

Mineral Statistics Survey Feedback Summary

Introduction

A short survey was produced to gain a better understanding as to who was using the World Mineral Statistics (WMS) dataset. All users accessing the WMS dataset section on the www.MineralsUK.com website were asked to complete a short online survey. The survey ran from the 2nd December 2015 until the 5th December 2016, in that time 495 data users chose to complete the online survey. (Note: all respondents are for convenience referred to here as 'data users' irrespective of whether they actually 'used' the dataset.)

The purpose of the survey was to gain a better understanding of the data users, the importance they place on the available dataset and the impact the dataset has on their work.

The data users were asked to complete the following ten questions online:

1. How frequently do you access the World Mineral Statistics dataset produced by the BGS?
2. From which of the following data sources do you also obtain data?
3. How frequently do you access these other data sources?
4. We would like to better understand what these data are used for, please select from the following list.
5. Could you please indicate what kind of organisation you work for?
6. How important to your work is the World Mineral Statistics dataset produced by the BGS?
7. Which commodity groups do you require data for your work?
8. Which geographic areas do you require data for your work?
9. Please indicate if you would like to see any of the following in the future?
10. Any additional comments (free text box).

Questions 1-9 had multiple-choice answers; questions 2, 4, 5, 7-10 also had free text boxes. The responses to these questions are summarised below.

How frequently do data users access the World Mineral Statistics dataset?

The data users were asked to select one of the following six options relating to how frequently they accessed the WMS dataset; Every month, Every few months, Several times a year, Once a year, Less than once a year and Very infrequently.

As you can see below in Figure 1, over half of the participants in the survey indicated that they accessed the WMS dataset several times a year or more frequently, this includes 12.7% of data users that access the dataset on a monthly basis. There were 26.9% of participants that said that they used the World Mineral Statistics dataset very infrequently. However as you can see from Figure 1 the overall response was evenly spread across all available access options.

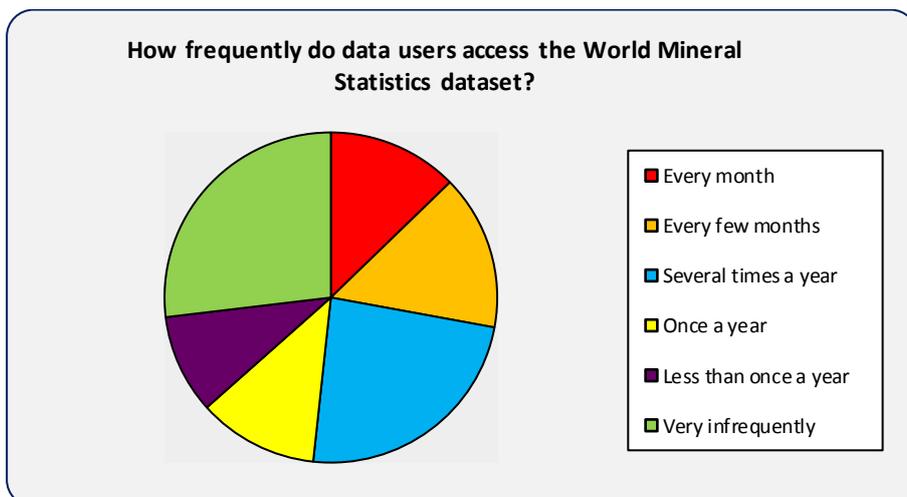


Figure 1: Responses to question 1 regarding frequency of use.

From which of the following data sources do you also obtain data?

The data users were asked to select from six options as to which data sources they also used in addition to the WMS dataset. The suggested sources were as follows; United States Geological Survey, ‘World Mining Data’ produced by the Austrian Federal Ministry of Science Research and Economy, International trade associations, SNL, No other sources used and an option of ‘Other’ with use of a free text box.

As you can see in Figure 2 below, the United States Geological Survey appeared to be the most popular additional source at 62.8 % this equates to 311 of the data users that answered the questionnaire. International Trade Associations and World Mining Data are also used by a number of our data users at 24% and 27% respectively. SNL appears the least popular at 6%, but as mentioned in the questionnaire this source does require payment. There was also the following comment made by one user about SNL: *‘They don’t have reliable total production by country data (or any reliable data, except corporate data). Raw Materials Data has stopped and it’s a shame.’*

Other data sources that are used by our data users that had not been listed were as follows: mining company data, the study groups (e.g. International Nickel Study Group, International Copper Study Group and International Lead Zinc Study Group), World Bureau of Metal Statistics, World Steel, World Bank and a number of individual country specific organisations.

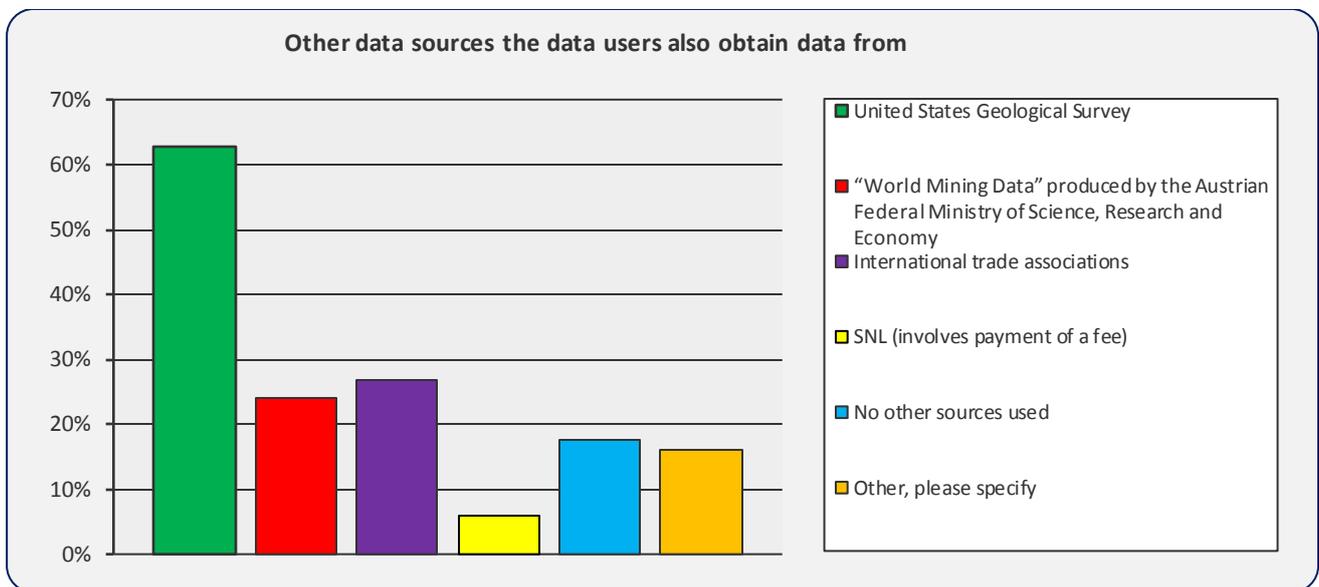


Figure 2: Responses to question 2 regarding other data sources.

How frequently do data users access these other data sources?

The data users were asked how often they accessed the additional data sources and to select one of the following seven options; every month, every few months, several times a year, once a year, less than once a year, very infrequently, no other sources used.

There was a fairly mixed response to this question as you can see in Figure 3, by the survey participants. However, the highest portion at 25.9% said that they accessed the other data sources several times a year. Interestingly 57 of our data users did not access any other additional data source and 69 users accessed the other data sources available very infrequently.

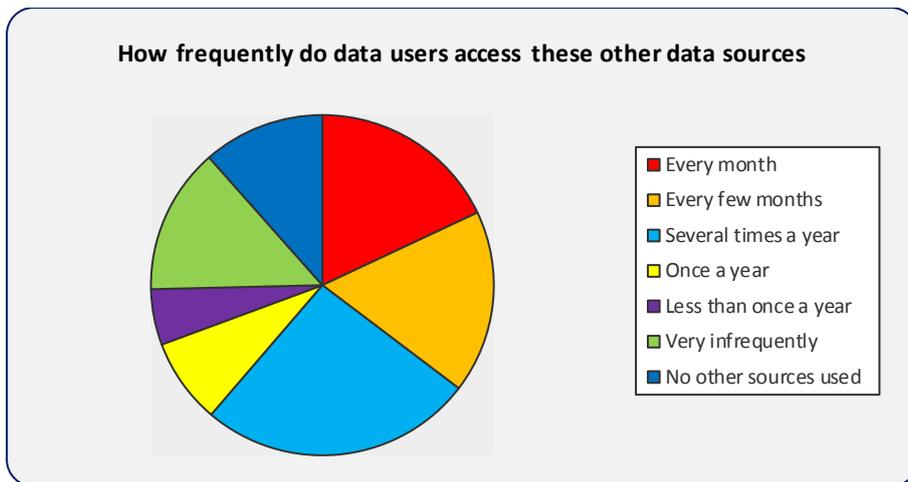


Figure 3: Responses to question 3 regarding frequency of use of the other sources.

What data users are using the WMS dataset for.

We wanted to better understand what data users were using the WMS dataset for. Data users were asked to select from the seven options available: Research related to security of supply of minerals / materials, Economic analyses, Research related to environmental issues, Sustainable development planning, Regulation or policy issues, Commercial strategic planning and Other. A free text box was available for them to add anything else they considered relevant.

As you can see in Figure 4, out of the 452 data users that answered this question, most data users indicated that the data was being used for Economic analysis and closely followed by Research related to security of supply of mineral / materials, at 43.1% and 40.5% respectively.

Only 21% of the data users that completed this question left specific information in the free text box relating to what they used the data set for and approximately half of these were comments from teachers, lecturers and students from all levels of the education system. There were also a number of people using our data for academic research, for magazine articles or for general interest reasons. From an industry perspective, the datasets are being used for research and development, investing, market planning - better understanding of the mining and minerals market and to examine the history of metals production. This is just a summary of what was mentioned.

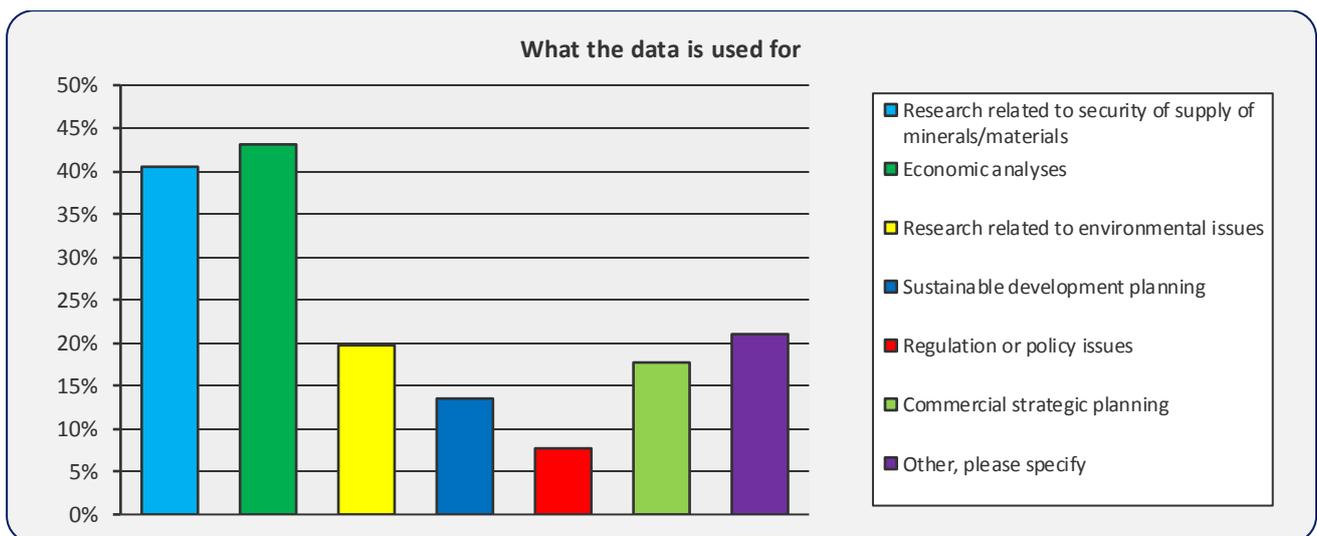


Figure 4: Responses to question 4 relating to the purpose of the data use.

What kind of organisation do the data users work for

The survey participants were asked to indicate what type of organisation they worked for by selecting one of the seven options: Academic research organisation, University, Government Department, Geological Survey, Industry trade association, Commercial Company and Other. A free text box was available for any additional information.

In Figure 5, you can see that the largest proportion of data users were from University at 36.1%. There were also a large proportion from commercial companies at 23.7%.

A selection of 'Other' organisations not specified in the list but identified in the free text box were as follows: Local Government, Newspaper, Technical Consulting firm, Mining Association, Freelance writer and researcher, Start-up - trying to establish a mineral advisory business, Investment management company, high schools and an international organization (the UN). One of the data users was quite descriptive in its purpose for accessing the data, which is worth a mention: 'We are conducting an economic impact study for the Ontario Mining Association (province of Ontario, Canada).'

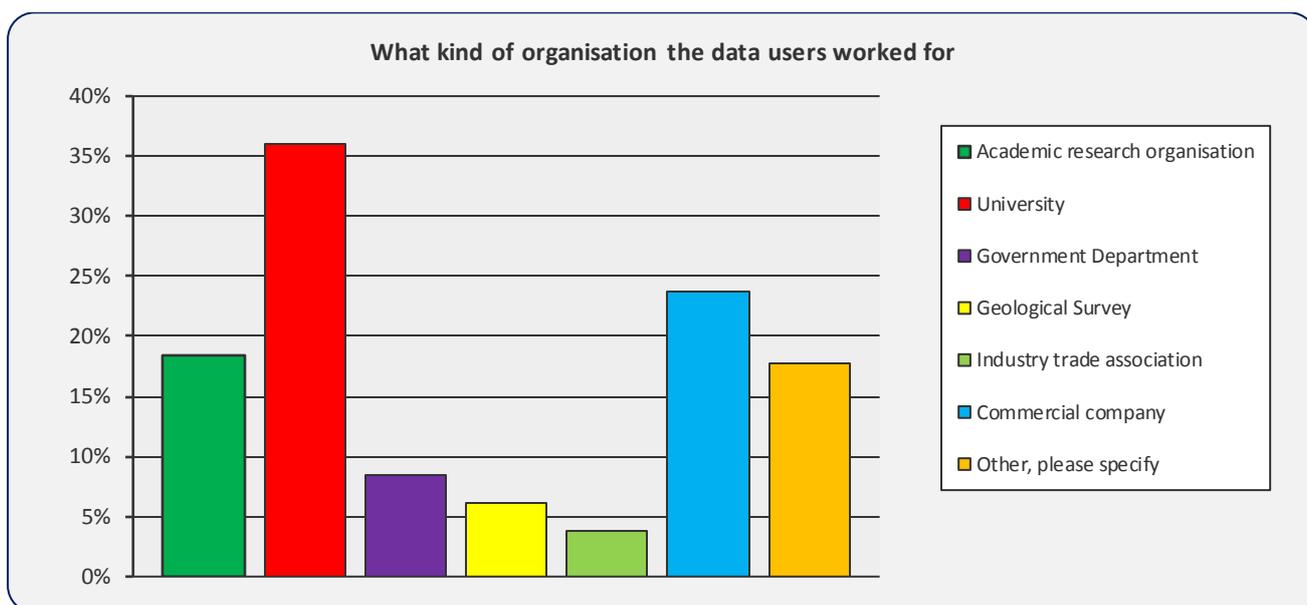


Figure 5: Responses to question 5 regarding the types of data users.

How important to the data users work is the World Mineral Statistics dataset?

The data users were asked how important the WMS dataset was to them and to select from the four options available; Absolutely essential - the work could not be completed without it, Very important - the work is greatly improved by using it, Fairly important - the work could be done without it but is better by using it and Not really important - the work would still be done if it was not available.

As you can see in Figure 6, from the 452 people that answer this question, 21.9% said the WMS dataset was absolutely essential, their work could not be completed without it. The highest proportion of users at 46.7% felt that the World Mineral Statistics dataset was very important, their work is greatly improved by using it. Only a small proportion of users (6.2%) felt that the dataset was not really important.

This shows that almost everyone felt that the WMS dataset being produced had some importance to them.

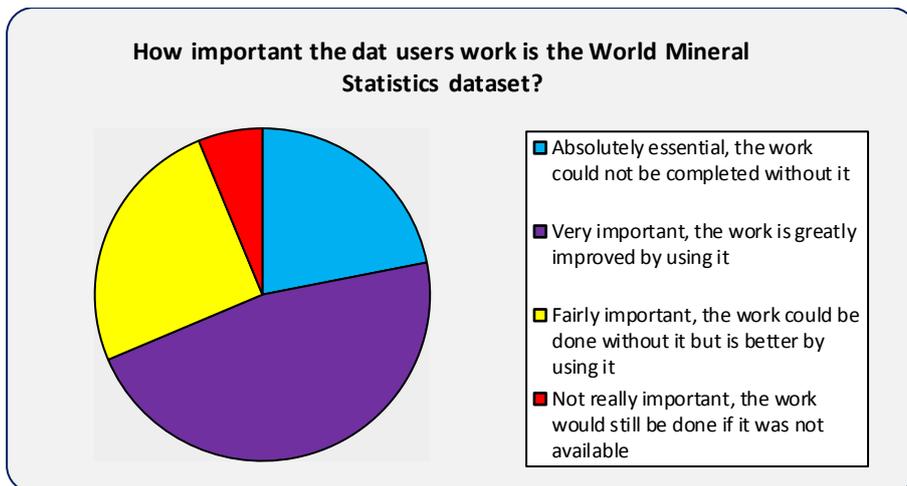


Figure 6: Responses to question 6 regarding the importance of the dataset.

Which commodity groups do data users require data for their work?

The data users were asked which of the following commodity groups data users required data for and were given ten options; all commodities currently included in the World Mineral Statistics dataset, all metals, Base metals only, precious metals only, Minor metals only, Iron and steel only, all Industrial minerals, Selected industrial minerals only, Energy minerals only and Other combination of minerals and metals. A free text box was also available.

As you can see from Figure 7, most data users (40.5%) want all the commodities currently included in WMS. There does seem to be a particular interest in all the metals at 20.1%. Energy minerals came out as the least important for data users work, this equated to only 5 data users. This may be because of the other sources available for this data, and ease of using their websites e.g. BP and OPEC.

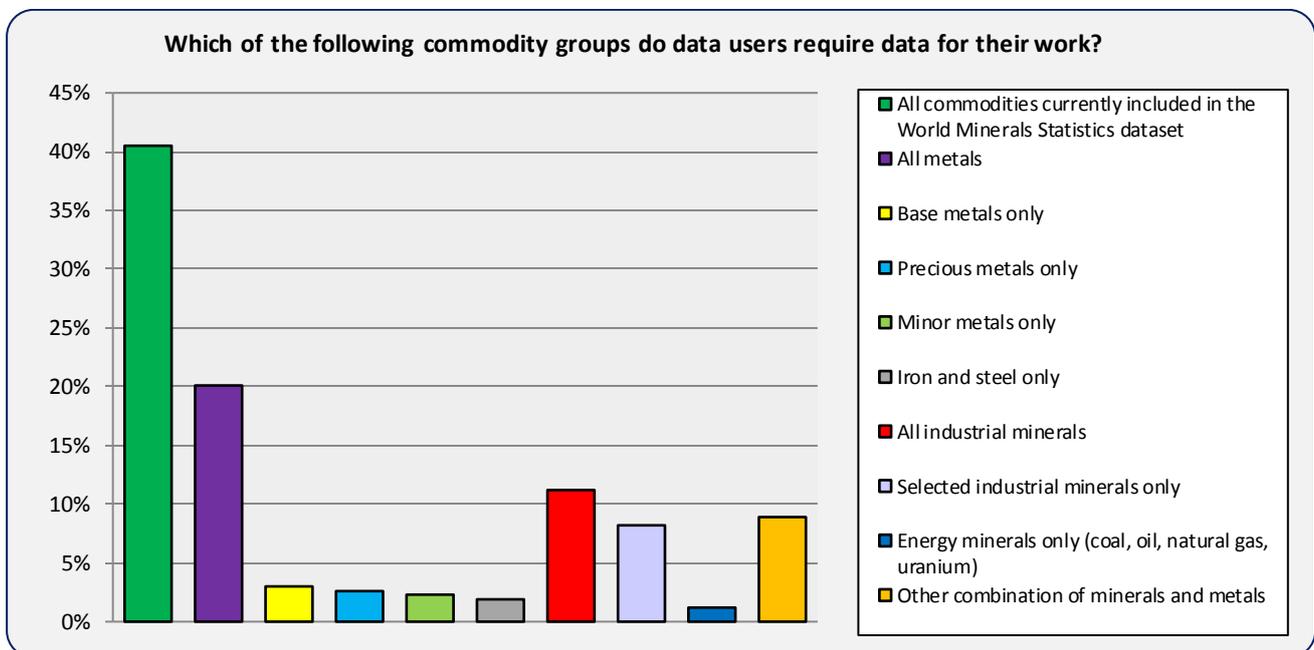


Figure 7: Responses to question 7 relating to commodity groups.

Which geographic areas do data users require data for their work?

The users were asked which geographic areas data users required data for and to select one of eight options available: All the countries of the world, World totals only, Europe only, The Americas only, Africa only, Asia only, Australasia only and Other combination of countries (with a free text box).

As you can see from Figure 8, 73.3% of data users require data for all the countries of the world. Of the remaining 26.7%, 9.8% were interested in World totals only but this is difficult to produce without having collected data for every country. Amongst the continents, Europe was largest with 6.6% and the second largest requirement was Africa only. The latter may be due to the greater exploration opportunities available in this area. Only 1 data user required just Australasia only.

The free text comments are quite varied. Within the different groups of countries that are specified, whole 'World' totals are frequently mentioned. There is a slight preference for developing countries but it is not exclusively those that are mentioned.

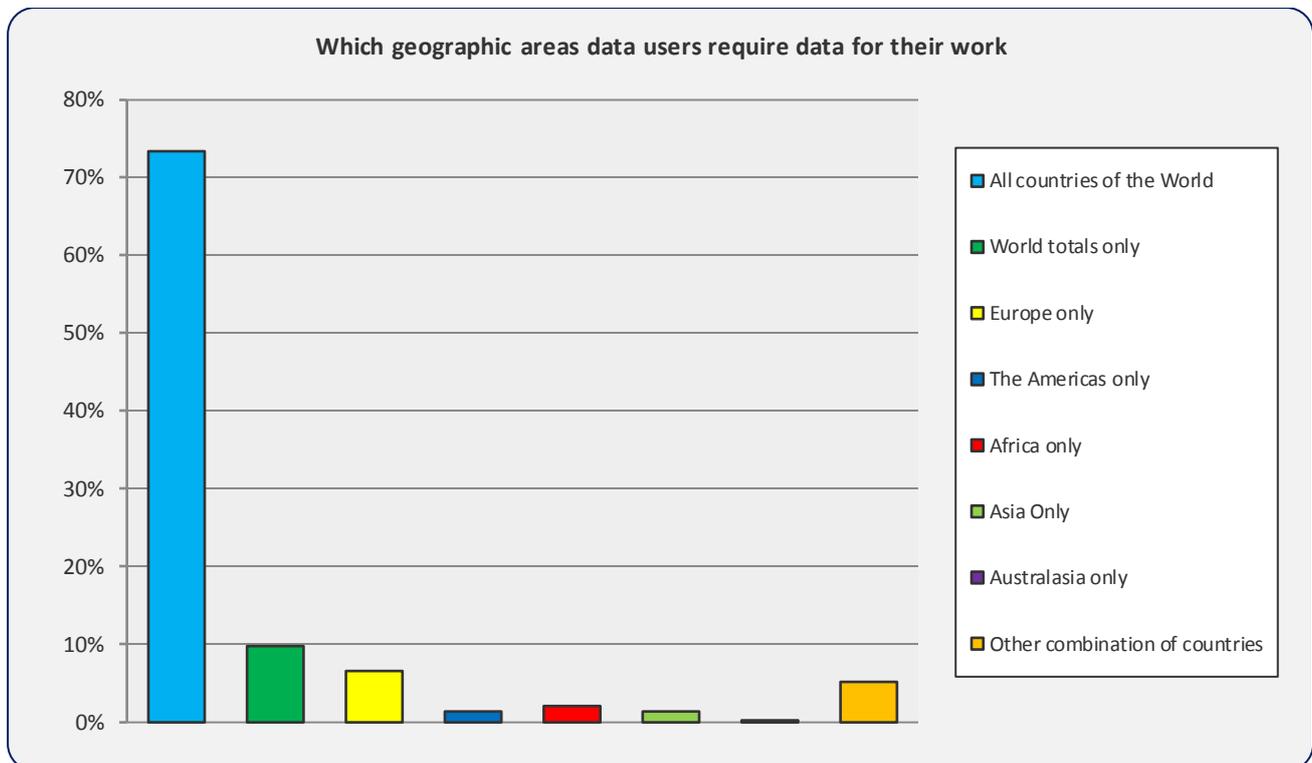


Figure 8: Responses to question 8 relating to geographic areas.

What would data users like to see in the future?

The data users were asked what would they like to see from the WMS dataset in the future and to select from the following nine options: A more interactive website containing graphs and maps, More analysis by BGS staff of what the data are indicating, Just the raw data available in MS Excel with no analyses or interactive graphs, Fewer commodities, The same commodities currently included, Additional commodities, A dataset focused on a smaller geographic area, Continue with a dataset covering the whole World and Other.

On reflection this is quite a mixed question and consequently there was a fairly mixed response, as shown on Figure 9. However 170 data users (39.8% of responses) would like to see a more interactive website containing graphs and maps. 38.2% of data users would like BGS to continue with a dataset covering the whole world. Only 7 data users out of the 427 that responded to this question would like to see fewer commodities.

From the Free text comments a lot of data users are requesting additional information e.g. resources / reserves, price, mining company data, analysis, consumption and end of use. A few data users would like some of our figures to be broken down further into more sub commodities e.g. ferro-alloys figures and rare earths data. A few data users would like data available for aggregates to cover a wider geographical area, currently it is only collected for Europe. The ability to be able to download more than 10 years was mentioned a few times.

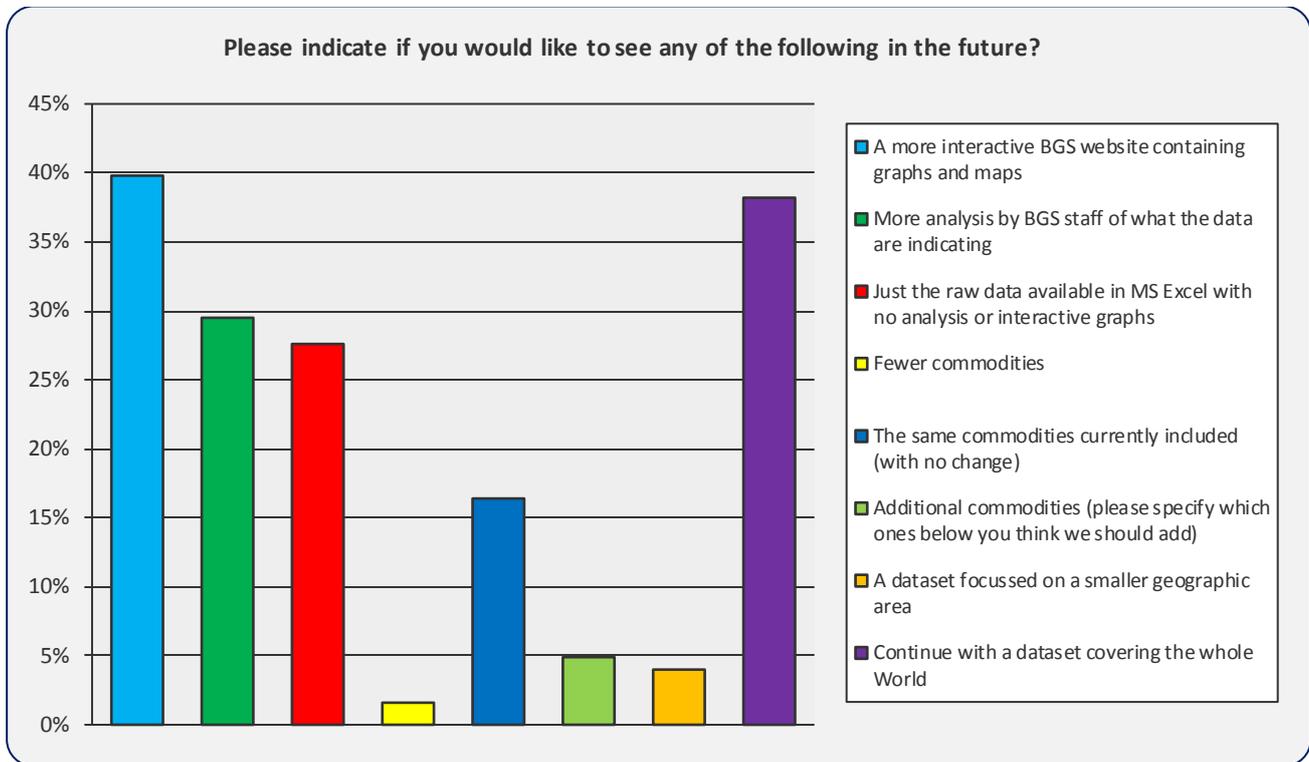


Figure 9: Responses to question 9 regarding ideas for future development.

Additional comments from data users

111 data users left a free text comment. Out of all of these comments a very large majority praised BGS for the World Mineral Statistics dataset. What is clearly shown from the comments made is that we have gained a reputation for quality and trustworthy data. There was only a couple of negative comments and a handful of constructive comments or suggestions of possible improvements.

From some of the comments it was interesting to see a bit more information of who was accessing the data and what they were using the data for. From a planner we had the following comment: *A knowledge of the mineral production statistics is a vital ingredient for planning and to keep in tune with global trends.* From a teacher we had this comment: *Excellent data sets, but would like to see more on historical trends (19thC onwards), regional data and analysis and more datasets and images made available - and tailored for - for teaching purposes, and Thank you for helping me in educating students about where resources come from.* From some organisations it is clear that they want very specific information relating to particular commodities (e.g. *For Abal-Association Brazilian Aluminium data is very important.*)

Some of the comments were possible suggestions for improvements to the database. Updating the data more quickly and frequently was mentioned, this would be nice if the data was made available to us sooner. Ranking of data was another request, but a few of the data users that mentioned this would like them ranked in different orders. There were requests for additional data e.g. trade data, consumption, processing methods and markets, sustainability, pricing and supply risks. Some would like to be able to download more than 10 years. One data user found the website complicated to use.

I have included a selection of the positive comments we received below:

Please keep up this great service - it is critically important to have such thorough data compilation and reporting continue!!

The world mineral statistics dataset produced by the BGS is far superior than the datasets provided by the United States Geological Survey and the Austrian Federal Ministry of Science, Research and Economy: the web site is easier to navigate and the process for downloading data in MS Excel format much easier.

The statistics provided are essential to a range of research topics, I doubt I could have published half the papers that I have without this detailed dataset.

I have accessed the BGS's world mineral production stats publications for many years. It is sometimes difficult to reconcile data from different sources (e.g. the USGS and the BGS), but the availability of long-term trend data and the country-by-country breakdown are invaluable.

I like to use your source because I find it trustworthy

This is a really useful and quite brilliant source. I am amazed by the coverage and speed of production.

I have used World Mineral Statistics (and the earlier reprint) for many years. The availability of these data in a consistent format is very important to my work. Other sources often have limitations that make using their data more difficult, especially when trying to blend information from a range of sources.

Thank you very much for your very great work and data which has made our research a lot better and easier for the last decade.

The statistics and survey by BGS is very important to the mining/mineral industry. The important work of BGS should continue.

Statistical services like yours are vital to the future and to understanding the present. The movement to economize should not be extended to vital scientific information needed to understand the economy-environment interrelationships.

The Mineral Statistics are an absolutely vital part of my work. They are very easy to access and follow. I am very impressed by how well the information is provided and amazed by the fact that we can access it freely. A brilliant service.

Conclusion

We had a high number of data users that chose to complete the survey and share their views on the dataset.

Over half of the survey participants are accessing the WMS dataset several times a year or even more frequently. Overall the WMS dataset had a particular importance to data users, with almost 22% feeling that the dataset was absolutely essential to their work.

About a quarter of our data users did not use an additional data source or not very often. The USGS appeared the most popular as an alternative source for data.

The commodities currently included in the WMS dataset was what the highest proportion of data users wanted. A particular interest in all the metals was also evident. Most data users wanted us to continue with data for every country of the world.

There were some suggestions for improvements to the dataset. Some of these could be looked at and may be simpler to implement than others e.g. the number of year's data that you are able to download at any one time.

Overall we had some very positive comments and it is clear that a number of different types of organisations value our data and we have gained a reputation for being a trustworthy resource with quality data.