

GALBRAITH CONSULTING LIMITED
PROJECT 120
ISO TECHNICAL AUTHOR TRAINING

REPORT for WEEK 25th FEBRUARY to 1st MARCH 2001

SUMMARY

David Galbraith attended a week long training session hosted by two ISO technical editors (TEs) and funded by OGP. The training was found to be extremely useful and we expect that documents submitted following the training will be closer to ISO requirements and hence should pass through their FDIS completion more easily. In the short term there will be some delay as documents shortly to be submitted require further modification to more fully comply with their requirements.

There was also benefit in meeting with the other TC67 technical authors (TAs) and the discussions prompted by authors' comments were useful.

We recommend that such training is continued for other TC67 technical authors, but that where possible the training is given earlier in their involvement with TC67. We suggest that consideration be given to a short (1 or 2 day) session for draughtspersons, although it is noted that none of the ISO draughting office are fluent in English.

DISCUSSION

General

The subjects covered in the course addressed most aspects of the preparation of ISO standards, and knowledge was picked up in all areas covered, even those where we thought we were already up to speed.

New Directives part 2 and template (Version 2.0)

Copies of the new directives (Part 2, superseding the previous Part 3) were issued, together with paper copies of the overheads used and copies of the model documents (Rice model). Having used different versions of the ISO template with different version of Microsoft Word it is worth noting that the template / word package is becoming both easier to use and more robust (GCL use MS Office XP containing word 2002). Indeed we seem to have a more robust system than ISO themselves use (MS Office 2000), in that features that used to cause errors for us no longer do so, although they still do for ISO. A particular example is an apparent error on saving files (claiming to have run out of disk space) which is caused by having too many graphics (formulae) in a document. This has previously caused us numerous problems.

It was learnt that to update a document from one template version to the next is best achieved by recreating a blank document and copying text across in blocks, rather than by just attaching the latest version.

The ISO file Refstd2e.pdf, which is the (English language) reference manual for the template version 2.0 should be seen as an indispensable reference document and while Annex B of this document contains a correlation of style with use I suggest a further annex containing the definition of the styles is included to help with forensic work (finding out if and how a style has become corrupted during the preparation of a document).

Use of language

The use of language (Directives Part 2, Annex G) was further clarified beyond the guidance already provided on TechEd, the TC 67 TA's resource.

Clarification of what we need to get right and where it is less important

The ISO TEs went into some detail about the things that they look for and had examples of where they have had to make major or frequent modifications. A significant message in this section was the need for unambiguous and clear text; examples of API documents were produced where the text is unclear were produced. As we all know, API documents are often loosely worded on the basis that the users "know what is meant". A major and continuing SC 7/WG 3 editing panel task has been trying to improve clarity and remove scope for misinterpretation. This takes a huge amount of effort.

There is more scope for the use of "NOTES" and "EXAMPLES" than we have used in WG 3 and I will be including this in my finalisation of the next issue of our documents.

The attention given to informative annexes is significantly less than that for the normative text although correct formatting remains important.

Writing style

With the (volumetrically) substantial documents being produced by SC 7, frequently based on preceding standards, it is not possible for one person to prepare all the text, however it is desirable, and much easier for the user, if a consistent style (phraseology and layout) is used. ISO 19902 has been criticised for the changes in style through the document even though it has been critically examined by the editing panel. It is difficult to recommend how this is most easily achieved since in revising text the technical author is invariably influenced by the text he is reviewing. The importance of "English Mother Tongue" authors was stressed.

Use of symbols and formulae

There were a number of important things in this section, including:-

Subscripts and superscripts do not use the Microsoft subscript / superscript commands, but are specifically defined with a text height of two points less than the adjacent text (i.e. 8 point for normal text of 10 point, and 7 point in body text (9 Pt) in Notes, Tables and Figures) and with an offset of 3 points. The offset is achieved using Microsoft Word "Raise" or "Lower" in Format>Font>Character Spacing.Position

In the WG 3 texts we have used MathType / Equation Editor for symbols within the text, however, although this ensures identical format (i.e. Times new roman italic looks the same in the symbols and in the text), it is not accepted since it introduces graphics into the main text.

In some cases in WG 3 we have qualifications on formulae, such as:-

$$A = B + C \qquad \qquad \qquad \text{for } B > 3 \qquad \qquad \qquad (1)$$

$$A = B + 2C \qquad \qquad \qquad \text{for } B < 3 \qquad \qquad \qquad (2)$$

This is permitted by ISO with the additional tab being put into each applicable formulae style as it is used.

ISO do not seem to worry that the fonts between text, equations and figures are slightly different although called the same thing. Presumably this is sorted out as a document is put into the publication software.

Figures and Tables

There were a few things in this section which I was not aware of, even though they are explicitly stated in the directives. We were encouraged to use notes and footnotes to advantage in both figures and tables. The contents of tables are defined in "body text" format which both reduces text height by 1 point and adjusts the "before" and "after" spacing to produce a neater looking table.

Figures (drawing content)

The ISO drawing office has some quite explicit rules, which are available in drginst.pdf, however a number of these rules are difficult or impossible to implement without using the right software and high quality screens.

The drawing office seems to be very flexible in accepting drawings and will correct many errors (or non-compliances) with respect to their rules. However, due to the process ISO follow in finalisation of our documents, we can improve the ISO schedules by complying as closely as possible to their rules.

The ISO draughting office works using coloured lines (to represent different line thicknesses) on a black background. Many draughtsmen and most engineers prefer using varying width black lines on a white background (partly because you need to be using the package continuously to automatically correlate colour with thickness, and also because it is difficult to see the differing colours on a white background). It is relatively easy to globally change to the ISO practice before submitting drawings, and consequently I recommend we continue our practice of working black on white until final submission.

Useful clarification on the acceptability of words (language dependent text) was provided – Text OK for axes only of graphs, and OK for flowcharts, otherwise use numbers / figures to cross-reference.

As noted elsewhere we have considerable aggravation from symbols which include subscripts or mixes of *times new roman italic (for variables)* and upright arial (for constants) which can only seeming be handled in full AutoCAD with the ISO template.

Check lists

There are a lot of rules and requirements that we need to be aware of and practice where we prepare our documents. While experience assists in implementing the rules and requirements in preparing documents it is difficult to remember and implement them all during editing (even the ISO CS TEs cannot remember them all, all the time).

I suggest we prepare a checklist, or series of checklists that we can work through just before submitting documents, and that the checklist is updated as our experience of these documents increases. I have started preparing such a checklist.

Use of software

Use of Microsoft Word seems to be widespread within the TC 67 TAs, although there is some variation in version (ISO use 2000, I use XP{2002}, some others use '97).

Both ISO and I use a program called MathType for equation preparation and I recommend this for other TAs. MathType is the big brother of Microsoft Equation Editor and is written by the authors of Equation Editor for Microsoft – it costs about £80. Both ISO and I use version 4 although the latest recent version is 5.0. ISO provided details of the standard settings they use for equations.

The main software issue is for preparation of drawings. ISO use AutoCAD which costs several thousand pounds. I use AutoCAD LT which is a few hundred pounds, while others seem to use a variety of programs at various costs. While many of these can produce drawings readable by ISO they obviously lose features. The main aggravation we have with AutoCAD LT is text with subscripts and superscripts. We have played with this software a lot, and some, but not all, of the full AutoCAD text commands work, even if they are not mentioned in the LT manual. It is somewhat frustrating that the ISO prepared text files (prepared to allow the right fonts and with sub/superscripts) will not work in LT.

Access to information (other ISO documents and published TC67 standards)

There are a number of documents that are normative references within the ISO directives, but obtaining a full set of these is a significant expense to a technical editor. Other published TC 67 standards are also useful reference materials, both for cross-referencing and as examples of what has been accepted by ISO. I recommend that these are made readily and freely (or at a subsidised rate) to the editors. I personally believe they should be provided by ISO since we need them for preparing documents for ISO or the national standards bodies to sell, however ISO have indicated that this will not happen. In particular I have been having trouble getting the ISO standards handbook "Quantities and Units" which we are told is essential but which does not appear in the BSI catalogue and is not available through BSI stockists.

Availability of course presentation materials

We were advised that the overheads used during the week will soon be available electronically – presumably these will be available on the TC 67 Tech Ed site. The discussions were recorded to be the basis of notes for the PowerPoint slides.

Technical Authors / Technical Editors / Editing panels

The following comments are not based on the ISO training session, but are views that I have been formulating based on both my own experience with WG 3 documents and looking at documents prepared in other parts of TC 67 and other parts of SC 7.

Standards in the industry have traditionally been prepared on an informal voluntary basis primarily by oil company employees working with implicit or explicit approval from their employers (usually). Currently oil company employees do not have the time necessary to dedicate to standards preparation and the need to fund preparation is not well established. At present we are using a mix of competent discipline specialists with some ISO training (formal or picked up) and professional technical editors trained in ISO requirements but without the discipline knowledge. In reviewing TC 67 documents it is readily apparent which approach has been used in each document, with the discipline experts failing to fully comply with directives while the professional TEs do not always pick up faults associated with the structure of a document and text being misplaced.

The obvious solution to this is for the Project Leaders to dedicate sufficient time to work closely with the professional TEs, but we know that this cannot be achieved.

Leaving the identification of these issues to DIS voting stage is inefficient as numerous people will pick up and possibly report the same issues, as well as slowing the ISO process.

The recommended fallback position is therefore that an oil industry professional engineer should review and revise each of the TC 67 documents before public issue. Such an engineer should preferably be a discipline specialist for the standard being reviewed, or at least with familiarity with issues related to the discipline.

CONCLUSIONS

Overall the training week was found to be very useful and is expected to be of benefit in the medium and long term preparation of our standards.

The ISO CS overheads and notes should be accessible from the TC67 TechEd website when available.

It is recommended that common TC 67 checklists incorporating our learnings are prepared (from the start by GCL?) and used throughout as, at least, Aide memoirs.

A means of distributing relevant ISO documents to TAs at reasonable cost should be pursued.

Issues were raised with respect to discipline specialist versus professional draughting for TC 67 documents.