

REPORT OF A BREACH OF THE CODE OF PRACTICE FOR STATISTICS

1. Core Information

Title and link to statistical output	UK trade in services by partner country: April to June 2019 Link
Name of producer organisation	Office for National Statistics (ONS)
Division and Branch	Sector & Financial Accounts, Trade and Tourism
Responsible Divisional Director (DD)	Rob Pike
Name and contact details of person dealing with report	Chloe Gibbs chloe.gibbs@ons.gov.uk 01633 651988
Departmental Statistics Head of Profession	Debra Prestwood
Link to published statement about the breach (if relevant)	Notice added to the relevant publication tables: The UK trade in services by partner country: Quarter 2 (Apr to June) 2019 has been temporarily removed, to allow for further data suppression to take place and ensure full confidentiality of data. It will be reinstated as soon as possible. This does not affect any other elements of this release or main figures.
Date of breach report	23/10/19

2. Circumstances of breach

Relevant principle(s) and practice(s)	Principle T6 – Data governance Practice T6.4
Date of occurrence of breach	23/10/19
<p>The UK trade in services by partner country: April to June 2019 release, containing quarterly and annual data between 2016 Quarter 1 and 2019 Quarter 2, was published at 9:30am on the 23/10/19 containing data which was not fully suppressed and therefore disclosive – this was noticed by the Trade team very shortly after 9:30am on the same day. All primary disclosure control was applied correctly, and secondary disclosure control applied correctly within each quarterly and annual data period. However, secondary disclosure control was not applied when comparing quarterly suppression patterns to annual suppression patterns – this was due to a misspecification in the tool created to apply secondary disclosure (this was the first time this tool was used in a production round and is not used by other areas of ONS), as well as a step of the quality assurance process being missed, and both of these were due to lack of handover from the previous team. Secondary suppression is typically applied manually, as there is not an ONS-recommended tool available for secondary suppression for data of Trade’s complexity and multidimensional nature. Due to the full trade in services time series being revised in line with Pink Book 2019 improvements, secondary disclosure needed to be applied to the full time series. As a result, a tool was developed to assist with the secondary disclosure process and reduce the risk of not completing secondary suppression in time for publication – however, despite the tool not considering the annual/quarterly link in suppression, this should have been picked up as part of the quality assurance process.</p> <p>An example of where this annual/quarterly suppression issue occurred is; the annual figure for a breakdown was correctly published, however, only one of the equivalent quarters was suppressed. This suppressed quarterly figure could then be inadvertently derived by subtracting the sum of the remaining three quarters from the annual figure. Of the 7,304 time points available in each time period, this issue affected 3.3% of all data points in 2016, 2.4% in 2017 and 3.3% in 2018. This is the first time a breach of this kind has happened on Trade statistics.</p>	

The ONS Publishing support team were notified between 9:45am and 10:00am, with the Trade team requesting to remove the dataset from the ONS website. The disclosive data itself was then removed from the public facing website by 11:05 and the versioning corrected so that the dataset pages would return a valid page (previous release of the data published 25 July 2019) by 11:12am. The notice explaining the situation to users went up at 1:41pm (this was the earliest possible time to put the notice up as the original dataset needed to be removed from the internal system before the notice could be published).

3. Impact of the breach

The breach has caused a delay to users accessing the lower level data – these data were made available again on 29/10/19 (4 working days late) once full secondary suppression had been undertaken. The bulletin and dataset containing total country data were still available during the time the dataset was temporarily removed, which contained the key messages and were unaffected by this issue.

The dataset was removed after 1 hour and 35 minutes of being up on the website. In the time the dataset was on the website, the download page was viewed 44 times (this excludes views from ONS staff) which we can assume each resulted in a download. It is possible each user could have saved a copy of the data, but as the dataset was removed as quickly as possible this risk was minimised.

In practice, it is unlikely that a user would link the quarterly and annual data together in a way that would disclose an individual company. For example, if, of the downloaded files, a user linked the quarterly and annual data, it is still unlikely that sensitive data would be disclosed as the user would need insider information of that specific industry or specific businesses within that industry to identify an individual company. However, the dataset was removed from the website as quickly as possible to mitigate this risk, and steps are now being taken (as highlighted in the corrective actions section) to prevent this occurring again.

The release is not market sensitive and is a more granular cut of trade in services data which was already published as part of the Monthly Trade release on 10th October 2019. The release is standalone, and the affected breakdowns do not impact on other releases within ONS.

Key external users in other government departments were notified of the incident on the same day. No queries were received regarding the removal of the dataset by any users, including members of the public.

4. Corrective actions (taken or planned) to prevent re-occurrence

Short-term

Secondary disclosure control has been re-applied to the data, taking into account the potential to use the quarterly data to disclose the annual data, and vice versa. This was quality assured by multiple members of the Trade team and was completed on 29/10/19 (4 working days late) and reuploaded to the ONS website, ready for use by users.

Long-term

An internal review has been held documenting the improvements and actions needed within the quality assurance process. During this we reviewed the actions needed to improve the secondary disclosure process alongside any potential improvements to desk instructions and staff training.

We will also undertake a review of the process to test new tools used to apply disclosure control to make sure they are fully operational before use in a production round. This review will determine what documentation and steps will be required for signoff and will be completed by 01/01/20.

Whilst no one else in ONS is using the tool in question, we will be speaking to other areas of ONS and other government departments (in particular HMRC who also process large amounts of complex Trade data) to both share the issues we have faced and also to investigate if there are any solutions to secondary disclosure we could learn from. We will also involve the Statistical Disclosure Control team in Methods, Data and Research Division in these conversations. These conversations will be ongoing until the next quarterly Trade in services release on 22/01/20.