timbertrends

Avenida del Pino, 270
Pinar de Campoverde
Pilar de la Horadada
03191, Alicante, Spain

Phone: 00 34 966 762 988
E-mail: nick@timbertrends.org

Roundwood Imports and Exports

- An Investigation

A Study
for the Forestry Commission

by Nicholas Moore
timbertrends

August 2012

EXTENSION TO CONTRACT NO: CFS 03/09

Table of Contents

Introduction:

The production, imports and exports of roundwood are important elements in the timber supply chain, but a lack of accurate data on imports and exports is inconsistent with the aim of industry having a meaningful assessment of the trade in timber products.

Import and export data are used nationally and internationally to determine the characteristics, scale and usage trends of timber products in addition to supplying important information to meet commercial, legislative and environmental requirements at the company and national level.

Regulatory bodies, representative organisations and individual business benefit from accurate measurement, leading to the appropriate understanding of the many operations within the UK timber industry.

For many years, the provision of data by Her Majesty's Revenue and Customs (HMRC) on the imports to the UK and exports from the UK of roundwood has been at variance to the expectations of industry practitioners.

In an attempt to address this deficiency, *timbertrends*, an independent industry analyst, was commissioned by the Forestry Commission to conduct an investigation into the import and export of roundwood to and from the UK.

It was hoped that this investigation into roundwood imports to and exports from the UK would provide a definitive view on the scale and type of roundwood being traded.

This has not been achieved; but a better understanding of these trading flows has been gained.

Data on the scale and the types of product traded has been refined to confirm that the import and export of roundwood by UK companies was over-stated by HMRC in 2011 and has probably been so for many years.

The attempt to achieve precision in measuring these trade flows has been constrained by the methodology used by HMRC to estimate the trade by smaller companies and also by the relatively poor quality of the official data supplied.

Questions remain over the extent of trade by smaller companies and also the extent to which sawn softwood may have been incorrectly declared as logs.

Consequently, while the results of this investigation into roundwood imports and exports reveal that progress has been made in providing a more accurate quantification of the trade in roundwood, this report identifies the need to pursue answers to the two main outstanding issues.

Purpose and Scope of this Investigation:

The purpose of this investigation was to examine the existing import and export data on roundwood as supplied by Her Majesty's Revenue and Customs (HMRC) and determine if these data were consistent with activities of companies operating in this area.

Objectives:

1. To analyse import and export data over a specific period of time in order to determine the scale, characteristics and source of these data.

2. To identify and confirm errors in these data, investigate the reasons for error, review and re-calculate these data to provide a more accurate assessment of import and exports over the period selected.

3. Use the knowledge gained from this investigation to re-assess the import and export of roundwood over other time periods with particular emphasis on the most current periods and provide a better basis from which to calculate the trade in roundwood for the future.

Methodology:

The investigation began in late 2011 and the time period selected was for January to September 2011. This period was selected because it provided a time-span of three quarters of the (then) current year which was deemed to be sufficient to examine representative data on imports and exports.

Import and export data was drawn from a database held by the author. This contains data classified by the Combined Nomenclature, which is a system of product coding and identification, as provided through the offices of the World Trade Organisation (WTO), which classifies the great majority of products traded in the world.

The Combined Nomenclature is broken down into chapters that contain information on specific product areas and the chapter concerned with wood products, including roundwood, is Chapter 44.

HMRC is the body with the responsibility of collecting import and export data in the UK and part of these data are published on the HMRC website whilst more detailed data are available for purchase.

It is these more detailed data that are purchased by the author and which have been used in this investigation.

Data for the prescribed period was extracted and sorted into product groupings - by code and description.

The HMRC provision comprises of a number of fields of data, with the key fields for analysis purposes identified. These were: Month; Country of Dispatch (for imports); Destination Country (for exports); Value; Mass; Unit.

The extraction of data into the fields as identified was supplemented by additional calculation fields in order to derive average prices and average weights (or densities) per data entry. This being the division of value by unit to give a £/m^3 average price measure and the division of mass by unit to give a kg/m^3 average weight measure.

These two measures provided the means to sort the data per product type into average price and average weight for each data entry and therefore expand the data to include measures that are meaningful to those involved in importing and exporting.

A supplementary set of average prices was derived using 'typical' or notional densities for each of the product types. These densities are provided by Eurostat (the Statistical Authority of the European Union) and by industry.

The key measure for evaluation purposes is average price, because this is the measure that is set by the market, based on prevailing trading conditions.

Other measures used for checking purposes are average weights and the ratio of value over weight and each of these has been used to assist the process of (data) error determination.

Once each roundwood product type had been categorised and calculation fields applied, a preliminary assessment of the data was made.

This preliminary assessment enabled the data entries provided by HMRC for each roundwood product type to be placed into different price (and weight) categories, identifying data entries that were below a specific price point, between various price ranges and crucially, those entries that had been estimated by HMRC.

From this assessment it was possible to identify HMRC data entries that appeared to be in error.

HMRC offer a query service known as "Trade Challenge", whereby import or export data that appears to be incorrect can be challenged by industry and HMRC officials will investigate these trades. These investigations often result in amendments being issued by HMRC, resource permitting, which correct previously published data errors.

For the period January to September 2011, a series of data entries were queried through the Trade Challenge system. The number of suspected errors was large and in order to achieve the maximum possible extent of data correction, the suspected errors were broken down into priority grouping, dependent on the scale of suspected error as measured by volume in descending order.

The Trade Challenge team were able to investigate and report on all of the "Highest Priority" and "High Priority" challenges lodged.

Approximately three to four months from the date of submitting Trade Challenges, a series of amendments appeared to the original data which allowed for a revised – and more accurate – set of data to be produced for the period in question.

Armed with this information, the second stage of the analysis took place which entailed contact with the trade and other bodies to determine activity in the market and compare this against the various data classifications that had been derived from the analysis of the original HMRC data.

Running parallel with industry contact, HMRC were contacted in order to better understand the data supplied and especially, the methods used by HMRC through which trade (import and export) estimates were made.

Following this supplementary contact with HMRC and contact with industry practitioners, the data was re-visited in order to complete the investigatory process into the trade in roundwood.

Executive Summary:

The official data on imports and exports of roundwood to and from the United Kingdom (UK), as provided by HM Revenue and Customs (HMRC) for the year 2011 contained many significant errors.

It is probable that similar errors have been present in many of the preceding years for which HMRC has published trade data on roundwood.

This report was tasked with providing a more realistic quantification of the trade in roundwood through the identification of errors in the official data and this has been accomplished for the year 2011.

From the work of this report, it was also hoped that a better method of arriving at more realistic assessments of trade in roundwood for the future would be developed and this has also been achieved.

Imports

The volume of roundwood of all types of softwood and hardwood imported to the UK for the period January to September 2011, as recorded by HMRC at the end of 2011 after amendments that applied up until that time, amounted to 0.93 million m^3.

The total volume published by HMRC before amendments was 1.20 million m^3.

Following the investigations made for this report, it is likely that a more realistic assessment of the volume imported over the period under review was 0.32 million m^3.

These volumes were derived from the aggregation of all varieties of imported roundwood, of which there are 16 different types imported by the UK, and can be further identified by the two broad types of wood – softwood and hardwood.

Softwood Roundwood Imports

Commodity codes used to classify the trade in timber products and roundwood in particular identify coniferous species as spruce and pine and also “coniferous wood in the rough….”

The total volume of all types of coniferous roundwood imported to the UK between January and September 2011 recorded by HMRC before any amendment was, in round terms, 695,000m^3.

Following a process of investigation, which included challenging suspected errors in the data supplied by HMRC, receiving further amendments from HMRC, further correction of remaining errors and the gathering of trade opinion, this total was reduced to approximately 282,000m^3, a total reduction of around 413,000m^3.

The largest reductions from the initial HMRC totals for coniferous roundwood were approximately 273,000m^3 of pine logs, 64,000m^3 of coniferous wood in the rough and around 20,000m^3 of spruce logs.

Hardwood Roundwood Imports

Hardwood roundwood is categorised by temperate and tropical species and the sum of the volume for all hardwood roundwood imported to the UK between January and September 2011 as provided by HMRC was 504,000m^3.

The investigations conducted for this report have revealed a more realistic total to be 36,000m^3.

The original HMRC total for temperate species was 230,000m^3 and the reassessed total from the investigations made have reduced this total to a little over 34,000m^3.

For tropical species, the HMRC total was 273,000m^3 and the reassessed total was around 1,500m^3.

Justification for Reassessment

The re-assessed totals are considered to be a more realistic evaluation of the UK import of roundwood.

The justification for this assertion is derived from of a number of actions that were carried out as part of this investigation and from further amendments made by HMRC in 2012 for the year 2011:

1. the identification of errors in the original HMRC data and the subsequent amendment of 383,000m^3 of the volume associated with these errors through the vehicle of Trade Challenges[1].
2. further substantial amendment of data carried out by HMRC.
3. the identification and joint (HMRC and timbertrends) analysis of the trade in oak logs estimated by HMRC to be below the threshold for Value Added Tax (VAT) declarations, otherwise known as below threshold trade (BTT) allocations.
4. contacts made and quantitative information provided by leading importers, sawmillers and representative bodies in the roundwood trade.
5. cross-referencing of UK import statistics with those available from Eurostat[2].
6. an examination and where required, further revision of the volume of trade remaining after the removal of amendments and BTT estimates.

The summary detail behind each of these six actions is as follows:

1. Between January and September 2011 all roundwood import data entries supplied by HMRC were analysed. During this period, a total of 1,151 import data entries were reviewed. Within this total, at least 101 were considered to be in error. A priority listing was presented to HMRC for investigation through the "Trade Challenge" process. There were 26 data entries designated "High" or "Highest" which accounted for 623,000m^3 in round terms.

2. The other 91 entries which were considered to be in error totalled around 267,000m^3. The 26 Trade Challenge candidates and the 91 other suspected errors amounted to 10% of all data entries for the period, but the volume contained within these data entries accounted for over 54% of the total of the original HMRC declared volume for the period.

3. In order to better understand how BTT estimates may have affected the declared roundwood import volumes from HMRC an investigation on a specific roundwood product over a one month period was conducted, jointly by HMRC and timbertrends.

[1] A Trade Challenge is where HMRC is requested to check a specific data entry consisting of a value, mass and unit declared for UK trade in a particular month with a specific country.
[2] Eurostat is the official statistical organisation of the European Union.

This was considered to be a manageable exercise, in light of the time and resource constraints of both parties.

The month of January 2011 and oak log imports (code 4403 9190 – other than sawlogs) were the subjects for the specific one month's study for the purposes of gaining a better understanding of BTT estimates.

If the result of this one month's exercise was representative of trade in other months, it can be concluded that the HMRC BTT estimates have grossly over-estimated roundwood imports.

The extent of this over-estimation is difficult to quantify, as the section of this report concerned with BTTA will reveal. However, an initial view suggests that BTT estimates may have been overstated by a factor of around 3.

The total of HMRC BTT estimates for oak logs, code 4403 9190 for the period January to September 2011 was 16,400m^3 while the reassessment through these investigations indicates that a more realistic total would have been approximately 1,100m^3.

4. Contact made with importers, sawmillers and trade bodies also indicated that the importation of roundwood to the UK is substantially less than official data report.

   In addition to the investigation into BTT estimates, importers of oak logs were contacted and from the discussions that ensued, a trade-based estimate of the volume of all oak logs (including sawlogs) imported to the UK was derived. This was considerably lower than the official data. Before the removal of errors and amendments, the volume of oak logs imported to the UK in 2011 (whole year) as provided by HMRC was around 63,000m^3.

   From trade estimates, the reassessed volume entering the UK in 2011 was nearer to 25,000m^3.

   Trade estimates for the importation of softwood logs were also appreciable lower than official data.

   Leading practitioners in softwood sawmilling and harvesting and other experts in this field believe that - trade between the Republic of Ireland and Northern Ireland aside – it is unlikely than **any** softwood logs are imported to the UK.

   The rationale for this belief is based on the economics involved with the cutting, debarking, loading and onward transportation of softwood logs from continental Europe.

   There would need to be a distinct quality premium for imported softwood logs to compete against the home-grown variety in the UK.

5. Cross-referencing the Eurostat data with HMRC and other sources did not help the cause of understanding.

   Eurostat data is sourced from HMRC, therefore each should be reporting similar totals.

   According to Eurostat, the UK imported around 24,000m^3 of spruce logs in the period January to September 2011, compared to the un-amended 25,000m^3 recorded by

HMRC. However, the re-assessed volume from the actions taken for this investigation amount to approximately 16,000m^3. While this volume is much lower than the official data, there remains a doubt over whether a good proportion of this volume is sawn softwood miscoded as logs.

Discrepencies similar to this example occurred with other roundwood products and consequently, accessing Eurostat data did not materially inform these investigations.

6. Following the removal of errors; the re-instatement of data amended by HMRC; a more realistic assessment of BTT trade and aware of trade opinion, a line-by-line of all data entries remaining for the period January to September was carried out.

   This examination enabled a number of further errors (not included in the HMRC Trade Challenge process) to be 'corrected' according to declared data which was considered to be representative of the trade in specific products (commodity codes) for different countries.

   This led to a further, more realistic assessment of import of all roundwood for the period under review and an estimate for the year 2011.

   This deeper analysis of the data also provided information that would lead to the establishment of a number of parameters that could be used in the future for further, more realistic quantification of the trade in roundwood.

Future Development

These investigations have provided a better understanding of the level of the roundwood import trade and consequently, a better understanding of the parameters, particularly average price, that prevailed at the time of the investigations.

These parameters, along with published conversion factors supplied by Eurostat and, importantly, the parameters derived from the error-free data entries of the on-going import data supplied each month from HMRC provide the basis from which a better assessment of roundwood import data can be applied from hereon.

Deployment of these parameters and a regular checking of these data would allow for the reporting of roundwood import data to be greatly improved.

Exports

A similar situation to the recording of roundwood imports exists in the reporting by HMRC of roundwood exports, especially coniferous roundwood, from the UK.

The original totals, prior to amendment provided by HMRC, are substantially higher than those published by the Forestry Commission[3] and other trade organisations.

For 2011, the official volume of all types of roundwood exported from the UK as published by HMRC was recorded as a little over 1.15 million m^3.

The majority of this volume was coniferous roundwood with a volume of 1.06 million m^3.

According to the Forestry Commission publication, "UK Wood Production and Trade" for 2011, the export of coniferous roundwood from the UK amounted to around 585,000

[3] UK Wood Production and Trade – Table 2, UK Softwood Deliveries

green tonnes which when converted to cubic metres provided a total of around 474,000m^3.

These data are compiled from long-standing and well-respected Forestry Commission surveys and have been reviewed and agreed by the independent committee, the Expert Group on Timber and Trade Statistics (EGTTS).

It is likely that the original HMRC roundwood export data is therefore overstated by a factor of around 2.2.

Main Findings:

Between the period January and September 2011, a total of 1,151 data entries in the importation of roundwood were originally provided by HMRC. These comprised of the following products, identified by an 8-digit commodity code and a product description (truncated) as shown in table 1 below and overleaf.

Table 1: Roundwood Codes and Descriptions

Roundwood Products		
Code	**Type_description**	**Description**
44031000	Roundwood Coniferous	WOOD IN THE ROUGH, TREATED WITH PAINT, STAINS, CREOSOTE OR OTHER PRESERVATIVES (EXCL. ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD IN THE FORM OF RAILWAY SLEEPERS; WOOD CUT INTO BOARDS OR BEAMS, ETC.)
44032011	Roundwood Coniferous	SAWLOGS OF SPRUCE OF THE KIND 'PICEA ABIES KARST.' OR SILVER FIR 'ABIES ALBA MILL.', WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED
44032019	Roundwood Coniferous	SPRUCE OF THE KIND 'PICEA ABIES KARST.' OR SILVER FIR 'ABIES ALBA MILL.', IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. SAWLOGS; ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD IN THE FORM
44032031	Roundwood Coniferous	SAWLOGS OF PINE OF THE KIND 'PINUS SYLVESTRIS L.', WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED
44032039	Roundwood Coniferous	PINE OF THE KIND 'PINUS SYLVESTRIS L.' IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. SAWLOGS; ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD IN THE FORM OF RAILWAY SLEEPERS; WOOD CUT INTO
44032091	Roundwood Coniferous	SAWLOGS OF CONIFEROUS WOOD, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. SPRUCE OF THE KIND 'PICEA ABIES KARST.', SILVER FIR 'ABIES ALBA MILL.' AND PINE OF THE KIND 'PINUS SYLVESTRIS L.')
44032099	Roundwood Coniferous	CONIFEROUS WOOD IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. SAWLOGS; ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD IN THE FORM OF RAILWAY SLEEPERS; WOOD CUT INTO BOARDS OR BEAMS, ETC.;
44034100	Roundwood Tropical	DARK RED MERANTI, LIGHT RED MERANTI AND MERANTI BAKAU WOOD IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD CUT INTO BOARDS OR BEAMS, ETC.; WOO
44034910	Roundwood Tropical	SAPELE, ACAJOU D'AFRIQUE AND IROKE IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD CUT INTO BOARDS OR BEAMS, ETC.; WOOD TREATED WITH PAINT, ST
44034935	Roundwood Tropical	TROPICAL WOOD IN THE ROUGH WHETHER OR NOT STRIPPED OF BARK ORSAPWOOD - SIPO OR OKOUME
44034940	Roundwood Tropical	SIPO IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD CUT INTO BOARDS OR BEAMS, ETC.; WOOD TREATED WITH PAINT, STAINS, CREOSOTE OR OTHER PRESER
44034995	Roundwood Tropical	ABURA, AFRORMOSIA, AKO, ALAN, ANDIROBA, ANINGRÚ, AVODIRÚ, AZOBÚ, BALAU, BALSA, BOSSÚ CLAIR, BOSSÚ FONCÚ, CATIVO, CEDRO, DABEMA, DIBÚTOU, DOUSSIÚ, FRAMIRÚ, FREIJO, FROMAGER, FUMA, GERONGGANG, ILOMBA, IMBUA, IPÚ, JABOTY, JELUTONG, JEQUITIBA, JONGKONG, KAPUR
44039110	Roundwood Temperate	SAWLOGS OF OAK 'QUERCUS SPP.', WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED
44039190	Roundwood Temperate	OAK 'QUERCUS SPP.' IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. SAWLOGS; ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD IN THE FORM OF RAILWAY SLEEPERS; WOOD CUT INTO BOARDS OR BEAMS, ET
44039210	Roundwood Temperate	SAWLOGS OF BEECH 'FAGUS SPP.', WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED
44039290	Roundwood Temperate	BEECH 'FAGUS SPP.' IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. SAWLOGS; ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD IN THE FORM OF RAILWAY SLEEPERS; WOOD CUT INTO BOARDS OR BEAMS, ET
44039910	Roundwood Temperate	POPLAR IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD CUT INTO BOARDS OR BEAMS, ETC.; WOOD TREATED WITH PAINT, STAINS, CREOSOTE OR OTHER PRES
44039930	Roundwood Temperate	EUCALYPTUS WOOD IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD CUT INTO BOARDS OR BEAMS, ETC.; WOOD TREATED WITH PAINT, STAINS, CREOSOTE OR O

Roundwood Products		
Code	**Type_description**	**Description**
44039951	Roundwood Temperate	SAWLOGS OF BIRCH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED
440399590	Roundwood Temperate	BIRCH, IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. SAWLOGS; ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD CUT INTO BOARDS OR BEAMS, ETC.; WOOD TREATED WITH PAINT, STAINS, CREOSOTE OR O
44039995	Roundwood Temperate	WOOD IN THE ROUGH, WHETHER OR NOT STRIPPED OF BARK OR SAPWOOD, OR ROUGHLY SQUARED (EXCL. ROUGH-CUT WOOD FOR WALKING STICKS, UMBRELLAS, TOOL SHAFTS AND THE LIKE; WOOD CUT INTO BOARDS OR BEAMS, ETC.; WOOD TREATED WITH PAINT, STAINS, CREOSOTE OR OTHER PRESER

The type description in the table above identifies three main types of roundwood: coniferous, non-coniferous temperate and non-coniferous tropical.

The Codes and Descriptions are used by all country members of the World Trade Organisation.

Extraction of Data

The totals supplied by HMRC – including HMRC instigated amendments[4] - through its monthly provision of data for all of roundwood products in terms of value, mass (sometimes referred to as weight) and units (usually cubic metres) for the period January to September 2011 was £52.4 million; 361.6 million kgs and 928,121m^3.

These measures for each of the different roundwood products are shown in Annex I to this report.

This scale of trade published by HMRC is considered by industry practitioners as being too high.

In order to examine the credibility of the data entries supplied by HMRC, supplementary calculations identifying average prices and average weights for each entry were carried out which enabled the data to be sorted into different price and weight categories.

For each roundwood product, a similar pattern of trade emerged.

A number of data entries were at the very low-end or at the very high-end of the price range. There were also a large number of entries that contained similar characteristics, especially average weight measures, but varied in price. A further number of data entries, often imports from a variety of different countries contained identical price and weight characteristics and consisted of sizeable volumes compared to other entries.

It was suspected that across each of the products and their price groupings, a number of errors existed.

Average price was the main measure used to identify potential errors and these were often the entries carrying the highest volume also.

The three entries below are examples of some of the more extreme errors and have been selected to demonstrate how just a few entries can significantly affect the overall totals reported.

[4] On a monthly basis, HMRC add data resulting from late declarations and amend data that HMRC's own systems have identified as being incorrect.

MONTH	Country	Code	£	Kgs	m3	Av Price	Av Weight	Description
201105	CANADA	44039995	89,301	59,877	59,877	91	1	WOOD IN THE ROUGH, W
201101	FINLAND	44032039	63,877	18,194	236,421	0	0	PINE OF THE KIND 'PINUS
201107	LITHUANIA	44031000	696	1	11,520	0.1	0	WOOD IN THE ROUGH, W

The suspected errors for each of these entries were highlighted by clearly incorrect average weights for each and at least two incorrect average prices.

It would appear that in the entry for Canada, the volume figure (m^3) had been duplicated in the weight (Kgs) column. The volume entries for Finland and for Lithuania also appeared to be incorrect.

These three data entries, in conjunction with a further 98 suspected errors, were offered to HMRC as candidates for Trade Challenges.

The reasons supplied to HMRC as justification for a Trade Challenge to take place for the three entries identified above were:

- The weight and volume (Unit) in the entry for Canada in May 2011 were identical, resulting in an average price of £91m^3 and an average weight of 1kg/ m^3. The weight appeared to be incorrect.
- The volume entry for Finland in January 2011 at 236,421m^3 was clearly incorrect.
- If the value had been correctly recorded, the import from Lithuania would appear to have contained errors in the declaration of weight and unit.

A full listing of the Trade Challenge candidates supplied to HMRC are provided in Annex II of this report. The candidates selected were further identified by a priority for investigation.

Of the total of 101 Trade Challenges submitted, HMRC investigated 26, all of which were identified as being of a “High” or a “Highest” priority.

The 26 entries investigated comprised 94% of the total volume of the 101 submissions, or 623,000m^3 of the total 661,000m^3 identified as probably containing errors.

Following completion of the investigations into the 26 Trade Challenges, the volume of 623,000m^3 was reduced to 239,000m^3. This process confirmed that around 383,000m^3 of imported roundwood had been incorrectly recorded.

By the time these Trade Challenge amendments and the usual amendment processes conducted by HMRC had taken place, significant volumes had disappeared altogether from the reporting of roundwood imports to the UK.

The effect of these reductions resulting from the 26 Trade Challenges, coupled with other HMRC amendments for 2011 which took place in the early months of 2012, reduced the initial HMRC totals of imported roundwood from:

£ million	Kgs million	000m^3
56.4	357.7	1,198

to:

£ million	Kgs million	000m^3
44.3	353.5	524

This process had the effect of raising the average price for all roundwood imports over the period to £84m^3 from £47m^3 previously and the average weight to 674kgs/m^3 from 301kgs/m^3.

However, this average price and weight improvement was insufficient to provide the necessary confidence that all roundwood imports had been satisfactorily corrected following the usual course of HMRC amendments and the results of the Trade Challenges.

Below (VAT) Threshold Trade Allocations

During the process of data extraction and sorting by average price and average weight, there regularly appeared a grouping that contained identical average price and weight characteristics.

If these data entries had always been identified as imports from just one country, the data similarities may have been acceptable, although still unlikely. However, these data similarities occurred with imports from a variety of countries, with known differences in product types and costs structures.

Consequently, further analysis was required to determine why a bulk of imports every month carried identical features in terms of average price and weight.

To aid this analysis, HMRC were re-contacted to seek advice on these groupings of imports.

It was suggested to HMRC that these groupings represented their own estimates of below threshold trade which, as a matter of course, are added to the import data for all trade declarations made in the European Union by companies registered for Value Added Tax.

This confirmation from HMRC arrived swiftly, leading to the identification of HMRC import estimates across the entire range of roundwood imports.

HMRC make estimates of the amount of trade that is conducted by companies that are not registered for Value Added Tax (VAT) and which therefore does not get reported in the import statistics in the same way as data from companies that are registered for VAT.

This procedure is referred to by HMRC as the calculation of Below Threshold Trade Allocations, leading to estimates of below threshold trade, or BTT estimates.

The detail behind the process which HMRC use to make these estimates is shown in Annex III of this report, however, in brief, in order for HMRC to derive the required factors to apply to quantify below threshold trade, the value of trade at the 4-digit commodity code level for all companies that fall below the value threshold for VAT registration is matched to the values of trade from those companies that are above the threshold, starting with the smallest and summated until the value of the below threshold trade is reached.

This is known as JATT, or Just Above Threshold Trade. The factor required for estimating below threshold trade is calculated from the JATT as a function of the total of (all) above threshold trade, or TATT.

This factor is used to produce an estimated value of below threshold trade at the 8-digit commodity code level, by country.

From this value estimate, the net mass (kilograms) and volume (cubic metres) are determined using Eurostat's net mass and volume conversion factors, which is a standard process used across Europe for making such estimates in all member states.

An example of one of these net mass conversions for the estimation of the below threshold trade in oak logs, commodity code 44039190, as supplied by Eurostat, is as follows.

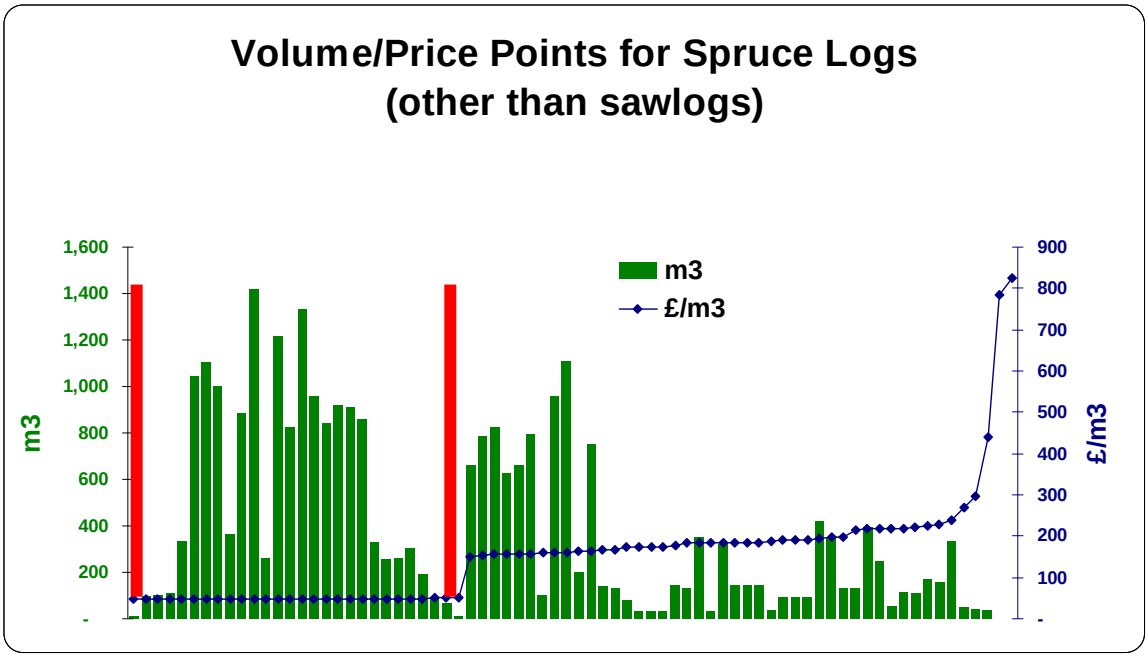
CN code	Supplementary unit	Description	Conversion factor for unit mass	Comments on the unit mass conversion factor	Conversion factor for value per kilogram in euro
44039190	CUBIC METRE	Oak "Quercus spp." in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, et	995.0000	Industry estimation ~1100-1180	0.20

The identification of these suspected BTT estimates included in the trade data, as published by HMRC, often exhibited different characteristics from all other data at the 8-digit level.

In this roundwood investigation, BTT estimates made by HMRC were made for most of the 8-digit roundwood commodity codes, the exceptions being for roundwood imported from outside of the EU. The volumes involved were small however and consisted of temperate and tropical log imports. In 2011, it was estimated, following completion of these investigations, that just over a 1,000m^3 of tropical logs were imported.

An example of the BTT estimates differing from other (declared) trade in the same commodity code is shown below for 4403 2019 Spuce Logs (other than sawlogs).

Chart 1: Volume and Price Data Points of Spruce Log Imports



The chart above shows all declared and BTT estimated data entries provided by HMRC for the period January to September 2011 for commodity code 4402 2019, Spruce Logs (other than sawlogs).

Volumes are depicted by the green bars in the chart above and the blue line with markers denotes the various prices prevailing at those volumes. As an example, the

highest volume shown is between the red bars and is for a volume of 1,330m^3 at a price of £49m^3.

The entries between the two red indicators are BTT estimates. All other entries are declared trade for the period.

There are 25 entries between the red bars – all at the estimated price of £49m^3 – which sum to a total of approximately 16,000m^3.

There are 49 declared entries – all at different price points - which sum to a total of over 12,500m^3.

The price points range from £49m^3 to over £700m^3, but as can be seen from the chart above the number of entries below £149m^3 or over £700m^3 are few (just 5) and it is likely that the two entries at the higher end of price range (over £700m^3) are errors in the declarations made. The entries between the price points £149m^3 and £230m^3 total 12,000m^3, or 96% of the declared entries, indicating a relatively believable range of prices for the volumes shown. Also, as would be expected, as prices rise, the volumes imported are less. It should be noted that the declared entries at the various price/volume points are before HMRC amendments were received and before the Trade Challenges made for these investigations were made. As will be seen later in this report, the difference between the BTT estimates and the un-amended and un-challenged declarations (as seen in the chart above) remain after further amendments and Trade Challenges are included in the data.

From the data used to form the chart above, it is evident that the BTT estimates are not consistent with the declared trade in these goods which in the main lies within 'believable' price/volume ranges.

The differences between BTT estimates and declared trade demonstrated for spruce logs above also exist with many of the other types of roundwood imported. Some of these differences are also of a greater magnitude.

The charts depicting these differences by each roundwood type are shown in Annex IV of this report.

It should also be noted, as previously mentioned, the BTT estimates are made before any HMRC amendments (or Trade Challenges) have taken place, therefore it is possible to compare the totals of trade for each roundwood commodity code before amendment (and Trade Challenge where relevant) and after, alongside the BTT estimates.

The initial quantification of imports published by HMRC in December 2011 for the period January to September 2011 is described through the following three tables.

The first table below shows the value and volume of roundwood imports with amendments removed (as it is this total that BTT estimates are based on) and of course, without the BTT estimates.

The second table shows the BTT estimates that were derived from the data in the first table.

The third table shows the combined volumes from the first and second tables, which is the initial total of roundwood imports calculated by HMRC.

Table 2: HMRC Initial Import Totals before Amendment & without BTT Estimates

Code	£	m3	Av. Price
44031000	6,788,892	55,114	123
44032011	1,922,094	8,944	215
44032019	2,179,487	12,464	175
44032031	1,312,628	15,445	85
44032039	5,724,509	264,536	22
44032091	6,042,710	125,973	48
44032099	1,343,651	51,573	26
44034100	328,987	389	846
44034910	1,781,065	13,085	136
44034935	44,811	92	487
44034995	1,372,751	216,669	6
44039110	1,553,443	10,000	155
44039190	4,773,088	13,962	342
44039210	-	-	
44039290	393,466	53,105	7
44039910	-	-	
44039930	1,441,416	2,146	672
44039951	9,208	23,290	0
44039959	17,803	6,544	3
44039995	4,293,451	106,753	40
Total	41,323,460	980,084	42

Table 3: BTT Estimates

Code	£	m3	Av. Price
44031000	2,142,975	10,539	203
44032011	895,902	16,307	55
44032019	789,452	16,024	49
44032031	416,420	7,022	59
44032039	2,030,037	35,428	57
44032091	2,384,896	56,154	42
44032099	705,514	19,265	37
44034100	-	-	
44034910	-	-	
44034935	-	-	
44034995	-	-	
44039110	1,284,735	11,276	114
44039190	2,750,551	16,400	168
44039210	-	-	
44039290	145,004	3,033	48
44039910	-	-	
44039930	-	-	
44039951	-	-	
44039959	-	-	
44039995	1,562,783	26,955	58
Total	15,108,269	218,403	69

Not all roundwood is subject to BTT estimation and because of the very small volumes of tropical logs imported, as will be seen later in this report, the volume of below threshold trade that has been identified and analysed for this report sums to a total of 218,403m^3.

Table 4 combines the declared import volumes from HMRC with the BTT estimates to provide the initial import total for roundwood between January and September 2011.

Table 4: HMRC Initial Import Totals before Amendment & BTT Estimates Included

Code	£	m3	Av. Price
44031000	8,931,867	65,653	136
44032011	2,817,996	25,251	112
44032019	2,968,939	28,488	104
44032031	1,729,048	22,467	77
44032039	7,754,546	299,964	26
44032091	8,427,606	182,127	46
44032099	2,049,165	70,838	29
44034100	328,987	389	
44034910	1,781,065	13,085	
44034935	44,811	92	
44034995	1,372,751	216,669	
44039110	2,838,178	21,276	133
44039190	7,523,639	30,362	248
44039210	-	-	
44039290	538,470	56,138	10
44039910	-	-	
44039930	1,441,416	2,146	
44039951	9,208	23,290	
44039959	17,803	6,544	
44039995	5,856,234	133,708	44
Total	56,431,729	1,198,487	47

Therefore, the initial total of roundwood imports provided by HMRC for the period under review amounted to around £56 million and 1.2 million m^3.

Once amendments were published throughout the period under review and into 2012 for the year 2011 and, as also shown in the earlier section of this report under "Extraction of Data", once the Trade Challenges – instigated by the work of this report - had been completed by HMRC, the totals for roundwood imports were further revised downwards to £44.3 million and 524,000m^3.

Therefore, a 'new starting' point in the quantification of roundwood imports for the period had been reached. However, this newly declared total of 524,000m^3 still included all of the BTT estimates which had been made on the original declared total of 980,084m^3 as shown in table 2.

The BTT estimates, based on the declared trade of 980,084m^3, represented 22% of this total, but with a newly determined total of around 524,000m^3, the BTT estimates remaining in the overall totals represented a higher percentage - 42% of that total.

This confirmed the need to review and probably revise the BTT estimates.

Further contact was made with HMRC to understand how BTT estimates were calculated and question the differences between BTT estimates and declared trade, in terms of price and volume. With an ever changing total, due to monthly amendments, it was a complex operation to match the author's data with HMRC data sources in order to achieve the sort of precision that might be required to conduct a detailed analysis.

Therefore, HMRC suggested a concentration on a specific product during a specific month over the period under review.

The month of January 2011 was selected for HMRC to investigate more deeply the import of commodity code 4409 9190 Oak Logs (other than sawlogs).

This commodity code was selected because of large variations between the BTT estimates and declared trade and because contact had already been made for the purposes of this investigation with leading importing companies of oak logs.

The importation of oak logs is also one of the more regular and significant roundwood products traded.

A prompt response from HMRC revealed that the BTT estimates were, as suspected, overstated.

The methodology used by HMRC in this instance had failed to provide a reasonable estimate of below threshold trade.

The reason behind this over-estimation was due to the nature of the trade in this commodity code.

This over-estimation of imports of oak logs (and other roundwood) can be shown by reviewing how the methodology was used to determine below threshold trade and how this provided misleading estimates in the importation of oak logs from France in particular.

France is the largest supplying country of oak logs to the UK.

As reported earlier, the BTT estimates are based upon the matching of below threshold trade at the HS 4-digit level with that just above the threshold, but in January 2011, all of the trade in roundwood from France (codes 4403 at the 4-digit level) was classed as just above threshold (JATT).

The HMRC methodology assumed that the JATT trade from France was equal or close to the BTT and this assumption transferred through to all BTT estimates for France at the 8-digit level, as determined by this specific inquiry into oak logs.

The allocation of factors for each country to determine below threshold trade are fixed each year and based on trade in the previous year. According to HMRC, this factor will always be in the range of between 0 and 1, but despite the ‘fixed’ nature of these factors, they can vary month-by-month because of ‘rescaling’.

In such circumstances, the factor used in the allocation of below threshold trade can exceed 1 and in January 2011, this occurred in the import of oak logs from France.

The explanation given by HMRC for this particular rescaling was because when all factors are applied to declared (actual) trade to create the “initial BTT allocations”, the total will generally be close to the amount of below threshold trade that needs to be allocated.

This initial allocation is then, when required, rescaled in order that the below threshold trade allocations add to the required total, as prescribed by the HMRC methodology.

Consequently, while the initial BTTA can equal the declared trade, after rescaling, it can sometimes be larger and in the case of France in January 2011, this occurred.

The calculations made by HMRC for the month of January 2011 for the importation of oak logs from France showed that the BTT estimates were higher than the declared trade.

An explanation of how this arose, using the data for this product for the month of January, is given below.

The declared trade on commodity code 4403 9190 oak logs for the month of January 2011 from France was £423,559. This total was generated by businesses classed as just above the threshold. The HMRC methodology assumes that all JATT should be reflected by the BTT estimates, but because rescaling took place for these trades (from the initial BTT allocation) in that month, the estimated below threshold trade estimate for the importation of oak logs from France was £486,199 (the declared trade had effectively, been increased by a factor of 1.15).

This estimated below threshold turnover of £486,199 is used to determine the mass (kilograms) and the supplementary units (cubic metres – m^3) using conversion factors provided by Eurostat which are used to convert estimated values into kilograms and m^3.

The conversion factors for the estimation of the BTTA trade in oak logs, commodity code 44039190, as supplied by Eurostat, are as follows.

CN code	Supplementary unit	Description	Conversion factor for unit mass	Comments on the unit mass conversion factor	Conversion factor for value per kilogram in euro
44039190	CUBIC METRE	Oak "Quercus spp." in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, et	995.0000	Industry estimation ~1100-1180	0.20

The conversion of the BTT estimate of £486,199 to kilograms and m^3 was as follows:

The conversion factor for value to kilograms in € was 0.2, which when converted to £ was approximately 0.17. Consequently, £486,199 by 0.17 = 2,886,807kgs.

This calculated weight was then converted to m^3 by dividing the conversion factor for unit mass for this product, of 995kgs/m^3 to provide a volume estimate of 2,901m^3.

These data are based on an approximate Euro/Sterling conversion rate, to accommodate trade in the UK, but are close enough for analysis purposes to the BTT estimate provided by HMRC for the importation of oak logs from France in January 2011 of: £486,199; 2,884,862kgs and 2,899m^3.

The method of calculation used is shown in table 5.

Table 5: Calculation of Mass and Units from HMRC BTT Value Estimates

Column	A	B	C	D	E	F	G
	CN code 44039190	Supplementary unit	Description	Conversion factor for unit mass	Comments on the unit mass conversion factor	Conversion factor for value per kilogram in euro	Conversion factor for value per kilogram in £
		CUBIC METRE	Oak "Quercus s	995	Industry estimation ~	0.200	0.17
HMRC BTT Estimate	£	m3		kgs			
Calculation	HMRC	Col A / Col G / Col D		Col A / Col G			
	486,199	2,901		2,886,807			

Adding these estimates to the declared trade, the total importation of oak logs from France in January 2011 as published by HMRC was: £909,758; 3,289,142kgs and 3,410m^3.

The fundamental flaw in these estimates is that they are based upon a methodology that requires both 'just above threshold trade' and a 'total of all threshold trade' or TATT, in order to produce the factor used in the estimation of below threshold trade, but in the example shown, the JATT equalled the TATT.

Consequently, the BTT estimates were made using a formula that gave rise to misleading data.

The BTT estimate for oak logs imported from France had been over-stated.

The import data for oak logs from France in January 2011, when published by HMRC appeared as:

Source	Month	Country	Code	£	Kgs	m3
HMRC BTT Estimate	201101	FRANCE	44039190	486,199	2,884,862	2,899
HMRC Original Entry	201101	FRANCE	44039190	423,559	404,280	511

Whilst the value between the declared trade £423,559 and the BTT estimate of £486,199 is fairly similar, the derived weights and volumes are significantly different.

This analysis is further complicated when reviewing the average price and weight characteristics of the declared trade. The average price of the declared trade of £829/m^3 is more akin to the price of sawn oak arriving from France.

As will be seen a little later in this report, it would appear likely that an element of miscoding has affected the declared totals and this specific declared trade in oak logs from France in January 2011 is included in a portion of trade that is considered to have been sawn oak; incorrectly coded.

As described, the HMRC methodology provides for the allocation of BTT estimates to all 8-digit codes which is based upon a formula using just above threshold trade and the total of (all) above threshold trade for generating initial allocations at the 4-digit level.

It is conceivable that - in reality - there was substantially less trade carried out by businesses below the VAT threshold than estimated.

This one-month's analysis has revealed the potential for large variances in the BTT estimates made by HMRC in roundwood commodity codes.

In the greater scheme of things - for all Chapters that HMRC need to make BTT estimates for, effectively all UK imports - the methodology that provides estimates of below threshold trade may hold good, but in the individual assessment of (relatively) small 4-digit trading areas – such as roundwood – the methodology appears to generate fairly wide variances against declared trade.

Moreover, the BTT estimates in the example above were based on a (declared) roundwood code which, in reality, was probably sawn oak.

Consequently, BTT estimates for this commodity for the month of January 2011 were probably based on a totally different product.

Comparisons with Trade Comments

As mentioned previously, contact was made with the leading importers of oak logs in the UK and the evidence gained from these conversations concerning the scale of trade for these goods can be compared against the data (including BTT estimates) published by HMRC.

The HMRC data for the period under review for both oak log codes, 4403 9110 and 4403 9190, following the usual process of monthly amendment from HMRC, but before the results of Trade Challenges, showed combined totals of £9,493,866; 39,660,163kgs and 48,985m^3.

For the year 2011, the totals were: £12,598,669; 50,650,884kgs and 63,539m^3.

Discussions with trade contacts revealed that the likely volume of oak logs (of all types) imported by the UK in 2011 was likely to have been between 23,000m^3 and 25,000m^3.

Should the volumes derived from trade comment be representative of the actual volumes imported in 2011, the HMRC data, before Trade Challenges, would have been over stated by a factor of around 2.5.

The detailed one month's analysis of oak logs in the previous section of this report, by identifying the over-estimated volume of below threshold trade, brought import data totals for this product closer to the volumes that trade commentators would have expected.

As will be seen in the following section of this report, further analysis has led to revised estimates of below threshold trade and also further amendment and correction of parts of the declared trade which (independently) generates a volume of oak logs that is even closer to trade expectation.

In the absence of any better indicator, the same percentage of below threshold trade over the original HMRC declared trade has been used with the revised declared trade that was derived from the further analysis. However, it is possible that the actual level of below threshold trade could be considerably lower than the revised estimate.

This contention is based upon the information supplied by the leading importers of oak logs and the general nature of the timber industry itself.

The likely volume of oak logs imported to the UK in 2011, as mentioned above, is close to 25,000m^3.

There are two companies that import oak logs in relatively large volumes on a regular basis. There are another group of around ten companies importing much smaller volumes on an irregular basis. There are also specialist manufacturers importing very small volumes. Examples include a worktop manufacturer and specialist flooring companies.

It is possible that some of the much smaller and specialist companies may fall into the category of below threshold trade, but certainly the two large importers and probably the other ten processors of oak logs would fit into the above threshold category.

The interpretation made from contact with these large importers and others is that as much as 90% of the annual volume of imported oak logs is probably purchased by companies above the VAT threshold.

The original proportions of below threshold trade estimated by HMRC for oak sawlogs and other oak logs were 83% and 58% respectively.

Other findings came from discussions with companies identified by HMRC as importers of oak logs. The most significant was that some of these companies had been incorrectly classified as importers of oak logs. The oak that these companies were importing was sawn timber.

This confirms another of the findings in the following section, namely, there has been an element of miscoding of sawn oak as oak logs.

Many in the timber industry view their industry as one that is very different from many other industries – and often with good cause.

There are many sectors within the broader timber industry, ranging from sawmillers that specialise in processing different materials, to specialist manufacturers of wood products, including the growing engineered wood products sector, but also a host of other companies involved in house building, joinery, decking, fencing, pallet making, furniture making, tool making, decorative products in addition to a mixture of different supplying companies procuring wood products for this very wide range of activities.

The structures of these sectors tends to vary, but as often is the case, there are usually a few large companies that account for a large proportion of the total volume.

This is certainly the case in the importation of oak logs.

If similar structures apply across many of the other timber industry sectors, it would provide further support to the belief that HMRC BTT estimates are too high.

Further Analysis of HMRC Data

The findings of this work thus far have revealed that there was a clear need to revise the BTT estimates made by HMRC for oak logs and a further need to review the declared data which had been subject to amendment by HMRC in the normal way and the revisions to data that have taken place because of the outcomes from the Trade Challenges made.

This involved deducting the identified BTT estimates from the initial HMRC declared totals and then adding HMRC amendments and outcomes of Trade Challenges to these initial declared totals to provide a relatively credible data set.

This data set by roundwood commodity code, was examined and any remaining errors in the data identified and removed from the 'good' data. These errors were then corrected according to the characteristics present within the 'good' data and re-introduced to the analysis.

Through this process, the identification of different parameters associated with each roundwood product was made and specifically, average price for each type of roundwood was highlighted and used in this further analysis.

An example of how this was conducted for commodity code 4403 9110 oak sawlogs was as follows:

With BTT estimates removed and all HMRC amendments and Trade Challenge results added to the remaining data, the following table for each month by each country exporting oak sawlogs to the UK was assembled:

Table 6: UK Imports (less BTT estimates) of Oak Logs (sawlogs) by Country, Jan-Sep 2011.

MONTH	Country	Code	£	kgs	m3	Av Price	Av Weight
201101	FRANCE	44039110	100,584	532,394	533	189	999
201102	FRANCE	44039110	46,187	204,103	213	217	958
201103	FRANCE	44039110	172,302	1,681,045	1,681	102	1,000
201104	FRANCE	44039110	160,150	1,567,982	1,566	102	1,001
201104	GERMANY	44039110	5,113	62,829	63	81	997
201105	BELGIUM	44039110	44,316	1	230	193	0
201105	FRANCE	44039110	82,554	508,510	492	168	1,034
201105	NETHERLANDS	44039110	87,519	1	537	163	0
201106	BELGIUM	44039110	24,478	1	127	193	0
201106	FRANCE	44039110	94,449	600,091	600	157	1,000
201107	FRANCE	44039110	138,282	438,482	498	278	880
201107	ITALY	44039110	7,228	1	6	1,205	0
201107	NETHERLANDS	44039110	52,702	1	414	127	0
201109	FRANCE	44039110	77,750	435,510	446	174	976
201109	ITALY	44039110	6,761	21,736	22	307	988
201109	NETHERLANDS	44039110	53,327	2	429	124	0
Jan-Sep	**Total**	**44039110**	**1,153,702**	**6,052,689**	**7,857**	**147**	**770**

The declared totals for all oak sawlog imports over the period was just over £1 million and 7,857m^3.

However, there remained a number of anomalies and probable errors in the data,

Average prices from different countries were broadly within the bounds of expectation, except perhaps the low priced imports from Germany in April 2011 and the high price of the July import from Italy.

The aggregated data for Germany in the table above comprised two HMRC entries for the month: one, a larger volume priced at around £70m^3 and the other at £115m^3.

Both entries exhibited the density characteristics that would be associated with oak roundwood.

Consequently, the data for Germany, although at the low end of the price range, was considered to have arisen from bone fide trade and was maintained in the analysis as oak sawlogs.

The data for Italy appeared to be in error, both from an average price and average weight measure.

This entry was subsequently revised (by the author) according to the characteristics shown in another data entry for the import of oak sawlogs from Italy in September 2011. This data entry provided an average price of £307m^3 and an average weight, or density, of 998kgs/m^3. The average price of £307m^3 for such a small volume and taking into account the transport costs involved was considered not to be unrealistic.

The revision made provided for a volume of 24m^3 in July for the trade from Italy rather the original 6m^3.

The revised data from Italy included, there were six data entries in the table above where the declared weight (~ 0kg/m^3) was clearly incorrect, however, the average prices were within the ranges that might be expected for the volumes involved. Consequently, in order to progress the analysis, it was decided to maintain these entries as oak sawlogs within the analysis, on the basis of the average price parameters alone.

Further support for the belief that the products under analysis were indeed oak sawlogs came after (temporarily) removing the six entries with probably incorrect weight declarations in table 6 above. This had the effect of raising the overall average weight to 990kg/m^3; very much in line with expectation.

The revised table with the corrected trade from Italy is shown below.

Table 7: UK Imports (less BTT estimates) of Oak Logs (sawlogs) by Country, Jan-Sep 2011 – Error Corrected.

MONTH	Country	Code	£	kgs	m3	Av Price	Av Weight
201101	FRANCE	440391100	100,584	532,394	533	189	999
201102	FRANCE	440391100	46,187	204,103	213	217	958
201103	FRANCE	440391100	172,302	1,681,045	1,681	102	1,000
201104	FRANCE	440391100	160,150	1,567,982	1,566	102	1,001
201104	GERMANY	440391100	5,113	62,829	63	81	997
201105	BELGIUM	440391100	44,316	1	230	193	0
201105	FRANCE	440391100	82,554	508,510	492	168	1,034
201105	NETHERLANDS	440391100	87,519	1	537	163	0
201106	BELGIUM	440391100	24,478	1	127	193	0
201106	FRANCE	440391100	94,449	600,091	600	157	1,000
201107	FRANCE	440391100	138,282	438,482	498	278	880
201107	ITALY	440391100	7,228	1	24	307	0
201107	NETHERLANDS	440391100	52,702	1	414	127	0
201109	FRANCE	440391100	77,750	435,510	446	174	976
201109	ITALY	440391100	6,761	21,736	22	307	988
201109	NETHERLANDS	440391100	53,327	2	429	124	0
Jan-Sep	**Total**	**44039110**	**1,153,702**	**6,052,689**	**7,875**	**147**	**769**

A similar analysis was carried out on the other oak log code 4403 9190 to arrive at an acceptable value and volume for this commodity over the period.

Revisions were made to three import entries from Slovakia and ‘corrected’ according to other data for Slovakia that was representative of this product.

A significant outcome of the analysis for other (than sawlogs) oak logs was the high level of average prices that prevailed over the period.

The eventual totals from this further analysis revealed a volume of 4,322m^3 and a value of £3.3 million, giving an average price over the period for all countries combined of £758m^3 which was considered to be unrealistic for the importation of oak logs.

Closer inspection and further contact with importers of oak logs suggested that perhaps two factors were in evidence here to generate such high prices.

The first being the likelihood that some sawn oak had been miscoded as oak log imports, which could account for the price levels revealed.

The other possibility was that, because of the relatively low volumes and sporadic supply (generated by infrequent demand from small users) the price might reflect the sort of prices charged for this type of trade.

One trade commentator indicated that irregular and relatively low volumes of oak log imports often commanded much higher prices than the 'typical' range of prices of between £120m^3 to £200m^3 which apply to regular and higher volume imports.

The possibility of miscoding was investigated by reviewing the average prices and average weights of imports of this commodity code.

Of the 4,322m^3, a total of 1,808m^3 was identified as volume that may have been miscoded.

The average weights associated with this volume appeared to be too low to be logs and the average prices more in line with sawn oak.

The breakdown of oak logs that may have been miscoded and all others is shown in the two tables below.

Table 8: UK Imports (less BTT estimates) of Oak Logs (other than sawlogs) by Country, Jan-Sep 2011 – Potential Miscodings

MONTH	Country	Code	£	kgs	m3	Av Price	Av Weight
201105	SPAIN	440391900	38,192	1	54	707	0
201104	SPAIN	440391900	38,536	52,012	53	727	981
201105	FRANCE	440391900	282,289	296,730	379	745	783
201101	SPAIN	440391900	25,392	23,838	31	819	769
201101	FRANCE	440391900	381,332	404,277	435	877	929
201107	SPAIN	440391900	28,145	24,292	32	880	759
201102	SLOVAKIA	440391900	13,073	11,177	14	934	798
201101	SLOVAKIA	440391900	17,676	13,155	18	984	732
201107	SLOVAKIA	440391900	18,972	12,000	19	984	622
201108	SLOVAKIA	440391900	14,755	11,559	15	984	771
201109	SLOVAKIA	440391900	19,874	13,182	20	984	652
201109	SPAIN	440391900	32,069	24,575	32	1,002	768
201104	SLOVAKIA	440391900	19,347	14,531	19	1,018	765
201108	GERMANY	440391900	176,095	64,889	152	1,159	427
201106	ITALY	440391900	79,830	25,715	68	1,174	378
201108	ITALY	440391900	53,827	2	44	1,223	0
201106	SPAIN	440391900	40,893	1	32	1,278	0
201107	ITALY	440391900	159,228	24,919	123	1,295	203
201104	ITALY	440391900	88,764	56,702	68	1,305	834
201103	ITALY	440391900	45,989	26,672	35	1,314	762
201109	ITALY	440391900	222,359	144,932	165	1,348	878
Jan-Sep	**Total**	**44039190**	**1,796,637**	**1,245,161**	**1,808**	**993**	**689**

As can be seen from the table above, there is a mix of data with average prices in the range of £707m^3 to £1,348m^3 and average weights (including at least three incorrect weight declarations) that would appear to be too low in most cases to be oak logs, although there are five entries with average weights at around 800kgs/m^3, more in line with log densities than sawn goods.

As reported earlier, the declared weights can often be inaccurate and misleading and it is possible that the values and the volumes declared for these data are also inaccurate.

Some of the higher average prices of over £984m^3 to £1,295m^3 are not uncommon for small volumes of sawn oak and again the average weights are not what would be expected for oak logs.

Hence, it is possible that some, if not all of the data, amounting to 1,808m^3 in table 8 was sawn oak.

The remaining data for this commodity was as follows:

Table 9: UK Imports (less BTT estimates) of Oak Logs (other than sawlogs) by Country, Jan-Sep 2011 – Less Potential Miscodings

MONTH	Country	Code	£	kgs	m3	Av Price	Av Weight
201103	NETHERLANDS	440391900	14,571	47,021	53	275	887
201104	BELGIUM	440391900	14,654	44,397	47	312	945
201106	GERMANY	440391900	19,619	65,298	60	327	1,088
201104	GERMANY	440391900	24,975	81,416	75	333	1,086
201103	GERMANY	440391900	22,183	69,995	63	352	1,111
201108	SPAIN	440391900	6,928	14,674	14	495	1,048
201102	FRANCE	440391900	118,127	133,235	225	525	592
201103	AUSTRIA	440391900	4,526	4,560	8	566	570
201107	FRANCE	440391900	201,859	283,682	350	577	811
201106	AUSTRIA	440391900	5,255	5,130	9	584	570
201103	FRANCE	440391900	188,746	318,297	317	595	1,004
201108	FRANCE	440391900	60,050	57,364	100	601	574
201101	GERMANY	440391900	14,938	29,584	23	649	1,286
201104	FRANCE	440391900	186,216	283,540	281	663	1,009
201109	FRANCE	440391900	263,301	339,587	397	663	855
201105	GERMANY	440391900	31,434	59,350	47	669	1,263
201106	FRANCE	440391900	287,019	398,219	421	682	946
201107	GERMANY	440391900	16,666	31,013	24	694	1,292
Jan-Sep	**Total**	**44039190**	**1,481,067**	**2,266,362**	**2,514**	**589**	**901**

As seen from table 9, average prices are much lower than in table 8 and the average weights higher, in many cases.

The volumes present in table 9 may well represent the smaller volumes of oak logs imported at higher prices as alluded to by a leading trade commentator.

The corrective action taken was to remove the suspected miscoded sawn oak from the analysis as shown in table 8, leaving the totals in table 9 to be added to those for the oak sawlog category to provide a new total for all oak logs imported over the period

Another effect of this further analysis was to remove Italy and Slovakia as suppliers of oak logs under commodity code 4403 9190.

Hence, a newly derived total of 7,875m^3 for oak sawlogs and the 2,514m^3 for oak logs other than sawlogs for all declared imports was provided (10,389 m^3 for all oak roundwood), **before the addition of below threshold estimates**.

The original BTT estimates were based on the un-amended HMRC data for the period under review which, as has been determined in this further analysis, was overstated.

Revision of the BTT estimates was therefore required and a method needed to be devised to achieve this.

In order to speed the process of re-estimation, without recourse to further re-examination by HMRC, a simple method of using the proportions allocated to BTT estimates in the original BTT estimates was employed with the revised totals of declared imports.

For oak sawlogs, code 4403 9110, the original proportion of BTT estimates to declared data was 83% and for other oak logs, code 4403 9190, the proportion was just over 58%.

Applying these proportions to the revised declared trade derived from this further analysis, the newly generated BTT estimates for each code were 6,512m^3 for oak saw logs and 1,126m^3 for other oak logs.

This compares to the original BTT estimates from HMRC of 11,276m^3 for oak saw logs and 16,400m^3 for other oak logs.

Adding the revised total of 10,389m^3 for all declared imports to the newly calculated BTT estimates, the total of all oak log imports would sum to just over 18,000m^3.

The period under review was January to September 2011, which in addition to covering three quarters (75%) of a year in time, also comprises very nearly 75% by value of trade, hence the estimated 18,000m^3 of oak logs imported for the first nine months of 2011, when grossed for the whole year, rises to 24,000m^3, a total very close to that derived from trade commentators.

The weakness in the method of recalculating the BTT estimates is the assumption that the proportion of below threshold trade within the method of recalculation remains the same as in the original HMRC methodology.

Some supporting evidence can be gathered to suggest that this method of recalculation, while based on the flawed HMRC methodology (for roundwood imports) does produce results which are more in line with industry expectation than the original BTT estimates.

The first piece of evidence was provided by the recalculation method employed for oak logs as shown above, where the recalculation resulted in a total very close to that described by trade comment.

Further evidence is provided by a similar analysis for all other roundwood codes and by examining the nature of the timber industry itself.

The two tables (2 and 3), previously shown on pages 17 and 18, describing the initial import totals of roundwood before amendment and addition of BTT estimates and the BTT estimates separately, can be repeated here to reveal the proportion of BTT estimates of the total for each roundwood code as published by HMRC.

Table 10: HMRC Initial Import Totals before Amendment & without BTT Estimates, BTT Estimates and BTT Estimate Percentages (Tables 2 and 3 combined)

Initial Import Totals before Amendment & BTT Est.			BTT Estimates		BTT %
Code	£	m3	£	m3	£ %
44031000	6,788,892	55,114	2,142,975	10,539	32%
44032011	1,922,094	8,944	895,902	16,307	47%
44032019	2,179,487	12,464	789,452	16,024	36%
44032031	1,312,628	15,445	416,420	7,022	32%
44032039	5,724,509	264,536	2,030,037	35,428	35%
44032091	6,042,710	125,973	2,384,896	56,154	39%
44032099	1,343,651	51,573	705,514	19,265	53%
44034100	328,987	389	-	-	
44034910	1,781,065	13,085	-	-	
44034935	44,811	92	-	-	
44034995	1,372,751	216,669	-	-	
44039110	1,553,443	10,000	1,284,735	11,276	83%
44039190	4,773,088	13,962	2,750,551	16,400	58%
44039210	-	-	-	-	
44039290	393,466	53,105	145,004	3,033	37%
44039910	-	-	-	-	
44039930	1,441,416	2,146	-	-	
44039951	9,208	23,290	-	-	
44039959	17,803	6,544	-	-	
44039995	4,293,451	106,753	1,562,783	26,955	36%
	-	-			
Total	41,323,460	980,084	15,108,269	218,403	37%

The BTT estimates by value averaged around 37% of the initial total and vary widely by individual code. As can be seen in table 10 above, these proportions vary from 32% of the total for pine sawlogs 4403 2031 to 83% for oak sawlogs.

The initial import totals, as described, are before amendment and Trade Challenge revisions, therefore, the BTT estimates were based on data that was later subject to substantial amendment. Consequently, the original BTT estimates are inaccurate.

In order to meet the objectives of this investigation and provide a better estimate of the importation of roundwood, a revised set of BTT estimates was required, one that reflected the true scale of trade – post amendment and post Trade Challenge import totals.

The amended HMRC import totals for roundwood before applying the results of Trade Challenges provided the next point for further analysis, which, as previously described in this report was a volume of around 524,000m^3. Following further analysis – which included further amendment of data by HMRC during the early months of 2012 and the corrections of obvious errors by the author – a revised total of the declared trade for all roundwood imports was produced.

These further amendments, author corrections and results of Trade Challenges brought about a significant reduction from the totals published by HMRC at the end of 2011 for the nine months to September 2011, as shown in table 11 below.

Table 11: Revised Import Totals after Amendments, Corrections & Trade Challenges

Code	£	m3	Av. Price
44031000	5,765,207	26,798	215
44032011	2,126,570	9,234	230
44032019	2,065,528	11,938	173
44032031	837,163	5,142	163
44032039	3,855,412	19,775	195
44032091	6,034,306	125,953	48
44032099	799,697	4,458	179
44034100	42,048	19	2213
44034910	158,658	267	594
44034935			
44034995	428,533	1,138	377
44039110	1,153,702	7,875	147
44039190	1,481,067	2,514	589
44039210			
44039290	317,528	782	406
44039910			
44039930	27,586	37	746
44039951	2,048	30	68
44039959	10,925	118	93
44039995	1,623,995	12,315	132
Total	26,729,973	228,393	117

By value, the revised import total – before BTT estimates are added – fell from £41.3 million (tables 2 and 9) to £26.7 million and by volume, from around 980,000m^3 to around 228,000m^3, a reduction of 35% in value and 77% in volume.

These reductions were as a result of three activities: HMRC amendments, Trade Challenges instigated through the work of this investigation and from the further analysis or 'cleaning' process conducted by the author, following HMRC amendment and Trade Challenge revisions.

The most significant reduction was by volume and the contributions to these reductions by the three activities conducted for this investigation were as follows:

HMRC amendments accounted for 290,612m^3
Trade Challenges accounted for 383,421m^3
Further analysis (cleaning) accounted for 77,658m^3

Of the total volume reduction of 751,691m^3.

The scale of these reductions confirms the belief that roundwood imports have been grossly overstated and this has probably been the case for many years.

The 228,393m^3 of declared and revised trade from table 11 is the total from which more realistic BTT estimates could be calculated.

A policy of non-disclosure operated by HMRC prevents the identification of companies that provide supplementary returns and therefore, the ability to gauge the true level of below threshold trade is inhibited.

The true value and volume of below threshold trade must lie below the original estimate totals of £15.1 million and 218,403m^3.

The only data available to produce a revised estimate of below threshold trade are the original proportions of below threshold trade, as shown in table 9.

In the absence of any other information, these are used to produce a revised set of BTT estimates.

Table 10 above has been re-cast with the revised import totals (after amendment, Trade Challenges and further analysis, from table 11) substituted for the initial import totals and the original BTT proportions applied to these revised import totals.

This is described in table 12 below.

Table 12: Revised Import Totals after Amendment, Corrections & Trade Challenges and Revised BTT Estimates

Code	£	m3	£ %	£	m3
44031000	5,765,207	26,798	32%	1,819,840	8,544
44032011	2,126,570	9,234	47%	991,210	5,452
44032019	2,065,528	11,938	36%	748,174	4,313
44032031	837,163	5,142	32%	265,583	1,631
44032039	3,855,412	19,775	35%	1,367,214	7,013
44032091	6,034,306	125,953	39%	2,381,579	49,710
44032099	799,697	4,458	53%	419,899	2,341
44034100	42,048	19		-	-
44034910	158,658	267		-	-
44034935				-	-
44034995	428,533	1,138		-	-
44039110	1,153,702	7,875	83%	954,140	6,512
44039190	1,481,067	2,514	58%	853,483	1,126
44039210				-	-
44039290	317,528	782	37%	117,019	264
44039910				-	-
44039930	27,586	37		-	-
44039951	2,048	30		-	-
44039959	10,925	118		-	-
44039995	1,623,995	12,315	36%	591,122	2,582
Total	26,729,973	228,393	37%	10,509,261	89,488

This calculation provides revised BTT estimates in table 12 above of £10.5 million and 89,488m^3.

If these lower, revised BTT estimate totals are added to the declared and revised import totals, an overall roundwood import total after these investigations for the period January to September 2011 is revealed, as shown below.

Table 13: Revised Roundwood Import Totals after Investigation

Code	£	m3	Av. Price
44031000	7,585,047	35,342	215
44032011	3,117,780	14,686	212
44032019	2,813,702	16,251	173
44032031	1,102,746	6,773	163
44032039	5,222,626	26,788	195
44032091	8,415,885	175,663	48
44032099	1,219,596	6,799	179
44034100	42,048	19	2213
44034910	158,658	267	594
44034935	-	-	
44034995	428,533	1,138	377
44039110	2,107,842	14,387	147
44039190	2,334,550	3,640	641
44039210	-	-	
44039290	434,547	1,046	416
44039910	-	-	
44039930	27,586	37	746
44039951	2,048	30	68
44039959	10,925	118	93
44039995	2,215,117	14,897	149
	-	-	
Total	37,239,234	317,881	117

Consequently, the revised total of 317,881m^3 is 74% lower than the original un-amended HMRC total for the period and 66% lower than the amended HMRC total for January to December 2011 published at the end of 2011 – but before further revision. The revised BTT estimates are 59% lower than the original BTT estimates.

These data cover the period January to September 2011, therefore, as no extraordinary trades occurred between October and December, a reasonable estimate can be made of the whole year 2011 which, in total, for all roundwood based upon the work of this investigation would amount to around £46 million and 397,000m^3.

As revealed in the introduction to this report, a better measure of HMRC below threshold trade for roundwood and further examination of coniferous log imports are required, in order to gain an even greater understanding of the trade in roundwood.

Both issues require further discussion. Discussions with HMRC are required over below threshold trade estimates and further examination of the importation of coniferous roundwood could prove instructive.

The case for improved BTT estimates has been proved in this report.

The case for further examination of coniferous log imports is less clear, however, supplementary analysis of this issue, with brief commentary is provided in Annex V of this report.

Annex I – HMRC Roundwood Import Totals Jan-Sep 2011 @ Dec 2011 after HMRC Amendments

Short Description	Code	£	Kgs	m3
WOOD IN THE ROUGH, TREATED WITH PAINT, STAINS, CR	44031000	8,564,376	19,203,746	64,230
SAWLOGS OF SPRUCE OF THE KIND 'PICEA ABIES KARST.	44032011	2,366,419	14,613,243	20,706
SPRUCE OF THE KIND 'PICEA ABIES KARST.' OR SILVER FI	44032019	2,858,889	18,277,289	27,888
SAWLOGS OF PINE OF THE KIND 'PINUS SYLVESTRIS L.', W	44032031	1,729,048	23,308,093	22,467
PINE OF THE KIND 'PINUS SYLVESTRIS L.' IN THE ROUGH,	44032039	6,333,360	39,589,068	56,478
SAWLOGS OF CONIFEROUS WOOD, WHETHER OR NOT ST	44032091	8,427,606	154,217,897	182,127
CONIFEROUS WOOD IN THE ROUGH, WHETHER OR NOT S	44032099	1,922,817	17,411,130	70,380
DARK RED MERANTI, LIGHT RED MERANTI AND MERANTI B	44034100	324,813	246,636	388
SAPELE, ACAJOU D'AFRIQUE AND IROKE IN THE ROUGH, W	44034910	1,754,862	2,120,538	12,619
TROPICAL WOOD IN THE ROUGH WHETHER OR NOT STRI	44034935	44,811	71,954	92
ABURA, AFRORMOSIA, AKO, ALAN, ANDIROBA, ANINGRÚ, A	44034995	1,228,258	1,900,980	216,326
SAWLOGS OF OAK 'QUERCUS SPP.', WHETHER OR NOT ST	44039110	2,438,437	17,780,344	19,133
OAK 'QUERCUS SPP.' IN THE ROUGH, WHETHER OR NOT S	44039190	7,055,429	21,879,819	29,852
BEECH 'FAGUS SPP.' IN THE ROUGH, WHETHER OR NOT S	44039290	503,244	3,037,942	56,048
EUCALYPTUS WOOD IN THE ROUGH, WHETHER OR NOT S	44039930	1,441,416	1,306,378	2,146
SAWLOGS OF BIRCH, WHETHER OR NOT STRIPPED OF BA	44039951	5,740	24,306	20,050
BIRCH, IN THE ROUGH, WHETHER OR NOT STRIPPED OF B	44039959	10,925	98,050	118
WOOD IN THE ROUGH, WHETHER OR NOT STRIPPED OF B	44039995	5,354,216	26,541,005	127,073
	Total	52,364,666	361,628,418	928,121

Annex II – Trade Challenge Candidates, Jan-Sep 2011

Challenge Priority	Type & Reason for Challenge	MONTH	Country	Code	£	Kgs	m3	Av Price	Av Weight	Description
HIGHEST	Highly Significant Volumes (Unit)	201101	FINLAND	440320390	63,877	18,194	236,421	0	0	PINE OF THE KIND 'P
HIGHEST	Highly Significant Volumes (Unit)	201106	GERMANY	440349950	48,046	25	59,523	1	0	ABURA, AFRORMOSI
HIGHEST	Highly Significant Volumes (Unit)	201108	GERMANY	440349950	17,822	1	56,770	0	0	ABURA, AFRORMOSI
HIGHEST	Highly Significant Volumes (Unit)	201107	GERMANY	440349950	42,492	1,020	51,634	1	0	ABURA, AFRORMOSI
HIGHEST	Highly Significant Volumes (Unit)	201108	ECUADOR	440349950	35,970	11,460	44,432	1	0	ABURA, AFRORMOSI
HIGH	Duplicate Weight or Unit	201104	NETHERLANDS	440349100	7,639	4,950	4,950	2	1	SAPELE, ACAJOU D'A
HIGH	Duplicate Weight or Unit	201105	CANADA	440399950	89,301	59,877	59,877	91	1	WOOD IN THE ROUG
HIGH	Significant Volumes	201106	CHINA	440399510	1,958	1	18,400	0	0	SAWLOGS OF BIRCH
HIGH	Significant Volumes	201105	UKRAINE	440320990	8,937	18,000	12,500	1	1	CONIFEROUS WOOD
HIGH	Significant Volumes	201107	LITHUANIA	440310000	696	1	11,520	0	0	WOOD IN THE ROUG
HIGH	Significant Volumes	201108	SPAIN	440320990	207,044	1,120	7,798	27	0	CONIFEROUS WOOD
HIGH	Significant Volumes	201106	LITHUANIA	440310000	463	1	7,680	0	0	WOOD IN THE ROUG
HIGH	Significant Volumes	201103	UKRAINE	440320990	8,517	19,525	6,900	1	3	CONIFEROUS WOOD
HIGH	Significant Volumes	201109	UKRAINE	440320990	9,171	17,336	6,610	1	3	CONIFEROUS WOOD
HIGH	Significant Volumes	201109	SPAIN	440320990	176,479	5,750	6,589	27	1	CONIFEROUS WOOD
HIGH	Significant Volumes	201108	UKRAINE	440320990	7,458	17,816	6,260	1	3	CONIFEROUS WOOD
HIGH	Significant Volumes	201105	IRISH REPUBLIC	440399510	5,202	2	4,860	1	0	SAWLOGS OF BIRCH
HIGH	Significant Volumes	201104	LITHUANIA	440310000	232	1	3,840	0	0	WOOD IN THE ROUG
HIGH	Significant Volumes	201108	CAMEROON	440349100	19,441	19,531	2,860	7	7	SAPELE, ACAJOU D'A
HIGH	Price	201106	IRISH REPUBLIC	440320310	89,858	2,859,480	2,859	31	1,000	SAWLOGS OF PINE (
HIGH	Price	201105	IRISH REPUBLIC	440320310	63,388	2,509,580	2,509	25	1,000	SAWLOGS OF PINE (
HIGH	Price	201104	IRISH REPUBLIC	440320310	83,568	2,406,310	2,406	35	1,000	SAWLOGS OF PINE (
HIGH	Significant Volumes	201103	USA	440391900	15,282	20,412	2,150	7	9	OAK 'QUERCUS SPP.
HIGH	Price	201102	IRISH REPUBLIC	440320310	67,496	2,120,950	2,120	32	1,000	SAWLOGS OF PINE (
HIGH	Significant Value	201104	FINLAND	440320390	470,295	923,772	1,174	401	787	PINE OF THE KIND 'P
HIGH	Significant Value	201109	PERU	440399950	196,694	26,670	19	10,352	1,404	WOOD IN THE ROUG
LESSER	Price	201106	CONGO DEM. REP. (ZAIRE)	440349100	23,931	19,630	1,770	14	11	SAPELE, ACAJOU D'A
LESSER	Price	201103	IRISH REPUBLIC	440310000	95,156	18,962	1,082	88	18	WOOD IN THE ROUG
LESSER	Price	201106	SINGAPORE	440391900	24,740	16,500	1,051	24	16	OAK 'QUERCUS SPP.
LESSER	Price	201104	SINGAPORE	440391900	24,987	16,500	1,051	24	16	OAK 'QUERCUS SPP.
LESSER	Price	201101	GERMANY	440310000	17,036	10,000	1,000	17	10	WOOD IN THE ROUG
LESSER	Price	201109	SLOVAKIA	440391900	19,874	13,182	878	23	15	OAK 'QUERCUS SPP.
LESSER	Price	201101	SLOVAKIA	440391900	17,676	13,155	877	20	15	OAK 'QUERCUS SPP.
LESSER	Price	201107	SLOVAKIA	440391900	18,972	12,000	800	24	15	OAK 'QUERCUS SPP.
LESSER	Price	201103	CONGO DEM. REP. (ZAIRE)	440349100	71,243	205,309	380	187	540	SAPELE, ACAJOU D'A
LESSER	Price	201101	CONGO DEM. REP. (ZAIRE)	440349950	44,928	103,027	380	118	271	ABURA, AFRORMOSI
LESSER	Price	201104	CONGO DEM. REP. (ZAIRE)	440349950	14,678	32,802	380	39	86	ABURA, AFRORMOSI
LESSER	Price	201103	ECUADOR	440349950	37,002	11,466	294	126	39	ABURA, AFRORMOSI
LESSER	Price	201105	ECUADOR	440349950	34,952	11,466	294	119	39	ABURA, AFRORMOSI
LESSER	Price	201107	ECUADOR	440349950	34,317	11,466	294	117	39	ABURA, AFRORMOSI
LESSER	Price	201107	BELGIUM	440320110	87,573	150,620	229	382	658	SAWLOGS OF SPRU(
LESSER	Price	201102	USA	440310000	22,977	39,723	201	114	198	WOOD IN THE ROUG
LESSER	Price	201101	IRISH REPUBLIC	440320310	93,619	278,556	135	693	2,063	SAWLOGS OF PINE (
LESSER	Price	201101	GERMANY	440320990	44,232	2,201	126	351	17	CONIFEROUS WOOD
LESSER	Price	201108	GERMANY	440310000	15,106	1	117	129	0	WOOD IN THE ROUG
LESSER	Price	201102	GERMANY	440320990	40,907	1	114	359	0	CONIFEROUS WOOD
LESSER	Price	201101	IRISH REPUBLIC	440320990	-	-	109	-	-	CONIFEROUS WOOD
LESSER	Price	201108	IRISH REPUBLIC	440392900	272	4	108	3	0	BEECH 'FAGUS SPP.'

LESSER	Price	201103	IRISH REPUBLIC	440392900	186	3	88	2	0 BEECH 'FAGUS SPP.'
LESSER	Price	201101	IRISH REPUBLIC	440320990	33,423	70,652	74	452	955 CONIFEROUS WOOD
LESSER	Price	201106	SWEDEN	440392900	1,095	73	73	15	1 BEECH 'FAGUS SPP.'
LESSER	Price	201102	FINLAND	440320390	23,645	8,088	65	364	124 PINE OF THE KIND 'P
LESSER	Price	201106	CHINA	440310000	1,490	720	62	24	12 WOOD IN THE ROUG
LESSER	Price	201104	IRISH REPUBLIC	440320990	16,623	1	62	268	0 CONIFEROUS WOOD
LESSER	Price	201104	SWEDEN	440320190	12,140	19,039	41	296	464 SPRUCE OF THE KIN
LESSER	Price	201102	SWEDEN	440392900	600	40	40	15	1 BEECH 'FAGUS SPP.'
LESSER	Price	201102	IRISH REPUBLIC	440320990	16,075	32,346	39	412	829 CONIFEROUS WOOD
LESSER	Price	201101	GERMANY	440320990	18,079	1	38	476	0 CONIFEROUS WOOD
LESSER	Price	201105	FRANCE	440320190	14,919	19,653	34	439	578 SPRUCE OF THE KIN
LESSER	Price	201107	FRANCE	440391100	27,787	29,307	29	958	1,011 SAWLOGS OF OAK 'C
LESSER	Price	201102	CONGO DEM. REP. (ZAIRE)	440349950	21,977	50,575	27	814	1,873 ABURA, AFRORMOSI
LESSER	Price	201102	TURKEY	440392900	39,617	23,458	26	1,524	902 BEECH 'FAGUS SPP.'
LESSER	Price	201105	FRANCE	440310000	218	10	22	10	0 WOOD IN THE ROUG
LESSER	Price	201103	NETHERLANDS	440349100	33,759	11,000	20	1,688	550 SAPELE, ACAJOU D'A
LESSER	Price	201106	IRISH REPUBLIC	440392900	51	1	20	3	0 BEECH 'FAGUS SPP.'
LESSER	Price	201103	FRANCE	440310000	431	9	19	23	0 WOOD IN THE ROUG
LESSER	Price	201102	USA	440399950	73,617	19,051	17	4,330	1,121 WOOD IN THE ROUG
LESSER	Price	201105	IRISH REPUBLIC	440392900	101	1	16	6	0 BEECH 'FAGUS SPP.'
LESSER	Price	201106	SWEDEN	440392900	768	15,190	16	48	949 BEECH 'FAGUS SPP.'
LESSER	Price	201101	ITALY	440320110	11,180	4,965	13	860	382 SAWLOGS OF SPRU
LESSER	Price	201102	IRISH REPUBLIC	440320990	- 7,706	- 2	11	- 701	- 0 CONIFEROUS WOOD
LESSER	Price	201108	CAMEROON	440349100	19,496	19,494	11	1,772	1,772 SAPELE, ACAJOU D'A
LESSER	Price	201104	FRANCE	440310000	189	6	10	19	1 WOOD IN THE ROUG
LESSER	Price	201102	MALTA	440310000	-	6,879	9	-	764 WOOD IN THE ROUG
LESSER	Price	201108	SWEDEN	440399300	430	10,206	9	48	1,134 EUCALYPTUS WOOD
LESSER	Price	201102	LATVIA	440320990	7,987	-	8	998	- CONIFEROUS WOOD
LESSER	Price	201109	ITALY	440391100	4,978	1	6	830	0 SAWLOGS OF OAK 'C
LESSER	Price	201107	ITALY	440391100	7,228	1	6	1,205	0 SAWLOGS OF OAK 'C
LESSER	Price	201102	CANADA	440399950	21,916	11,004	6	3,653	1,834 WOOD IN THE ROUG
LESSER	Price	201104	FRANCE	440310000	66	5	5	13	1 WOOD IN THE ROUG
LESSER	Price	201105	FRANCE	440310000	57	4	4	14	1 WOOD IN THE ROUG
LESSER	Price	201109	IRISH REPUBLIC	440392900	20	1	2	10	1 BEECH 'FAGUS SPP.'
LESSER	Price	201106	NETHERLANDS	440399950	16,245	16,986	2	8,123	8,493 WOOD IN THE ROUG
LESSER	Price	201108	AUSTRALIA	440310000	1,440	89	1	1,440	89 WOOD IN THE ROUG
LESSER	Price	201109	BELGIUM	440310000	10,494	21,452	1	10,494	21,452 WOOD IN THE ROUG
LESSER	Price	201108	BELGIUM	440310000	11,155	23,244	1	11,155	23,244 WOOD IN THE ROUG
LESSER	Price	201106	BELGIUM	440310000	29,480	62,949	1	29,480	62,949 WOOD IN THE ROUG
LESSER	Price	201105	CHINA	440310000	1,615	3	1	1,615	3 WOOD IN THE ROUG
LESSER	Price	201106	FRANCE	440310000	6	1	1	6	1 WOOD IN THE ROUG
LESSER	Price	201102	MALTA	440310000	2,476	1	1	2,476	1 WOOD IN THE ROUG
LESSER	Price	201106	IRISH REPUBLIC	440320110	598	418	1	598	418 SAWLOGS OF SPRU
LESSER	Price	201109	FRANCE	440320190	784	1	1	784	1 SPRUCE OF THE KIN
LESSER	Price	201103	FRANCE	440320190	826	1	1	826	1 SPRUCE OF THE KIN
LESSER	Price	201109	BELGIUM	440320310	1,200	10	1	1,200	10 SAWLOGS OF PINE (
LESSER	Price	201103	IRISH REPUBLIC	440341000	5,682	2	1	5,682	2 DARK RED MERANTI
LESSER	Price	201106	IRISH REPUBLIC	440341000	11,508	2	1	11,508	2 DARK RED MERANTI
LESSER	Price	201104	IRISH REPUBLIC	440341000	11,623	274	1	11,623	274 DARK RED MERANTI
LESSER	Price	201104	GERMANY	440349950	4,670	21,200	1	4,670	21,200 ABURA, AFRORMOSI
LESSER	Price	201105	GERMANY	440349950	4,120	1,717	1	4,120	1,717 ABURA, AFRORMOSI
LESSER	Price	201109	SWEDEN	440399950	7,422	51,634	1	7,422	51,634 WOOD IN THE ROUG
LESSER	Price	201104	TURKEY	440399950	12,359	70	-		WOOD IN THE ROUG

Annex III – Synopsis of the HMRC Methodology to determine Below Threshold Trade Allocations (BTTA)

BTT (Below Threshold Trade) totals

The below threshold total for a month is calculated by adding up the global declarations for all traders not on the Intrastat register that month, excluding any declaration whose value exceeds the assimilation threshold as outliers. The below threshold trade total is used both in the calculation of the factors and their implementation.

JATT (Just Above Threshold Trade) calculation

The JATT for a period is formed by adding up all the supplementary declarations by each trader over the period, then selecting the trade from the smallest traders, ascending until the BTT total is just exceeded.

Factor calculation

Each year the factors are recalculated, and are used both for that year's annual allocations and the next year's monthly allocations. Taking the declarations for the twelve months January to December, the factor for each 4-digit comcode/country combination is calculated as follows:

$$\frac{\mathrm{JATT}_{ij}^{\mathrm{SD}}}{\mathrm{TATT}_{ij}^{\mathrm{SD}}}$$

$i = \text{Country},\ j = 4\,\text{digit comcode},$

$\mathrm{SD} = \text{Supplementary declarations},$

$\mathrm{JATT} = \text{Just above threshold trade},$

$\mathrm{TATT} = \text{Total above threshold trade}.$

BTTA (Below Threshold Trade Allocation)

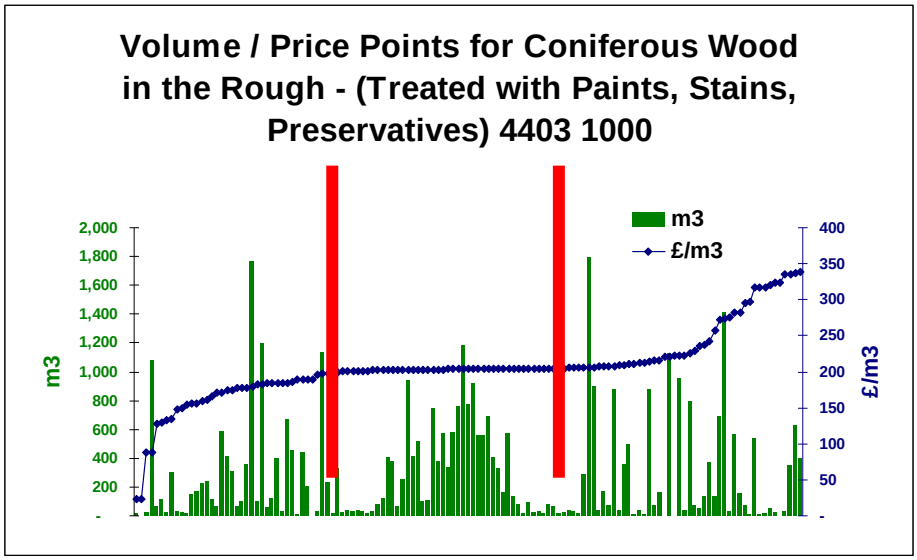
The allocations (both annual and monthly) are derived by multiplying the total in each 8-digit comcode/country combination by the appropriate factor to produce initial allocations. These are then scaled uniformly so that they add up to the required BTT total (for the annual allocations, they will initially add up to the JATT total).

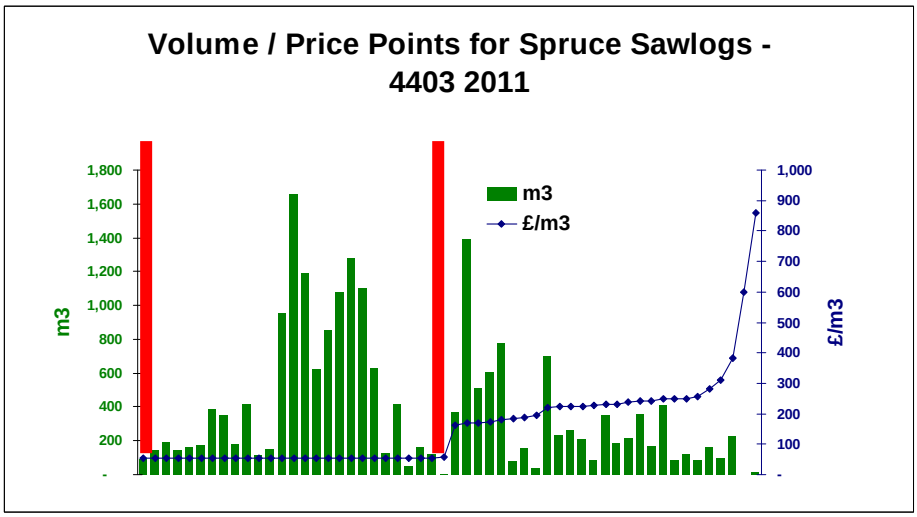
Annex IV – Identification of Below Threshold Trade Estimates

The following charts show all data entries for each roundwood code, except tropical varieties, by the imported volume and price for each entry.

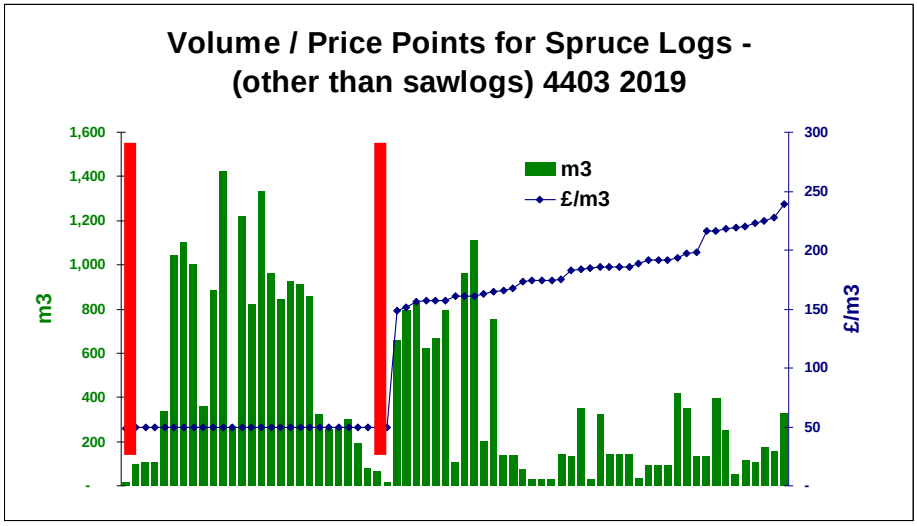
The green bars denote volume and the blue line the landed prices for that volume.

The volumes and prices between the red lines are the HMRC below threshold trade (BTT) estimates.

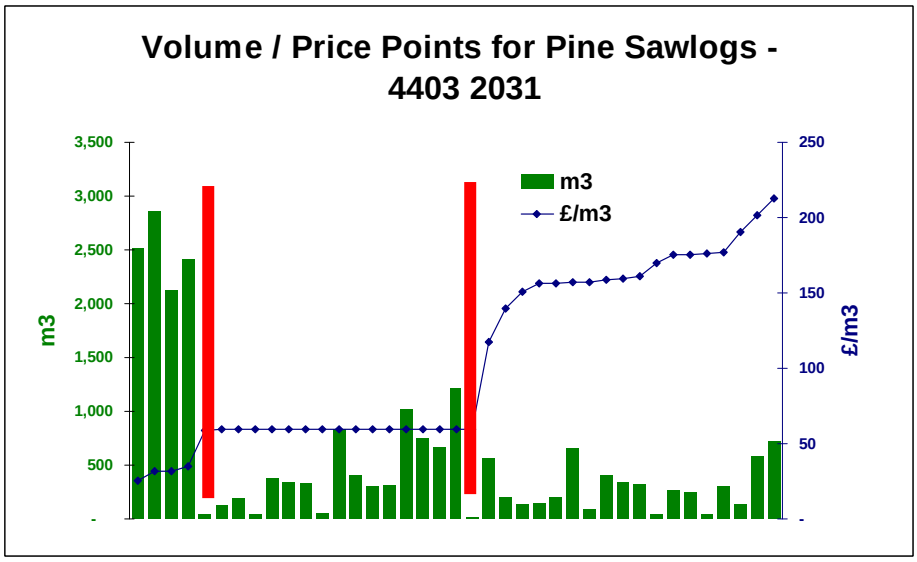




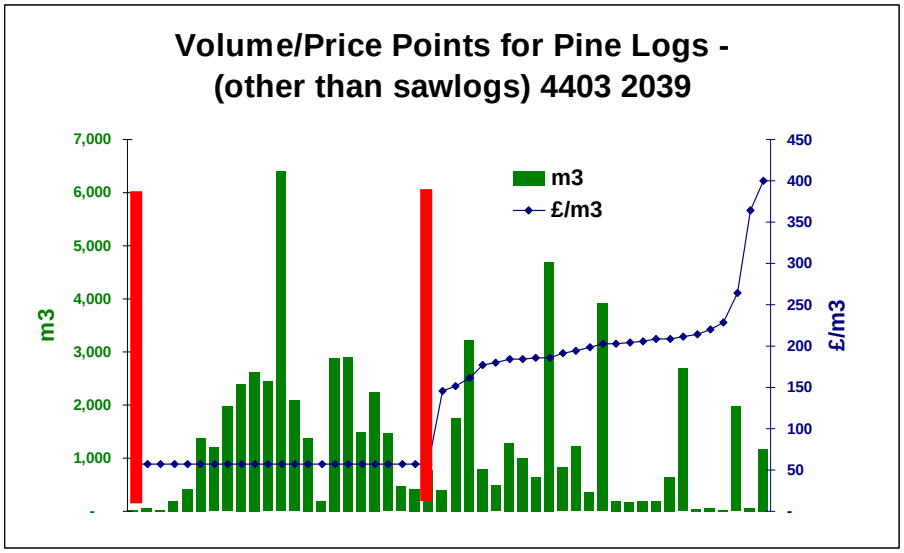
Outside of the BTT range, higher volumes of spruce sawlogs appear to have been imported at prices below and above the £200m^3 mark. Lower volumes at higher prices appear also to have been imported. The price levels above £300m^3 would appear to be errors in the data.



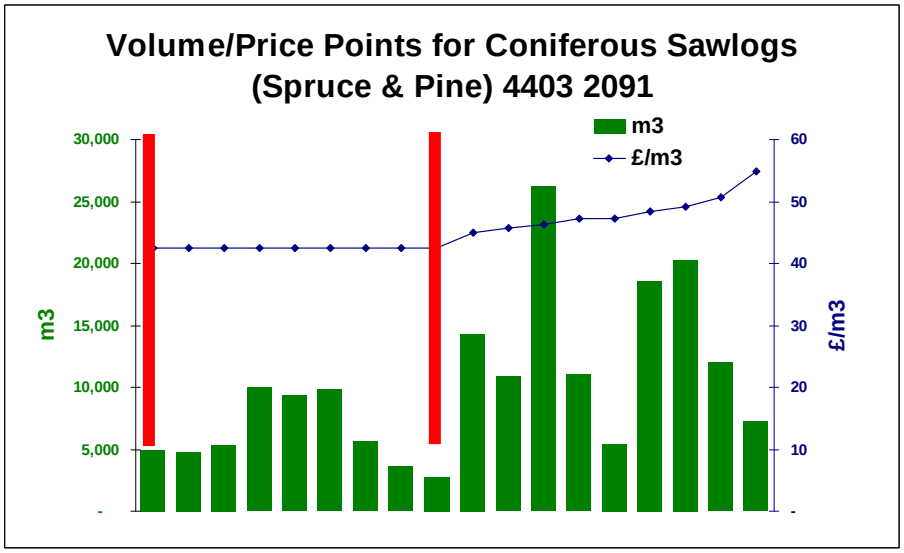
The majority of the volume outside of the BTT range is concentrated around the expected price range of £120m^3 to £160m^3. Lower volumes also appear to have been imported at higher prices.



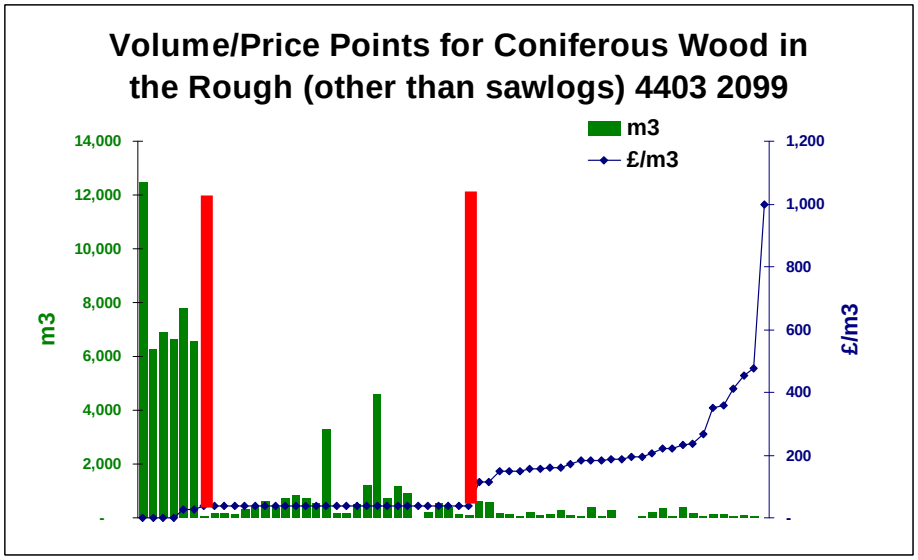
The high volumes at very low prices – to the left of the first red marker – suspected to be errors were later all amended by HMRC. The actual trade in pine sawlogs, to the right of the red marker, varies in price, but the bulk of these imports are priced at around £150-£160m^3.



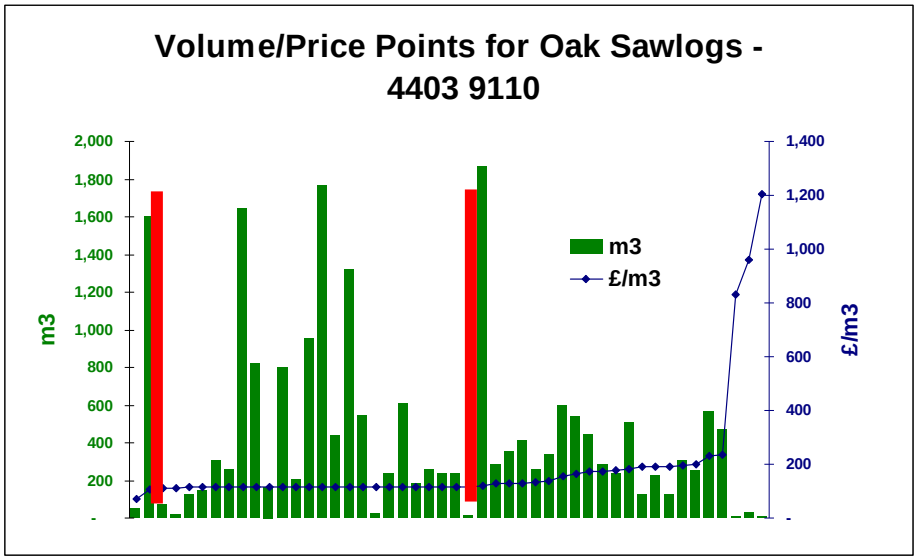
The greater part of the volume of imported pine logs (other than sawlogs) is as a result of HMRC estimates. The bulk of the actual declared trade is priced between £150-£210m^3.



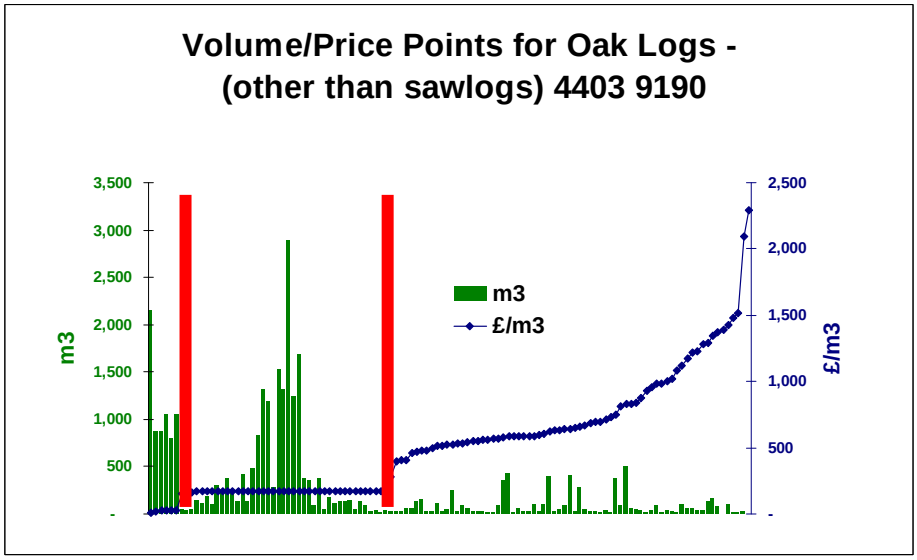
This commodity, despite there being fewer data entries than for many other types of roundwood, has the highest re-assessed volume at around 175,000m^3. The average prices of declared trade are around £50m^3.



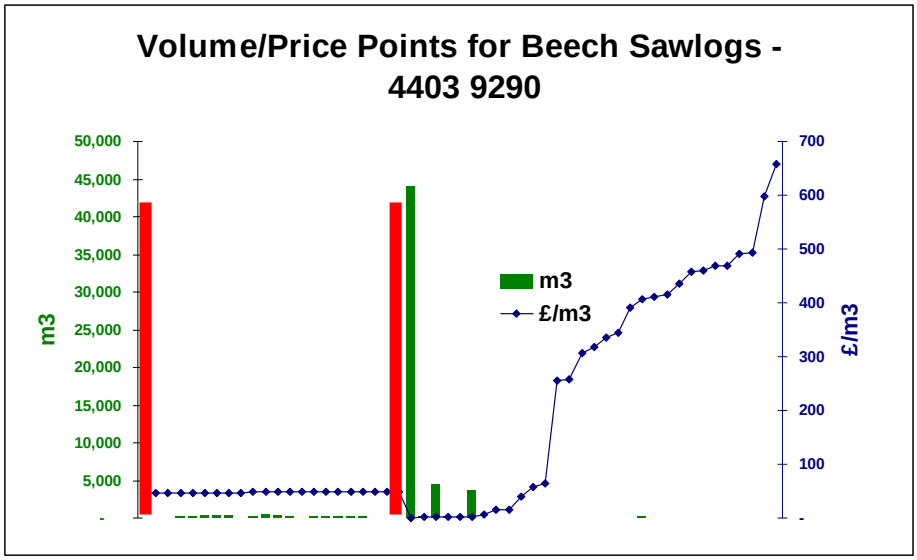
Large errors were detected (to the left of the first red marker).



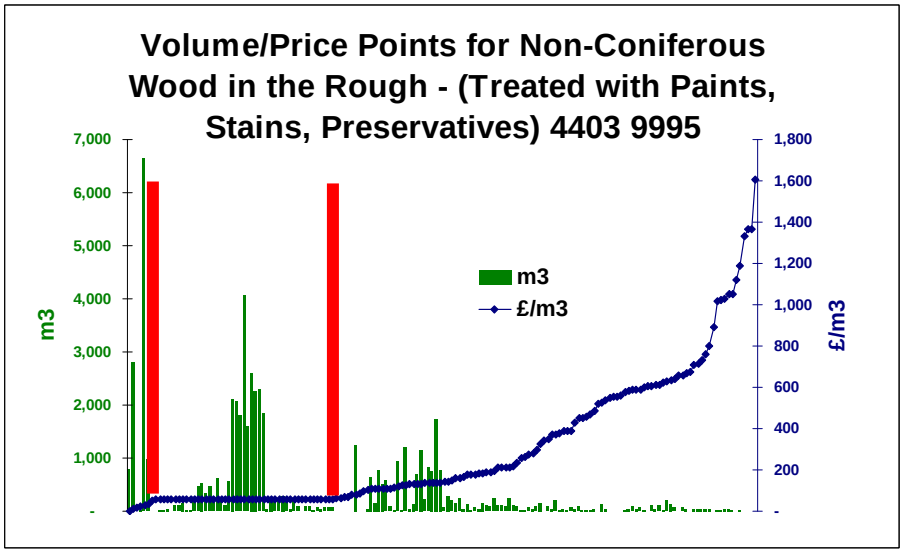
The average prices of the declared trade are around expected levels, but as featured in the body of the report, the BTT estimates grossly inflated the total volume published by HMRC.



A similar situation existed with other oak logs, although it is believed that a good proportion of the declared trade was in sawn oak rather than roundwood.



The one very high volume entry was later revised by the author, however, if this commodity has been correctly coded, it would indicate that some of the very low volumes of imported beech logs were purchased at high prices.



As has occurred with other roundwood, the BTT volume estimates are greater than declared trade. The majority of declared trade existed in the £100-£200m^3 price range.

Annex V – Possible Miscoding of Sawn Softwood

UK trade opinion is of the belief that there is little or no volume of spruce or pine logs imported to the UK, outside of the cross-border trade between Northern Ireland and the Republic of Ireland.

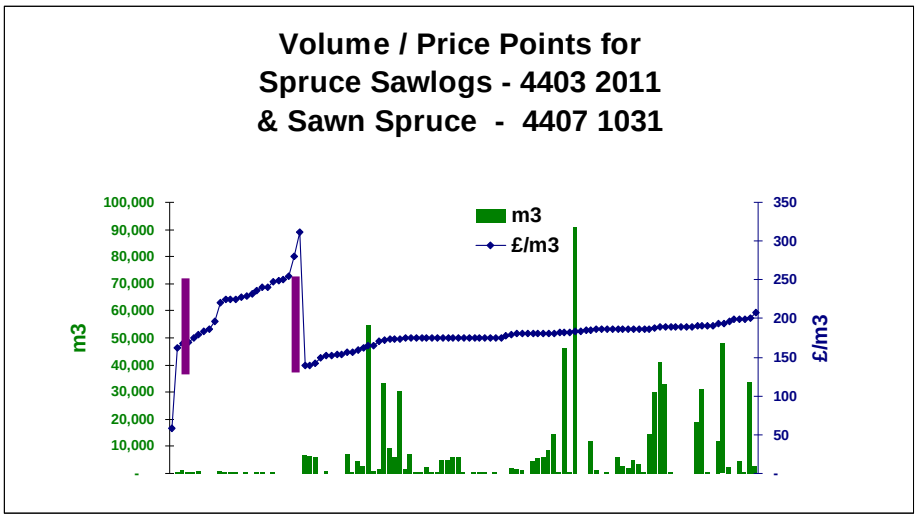
The investigations made for this report have not been able to confirm or refute this contention.

Sawn softwood imports in 2011 amounted to over 4.5 million m^3. The identifiable volume of coniferous roundwood imports (excluding varieties classified as wood in the rough) for the period January to September 2011 totalled around 0.24 million m^3.

The great majority of this trade was between the Republic and Northern Ireland.

The estimated volume of imports to the UK from the Republic over the period January to September 2011 was 0.19 million m^3.

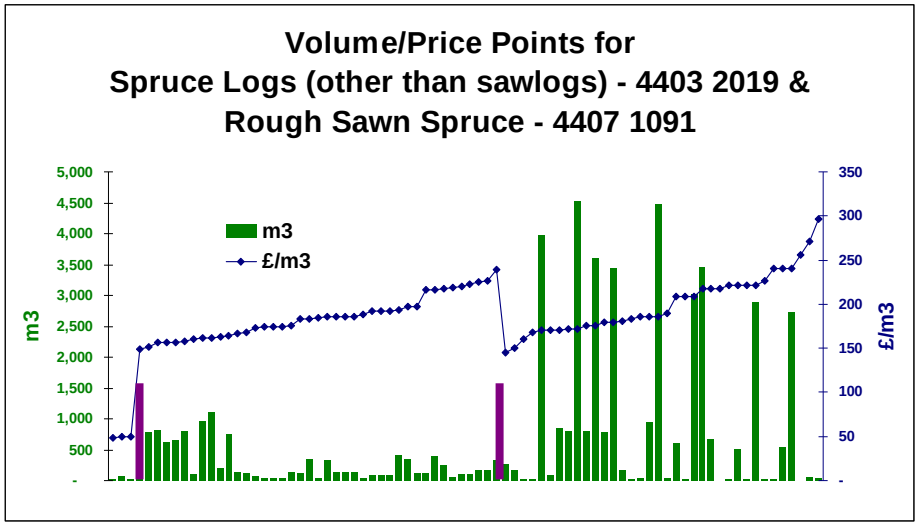
The charts shown in Annex III which identify the BTT estimated trade and declared trade can be adapted to attempt to compare the volumes and prices of coniferous roundwood import to those of sawn softwood for the individual species.



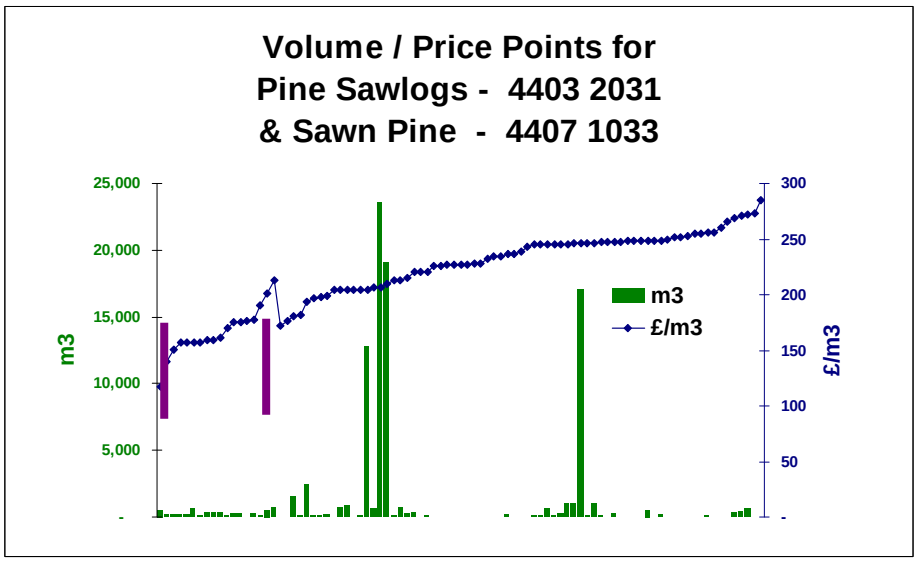
The declared spruce sawlog volumes and prices are bounded within the two purple coloured markers. All volumes and prices to the right of the marker are for sawn softwood and this applies to all charts in this Annex.

Whilst the declared volumes of spruce logs are comparatively low, the average prices are consistently higher than those for sawn spruce.

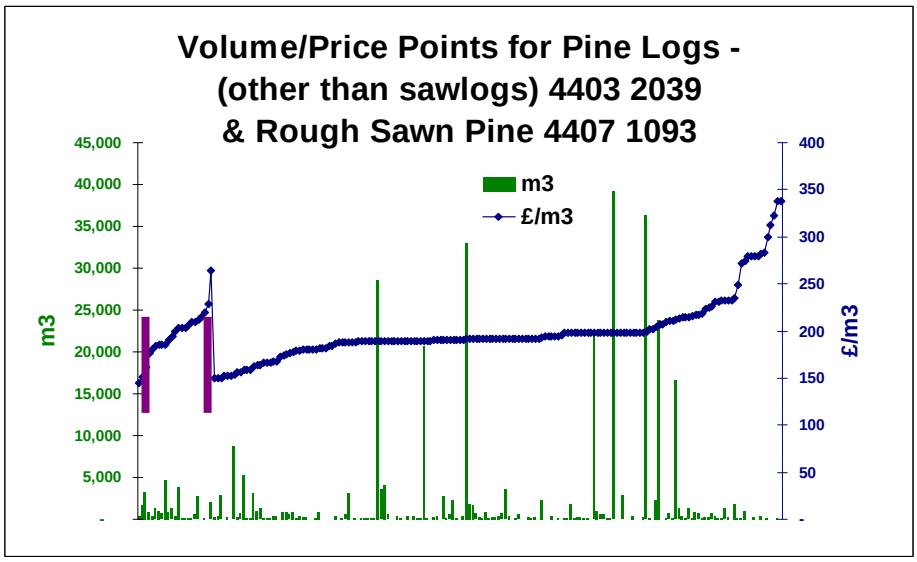
Further examination of average weights to attempt to further confirm differences between logs and sawn softwood, at this stage of the investigation, proved inconclusive.



The differences in average price between spruce logs (other than sawlogs) and sawn spruce are less marked than with spruce sawlogs. This area would provide a starting point for further examination.



The bulk of the declarations for imported pine sawlogs are priced between £150-£160m^3 while the average price of sawn pine is approximately £214m^3.



As with the analysis for spruce logs (other than sawlogs) average price ranges are not too dissimilar, hence this area would also be worthy of further examination.