

### 1. Introduction

- 1.1 These guidelines set out the format to be adopted for papers/articles/books submitted to the Actuaries Institute for presentation at events, inclusion in any publications or the website.

**Note:** See separate Author Guidelines for the *Australian Journal of Actuarial Practice*. See also separate specifications for artwork and graphics for *Actuaries* magazine.

### 2. Formatting Requirements

- 2.1 Papers should be submitted electronically (via email or on disk). The preferred font is *Century Gothic* 11 pt. Papers should generally be single-spaced; two lines should be left between paragraphs, headings etc (ie. two 'returns' or 'enter' on the keyboard). New paragraphs do not need to be indented.
- 2.2. Papers should have the following formatting:
- Left and right-hand justified.
  - Paper/article title in *Century Gothic*, 24 point, **bold**, Centred.
  - Author name centred under title in *Century Gothic*, 18 point, **bold**.
  - All other headings (except the Abstract – see point 2.3 below) should be left-justified. Major/section headings should be in *Century Gothic*, 12 point, **Bold**. Secondary headings should be in *Century Gothic*, 11 point, **Bold**.
  - Numbering, bullet points, etc may be used as necessary. Please use plain round bullets in normal 11 point size, e.g. •
  - Highlighting or emphasis of words, phrases, paragraphs etc, should be achieved with use of the 'bold' or 'italic' functions (e.g., **bold**, *italic*). Please do not use the underline function (e.g. Underscore) for emphasising text, headings, etc.
  - Refer to 'Guide to preparing graphs' at the end of this *Guideline for Authors* for detailed instructions on how to prepare graphs, figures, captions for graphs/figures, etc, for inclusion in Actuaries Institute papers/ articles/books.
- 2.3 All papers should include an Abstract and Keywords at the beginning of the document. The heading 'Abstract' should be centred, in 12 point bold, and followed by the abstract text in 11 point. The Keywords should follow the abstract text in italicized font as follows:  
*Keywords: author; author guidelines; publication.*
- 2.4 The Actuaries Institute prefers to use 'End Notes' at the end of a paper, rather than footnotes at the bottom of each page. End Notes should be typed in the same font and point size as the paper, ie. *Century Gothic* – 11 point.
- 2.5 Page numbering should not appear on the first (title) page. Each page after the title page should be numbered in the margin footer (in MS Word, select 'View', 'Header/Footer') as follows: *Century Gothic*, 9 point, **Bold**, Centred.
- 2.6 The title of the paper (or a shortened version if the full title is too long) should appear on all pages (except the first title page) in the margin header (in MS Word, select 'View', 'Header/Footer') as follows: *Century Gothic*, 10 point, **Bold**, Centred.

- 2.7 Minimum formatting should be used, other than as indicated in Points 2.1 to 2.5 above; formatting such as colours, alignment, indentation, line spacing, etc should either not be used, or kept to a minimum.
- 2.8 Council requests that sexist language be avoided where possible.

### 3. References

- 3.1 Ideas and concepts obtained from elsewhere should be accordingly acknowledged as 'References'.
- 3.2. References should appear at the end of the paper and should follow the style and format of the following examples for book and article:
  - Bellis C, 1997, *The Future Managers – Actuaries in Australia 1853-1997*, The Institute of Actuaries of Australia.
  - Barker M, 1999, *Some Thoughts on Systematic Risk*, Convention 1999 Workshop Papers, Vol II, The Institute of Actuaries of Australia.
  - Benjamin B & Pollard J H, 1993, *The Analysis of Mortality and Other Actuarial Statistics*, The Institute of Actuaries, London & The Faculty of Actuaries, Edinburgh.
  - Waldron I, 1991a, 'Effects of labor force participation on sex differences in mortality and morbidity', in *Women, Work and Health*, eds M Frankenhaeuser, U Lundberg & M Chesney, Plenum Press, New York.
- 3.3 References referred to in the paper should:
  - state the author's name (e.g. "Spain"), followed by
  - year of publication (e.g. "Spain (1982)")
  - year of publication plus alpha letter where the author has more than one publication listed for that year (e.g. "Spain (1982a)")
  - where relevant, include page number/s (e.g. "Spain (1982) p. 23" or "Spain (1982) pp. 23-27")

### 4. Copyright

- 4.1 The copyright of sessional and convention papers presented by members at the Actuaries Institute events vests with the author(s). On signature of the Actuaries Institute Publication Agreement, the Author/s assign the Actuaries Institute with the rights to publish the Work, whether in print, electronic or any other medium of publication, in any publication the Actuaries Institute publishes itself.
- 4.2 The Author/s agree that such assignment means that, if the Work is subsequently published in another publication, they will acknowledge the original Actuaries Institute Publication. (e.g. 'First published at Financial Services Forum, Actuaries Institute')
- 4.3 The Author/s also warrant that they are not aware that the Work contains anything that is defamatory or indecent or which infringes the statutory or common law rights of any third parties.
- 4.4 The Author/s have obtained any relevant permissions to use work the copyright in which belongs to any other person or persons and acknowledge these in the Work.
- 4.5 The Actuaries Institute agrees to publish the Work in any Actuaries Institute publication, whether in print, electronic or any other medium. The Work shall not be edited or abridged without the approval of the authors except for minor changes to spelling and style.
- 4.6 The Actuaries Institute will ensure that all reproductions of the Work acknowledge the Author/s as the author/s, and include their agreed copyright statement: (list terms / copyright statement here).
- 4.7 Paper authors and peer reviewers should ensure that the appropriate written permissions are obtained for any reproductions proposed for inclusion in any papers/articles/books. Copy of permission details are required to be lodged with the Actuaries Institute.

## Guidelines for preparing graphs

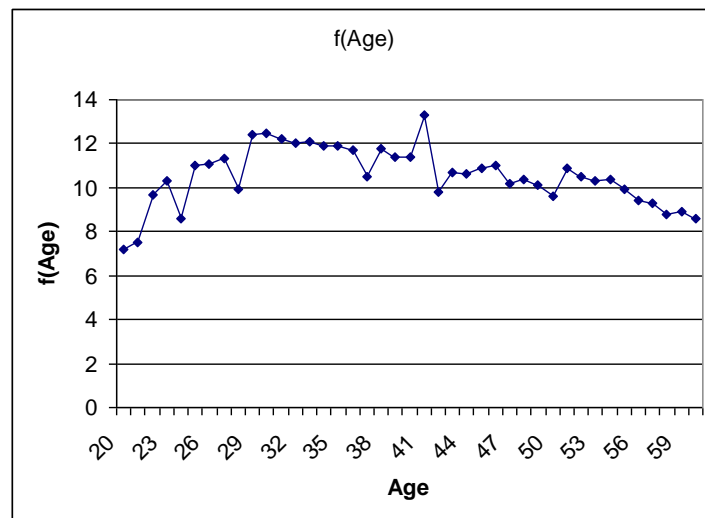
**N.B. Difficulties with graph resolution may result in a paper being returned to an author for revision.**

### Graphs

A graph should enhance the author's argument, never detract from it. To this end each author should ensure the legibility of their graphs and consider whether the form of the graph is the most suitable available. In addition, the Actuaries Institute has some preferences for the appearance of graphs, so that a consistent "look" is presented throughout.

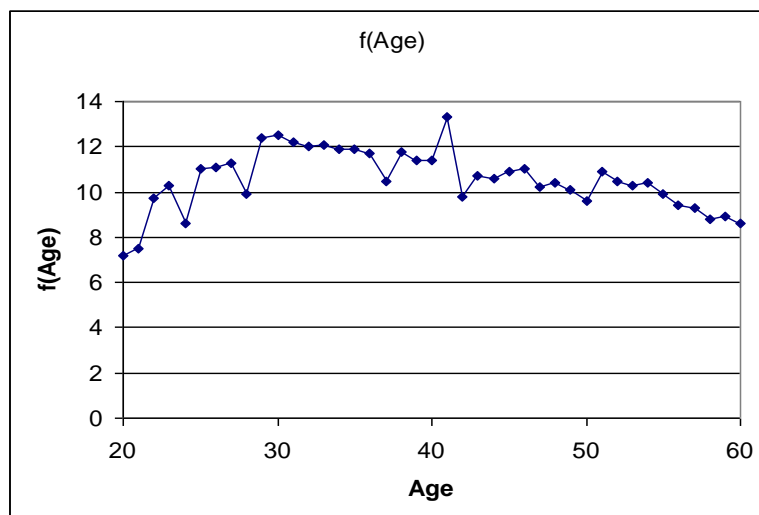
### Suitability

There may often be more than one way to plot a data set. For example, figures 1 and 2 show the difference between Excel's "line" and "xy" charts used to plot the same data.



**Figure 1: An Excel "line" chart. The horizontal axis represents categorical data.**

In the "line" chart above Excel assumes that the horizontal axis represents categorical data, whereas in the "xy" chart below the horizontal axis is assumed to represent continuous, numeric data. In the "line" chart the horizontal axis is cluttered by the age labels and it is not clear which label corresponds to which data point. The age label does not correspond to the tick mark directly above it, but to the space between tick marks which the angled label "points" to. The "xy" chart in figure 2 displays the age data in a much more intuitive way and is to be preferred for this data.



**Figure 2: An Excel "xy" chart. The horizontal axis represents continuous, numeric data.**

## Legibility

Authors will usually produce their documents on A4 paper with a paragraph width of 15 to 16 cms. Sometimes, a reduction in the size of the document may be necessary from A4 format to publication size. Graphs will always remain legible without the text being too large, provided authors ensure their graphs are no wider than 16 cms on an A4 page and use a font size of between 12 and 15 points for all text within the graph, including titles, axis labels and legends. Any "auto scale" feature in the graphing tool should be turned off, so that font sizes of graph elements will not change if the overall dimensions of the graph are altered. In Excel the overall font may be set to 12 points and the "auto scale" feature turned off in the "Format Chart Area" dialogue box as shown in Figure 3 below.

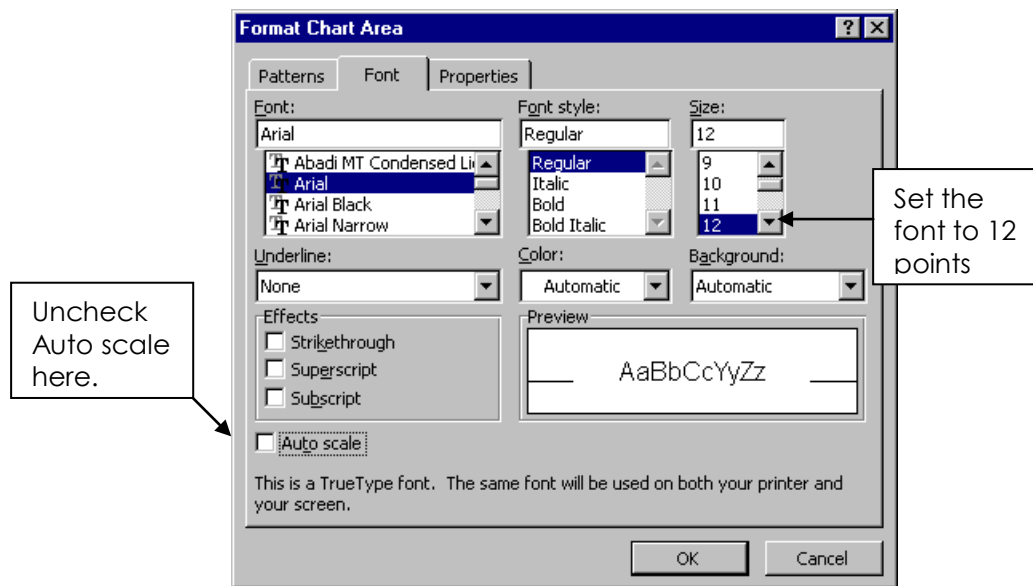


Figure 3: The "Format Chart Area" dialogue box in Excel with the "Font" tab selected.

## Preferences for Graphs

### Appearance of graphs

Colours and patterns should be selected with black and white printing in mind. The graph pane should not be coloured, but should be clear or white in appearance. Gridlines should be used minimally and with discretion. Where used, they should enhance the readability of the graph.

The horizontal axis of a graph should not be cluttered with labels. When this happens, the author is often tempted to reduce the font size to fit all the labels in, with the result being barely legible. As Actuaries Institute publications may further reduce the size of the graph, the graph may quickly become totally illegible, necessitating the paper's immediate return to the author for revision. The solution to this problem is to change to a more suitable type of graph, e.g. a bar graph instead of a column graph, or an xy graph instead of a line graph.

### Captions

In general, graph captions are inserted within the Word document (or other word processing program), so that automatic numbering of captions may be applied and so that captions may be easily formatted with consistent document styles.

Traditionally, publishers have placed captions below figures and above tables – this is the preferred format for Actuaries Institute papers; however, the Actuaries Institute will accept captions above both figures and tables.

To allow for the proper placement of captions within the Word document, any graph title within the graph itself should be cropped when pasting the graph into the Word document (see Figure 4 below). If the graph has a border line around it, it will not be possible to crop the title without also cropping the border; in this case, the border should be either omitted or applied in Word.

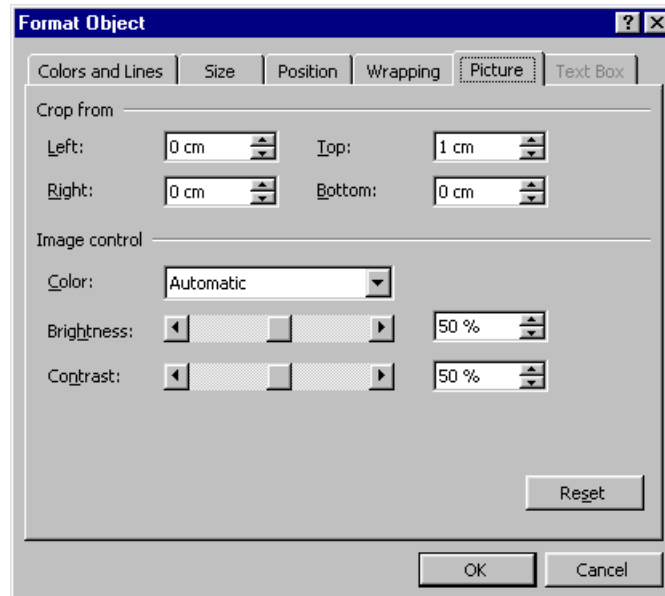


Figure 4: Word dialogue box used to crop 1 cm from the top of a graph.

## To float or place inline?

Word has two types of graphic:

A "floating" graphic, when selected, has no line around it, but has white squares at the corners and mid-way along the sides. This type of graphic can be placed anywhere on a page and is "anchored" to a particular paragraph. Problems may arise when cutting and pasting a "floating" graphic or when adding or deleting nearby text.

An "inline" graphic, when selected, will have a black line around it with black squares at the corners and at the mid-way point of the sides. This type of graphic is treated just like a large character within the text. An "inline" graphic is easier to manage than a "floating" graphic and so causes fewer problems for authors. This is the Institute's preferred format for graphics.

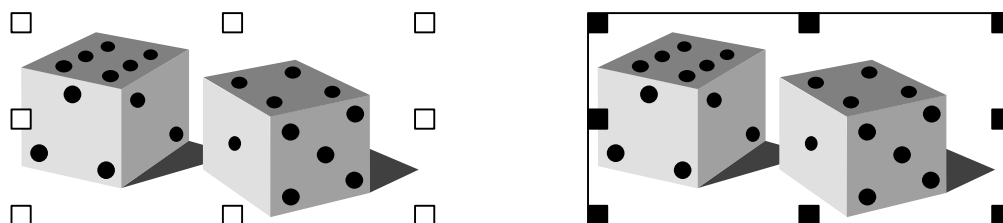
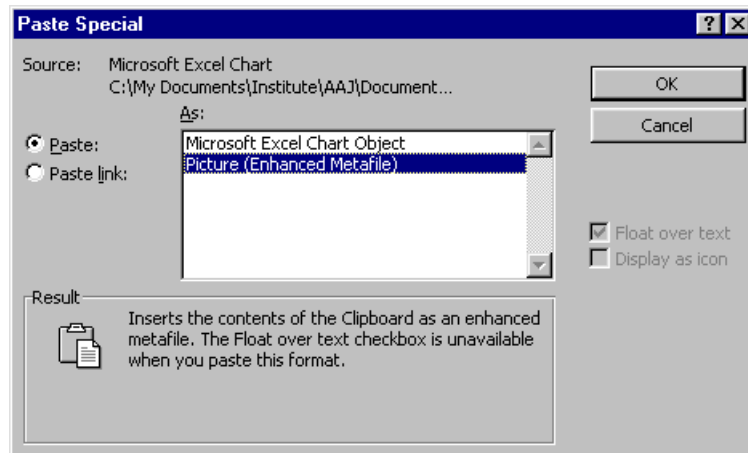


Figure 5: The appearance of a "floating" graphic (on the left) and an "inline" graphic (on the right) when selected.

## Pasting the graph into the document

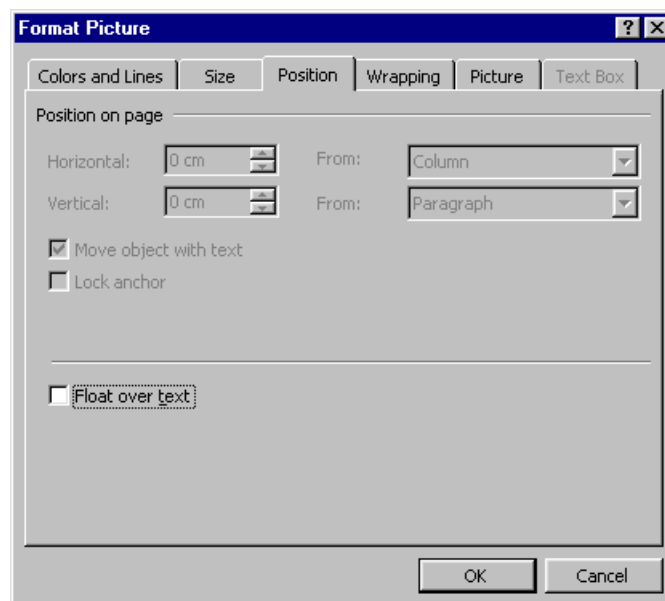
Graphs should be pasted "inline" (see above) and centred on the page. The graph should not be linked to the source spreadsheet. When an author comes to paste a graph in a document, say from Excel to Word, the following steps should be taken:

- Copy the graph as usual in the spreadsheet.
- In Word, click in the document where you want the graph to appear, then select Paste Special from the Edit menu.
- In the Paste Special dialogue box (as shown in Figure 6 below), select "Paste" (not Paste link) on the left, select "Picture" in the central list, and uncheck "Float over text" if it is not greyed out. Then click the OK button.



**Figure 6: The Paste Special dialogue box in Word showing the correct settings for pasting an Excel graph.**

If the "Float over text" option was checked, but greyed out, in the Paste Special dialogue box, the picture will be pasted as "floating". Immediately convert the picture to "inline" while it is still selected by choosing Picture from the Format menu, and unchecking "Float over text" on the Picture tab as shown in Figure 7 below.



**Figure 7: The Format Picture dialogue box in Word showing "Float over text" unchecked.**