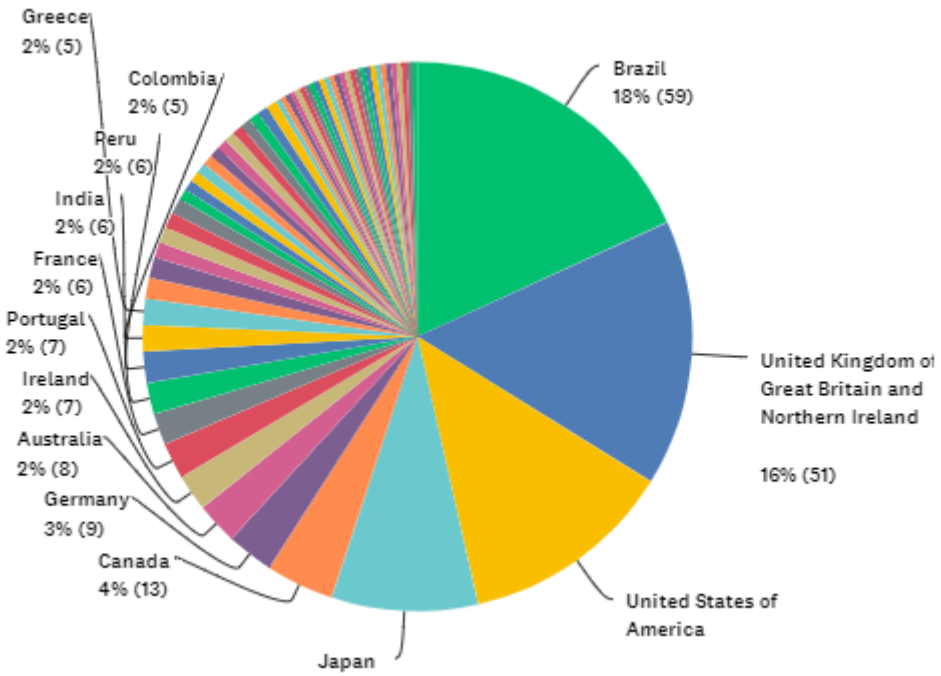
The detailed individual comments provided by the respondents to the online surveys should be reviewed in detail, these would provide valuable underpinning evidence and would contribute significantly to the development of a survey mapping priority list.

**Annex A**

**Second online survey headline results**

## Q5 In what country do you mainly work?

Answered: 325 Skipped: 11

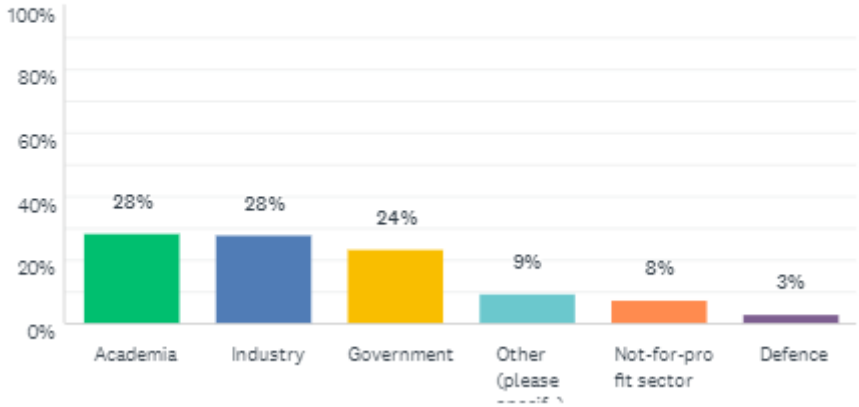



The responses of the top 10 countries by percentage level and total responses overall is as follows:

| | | |
|---|---|---|
| Brazil | 18% | 59 |
| United Kingdom of Great Britain and Northern Ireland | 16% | 51 |
| United States of America | 13% | 41 |
| Japan | 9% | 28 |
| Canada | 4% | 13 |
| Germany | 3% | 9 |
| Australia | 2% | 8 |
| Ireland | 2% | 7 |
| Portugal | 2% | 7 |
| France | 2% | 6 |

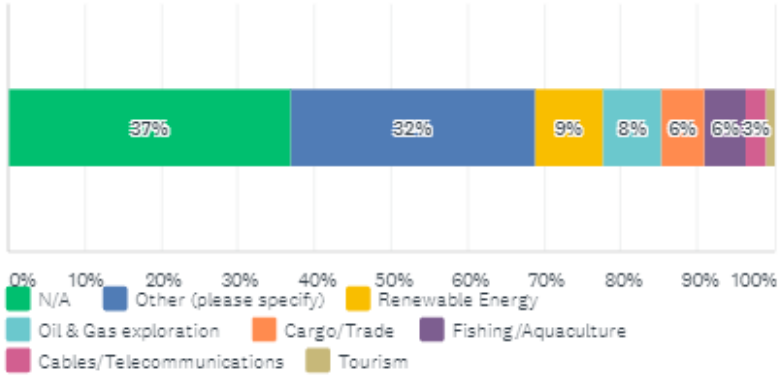
## Q6 What sector do you represent or work in?

Answered: 329 Skipped: 7



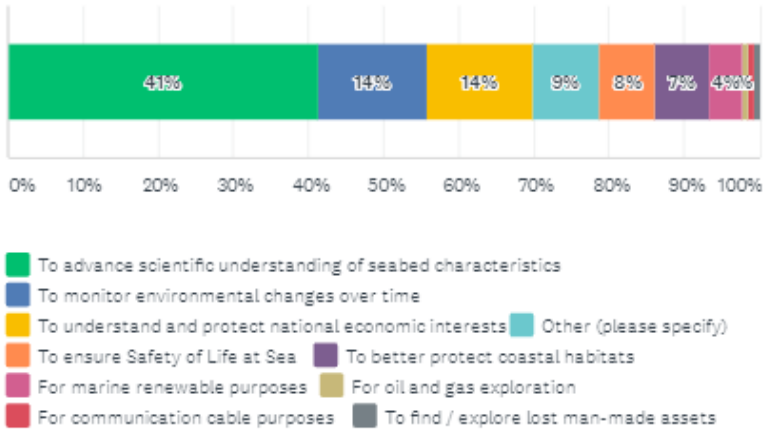

## Q7 If you are within the maritime industry, which specific area/sector do you represent?

Answered: 309 Skipped: 27



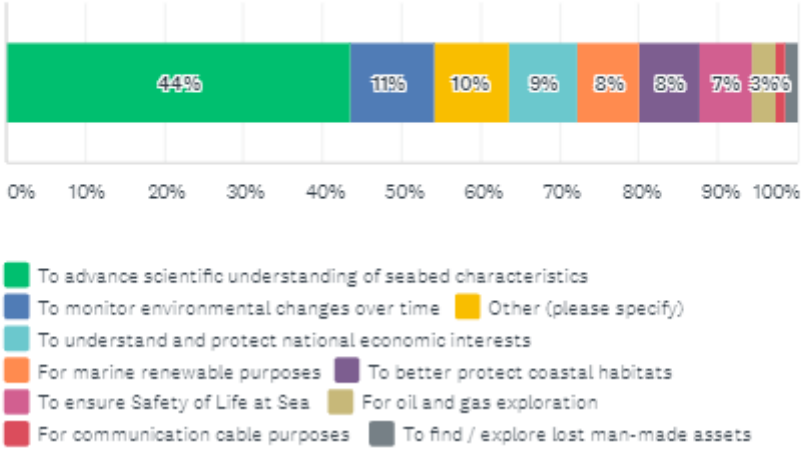
## Q8 What do you consider the main benefit of mapping the world's oceans to be?

Answered: 305 Skipped: 31



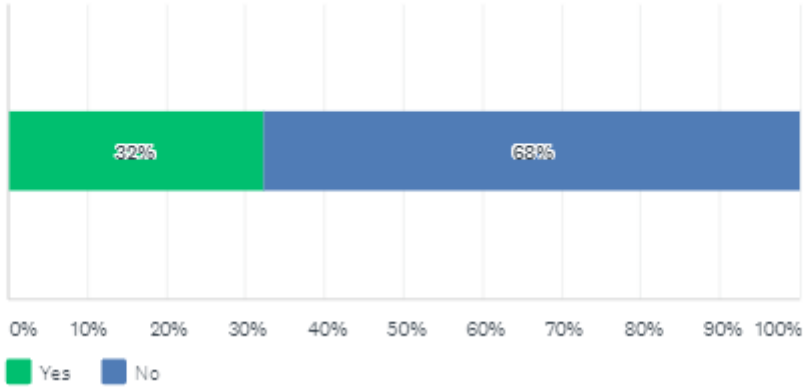

## Q9 Why are you particularly interested in mapping the ocean floor?

Answered: 303 Skipped: 33



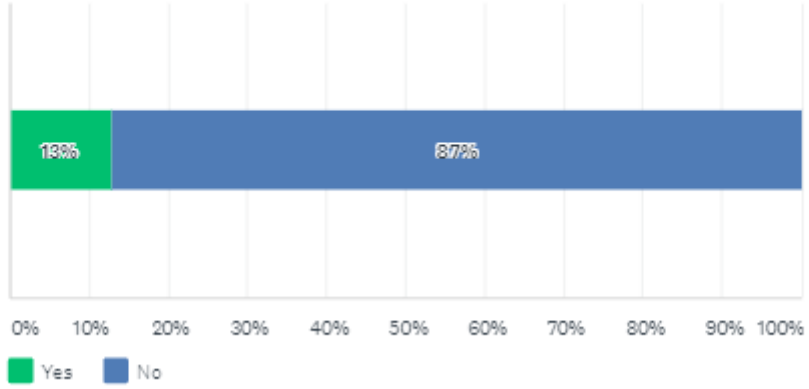
## Q10 Have you ever estimated the environmental, social and economic value of mapping the seabed of greatest interest to you?

Answered: 303 Skipped: 33



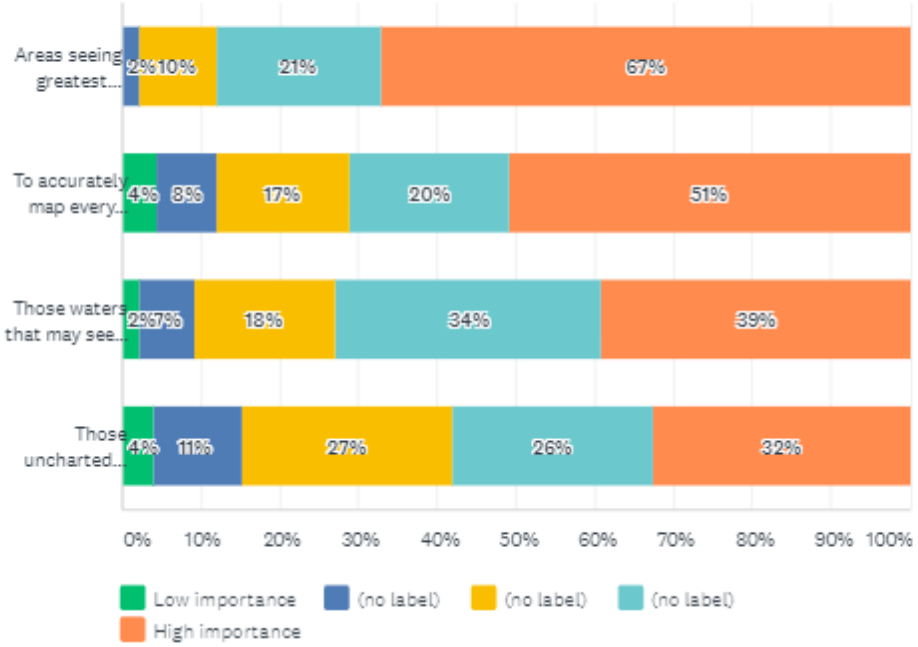

## Q11 Are you aware of any third-party models for estimating the environmental, social and economic value of mapping the seabed?

Answered: 302 Skipped: 34



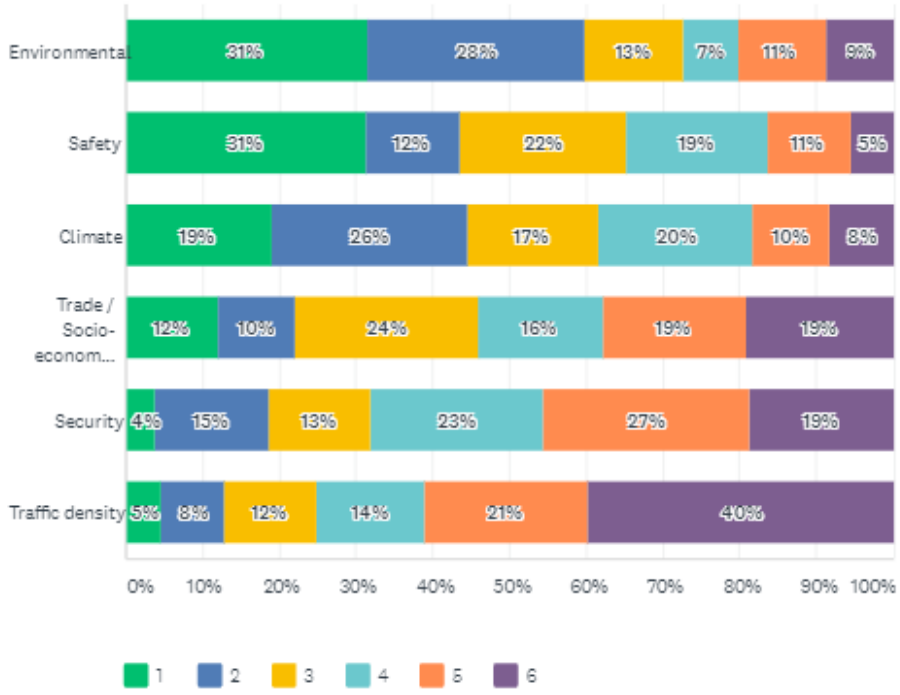
## Q12 80% of the world's oceans are currently uncharted; how highly do you rate the following priorities?

Answered: 274 Skipped: 62



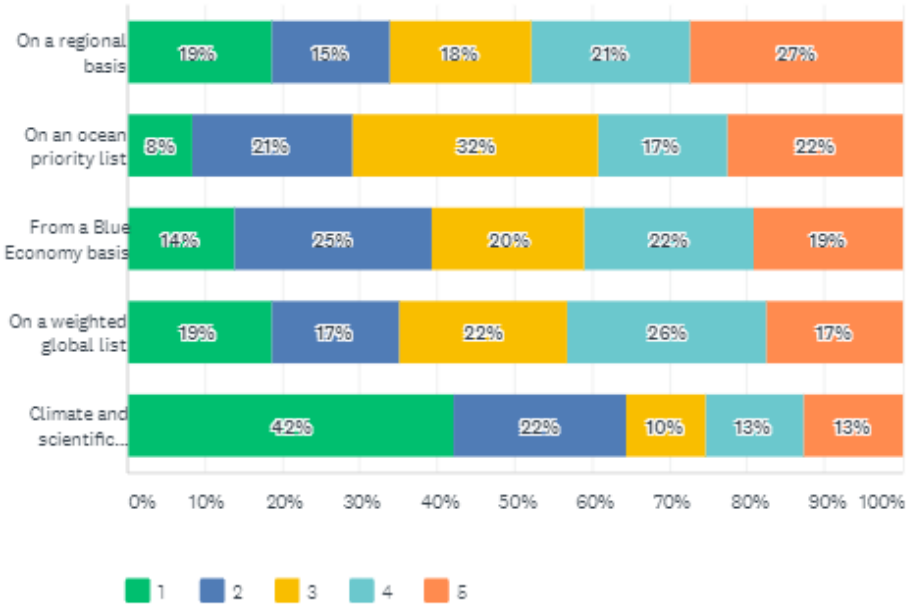
## Q13 Which factors should be given greater weighting within a geospatial prioritisation modelling tool (where 1 is the most important and 6 the least)?

Answered: 275 Skipped: 61



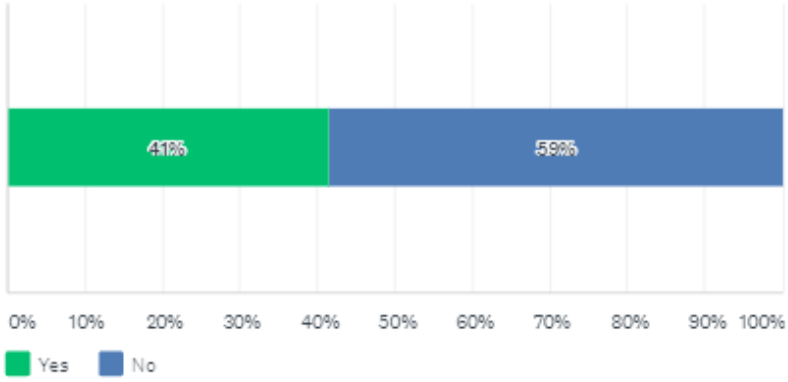
## Q14 How should we prioritise marine geospatial surveys (where 1 is the most important and 5 the least)?

Answered: 269 Skipped: 67




## Q15 Are there any particular areas of the seabed that you are currently trying to get mapped?

Answered: 270 Skipped: 66



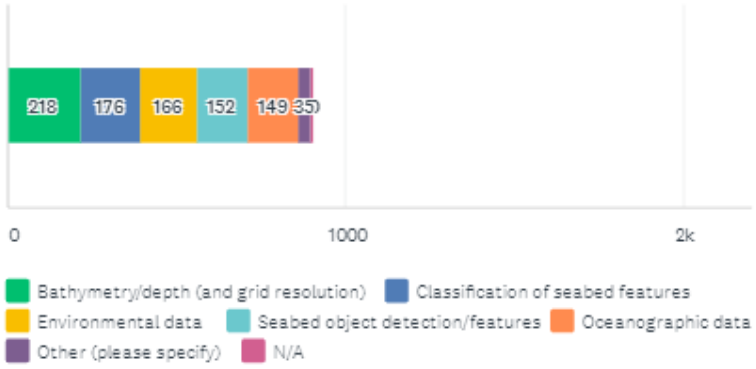
## Q16 If you answered 'yes'...

Answered: 111 Skipped: 225

| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| Have you applied for funding / resource to map this part of the seabed? | 97% | 108 |
| Have you articulated the environmental, social or economic value of mapping this area of the seabed? If yes, please give details / links. | 91% | 101 |
| Please share details of your area of interest | 99% | 110 |
| Why do you want to map this part of the seabed? | 99% | 110 |

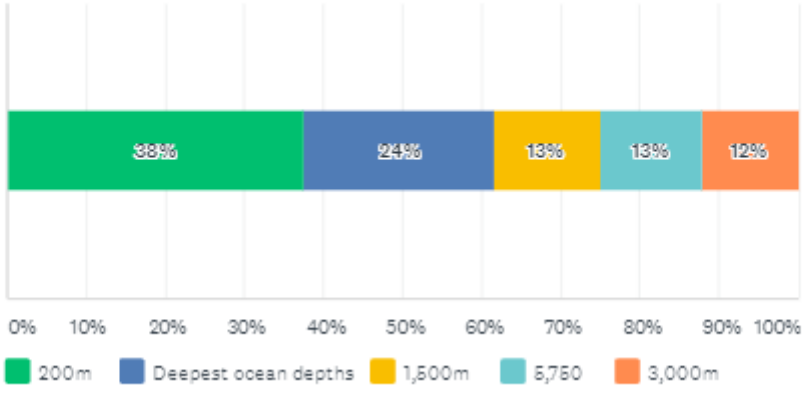
## Q17 What marine geospatial information is needed by you? Please tick all that apply.

Answered: 257 Skipped: 79



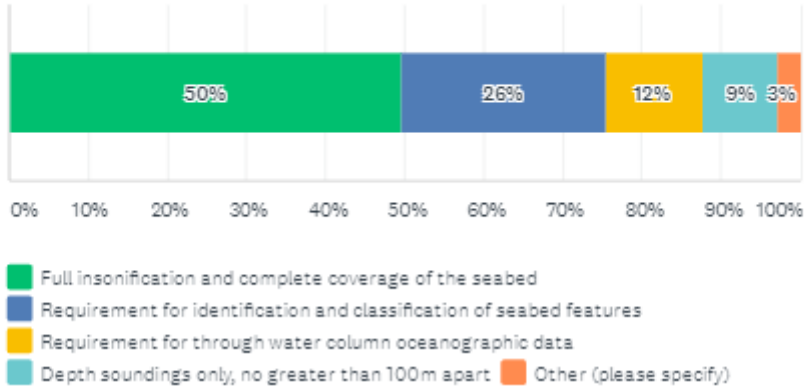

## Q18 To what depths do you require marine geospatial information?

Answered: 256 Skipped: 80



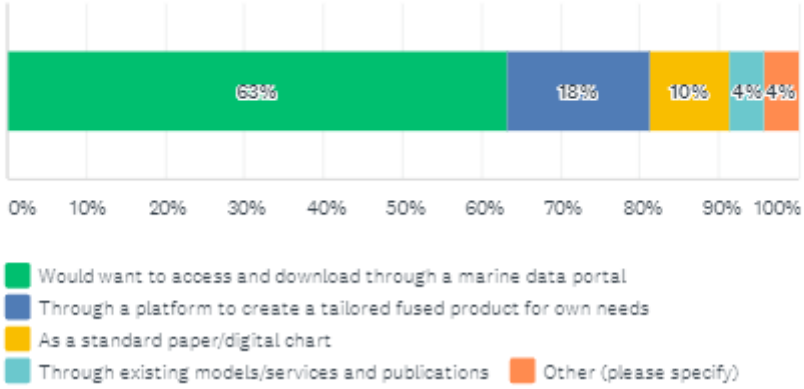
## Q19 What level of detail and density of geospatial data is needed?

Answered: 254 Skipped: 82



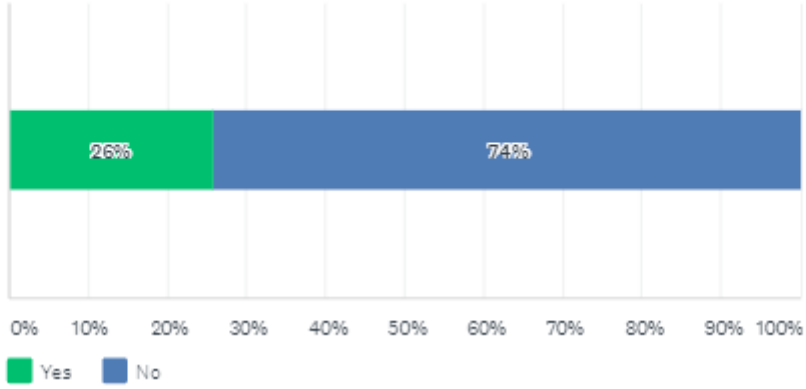

## Q20 How would you want to use, or access marine geospatial data collected?

Answered: 256 Skipped: 80



## Q21 Do you have any existing or forthcoming data that you could contribute to the Seabed 2030 mission?

Answered: 227 Skipped: 109




## Q22 Please list any other sources of information you think we should explore.

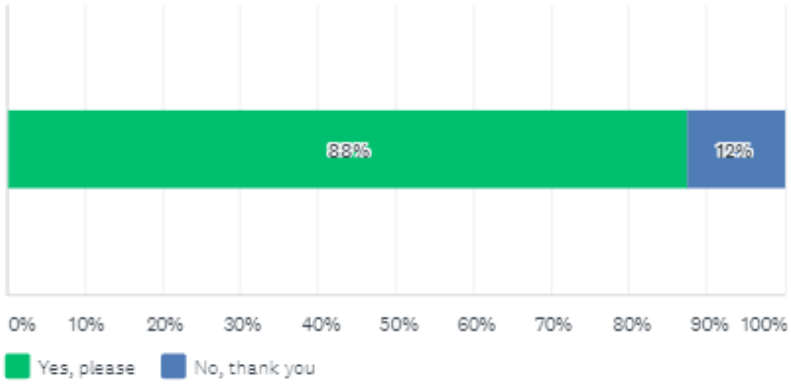
Answered: 72 Skipped: 264

## Q23 Is there anything else you would like to add?

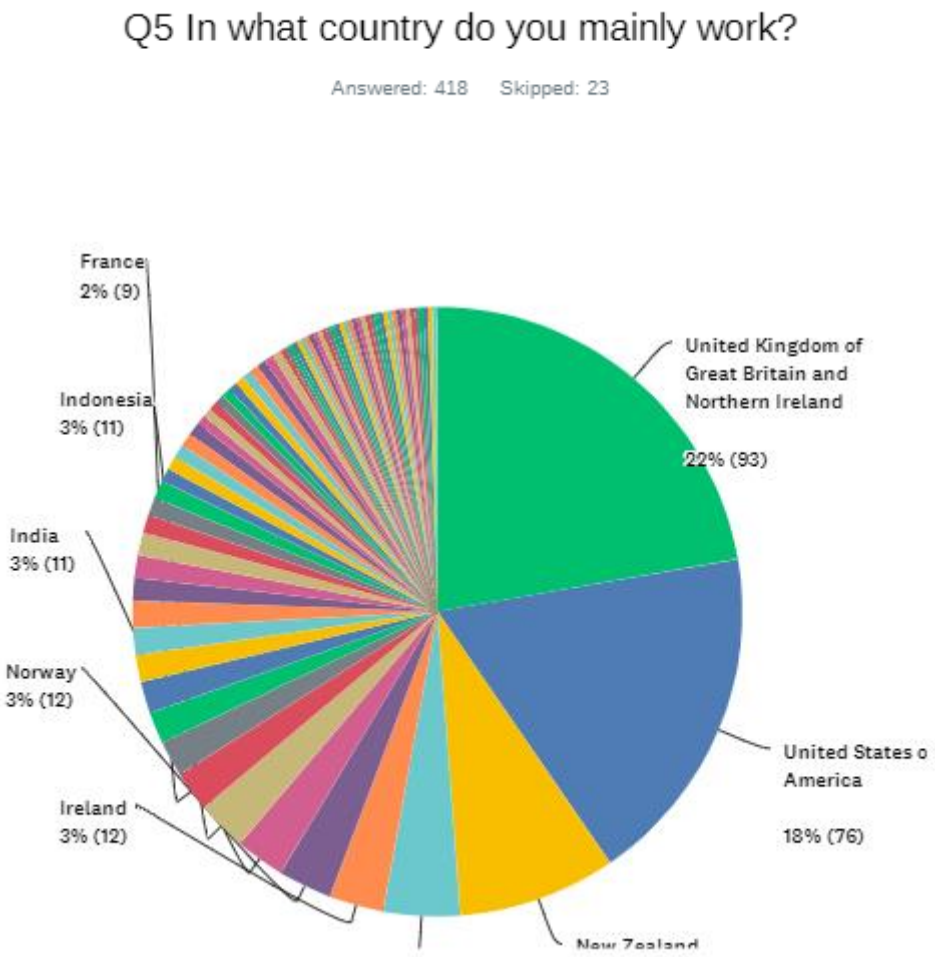
Answered: 90 Skipped: 246

## Q24 Would you be interested in receiving the report that emanates from this survey?

Answered: 226 Skipped: 110



**First online survey headline results**

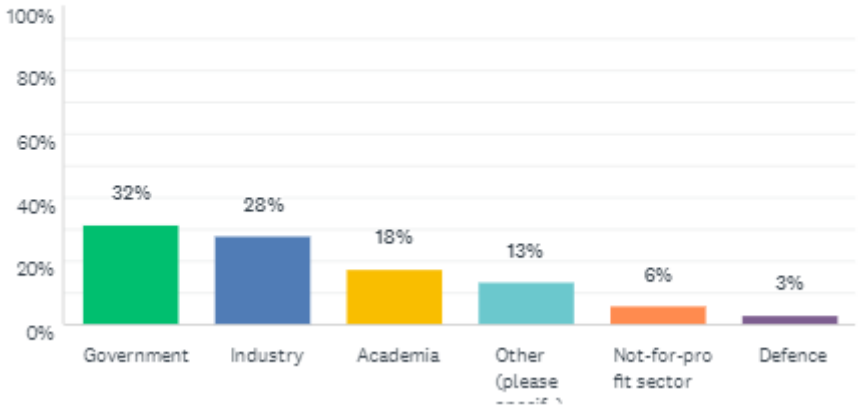



The responses of the top 10 countries by percentage level and total responses overall is as follows:

| | | |
|---|---|---|
| United Kingdom of Great Britain and Northern Ireland | 22% | 93 |
| United States of America | 18% | 76 |
| New Zealand | 8% | 35 |
| Australia | 4% | 17 |
| Ireland | 3% | 12 |
| Norway | 3% | 12 |
| India | 3% | 11 |
| Indonesia | 3% | 11 |
| France | 2% | 9 |
| Singapore | 2% | 8 |

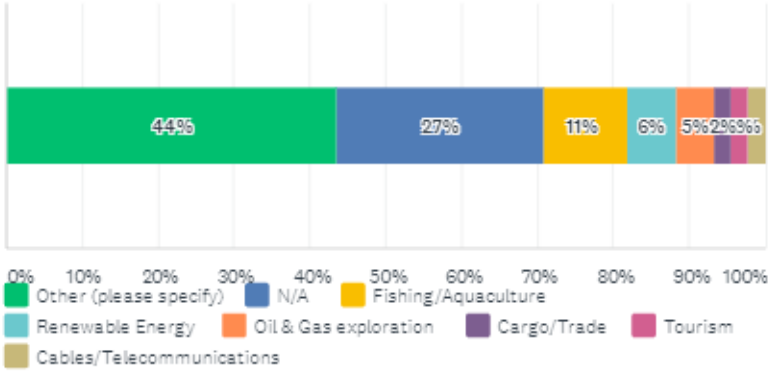
## Q6 What sector do you represent or work in?

Answered: 433 Skipped: 8



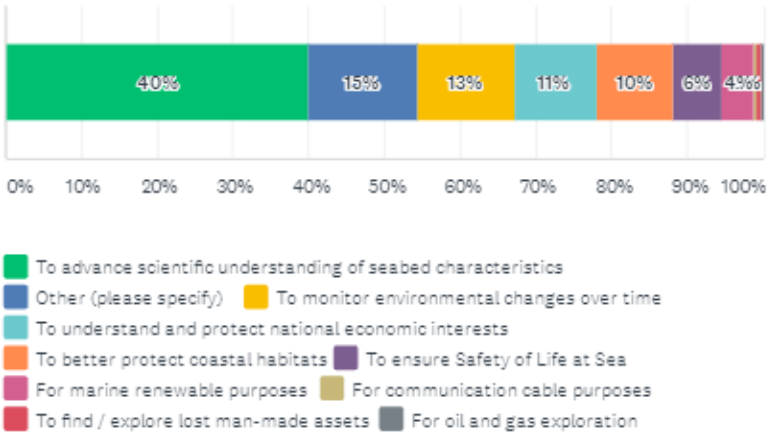

## Q7 If you are within the maritime industry, which specific area/sector do you represent?

Answered: 410 Skipped: 31



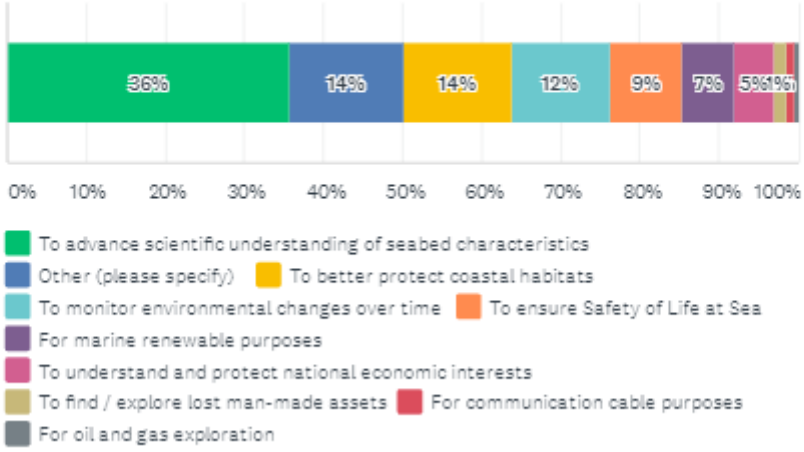
## Q8 What do you consider the main benefit of mapping the world's oceans to be?

Answered: 406 Skipped: 35



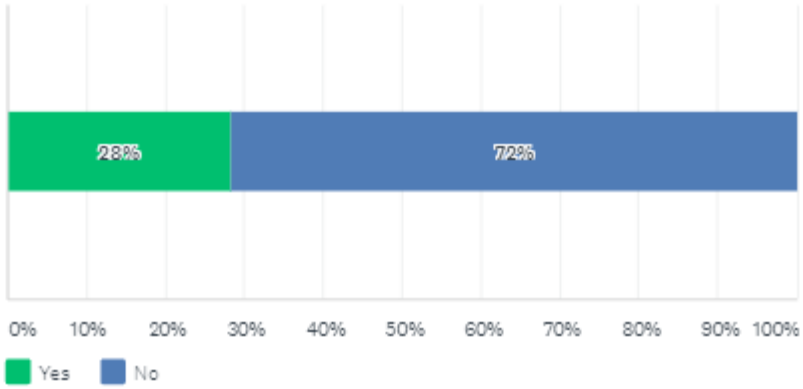

## Q9 Why are you particularly interested in mapping the ocean floor?

Answered: 402 Skipped: 39



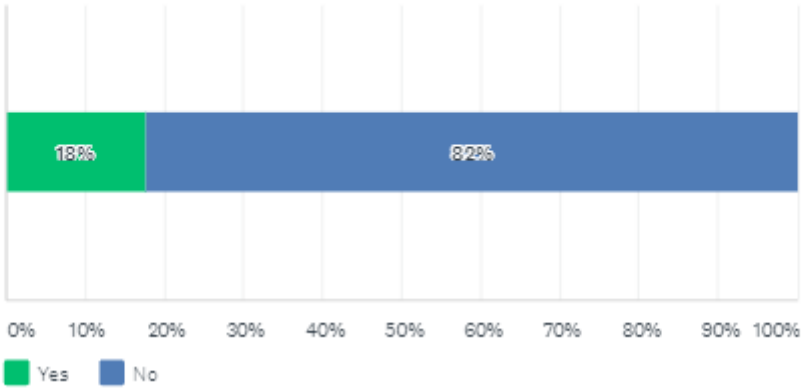
## Q10 Have you ever estimated the environmental, social and economic value of mapping the seabed of greatest interest to you?

Answered: 404 Skipped: 37



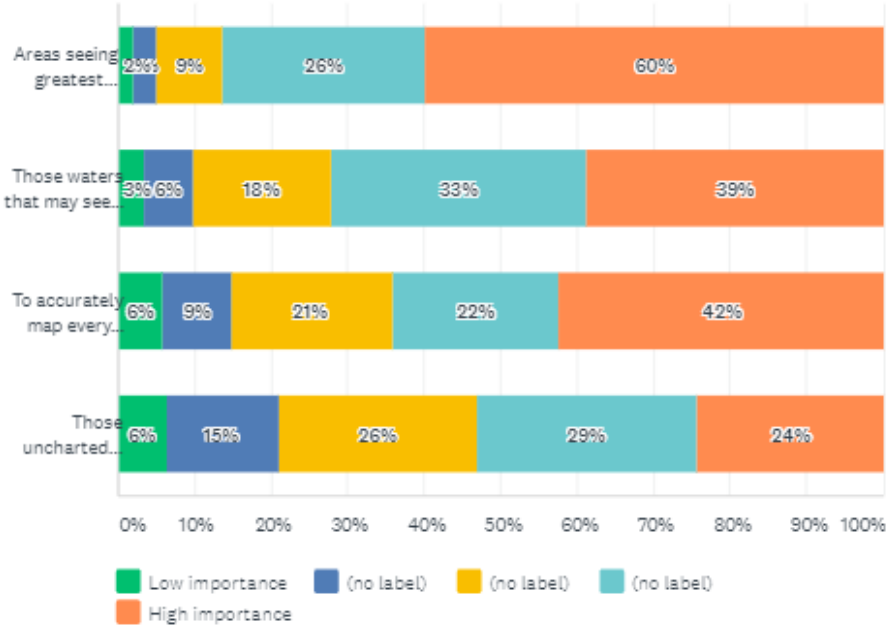

## Q11 Are you aware of any third-party models for estimating the environmental, social and economic value of mapping the seabed?

Answered: 402 Skipped: 39



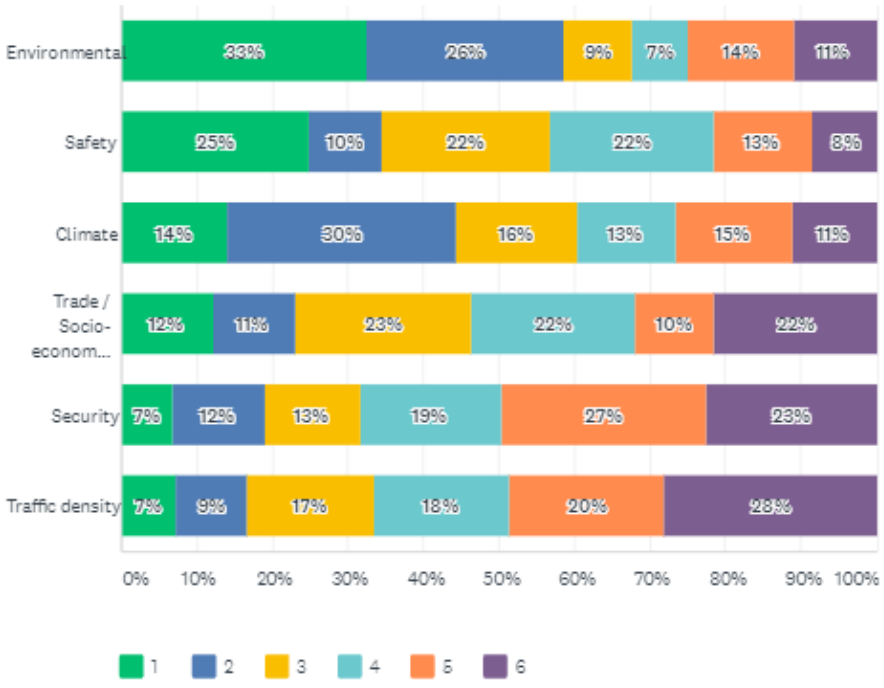
## Q12 80% of the world's oceans are currently uncharted; how highly do you rate the following priorities?

Answered: 366 Skipped: 75



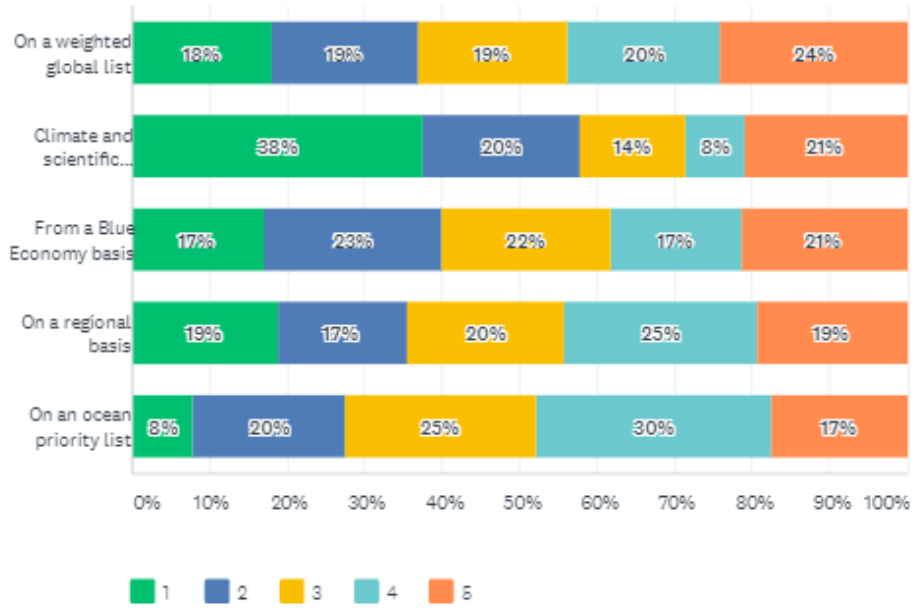

## Q13 Which factors should be given greater weighting within a geospatial prioritisation modelling tool (where 1 is the most important and 6 the least)?

Answered: 372 Skipped: 69



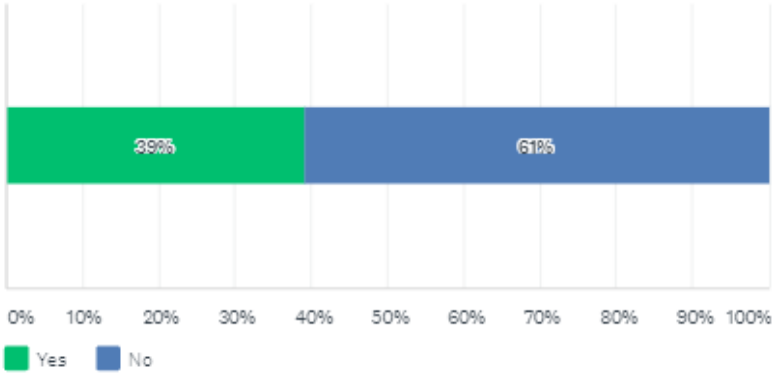
## Q14 How should we prioritise marine geospatial surveys (where 1 is the most important and 5 the least)?

Answered: 363 Skipped: 78




## Q15 Are there any particular areas of the seabed that you are currently trying to get mapped?

Answered: 368 Skipped: 73



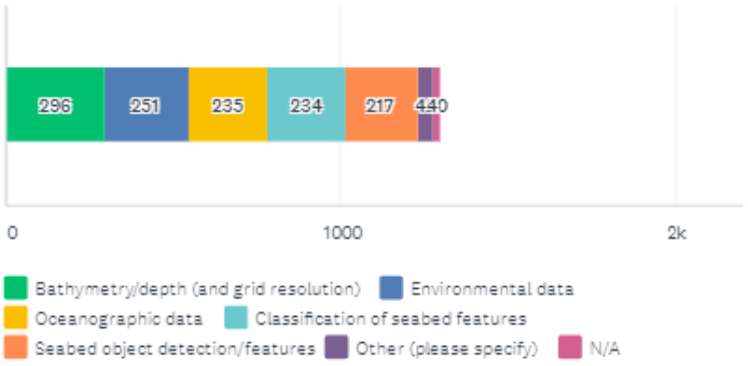
## Q16 If you answered 'yes'...

Answered: 145 Skipped: 296

| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| Have you applied for funding / resource to map this part of the seabed? | 99% | 143 |
| Have you articulated the environmental, social or economic value of mapping this area of the seabed? If yes, please give details / links. | 93% | 135 |
| Please share details of your area of interest | 100% | 145 |
| Why do you want to map this part of the seabed? | 99% | 143 |

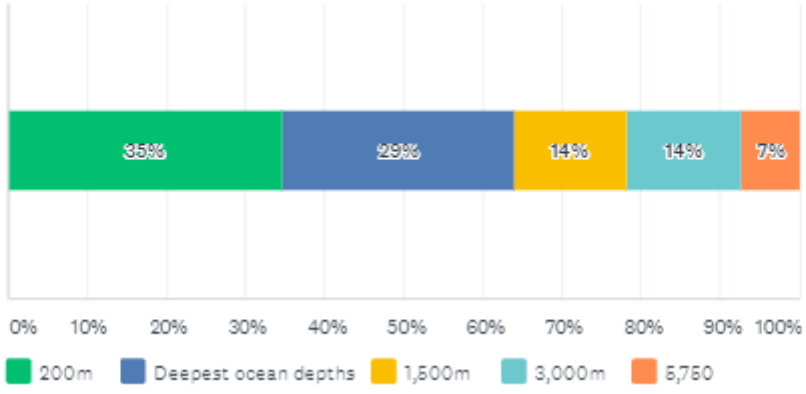
## Q17 What marine geospatial information is needed by you? Please tick all that apply.

Answered: 360 Skipped: 81



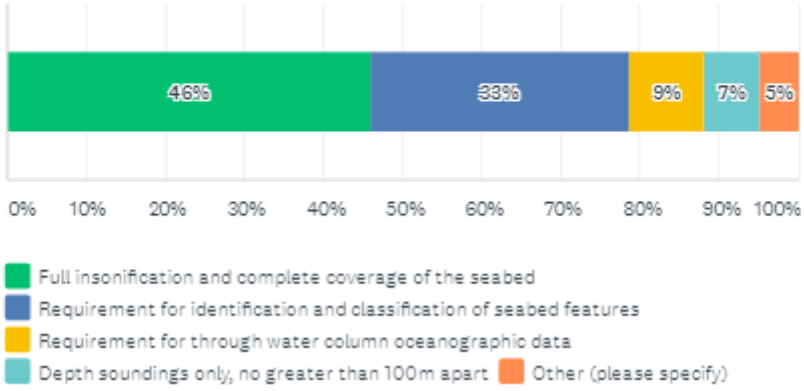

## Q18 To what depths do you require marine geospatial information?

Answered: 342 Skipped: 99



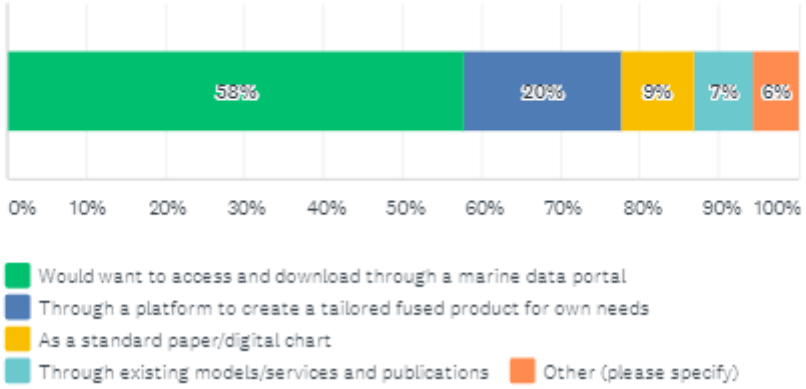
## Q19 What level of detail and density of geospatial data is needed?

Answered: 348 Skipped: 93



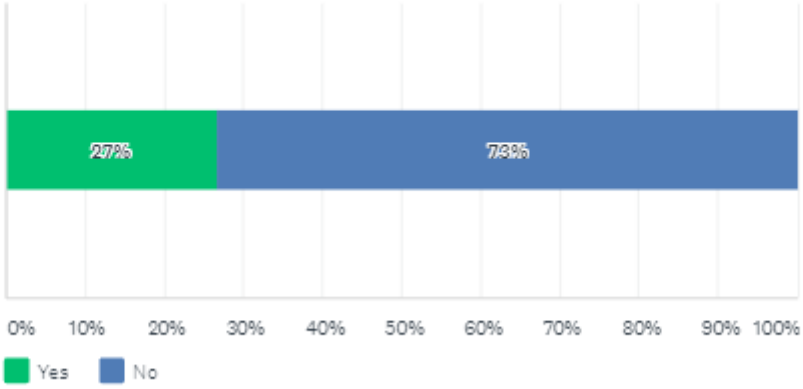

## Q20 How would you want to use, or access marine geospatial data collected?

Answered: 354 Skipped: 87



## Q21 Do you have any existing or forthcoming data that you could contribute to the Seabed 2030 mission?

Answered: 348 Skipped: 93




## Q22 Please list any other sources of information you think we should explore.

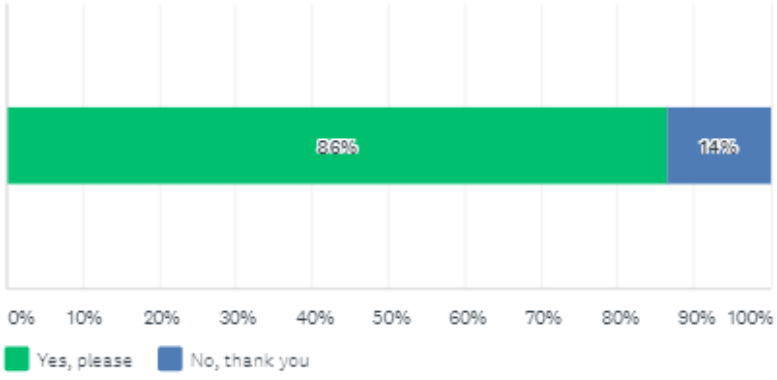
Answered: 117 Skipped: 324

## Q23 Is there anything else you would like to add?

Answered: 153 Skipped: 288

## Q24 Would you be interested in receiving the report that emanates from this survey?

Answered: 348 Skipped: 93



**Annex C**

**Article written for Seabed 2030**

**Harnessing the wisdom (and data) of the shipping crowd**

It's the Greeks we have to thank for furnishing us with the word 'ocean'. Back in Ancient times, they believed that the Ocean was a huge, deep, swirling river encircling the earth, and also the source of all other waters in the world. More lyrically, the Greek poets identified the personified being of Oceanus – the son of Heaven and Earth (Uranus and Gaia) – as a celestial Titan of the highest order, and father of some 3,000 more junior river gods. But that's another story…

Several centuries later, we have a much clearer picture of the richness, complexity and inter-connectedness of the world's seas and oceans. However, there is one marine element that still remains to some extent mysterious – the seabed.

A detailed understanding of the composition and characteristics of the seabed is important for all manner of critical reasons, not least to help address the issue that will only grow in prominence as the decade progresses – that of climate change. We already know that attributes of the seabed are crucial factors for understanding ocean circulation patterns that distribute heat between the tropics and poles. Bathymetric data, or measurements of water depth, also supports detailed assessments of potential sea-level rise, as well as enhancing the accuracy of tsunami and storm-surge modelling that can provide the basis for actions to protect potentially vulnerable coastal communities.

However, even with so many technological advances in measuring bathymetry in recent years, we are really only squinting at the big seabed picture and related opportunities, as a full view is obscured by one key element – a lack of data. Over 80% of the oceans remain unmapped using modern high-resolution mapping technology. While some sea spaces are relatively well charted, other parts of the world are still unknown, a fact that significantly hinders scientific, humanitarian and socio-economic development.

**Global ambition**

That's where the Nippon Foundation-GEBCO Seabed 2030 Project comes in. Seabed 2030 was established as an ambitious global endeavour to revolutionise the world's understanding of the ocean floor. The pioneering project aims to catalyse policy decisions, sustainable actions and scientific research informed by detailed, up-to-date bathymetric information.

It can be easy to think of these challenges as being in the remit of governments and ocean scientists alone. However, the shipping industry can contribute to and benefit significantly from this drive to map the seabed.

The world's sea spaces are becoming ever more congested and complex, a situation that will only escalate in the coming decades, as governments rightly promote a Blue Economy agenda that looks to integrate various marine and maritime interests. This could mean new prioritisation for fisheries; aquaculture; a variety of offshore marine renewable infrastructure; the establishment of more Marine Protected Areas; extra investment in coastal tourism; and the further roll-out of fibreoptic cables to feed a data-hungry world.

While there is obviously great value in all of these ventures, one danger could be that long-established shipping lanes come under increased pressure, with new routes proposed to enable the integration of new marine infrastructure. If the full consequences of such changes are not fully understood and factored in,

rerouting may raise the risk of collision or grounding, could increase shipping costs or even change the commercial dynamics of a region so that ports or shipping services become challenged.

In order, then, to promote a common vision for the use of a marine area and fully empower integrated marine spatial planning that recognises the needs of all stakeholders, one thing is essential – a detailed map of the seafloor.

Another example of likely interest to the shipping sector is the growing push towards navigation and routing informed by Artificial Intelligence. Such systems are only as good as the data fed into them; the more that can be known about the seabed, the greater the promise will be of these advanced technologies – both for cost efficiencies and to reduce emissions by optimising route planning.

**Stepping up**

Initially, there are two ways that the shipping community can contribute to this endeavour. First of all, Seabed 2030 has launched an online survey to learn from marine and maritime stakeholders which areas of the seabed they think are priority areas for mapping. The survey will help to establish a clearer picture of this, and attempt to catalogue models being used to quantify the environmental, social and economic values and benefits of seabed mapping. In doing so, we will be in a much better position to articulate the areas thought to be in greatest need of being surveyed and – crucially – why governments, industry, academia and philanthropy should support such activity. Hundreds of informative responses have already been collated, but it is critical that the views of the shipping sector are reflected in the mix. If you wish to view and contribute to the survey, which only takes about ten minutes to complete, please visit www.bit.ly/SB_2030.

The second opportunity demands a more long-term and integrated view. Some estimate that, in an average year, a large container ship travels three-quarters of the distance to the moon. Multiply that by the thousands of ships traversing the seas and oceans, and the distances covered beg some key questions. What percentage of those routes cross over areas of seabed not yet surveyed with modern tools, or perhaps not surveyed at all? If the shipping community was to collect bathymetry data as they go about their everyday business, how much would that push the needle towards the goals of the Seabed 2030 project?

In a digital-first world, the potential for crowd-sourced data and community analysis is being promoted with great success in many sectors. In the marine domain, for example, the Seagrass Spotter allows ocean enthusiasts around the world to record and share instances of seagrass – critical to marine health – via a tailored smartphone app, in order to establish a more sustainable monitoring network than is currently available solely within scientific resource.

The opportunity for such proactive crowd-sourced positivity is now available to the global shipping community through Seabed 2030. If you feel you are able to integrate the collection and sharing of bathymetric data into your routine operations, have existing datasets that you would like to contribute, or would simply like to learn more about ongoing crowd-sourced bathymetry programmes you can join, you can do so by emailing csb@seabed2030.org.

Over the centuries, shipping has contributed massively to the prosperity of the world and the everyday lives of people all over the planet – carrying essential food, energy, medicines and commodities to those that need them; providing employment to millions; empowering thousands of broader supply chains and sectors. The new opportunity in the 21st century is to complement this almost standard activity by contributing further to the scientific understanding of the world's seas and oceans, to help build the knowledge base that will enable us to tackle the major environmental and human issues we will face in the coming decades.

As well as thinking of the ocean as a river, those Ancient Greeks also thought that the sun and the stars rose out of the sea every day and returned to them at sunset. With initiatives such as Seabed 2030 driving the marine community, we are on the edge of bringing much new hope and inspiration to the surface every day, as we develop several new levels of understanding of our ocean environment. The shipping sector has a lot to benefit from this global initiative – and a very large part to play.

Please email csb@seabed2030.org to discuss ways to collect and contribute bathymetric data. You can also contribute to the Seabed 2030 survey by visiting www.bit.ly/SB_2030.