

DISCLOSURE CONTROL AND ROUNDING POLICY

Purpose

Falmouth University is required under the Freedom of Information Act 2000 (FOI) to make available to the public, information which is in the public interest in order to further the transparency of government and public bodies.

As a Data Controller Falmouth University is also required under the General Data Protection Regulation (GDPR) and the Data Protection Act 2018 (DPA) maintain the rights to privacy of individuals in processing and storing data through its legitimate business operations.

This policy aims to clarify how we can publish information either planned over a period of time or through requests received under FOI legislation. Central government has an established series of policies ranging from the Ministry of Defence through to the Office for National Statistics, along with organisations such as the Higher Education Statistics Agency, which sets out guidance on methods for rounding and suppression of statistical data which describes small groups and could be used to identify individuals in certain cases. By adopting this approach, Falmouth University aims to balance the need to be transparent with the rights and freedoms of individuals.

Scope

All information assets generated or processed by Falmouth University as the designated **Data Controller** are governed by this policy without exception and includes those created prior to the publishing of this policy. This will include information in any format, including but not limited to;

- Electronic information, i.e. data stored within any digital storage medium.
- Paper information, i.e. records, notes, minutes, etc.
- Information shared orally or visually, i.e. telephone or video conference meetings.

Where Falmouth University works with a 3rd party in the capacity as a **Data Processor**, the 3rd party **Data Controller** will be responsible for setting the disclosure control and rounding policy or formally adopting this policy for that specific purpose.

Responsibility

All individuals working for or with Falmouth University are responsible for following this policy when publishing any and all information.

Enforcement

Any individual working for or studying with Falmouth University who fails to comply with this policy may be subject to the instigation of disciplinary procedures and, in certain circumstances, legal action may be taken. Failure of a contractor to comply may lead to the immediate cancellation of a contract and/or appropriate legal action.

The designated Data Protection Officer will have an overriding legal duty to report any and all breaches to the Information Commissioners Office within 72 hours of discovery, after a thorough initial investigation and assessment of the risks to the data subjects' risks and freedoms.

Risk Assessment for disclosure control

All staff must consider disclosure control when presenting any statistical or numerical information to safeguard the rights and freedoms of individuals, to protect commercially sensitive information or where sharing the statistics may result in harm to an individual.

Method

Falmouth University has adopted the formal Standard Rounding Methodology as specified by HESA and is based on 7 basic rules¹;

1. All numbers are rounded to the nearest multiple of 5.
2. Any number lower than 2.5 is rounded to 0.
3. Halves are always rounded upwards (e.g. 2.5 is rounded to 5).
4. Percentages based on fewer than 22.5 individuals are suppressed.
5. Averages based on 7 or fewer individuals are suppressed.
6. The above requirements apply to headcounts, FPE and FTE data.
7. Financial data is not rounded.

These rules, and the examples and guidance below are adapted from the guidance issued by HESA on their website.

Example

Below is a table of example data prepared from raw data;

| Department | Female Staff | Female Average Salary | Male Staff | Male Average Salary | Total Staff | % Female Staff |
|--------------|--------------|-----------------------|------------|---------------------|-------------|----------------|
| Biology | 91 | £40,556 | 153 | £41,002 | 244 | 37.3% |
| Chemistry | 7 | £39,100 | 17 | £40,351 | 24 | 29.2% |
| Physics | 4 | £41,246 | 14 | £41,128 | 18 | 22.2% |
| Total | 102 | £40,483 | 184 | £40,951 | 286 | 35.7% |

Below is how the data will appear after applying the rounding method described above;

| Department | Female Staff | Female Average Salary | Male Staff | Male Average Salary | Total Staff | % Female Staff |
|--------------|--------------|-----------------------|------------|---------------------|-------------|----------------|
| Biology | 90 | £40,556 | 155 | £41,002 | 245 | 37.3% |
| Chemistry | 5 | -- | 15 | £40,351 | 25 | 29.2% |
| Physics | 5 | -- | 15 | £41,128 | 20 | -- |
| Total | 100 | £40,483 | 185 | £40,951 | 285 | 35.7% |

In the second table, the rules have been applied as follows;

- All the counts of individuals have been rounded to the nearest multiple of 5 as per the first rule in the method.
- The total number of staff in the fictional chemistry department doesn't match the sum of female and male staff because the real sum (24) is rounded independently of the constituent parts as per the first rule in the method.
- Average salaries of female staff within the fictional chemistry and physics departments are suppressed because there are 7 or fewer people in these groups as per the fifth rule in the method.
- The percentage of female staff within the fictional physics department is suppressed because there are fewer than 22.5 staff overall as per the fourth rule in the method.

Rationale

Falmouth University has adopted this approach in order to reduce the risk of identifying individuals from published figures.

By **rounding** all figures to the nearest multiple of 5 we are helping to prevent multiple sources of data being combined to identify small numbers. As an example, if a figure were released showing 24 students were studying physics, and a subsequent figure showed 23 students on the physics course where of white / European ethnic origin. The two tables combined would show that there is exactly one person whose ethnic origin is not white / European. By rounding the numbers this potentially personal information is obscured.

In suppressing **percentages** for small groups we aim to reduce the likelihood of giving away the true un-rounded figures in any published data. As an example, the rounded figures in the first table below could only match the percentages for one set of original unrounded data;

| | | |
|--------------|-----------|---------------|
| Female | 0 | 12.5% |
| Male | 5 | 87.5% |
| Total | 10 | 100.0% |

The only un-rounded figures that could give these percentages are;

| | | |
|--------------|----------|---------------|
| Female | 1 | 12.5% |
| Male | 7 | 87.5% |
| Total | 8 | 100.0% |

Suppressing percentages where the total is less than 22.5 (rounding to 20) significantly reduces the risk, but doesn't eliminate it completely. This is an acceptable risk as it balances the privacy of individuals against the need to produce useful data for publication and FOI response.

Averages are suppressed only for much smaller groups of 7 people or fewer. An average salary for one person will be that person's actual salary. In a small group of people some of them could work out the salary of another member by calculating backwards from their own salaries. The more people in the group, the less plausible this scenario becomes. By suppressing averages based on groups of 7 or fewer (anything rounded to 0 or 5) this eliminates the most likely chances of working out someone's personal information.

How to apply the method

The easiest way to apply rounding is to use the **MROUND** function in Microsoft Excel:
=MROUND(cellref,5)

To suppress percentages and averages you can use the **IF** function:

Percentages: **=IF(cellref1<22.5,"..",cellref2/cellref1)**

Averages: **=IF(cellref1<=7,"..",cellref2/cellref1)**

Version Control

| Version Number | Author | Purpose/Change | Date |
|----------------|-------------------------|----------------|------------|
| 0-1 | Ben Bull, IG Manager | Initial Draft | 27/07/2018 |
| 1-0 | IT Group | Approved | 05/09/2018 |

ⁱ Hesa.ac.uk. (2018). Rounding and suppression to anonymise statistics | HESA. [online] Available at: <https://www.hesa.ac.uk/about/regulation/data-protection/rounding-and-suppression-anonymise-statistics> [Accessed 27 Jul. 2018].