

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.

All breach reports are published on the UK Statistics Authority's website and need to explain (clearly and concisely) what happened to cause the breach and what is being/has been done by the statistical Head of Profession (HoP) to ensure the risk of recurrence is minimised.

1. Background information

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

Young people not in education, employment or training (NEET), UK: Nov 2016

<https://www.ons.gov.uk/releases/youngpeoplenotineducationemploymentortrainingneetuknov2016>

Focus on property crime, England and Wales: year ending March 2016

<https://www.ons.gov.uk/releases/propertycrimeinenglandandwalesyearendingmarch2016>

Index of private housing rental prices (IPHRP) in Great Britain, results: Oct 2016

<https://www.ons.gov.uk/releases/indexofprivatehousingrentalpricesiphrrpingreatbritainresultsoct2016>

Name of Producer Organisation

Office for National Statistics

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

Glenn Everett, Statistical Head of Profession, Office for National Statistics, Government Buildings, Cardiff Road, Newport, NP10 8XG.

Date: 24/11/2016

2. Circumstances of breach

Relevant Principle/Protocol and Practice

Protocol 2 Release Practices/Practice 4

Issue statistical releases at the standard time of 9.30am 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

24/11/2016, between 09:30 and 09:34

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

System issue: all releases published correctly but a bug on the website prevented the releases being visible to users either from the release calendar or a direct URL. All components of the releases were affected.

Reasons for breach

All releases published correctly but a bug on the website prevented the releases being visible on the front end of the website to users.

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

None known (nor expected as brief delay to non-market-sensitive release.)

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

Description:

- Front-end component failure resulted in partial website unavailability
- CloudFlare maintained full website availability using cached content
- 9:30 publishing completed successfully, but search index updates failed
- CloudFlare serving cached content meant the releases were not publicly available

What was the root cause?

- Front-end Zebedee Reader instances run out of available file descriptors
- Root cause for this is currently unknown:
 - No unexpected spikes in traffic were observed
 - Load balancer and EC2 instances were not showing abnormal load
 - No publishes were in-progress when Pingdom identified failures
 - An increase in load balancer failures (4xx and 5xx errors) was recorded at times matching the Pingdom alerts, suggesting the failure was internal

What changes have we implemented to prevent a recurrence?

- Reduced delay on sending Pingdom alerts
- Monitoring and alerting on load balancer metrics
- Monitoring and alerting on service log output
- Improved service health checking so unhealthy instances are removed

The issue has been fully investigated by the DEV (website development) Team and the steps taken above fully implemented.

The issue has not reoccurred since the date of this report.

A post mortem report has been produced which details: what happened, remedial action taken and lessons learnt.

Notes: Zebedee is ONS Digital's content management system back end
Pingdom is the software used to monitor the website performance

5. Links to published statements about this breach

None made as resolved by 09:34

6. Any other relevant supporting material

Post mortem report (summarised above)

https://docs.google.com/document/d/1xfVH6ZwM46egBQdarrxe3ooXV38JxYvtsP6BUn_jj0/edit