

BREACH OF THE CODE OF PRACTICE FOR OFFICIAL STATISTICS

This document reports a breach of the Code of Practice for Official Statistics, or the relevant Pre-release Access to Official Statistics Orders, to which the Code applies as if it included these orders.

1. Background information

Name of Statistical Output (including weblink to the relevant output or 'landing page')

1. **Output in the Construction Industry, September and Q3 2014** - <http://www.ons.gov.uk/ons/rel/construction/output-in-the-construction-industry/september-and-q3-2014/index.html>
2. **Capital Stocks and Consumption of Fixed Capital, 2014** - <http://www.ons.gov.uk/ons/rel/cap-stock/capital-stock--capital-consumption/capital-stocks-and-consumption-of-fixed-capital--2013/index.html>
3. **Profitability of UK Companies, Q2 2014** - <http://www.ons.gov.uk/ons/rel/pnfc2/profitability-of-uk-companies/q2-2014/index.html>
4. **Household Satellite Accounts, Valuing Household Clothing and Laundry Services in the UK** - <http://www.ons.gov.uk/ons/rel/wellbeing/household-satellite-accounts/valuing-household-clothing-and-laundry-services-in-the-uk/index.html>

Name of Producer Organisation

Office for National Statistics (ONS)

Name and contact details of the statistical Head of Profession (Lead Official in an Arm's Length Body) submitting this report, and date of report

Glen Watson, Director General, Office for National Statistics, Government Buildings, Cardiff Road, Newport, NP10 8XG
14 November 2014

2. Circumstances of breach

Relevant Principle/Protocol and Practice

Protocol 2 release practices/Practice 4 issue releases at 09:30 am
Issue statistical releases at the standard time of 9:30 am on a weekday, to maintain consistency and to permit time for users to understand and respond to the information during normal working hours.

Date of occurrence

14th November 2014

Nature of breach (including links with previous breaches, if any)

Publishing to the ONS website failed at 09:30 am, affecting all four statistical releases that were due to be published.

System failures were identified by the Publishing Support Team (PST) and IT team from approximately 09:20 am. By 09:27 am it had become clear that multiple items were failing in the publishing queue for the website. Following liaison with IT colleagues, PST invoked the Business Continuity Plan. The four statistical releases were then uploaded to the back-up website.

Customers were first alerted (via Twitter) to the availability of the data on the emergency website at 09:39 am. Shortly afterwards the homepage of the ONS website carried a prominent link to the back-up website.

Webpage formatting issues on the ONS website persisted until approximately 11.00 am, with some, but not all, data being accessible. All issues were resolved and an updated message was published on the ONS website homepage by 11:15 am.

Reasons for breach

The publishing failure was a result of human error. In preparation for an impending deployment of security enhancements, a member of staff from an external security testing company carried out penetration tests against the live website.

The tests in question should not have been run against the live website. Formal processes and a scoping document specified that the tests are run against a pre-production environment, and not the live environment.

The tests triggered the re-indexing of all website content for the live website (the 'index' holds all website content and when someone tries to access or search for content on the live site, it is the index that delivers this content). This re-index began at approximately 07:45 am. This in turn caused publishing processes to fail as each time an item of content is published it also results in re-indexing.

3. Reactions and impact (both within the producer body and outside)

The ONS Customer Contact Centre received three enquiries from customers, two specifically enquiring about construction data and one enquiring more generally about today's releases. All customers were directed to the back-up website. The teams responsible for producing the Outputs effected also received calls from customers and were given assistance to access the data they required.

Several tweets referred to the construction release. No other social media or other media enquiries or complaints were received for that release or the others.

Website analytics show that 97 successful visits were made to the construction release landing page, and there were 50 visits to the statistical bulletin page during the time that problems were being experienced. This confirms that customers were able to access data, albeit with the page formatting compromised.

4. Corrective actions taken to prevent reoccurrence of such a breach (include short-term actions, and long-term changes made to procedures)

- A website enhancement was deployed and tested successfully on 21 November 2014 which will prevent anyone accidentally triggering the re-indexing of the website content.
- ONS uses several security testing companies. The testing company responsible for this mistake will be taken off the list and not used in future.
- No testing will be carried out before 11.00 am - this will ensure no impact on 09.30 am publishing.
- An email alert to IT support staff notifying them that a re-indexing operation had been initiated would have helped to identify the issue. This will be put in place using SPLUNK software.
- All scoping documents for this type of testing will make it explicit that tests must only be run in the environment specified and will state prominently that live testing is out of scope.
- In addition, a joint IT/Digital Publishing workshop was held to review issues that could result in 09.30 am publishing breaches. A report will be produced with mitigations and recommendations.

5. Links to published statements about this breach

ONS was able to tweet a link to the back-up website at 09:39 am and, shortly afterwards, the website homepage carried the message:

Website issues 14 November 2014

We are currently experiencing problems with the ONS website. All of the releases published on 14 November 2014 can be accessed via our contingency website.

<http://onsbackup.org.uk/category/releases/>

The message was updated at 11:15:

Website issues 14 November 2014 - Resolved

UPDATE 11:15am. The website issues experienced today have now been resolved. ONS apologises for any inconvenience caused.

6. Any other relevant supporting material

7. Comments from the UK Statistics Authority