

Northern Ireland Broad Economy Sales and Exports Statistics User Consultation: Results

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Background

The breadth and depth of NI trade statistics currently available via the Broad Economy Sales and Exports Statistics (BESES) vastly exceeds those available prior to 2015. Both they and the policy orientated work streams that they have informed, were pivotal to the work that NISRA, in conjunction with other Government Departments and delivery partners/ stakeholders, advanced in respect of EU Exit in order to secure the best possible outcome for Northern Ireland and the UK.

To reach this position, NISRA has engaged extensively with a broad range of users over the years, including expert users of NI economic statistics. This collaboration has helped to secure helpful feedback and insight that has not only underpinned NISRA's approach to the development, reporting and dissemination of BESES, but also other statistical series within ELMS and indeed NISRA's wider portfolio of outputs.

The BESES is currently designated as experimental statistics and will remain experimental until user feedback indicates that they are useful and credible. In line with the Statistics Authority Code of Practice (specifically [Value pillar V1: Relevance to users](#)) and as part of their continuous development and engagement with stakeholders, NISRA's Economic and Labour Market Statistics branch (ELMS) conducted a User Consultation to help ensure the data meets the needs of users, while gaining an understanding of (a) how the BESES is being used and (b) if there are any potential areas for improvement. The BESES is currently undergoing a review by the Office for Statistics Regulation (OSR) with a view to attaining National Statistics accreditation.

A user consultation was set up on the NI Direct website via Citizen Space. Users were invited to provide their views and feedback from 18th May 2021 until 11th June 2021. In total, 22 users responded to the survey. Some of these included:

- Department for the Economy (DfE);
- Department of Agriculture, Environment and Rural Affairs (DAERA);
- Northern Ireland Statistics and Research Agency (NISRA);
- Department for International Trade (DIT);
- Office for National Statistics (ONS);
- HM Revenue and Customs (HMRC);

- Agri-Food and Biosciences Institute (AFBI);
- University of Sussex and InterAnalysis; and
- The Welsh Government.

This paper provides a summary of the findings of the consultation along with our proposed response to the future development of the statistics.

Contents

Background	1
Results	4
Overview	4
Uses of BESES	4
Quality of BESES and advice from NISRA.....	5
Analysis	6
Presentation of Results	9
BESES Development Plan	10
Annual Business Inquiry.....	11
Final Comments	12
Conclusion	13
Next Steps	14
Theme: Timeliness	14
Theme: Greater levels of disaggregation	14
Theme: Faster Disclosure checking	14
Theme: Summary documentation detailing survey uses, limitations, etc.....	15

Results

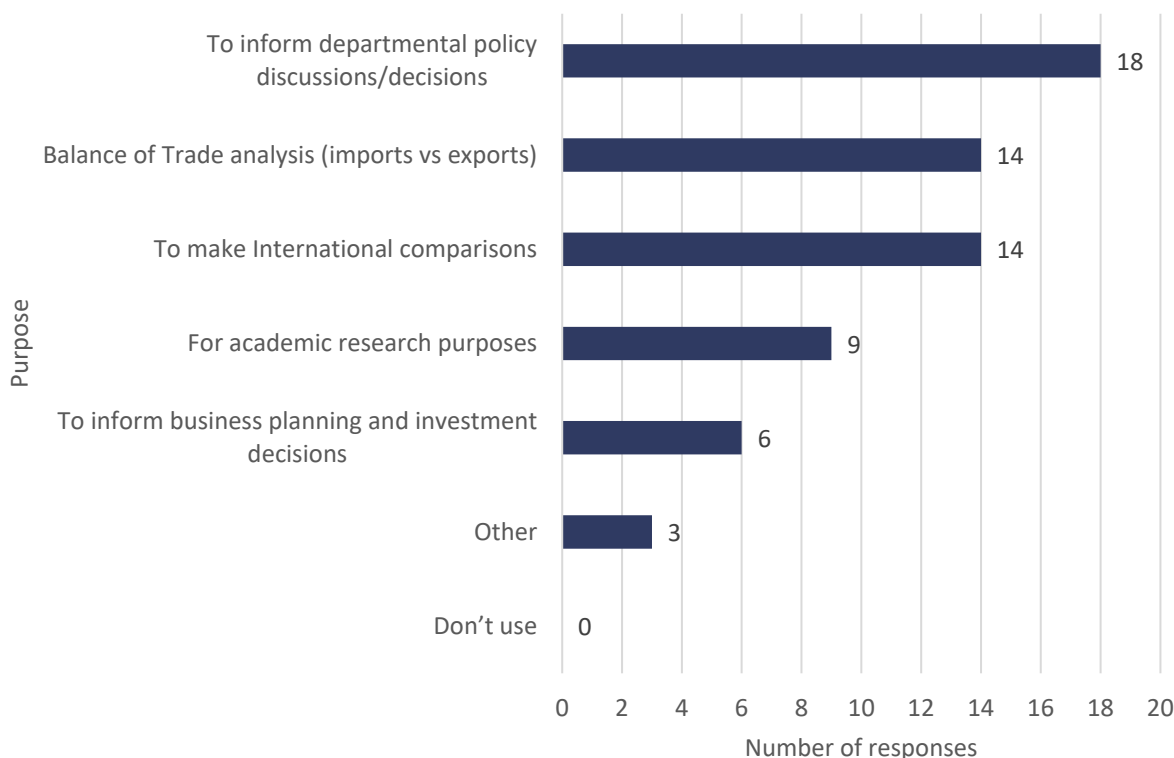
Overview

All respondents (100%) agreed that it has been worthwhile for NISRA to develop the BESES measure for Northern Ireland.

Uses of BESES

Respondents used the BESES for a variety of purposes (Figure 1). The most popular use selected by 82% of users was to inform departmental policy discussions/decisions followed by Balance of Trade analysis (imports vs exports) (64%) and to make international comparisons (64%). Other uses stated by respondents included the analysis of NI-GB trade and for incorporation into other statistical publications alongside other data sources such as [Supply and Use Tables](#).

Figure 1: For which of the following purposes does your organisation use the BESES? (Please select all that apply)*



***Note that respondents could select more than one answer.**

The vast majority of respondents (91%) stated that they are currently working on or planning projects that would benefit from data available from the BESES. Many of these projects are using BESES as a means of analysing and monitoring the impact of EU Exit and the NI Protocol, as well as aiding policy decision-making.

One respondent stated:

“We are using BESES data for our ongoing analysis in relation to Brexit. It’s the only reliable source of data for NI GB trade.”

Other projects using the BESES included research on cross-border trade, analysis comparing trade with other nations and linking BESES data with other data sources.

Quality of BESES and advice from NISRA

All respondents (100%) stated that the BESES is of sufficient quality for their needs. Suggestions for improvement included wider industry sector coverage and more granular data in relation to District Council Area breakdowns and individual country-level data.

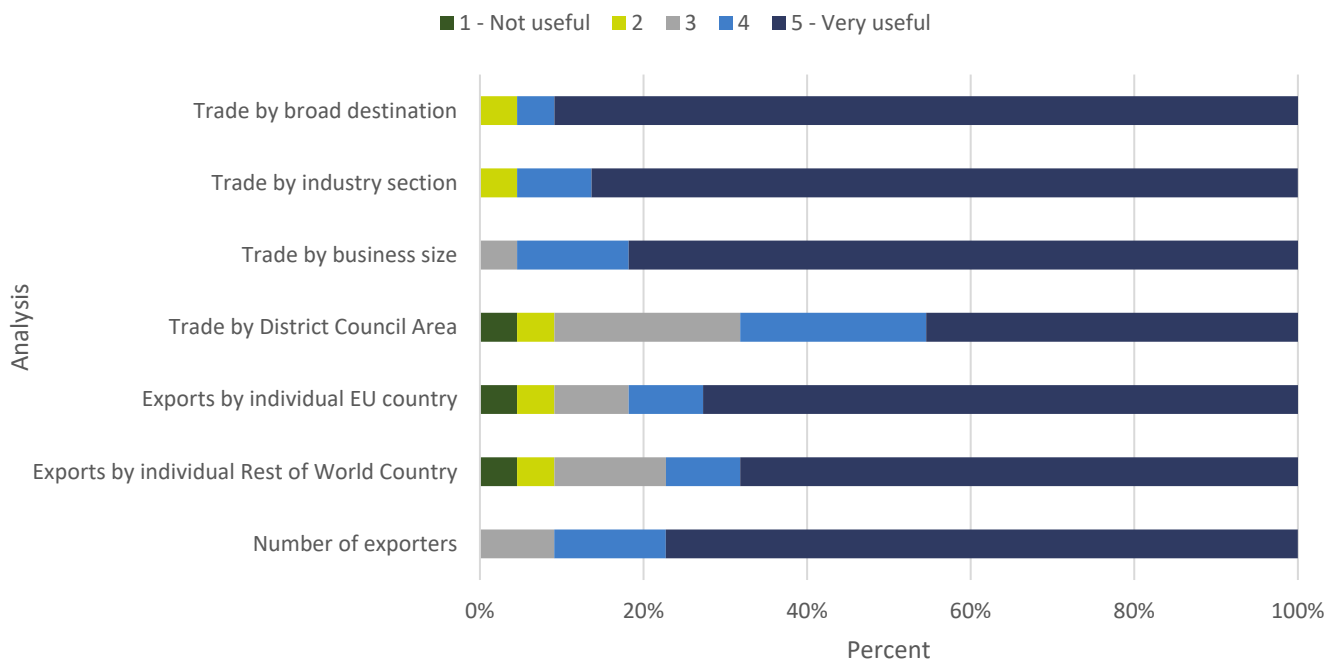
Respondents were then asked to comment on how clear the advice is from NISRA regarding the strengths and limitations of the BESES. While for most respondents the advice is clear, the statisticians involved have been readily available to answer any questions relating to the data as well as any limitations or caveats. Areas for improvements included publishing a summary of limitations that can be easily copied and cited and any comments on the potential of linking and comparing the BESES with other data sources.

Analysis

Figure 2 illustrates how useful respondents found some of the analysis routinely published via the BESES. The seven analyses presented were trade by broad destination, industry section, business size and district council area; exports by individual European Union (EU) and Rest of World (ROW) country; and the number of exporters. Respondents were asked to rate the usefulness of each analysis on a scale of 1 to 5 where 1 is not useful and 5 is very useful.

The majority of respondents provided a score of 4 or 5 for each analysis. Trade by broad destination, industry section and business size appeared most useful with 95% of respondents giving each analysis a rating of 4 or 5. Views were slightly more mixed regarding trade by District Council Area with almost a quarter (23%) giving a rating of 3.

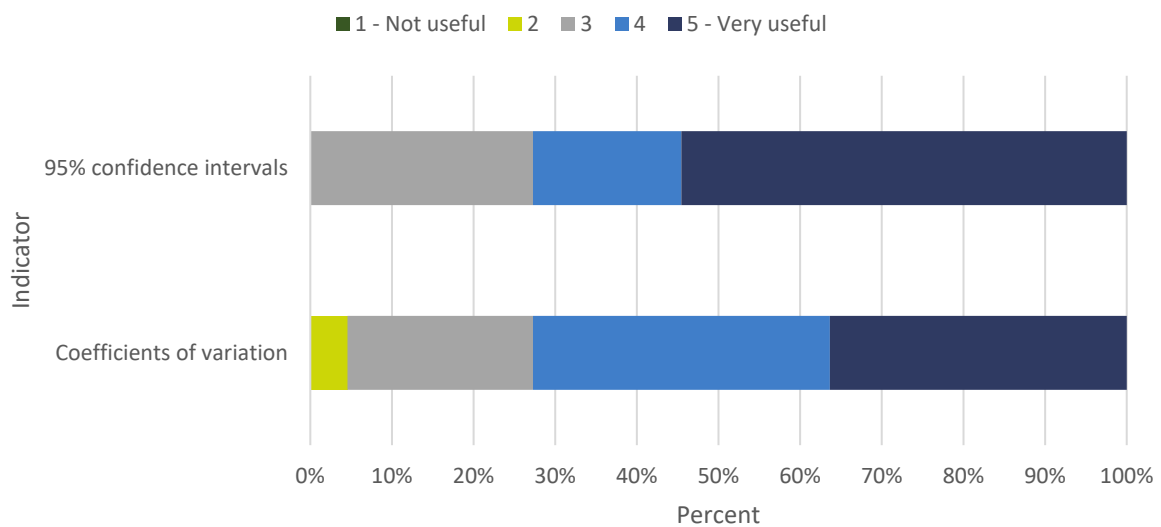
Figure 2: NISRA routinely produce the analysis below. On a scale from 1 to 5, where 1 is not useful and 5 is very useful, how useful do you find these analyses? (Please provide a rating for each statement)



Similarly, respondents were asked to rate on a scale of 1 to 5 (where 1 is not useful and 5 is very useful) how useful they found the quality indicators (95% confidence intervals and coefficients of variation) which are produced alongside each estimate (Figure 3).

For both indicators, 73% of respondents provided a score of 4 or 5. However, a greater proportion of respondents (55%) gave 95% confidence intervals a score of 5 compared to Coefficients of variation (36%). Neither indicator received a score of 1 – Not useful.

Figure 3: NISRA routinely produce quality indicators (95% confidence intervals and coefficients of variation) alongside each estimate. On a scale from 1 to 5, where 1 is not useful and 5 is very useful, how useful do you find these quality indicators? (Please provide a rating for each statement)



The majority of respondents (77%) stated that their organisation is interested in all of the sectors currently published in the trade tables (Table 1). For those interested in specific sectors, over a fifth (23%) of respondents were particularly interested in section A - Agriculture, forestry and fishing, 18% were interested in section C – Manufacturing and 14% were interesting in section G – Wholesale and retail trade, repair of motor vehicles.

Table 1: Which industry sectors is your organisation most interested in having covered in the trade tables? (Please select all that apply)*

Industry Sector	Number of Responses	% of Respondents
A. Agriculture, forestry and fishing	5	23%
B. Mining and quarrying	0	0%
C. Manufacturing	4	18%
D. Electricity, gas, steam and air-conditioning supply	0	0%
E. Water supply; sewerage, waste management	0	0%
F. Construction	0	0%
G. Wholesale and retail trade, repair of motor vehicles	3	14%
H. Transportation and storage	1	5%
I. Accommodation and food service activities	0	0%
J. Information and communication	1	5%
K. Financial and insurance activities	1	5%
L. Real estate activities	0	0%
M. Professional, scientific and technical activities	1	5%
N. Administrative and support service activities	1	5%
O. Public administration and defence; compulsory social security	0	0%
P. Education	0	0%
Q. Human health and social work activities	0	0%
R. Arts, entertainment and recreation	0	0%
S. Other service activities	1	5%
T. Activities of households	0	0%
U. All of the above	17	77%

***Note that respondents could select more than one answer.**

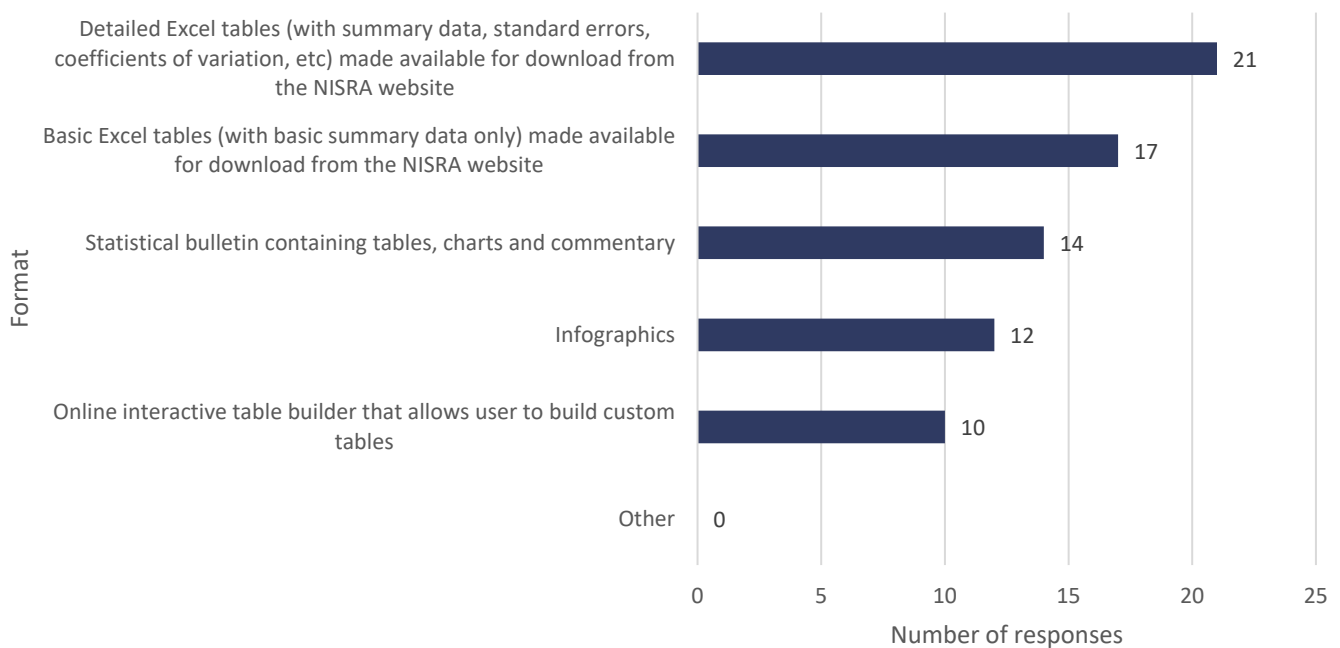
Half (50%) of users stated that they would benefit from additional sub-sector analysis. Some of these respondents did not have suggestions for particular analysis, but felt that any opportunity for more granular data would be helpful.

For those with specific requests, suggestions included further breakdowns of sectors C - Manufacturing, F - Construction and G - Wholesale and Retail trade, repair of motor vehicles.

Presentation of Results

When asked about how the results of the BESES should be presented, almost all respondents (95%) indicated that the detailed Excel tables (with summary data, standard errors, coefficients of variation, etc.) which is made available for download from the NISRA website were most useful (Figure 4). This was followed by basic Excel tables (with basic summary data only) (77%) and Infographics (55%). Although not currently available, 45% of respondents indicated that an online interactive table builder that allows users to build custom tables to suit their individual needs would be useful.

Figure 4: Which format do you find most useful for the presentation/publication of BESES trade data? (Please select all that apply)

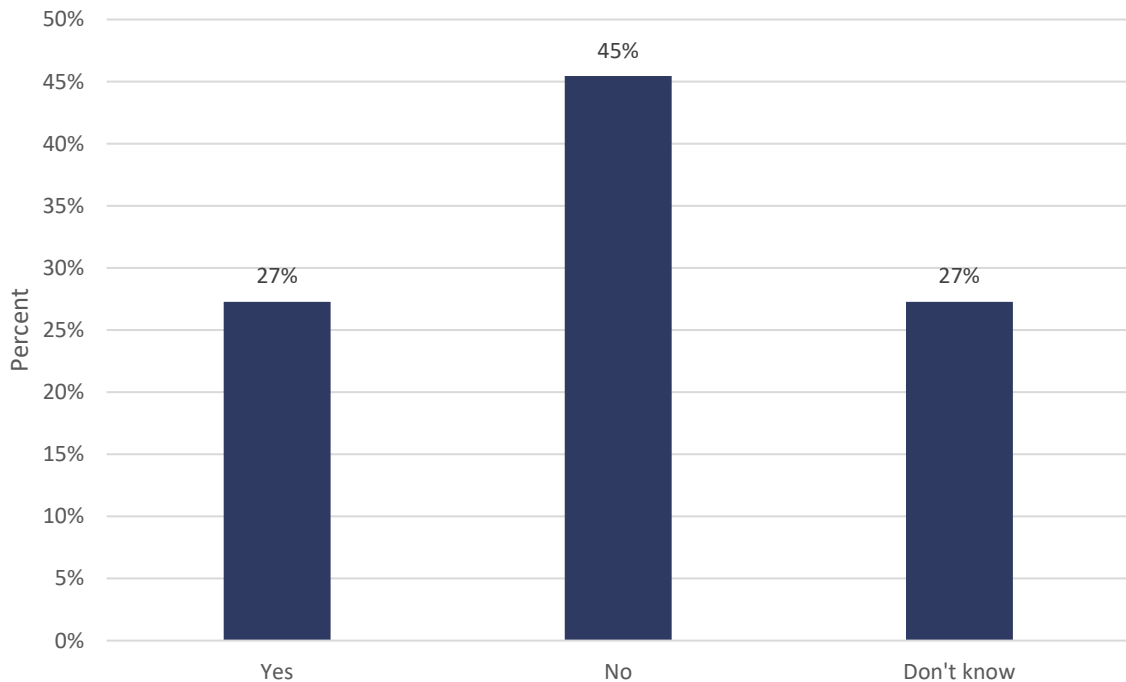


***Note that respondents could select more than one answer.**

BESES Development Plan

NISRA has published a [BESES development plan](#) and users were invited to provide their views on whether there are any other priority areas they think should be added to NISRA's plan. Just under half of respondents stated No (45%), followed by Yes (27%) and Don't Know (27%) (Figure 5).

Figure 5: NISRA has published a development plan for 2021. Are there any other priority areas you think should be added to NISRA's plan?



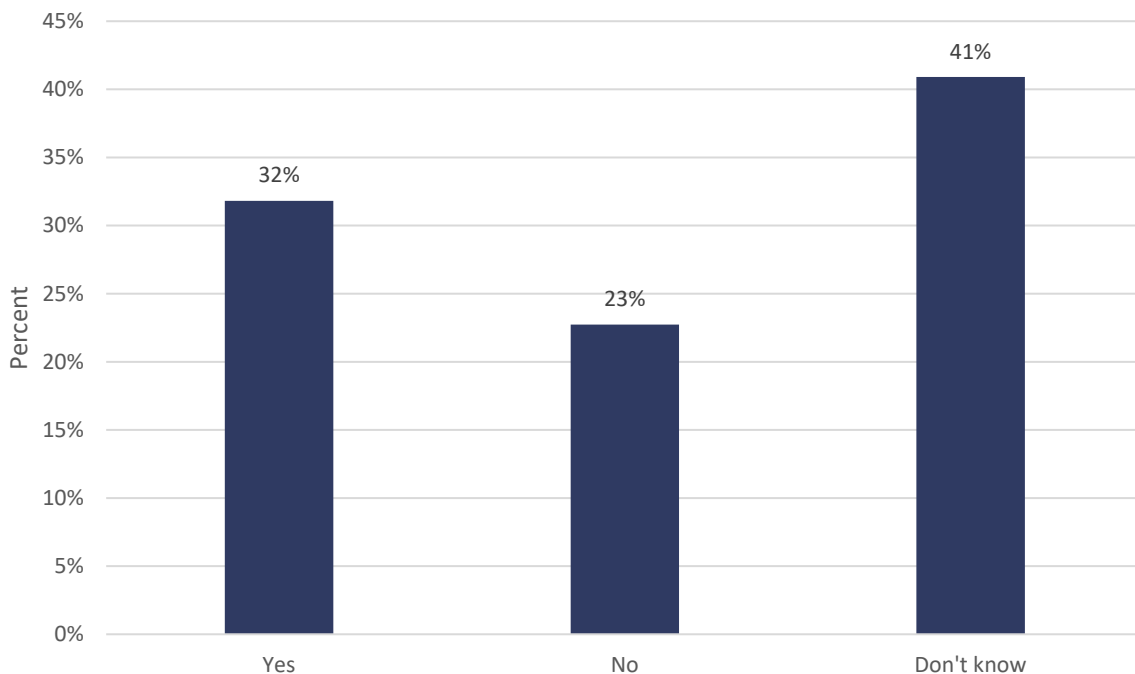
Respondents were also asked what other areas should be added as a priority to NISRA's plan. Areas suggested included a more automated approach to disclosure checking, as this task can take a significant amount of time; while two respondents also referred to the timeliness of the data stating that it would be useful if data were more recent.

Annual Business Inquiry

The exports and imports data collected by NISRA are a subset of the data available from the [Annual Business Inquiry](#). The entire ABI dataset thus relates exports and imports to other variables, such as employment, purchases and GVA.

Respondents were asked whether there are any particular linkages between exports and other variables they thought NISRA should explore. Just over two fifths of respondents (41%) answered Don't Know, followed by 32% who answered Yes, and 23% who said No (Figure 6).

Figure 6: The exports and imports data collected by NISRA are a subset of the data available from the Annual Business Inquiry. The entire ABI dataset thus relates exports and imports to other variables, such as employment, purchases and GVA. Are there any particular linkages between exports and other variables you think NISRA should explore (for example, exports as a percentage of GVA)?



For those that answered Yes, suggestions of linkages included exports as a percentage of GVA, more breakdowns of trade by District Council Area and greater exploration of the purchases/import data.

For some of the respondents, while they did not necessarily have specific requests, they would appreciate the opportunity to explore potential linkages for more in-depth analysis. One respondent stated:

“The more interlinked the better. This is important for making assessments of policy impact.”

Final Comments

Finally, respondents were invited to express any other views to inform the development of the BESES.

Respondents were complimentary of the statistics but suggested that BESES might benefit from greater resourcing and staffing levels, particularly given recent demand for NI trade statistics in the wake of EU Exit and timeliness was again raised as an issue.

Conclusion

Overall, the findings from this survey have been very positive and encouraging to the NISRA ABI and BESES teams. Users have found that the creation and development of the BESES has been worthwhile and find the outputs very useful. These outputs underpin a wide range of activities, including supporting the development and implementation of departmental policy and international comparisons of trade that was pivotal to both NI's and the UK's EU Exit work streams.

Every respondent stated that the BESES is of sufficient quality to meet their needs and the majority of respondents felt that the guidance and advice provided by NISRA regarding the use of BESES was clear.

Respondents found the vast majority of the routine analysis tables produced to be either useful or very useful. This was also true of the quality indicators published alongside each estimate. In addition, there was strong support for the current presentation of BESES results in Excel format, supplemented by a statistical bulletin.

Specific themes or areas for development emerging from the survey centre principally on a greater level of disaggregation and more timely results.

NISRA has provided an initial response to the main emerging themes in the next section.

Next Steps

Findings from this survey will be combined with recommendations emerging from the ongoing OSR review of the BESES. However, there are some themes/actions that NISRA can address in the meantime.

Theme: Timeliness

The main headline results (destination-level data) are published in December each year, three weeks after the publication of Northern Ireland Annual Business Inquiry (NIABI) headline results, approximately six weeks following the end of the fieldwork period and nine months after the end of the financial year reporting period.

However, the BESES publication date is dependent on the NIABI publishing on time as there are several common variables across both datasets and the NIABI publication sets the top-line totals to which BESES is constrained.

There is little scope for trimming these milestones.

Having said that, NISRA is keen to gain a deeper understanding of which group(s) of users would find more timely results beneficial and for what purpose, along with the impact that not having them earlier is having on their work. Thereafter, we can explore the relative merits/viability of addressing such need, albeit in the context of finite resourcing constraints, data utility/quality considerations and any precedents it might set for others.

Theme: Greater levels of disaggregation

The response to this theme should be read in conjunction with “*Theme: Faster Disclosure checking*” below as both themes are directly related.

As with any sample survey, increasing levels of disaggregation results in estimates being derived on the basis of smaller numbers which can, in turn, diminish the robustness of the estimates concerned. NISRA will however investigate and consider publishing more disaggregated data provided it is fit for purpose; is of sufficient coverage, utility and quality; and can support the derivation of robust and insightful inferences when viewed alongside the relevant quality indicators. Clearly, users would have a responsibility to ensure that they play their part in this process.

Theme: Faster Disclosure checking

The response to this theme should be read in conjunction with “*Theme: Greater levels of disaggregation*” above as both themes are directly related.

The BESES data is gathered through the [NI Annual Business Inquiry \(NIABI\)](#), which is conducted under the [Statistics of Trade and Employment \(Northern Ireland\) Order 1988](#). Under that order, NISRA is required to ensure that all the information provided by businesses

is kept secure, via a range of physical and technical security arrangements and disclosure control methods, as it is illegal to reveal data from an individual business or to identify any business to unauthorised persons.

The current disclosure checking process for BESES is resource intensive and time consuming. While all primary disclosive cells are detected through statistical coding, secondary disclosive cells are detected through a combination of coding and manual inspection and testing. This secondary process can be slow, depending on the size of the particular query/data table undergoing checks.

To that end, over the last year ELMS have been testing the R package "[sdCTable](#)", which is designed to provide statistical disclosure control in tabular data. sdCTable automates disclosure control and facilitates the production of protected tables in an efficient and effective manner.

ELMS has been running sdCTable in parallel with its normal disclosure checking process to ensure consistency of checking. This preliminary use has been very successful and NISRA hopes to fully roll out the use of sdCTable within the next few months, allowing automated production of more disaggregated tables, with rapid application of data suppression rules.

Theme: Summary documentation detailing survey uses, limitations, etc.

The BESES page on the NISRA website provides extensive documentation regarding survey coverage, uses, limitations, developments, etc. However, in response to this theme, over the next few weeks, NISRA will additionally develop a one-page reference guide providing users with key data descriptions, uses, limitations, lines to take, etc.