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Northern Ireland Broad Economy Sales and Exports Statistics Development Plan

Geographical Area: Northern Ireland

Theme: Economy Frequency: Ad Hoc

This development plan sets out the progress made by the Northern Ireland Statistics Research Agency (NISRA) in developing Northern Ireland trade statistics over the last 5 years along with providing an overview of the plans for the next 2 years.

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1 Introduction and background

1.1 Introduction to the Broad Economy Sales and Exports Statistics

The <u>Northern Ireland Executive's Economic Strategy (2012)</u> referred to the need to improve the measurement of Northern Ireland's exports beyond that of the manufacturing sector. NISRA subsequently developed the Broad Economy Sales and Exports Statistics (BESES) survey to capture the external sales of NI businesses to markets outside of NI.

The BESES data is captured through the Northern Ireland Annual Business Inquiry (NIABI). NIABI is an integrated survey that provides information on the value of the economic activity that businesses generate and associated expenditure across the main industrial sectors in Northern Ireland. The NIABI provides a number of high level indicators of economic activity such as the total value of sales and work completed by businesses (Turnover), the value of exports as well as the value of the purchase of goods, materials and services. The UK Annual Business Survey, carried out by the office for National Statistics (ONS), collects similar data on GB economic activity. However the NIABI is unique in that it captures the value of trade.

Further information on the BESES including relevance to users and accuracy of the results is details in the <u>Northern Ireland Broad Economy Sales and Export Statistics: Quality Report.</u> A summary of the uses of the BESES data alongside the revision policy is also available on the <u>BESES webpage</u>.

Coverage

The NIABI, and BESES, excludes the insurance and re-insurance industries along with Public Administration and Defence plus Agriculture, Forestry and Fishing. Local authority and central Government bodies in Education and Human Health and Social Work Activities plus Medical and Dental Practice Activities are also excluded from the survey.

More detail on the coverage of the NIABI can be found in the background notes of the <u>NIABI</u> publication.

1.2 Background to the development of the BESES

The BESES data was first published in 2015 as an experimental annual measure of local businesses' sales to markets outside Northern Ireland (NI). The <u>first publication in 2015</u> (referred to survey years 2011 and 2012) and provided a more comprehensive measure of such sales than had previously been available at the NI level through the <u>NI Manufacturing Sales and Exports Survey (MSES)</u>.

The breadth and depth of NI trade statistics currently available via the BESES vastly exceeds those available prior to 2015. The outputs have been driven through user engagement in the context of a period of significant increasing demands from users for more NI specific trade data following the UK's referendum on EU membership in June 2016. This created extraordinary demands for our data as policy makers sought to understand the baseline prior to EU Exit and what EU Exit could potentially mean for NI and its businesses.

The outputs have subsequently developed to provide three separate publications annually providing users with details of NI businesses' purchases and imports from external markets

outside of NI. We now also provide users with details of the external sales/exports and external purchases/imports disaggregated by goods and services, alongside a sub-regional disaggregation of exports.

Further information on the background to the BESES can be found in the BESES <u>Background</u> Notes document on the NISRA website.

2 Progress since 2015

Prior to survey reference year 2011, the NIABI and the NI MSES existed as separate surveys with sample sizes of approximately 5,000 and 3,500 respectively. However, in light of users' need for more detailed statistics (particularly in relation to geographical disaggregation and the growing requirement for a more comprehensive picture of NI exports activity) the NIABI and MSES surveys were merged and the sample boosted to approximately 9,000 in 2011. This was expanded to approximately 11,000 in survey reference years 2012 and 2013. At present the sample size is approximately 9,500 businesses for the reference year 2019.

The merger of the two surveys and increased sample size has required NISRA to invest significantly in our internal survey administration and processing systems which has been underpinned by the development of our Integrated Business Survey System. There has also been significant investments in time and resources to develop the statistical processing systems through the development of statistical software code to analyse the data received by businesses and produce the outputs that are available today.

2.1 Developments in outputs since 2015

As outlined in Section 1, the initial results published in 2015 provided details of external sales to Great Britain (GB) and exports to markets outside of the UK disaggregated by broad industry classifications. The outputs from the survey have increased significantly since that time in terms of the array of new variables and granularity of the data available to users as highlighted below¹.

Table 1: Details of BESES Publications, variables and date of first release

Publication	Information available	First published
Publication Methodology Paper on the Production of Northern Ireland Broad Economy Exports Estimates with Experimental Estimates for 2011 and 2012	Methodology paper presenting initial experimental estimates for 2011 and 2012 relating to: Sales & exports to broad destinations Turnover by industry sector Exports by industry sector Exports to markets within the rest of the EU	6 th March 2015
	Exports to markets outside the EU The purpose of the paper was to seek user views on the approach adopted to improve the measurement of exports and plans for future development, in line with the Code of Practice for Official Statistics.	

¹ Note that data tables are available in both MS Excel and Open Document Spreadsheet formats to aid accessibility

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Publication	Information available	First published
Value of goods and services purchased by NI businesses	 Time series of data from 2011-2018 relating to: Purchases & imports of goods and services from trade partners Total purchases of goods and services by industry sector Imports of goods and services by industry sector Quality indicators for each estimate (confidence intervals and coefficient of variation) Data tables available here .	31 st May 2018
Value of sales of goods and services to markets outside of NI by NI businesses	 Time series of data from 2011-2018 relating to: Sales & exports of goods and services to broad destinations Total sales of goods and services by industry sector Exports of goods and services by industry sector External sales of goods and services by broad industry sector Quality indicators for each estimate (confidence intervals and coefficient of variation) Data tables available here.	8 th July 2016
Value of sales to markets outside of NI by NI businesses Note that this is the first of the three annual releases and the precursor to the subsequent publications	 Time series of data from 2011-2018 relating to: Sales & exports to broad destinations Turnover by industry sector Exports by industry sector Exports to markets within the rest of the EU Exports to markets outside the EU Sales & exports to broad destinations by business size Quality indicators for each estimate (confidence intervals and coefficient of variation) Number of sellers and exporters by broad destinations and business size Number of businesses selling to destinations outside NI (External sales to GB) by industry section Number of businesses exporting from NI by industry section Sales & exports by broad destination and District Council Area Number of businesses selling & exporting by broad destination and District Council Area Data for Draft Programme for Government Indicator 21: External Sales 	17 th February 2016
Overview of Northern Ireland Trade slide pack	Data tables available here . Overview of Northern Ireland (NI) trade with Great Britain (GB), Ireland (IE), the Rest of the European Union (REU) and the Rest of the World (RoW) using publicly available data from the NISRA Broad Economy Sales and Exports (BESES) statistics, HMRC's Regional Trade Statistics (RTS) and data from the Goods Exports and Imports statistics administered by the Central Statistics Office (CSO) in Ireland.	20 th December 2017
Overview of Northern Ireland Trade with Great Britain	Overview on trade in goods between Northern Ireland (NI) and Great Britain (GB) using publicly available data from the NISRA Broad Economy Sales and Exports Statistics (BESES)	27 th September 2018

We continue to work closely with users to provide data to meet their needs as demonstrated by the range of statistics that we now produce. These have been driven by engagement with key users and as a result of increasing demand for data to inform EU Exit discussions over the last four years.

The above shows that as demand for specific datasets has emerged we have responded by providing data to users and making this data publicly available. From initially providing high level industry level exports and external sales statistics in 2015, the BESES now offers users data relating to external purchases from GB and imports from outside the UK, information on the goods and services breakdown of these trade, details of the numbers and characteristics of businesses involved in trade and a district council level breakdown of exports and external sales.

The BESES uses the coefficient of variation to provide precision estimates for the published results. Coefficients of variation and 95% confidence intervals are now routinely published alongside all published data tables.

All this new information allows users to have a greater understanding of the picture of NI trade.

2.2 Usage of BESES statistics

Detailed information on the uses of the BESES statistics is presented in the <u>Summary of usage of the Broad Economy Sales and Exports Statistics document</u> on the BESES webpage.

Users of BESES data

NISRA has engaged extensively throughout the project with expert users of NI economic statistics whose views have helped shape the development of the BESES.

Users include:

- Department for the Economy (DfE);
- Department of Finance (DoF);
- Department of Agriculture, Environment and Rural Affairs (DAERA);
- The Executive Office (TEO):
- NISRA Economic Accounts Project;
- InterTradeIreland (ITI);
- The Economic and Social Research Institute (ESRI):
- Office for National Statistics (ONS):
- HM Revenue and Customs (HMRC);
- Department for Exiting the EU (DExEU);
- HM Treasury (HMT);
- Department for International Trade (DIT);
- The Department for Business, Energy and Industrial Strategy (BEIS)
- Cabinet Office;
- Home Office;
- Medicines and Healthcare Products Regulatory Agency (MHRA);
- Food Standards Agency (FSA);
- UK Trade Policy Observatory (UKTPO);
- The Ulster University Economic Policy Centre (UUEPC);
- The Economic Statistics Centre of Excellence (ESCOE) in the University of Strathclyde;
- Central Statistics Office Ireland: and
- NI economic commentators and private sector consultants.

Informing EU Exit

Since 2016 the demand for BESES data has been enormous. This has primarily been driven by the need for government departments and analysts to understand the trading position of the UK and indeed NI in the context of EU Exit.

We have worked closely with users of our data to ensure that we can provide the data that meets their needs. This is demonstrated by the range of new variables that we have published over recent years as highlighted in Table 1 above.

Indeed, in addition to providing data in response to ad hoc requests from users, where possible we have also made datasets available to users to inform numerous trade/EU Exit related reports and papers over recent years. A sample of these reports which BESES has helped inform is highlighted below:

- HM Government: Northern Ireland and Ireland Position Paper (August 2017);
- <u>HM Government: Additional Data Paper: Northern Ireland Trade Data and Statistics</u> (August 2017);
- NISRA Cross Border Supply Chain Report (June 2018);
- ESRI: Export Participation and Performance of Firms on the Island of Ireland (September 2018);
- <u>DFE: The Annual Purchases Survey in Northern Ireland Modelling the Origin of Products</u> (November 2018);
- <u>DFE: Northern Ireland International Trade in Services New Perspectives (November 2018);</u>
- <u>DFE: Northern Ireland Retail Study: Value, Volume and Proportion of Goods Sourced from</u> GB or transported via GB from other parts of the world (March 2019);
- ESRI: Shock absorption capacity of firms in Ireland and Northern Ireland;
- <u>DFE: Irish land border existing and potential customs facilitations in a no-deal scenario</u> (June 2019):
- DfE: Northern Ireland Trade Data an update (July 2019);
- DExEU: European Union (Withdrawal Agreement) Bill Impact Assessment (October 2019);
- NISRA: EU Exit trade analysis;
- NISRA: 2015 & 2016 Supply-Use Tables (December 2019);
- Cabinet Office: The UK's approach to the Northern Ireland Protocol (May 2020);
- UK Internal Market White Paper (July 2020); and
- UK Internal Market Bill -impact assessment (September 2020)

In addition to the above publicly available documents we also know that BESES statistics have been used to inform internal briefings and discussions around EU Exit within NI and GB departments including in papers across Whitehall and in evidence shared between the UK Government Negotiating Team and the EU's Taskforce 50 team.

Northern Ireland Executive Programme for Government

The Programme for Government is the highest level strategic document of the Northern Ireland Executive. A draft Programme for Government Framework was consulted on during 2016. It used an outcomes-based approach to develop an Outcomes Delivery Plan which sets out the actions that departments will take to give effect to the previous Executive's stated objectives of Improving wellbeing - by tackling disadvantage and driving economic growth.

The annual rate of external sellers (i.e. the proportion of all survey-eligible businesses that sell outside NI) sourced from the BESES, was selected as an indicator in the draft Programme for Government Framework and NICS Outcome Delivery Plan 2018/19. It is used alongside a number of other <u>indicators</u> to inform progress against Outcome 1, prospering through a strong, competitive, regionally balanced economy.

NISRA Economic Accounts Project

The BESES statistics are a key input data source to the NISRA Supply-Use Tables (SUTs) which provide users with a number of indicators relating to the structure and inter-industry relationships of the NI economy to aid economic analysis and decision making. These include but are not limited to Gross Domestic Product (GDP), output by NI industries, consumption of goods and services and levels of investment. Specifically the BESES data is the foundation for the trade components of the SUTs and associated Input-Output Tables (IOTs).

Further information on the Economic Accounts Project can be found here.

Economic modelling of the NI economy

The development of the Economic Accounts Project in NISRA has facilitated a number of economic modelling projects undertaken by the Department for the Economy. These include the development of a Computable General Equilibrium (CGE) model² and a Partial Equilibrium model currently under development. The aim of the models is to provide policy makers with information on the potential impact of EU Exit on the NI economy.

The economic accounts produced by NISRA are the foundations of the models developed but the BESES data has also been used as inputs to the models and helped to inform the inputs to the various scenarios which are being modelled. The BESES team have worked closely with colleagues in DFE and their contractors to provide data to inform their work.

Office for National Statistics sub-national trade statistics

NISRA has been engaging with colleagues in the ONS over recent years to inform the development of their suite of sub-national trade statistics to ensure consistency in messaging and coherence across publications where possible. To this end we have a data sharing agreement with the ONS to provide BESES data to inform their work.

Central Statistics Office Ireland Trade Asymmetries project

BESES data has been shared with the CSO Ireland to inform an internal project investigating asymmetries between what CSO and NISRA report in terms of NI and IE trade. The aim is to reduce the asymmetries of what is reported from the two different sources which have been designed for different purposes. It is envisaged that CSO will produce a report in due course.

² Further information is available in the Department for the Economy Research Bulletin: Expanding the Analytical Toolkit with Computable General Equilibrium Modelling

2.3 User engagement

Over the last three years the BESES Team has held membership of a number of EU Exit related analytical groups that have had a focus on NI trade. These groups are excellent networking opportunities to build connections with other data producers and users of our statistics to allow us to be kept informed of developments, actively be involved and contribute to new areas of development and engage with users of our statistics.

Table 2: Details of stakeholder groups/working groups that NISRA staff hold membership of

Trade / EU Exit Groups		
Group	Membership	
ONS Global Trade and Investment	ONS, Scottish Government, Welsh Government	
Working Group		
ONS Sub-national Trade in	ONS	
Services Working Group		
Trade Data Through EU Exit	UK Statistics Authority (UKSA), ONS, DIT, HMRC, Scottish	
Working Group	Government, Welsh Government	
Sub-national Trade working group	ONS, HMRC, DFT, Scottish Government, Welsh	
1867	Government	
UK Trade Analytical group	ONS, HMT, BEIS, HMRC, DIT, DfE, DEFRA, DfT, DCMS	
NI Analysis Working Group	ONS, HMT, BEIS, HMRC, DIT, DfT, Cabinet Office, DfE, NI	
Data continua Consea Description antal	Office, TEO,	
Data capture Cross Departmental Network	Food Standards Agency, DEFRA, DAERA, NI Councils	
Trade Bill Workshop	ONS, HMRC, Scottish Government, Welsh Gov Government	
EU Exit Workshop	UKSA, DIT, ONS, HMRC, Scottish Government, Welsh	
LO EXIT WORKSHOP	Government	
DIT Trade Analysts Roundtable	DIT, ONS, DfE, Scottish Government, Welsh Government	
Previous groups that are no		
longer operational		
Economic and Trade Data through	ONS, DExEU, HMT, HMRC, DfT, BEIS, Cabinet Office, DIT,	
EU Exit	Scottish Government, Welsh Government	
Alternative Arrangements Working	DExEU, DfE, DAERA	
Group		
Trade Survey of Hauliers Working	DExEU, ONS, DFT, DfE	
Group		
Economic Statistics Centre of	ESCOE, ONS, Scottish Government, Welsh Government	
Excellence Interregional Trade		
Working Group		

Membership of these groups has allowed us to gain feedback from users as well as maintain an understanding of what our data is being used for whilst at the same time ensuring users are fully aware of the strengths and limitations of our data.

3 Development Priorities

In order to ensure that we continue to provide robust and relevant data that serves the public good by informing the public about economic matters and assisting in the development and evaluation of public policy we have outlined below a number of areas that we intend to focus our resources on over the next two years.

National Statistics Accreditation

The BESES statistics are currently experimental statistics which are still undergoing evaluation and are subject to revision. However NISRA have nominated the statistics to be assessed by the Office for Statistics Regulation (OSR) in 2021/22 with a view to having them accredited as National Statistics.

Official statistics that are assessed as fully compliant with the Code of Practice for Statistics (that is, they meet the highest standards of trustworthiness, quality and value) are designated as National Statistics.

NISRA will work with the OSR in progressing the accreditation of the BESES statistics as a National Statistic.

Programme for Government

The NI Executive Office is currently undertaking a review of indicators to inform the development of a new Programme for Government for 2021 and beyond. We are working with the development team to ensure that the current indicators are fit for purpose and agree on what BESES indicators best suit the outlined objectives going forward. This is an ongoing process.

Continued collaboration with other Government Departments

The BESES team is currently working closely with colleagues in ONS, HMRC and HMT on a number of areas including the development of the ONS sub-national trade statistics and the work HMRC and HMT are doing around the implications of BREXIT and the impact on the UK and NI economy. We will continue this work going forward with a view to ensure coherence across outputs and consistency n messaging.

Investigations into publishing more disaggregated BESES data

We are currently investigating what potential new datasets we can release by looking at the level of disaggregated data we can make publicly available within the constraints of ensuring data confidentiality. Work has commenced on the development of R³ code to automate disclosure checking of data at more granular levels than what is currently published and this will continue throughout 2021.

Upon completion of this programming project and investigations we will release more granular BESES data as dictated by our disclosure rules.

Improving accessibility to data

The NISRA Economic and Labour Market Statistics branch are currently involved in a project with the Administrative Data Research Centre Northern Ireland to incorporate business data

³ A statistical computing and graphics package

into the secure research environment administered by the NISRA Research Support Unit. It is early stages in the project but it is hoped that during 2021-22 / 2022-23 that business data, including BESES data, will be included in the datasets that allow researchers safe access to project specific de-identified data in a secure environment in order to carry out secondary data analysis.

4 Development plan engagement

The purpose of this development plan is to provide users with a greater understanding of the next stages of development of the BESES statistics. This work has been prioritised in line with Economic and Labour Market Statistics and broader NISRA priorities in addition to known user requirements.

We welcome all communication from users both in terms of this development plan and more widely in relation to the BESES publications and outputs.

If you would like to provide comments or feedback please email to:

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