



EUROPEAN CONFERENCE ON QUALITY IN OFFICIAL STATISTICS 2024 ESTORIL - PORTUGAL



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QUALITY IN OFFICIAL STATISTICS
2024 ESTORIL - PORTUGAL

To mislead or not to mislead – why preventing misuse of statistics is more effective than combatting it

Elise Rohan, Office for Statistics Regulation, United Kingdom



eurostat 

The conference is partly
financed by the European Union



The Office for Statistics Regulation (OSR)

The regulatory arm of the UK Statistics Authority –
we regulate official statistics across the UK Statistical
System

**Promote and safeguard the production
and publication of official statistics**

Independent of official statistics producers - we do
not produce statistics and are separate from the Office
for National Statistics (ONS)

UK Statistics Authority
(UKSA)

Office for
National
Statistics
(ONS)

Office for Statistics
Regulation
(OSR)



Our vision – statistics should serve the public good

How statistics are produced

We uphold the trustworthiness, quality and value of statistics and data used as evidence

How statistics are valued

We develop a better understanding of the public good of statistics

How statistics are used

We protect the role of statistics in public debate



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Code of Practice for Statistics
Ensuring official statistics serve the public
Edition 2.0
February 2018

Office for Statistics Regulation
State of the Statistical System 2021/22
July 2022

Office for Statistics Regulation Guidance
Guidance for Models: Trustworthiness, Quality and Value.
July 2022

Code of Practice for Statistics
Home The Code Voluntary application Case studies Using official statistics Glossary
The Code of Practice for Statistics sets the standards that producers of official statistics should commit to.
The Code benefits all of us, as users and citizens. Compliance with the Code gives you confidence that published government statistics have public value, are high quality, and are produced by people and organisations that are trustworthy.

UK politics & policy + Add to myFT
UK statistics watchdog warns over government use of Covid data

Weights and measures: how consultations relate to OSR's role
Share this: [Facebook](#) [LinkedIn](#)
In our latest blog, Director General Ed Humpherson responds to concerns raised with OSR regarding the recent consultation by Department for Business, Energy & Industrial Strategy on the Choice on units of measurements: marking and sales.
This blog was amended on 4 October 2022 to provide further clarity about question design
Published 21 September 2022
Author Ed Humpherson, Director General, Statistics Regulation

Office for Statistics Regulation
Statistical leadership
Making analytical insight count
February 2021

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Intelligent transparency
Transparency and clarity support public confidence in statistics and the organisations that produce them and minimise the risk of misinterpretation of statistics and data.
Statistics and data should serve the public good. They should allow individuals to reach informed decisions, answer important questions and provide a mechanism for holding government to account. Statistics and data also underpins successful implementation of government policies, and individuals' views on the effectiveness of policy decisions.
Our latest blogs on transparency Our latest work on transparency

Office for Statistics Regulation
A UK-wide public dialogue exploring what the public perceive as 'public good' use of data for research and statistics
October 2022



Coronavirus: Government's use of testing figures 'falls well short' of normal standards, warns chief statistician

'Not surpr
Andrew
Tuesday 2

Matt Hancock blasted by UK statistics watchdog over 'inadequate' testing figures

The UK
the "ex

Hancock defends virus statistics after criticism

Coronavirus 40,000 de
🕒 2 June 2020

Statistics watchdog: ministers still misleading public on coronavirus tests

avirus testing total at

ITV REPORT 2 June 2020 at 12:13pm

Head of UK S
clarity from g

- [Coronavir](#)
- [See all our](#)

Statistics watchdog criticises government's inadequate data on coronavirus tests





Defining misleadingness

Misleadingness, how to define it and what this means in our context as a statistics regulator, is something that we routinely come back to.

This started with a think piece in May 2020 and a follow up think piece in May 2021 with input from Jenny Saul, a philosopher who has written and thought extensively about misleadingness. To arrive at a definition, we considered three elements:

- Materiality and intention
- Audience
- Case-based

This work led us to a working definition of:

“We are concerned when, on a question of significant public interest, the way statistics are used is likely to leave audiences believing something which the relevant statistical evidence would not support.”



Intelligent Transparency

Equality of access

Data used by government in the public domain should be made available to all in an accessible and timely way.

Enhancing understanding

Sources for figures should be cited and appropriate explanation of context, including strengths and limitations, communicated clearly alongside figures.

Independent Decision Making and Leadership

Decisions about the publication of statistics and data, such as content and timing, should be independent of political influence and policy processes.

Public conversations focus on the important issues – rather than about a lack of transparency which can result in confusion about where numbers come from or accusations that governments cherry pick or manipulate data

Builds trust in the organisations which produce data and statistics

Enhances the value of data and statistics e.g. by allowing independent analysis to be carried by others



Bringing our misleadingness definition up to date

Since the launch of the campaign, OSR has continued to promote and embed intelligent transparency across government.

However, since 2021, we have seen more cases where the use of statistics is misleading due to a lack of context rather than the figure not being in the public domain.

In 2023, we commissioned a PhD philosophy student, Kyle Adams from the University of Waterloo, to review our definition of misleadingness. He sought to answer the following questions:

- Does OSR need a definition of misleadingness, or does it just need a guideline?
- Is it appropriate to base a definition on an audience's beliefs?
- What do we mean exactly by “audiences”?



Findings from our roundtable with philosophers

- Trying to correct or remove information after it has been digested is not effective.
- The structure of the internet and social media means statistics can gain a life of their own, even when all the right steps are taken by the producer.
- Social media flattens information to the same level of importance so when misuse is seen among a long list of information, subtly misleading claims can slip through.
- The audience of ‘the public’ contains lots of different groups within it and there is a risk that tailoring the communication to the lowest level of understanding opens up more opportunities for the communication to be misinterpreted.



Identifying best practice around communication

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David Pares
Head of Communications, HM Treasury
(by email)

Dear David,

HM Treasury Chart on inflation

I am writing to you about a [graph](#) posted on the @HMTreasury Twitter timeline in February that shows the annual inflation rates according to the Consumer Price Index (CPI) from October 2022 to January 2023. This was an update to a similar [graph](#) posted on 19 January:



We consider that the way the tweet presents this data to be misleading. The chart gives a misleading impression of the scale of the deceleration in inflation, due to the y-axis beginning at 8%.

UK Statistics Authority

Sir Robert Chote, Chair
Fry Building, 2 Marsham Street, London, SW1P 4DF
robert.chote@statistics.gov.uk
statisticsauthority.gov.uk

From Rachel Reeves MP
Shadow Chancellor of the Exchequer
(email)

24 April 2023

Dear Shadow Chancellor,

I am writing to you about a graphic¹ posted on your Twitter timeline on 14 March showing GDP growth rates forecast for each of the G7 countries by the International Monetary Fund in January².

An important role of data visualisation is to aid understanding of the data. But in this case the graph is misleading as neither the piles of coins nor the flags display the growth rates to scale, as shown in the annotated version below. That said, it remains the case that the UK was the only country for which negative growth was forecast.

Details from the UK Statistics Authority have spoken to your office on this subject. I am sure you will find this information helpful. I am sure you will find this information helpful. I am sure you will find this information helpful.

Yours sincerely,

Robert Chote
Chair



Office for Statistics Regulation

Internship Project
Statistical Literacy

Jessica McMaster
Cambridge Grand Challenges
September 2022

Insight Programme
Approaches to communicating uncertainty in the statistical system
September 2022

¹ twitter.com/RachelReevesMP/status/163562884428657102, @RachelReevesMP on Twitter, 14 March 2023
² [World Economic Outlook Update](#), International Monetary Fund, 30 January 2023



What does this mean for OSR

We have agreed a revised definition of misleadingness for our context:

“We are concerned when, on a question of significant public interest, statistics are used to communicate a descriptive statement that the wider relevant statistical evidence would not support, despite otherwise being an accurate statement.”

We anticipate that the 2024 General Election will be challenging due to the increasingly online nature of election campaigns. The lessons learned from the 2019 General Election and work since point to the need to:

- Focus on improving the speed of our interventions.
- Consider the channels in which we intervene.



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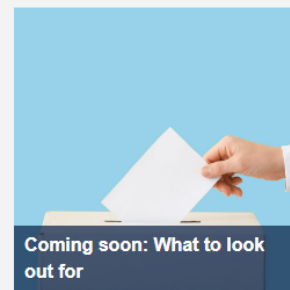
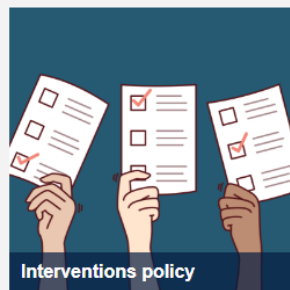
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Election 2024

For statistics to serve the public good, they should support democratic debate. This is particularly important during a general election campaign, when statistics play a role in informing decisions made by the electorate. OSR has an important role in promoting and safeguarding the use of statistics in public debate. You can read more about our role during a general election in this [blog post](#).

As a UK general election must be called by 17 December 2024, government statistics and data may be under additional scrutiny as campaigns begin to run.

This page brings together our new and existing guidance to help users navigate statistical claims surrounding an election and to support those working with statistics in upholding the Code of Practice for Statistics.



Election 2024: Guidance on the use of statistics in a pre-election period

The Office for Statistics Regulation's (OSR) role is to promote and safeguard the use of statistics in public debate. We use our independent voice to stand up for statistics and to represent the public, reporting publicly where we have concerns and highlighting good practice.

Ahead of the pre-election period, OSR's expectations of organisations remain the same as any other time. OSR has a clear [interventions policy](#) in public debate.

Government statistics and data are therefore it is essential that organisations follow the principles of [Intelligent Transparency](#).

Requests for statistical support should remain focused on supporting the public good.

Officials involved in producing government statistics ahead of an election, at the geography level, and there is a need to take steps to reflect these in the public domain.

Pre-election period

The Cabinet Office and Devolved Administrations set out the guidance on statements or publishing new analysis during the pre-election period. Statistics fieldwork should continue to be published during the pre-election period.

To align with these pre-election period, the guiding principle is to avoid misleading to the point it could cause confusion.

Producers should refer to this guidance when making any public statements made during the pre-election period that are already in the public domain.

Where unpublished data are referred to in a public statement, the Head of Profession for Statistics should be consulted. This applies to the unexpected cases where the Head of Profession for Statistics take a broad scope in our internal analysis or unpublished data. We would expect producers to be transparent.

Where misinterpretation arises from a lack of context rather than the figure not being in the public domain, OSR will work with producers to publish a clarification and any context on their behalf.

The UK Statistics Authority owns and maintains [guidance regarding the publication of statistics on polling day](#).

Data in debate: The role of statistics in elections

Share this:



In our latest blog, our Head of Casework and Director General set out the guidance and support available for navigating statistics during an election campaign, and our role in publicly highlighting cases where statistics and data are not published or presented in a misleading way.

[Intelligent transparency](#) is something we talk about a lot in OSR. It involves taking an open, clear, and accessible approach to the release and use of data and statistics by default. It's something we care about deeply, as public confidence in publicly quoted statistics is best enabled when people can verify and understand what they hear.

Taking a transparent approach by default will be particularly important during the upcoming general election campaign, where statistics will likely play a role in informing decisions made by the electorate but opportunities for governments to publish new analysis will be restricted. This is because in the weeks leading up to an election, known as the pre-election period, the Cabinet Office and Devolved Administrations set rules which limit public statements or the publishing of new policies and outputs.

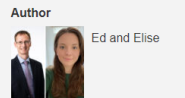
Official statistics are unique in this respect as routine and preannounced statistics can continue to be published during this time, in line with the Code of Practice for Statistics. However, given that the pre-election ushers in a period of public silence for most government department activity, the publication of new information should be by exception. Any public statements made during the pre-election period should only refer to statistics and data that are already in the public domain to ensure that the figures can be verified and to avoid the need to publish new figures.

Part of our role as a statistics regulator is to promote and safeguard the use of statistics in public debate. We do not act to inhibit or police debate, and we recognise that those campaigning will want to draw on a wide range of sources, including statistics, to make their case for political office. Nevertheless, we will publicly highlight cases where campaigning parties have made statements that draw on statistics and data that are not published or presented in a misleading way.

Our [interventions policy](#) guides how we make these interventions, but we recognise that election campaigns require particularly careful judgement about when to intervene. This is why we've published our [Election 2024 webpage](#), which brings together our guidance and support on election campaigns. This includes new guidance on the use of statistics in a pre-election period for government departments which sets out our expectations for how they should handle cases where unpublished information is referred to unexpectedly.



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Thank you for listening

Find out more and get in touch:

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Find us on Twitter: [@StatsRegulation](https://twitter.com/StatsRegulation)



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The conference is partly
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