CCURG Government Agencies Productivity Commission: Standards & Accreditation Submission Supplementary Comment to the CCURG Submission

Background: The following is additional comment to the CCURG Submission to the Productivity Commission (PC) on compliance and conformity (often used interchangeably), and was prepared in response to:

- Questions asked at the recent CCURG meeting with PC representatives &
- Comments given by Standards Australia (SA) to statements in the CCURG Submission.

Need for Conformity: Annex F of HB 162-2002 Rules for the structure and drafting of Australian Standards, identifies the need and means that could be used for demonstrating compliance with Australian Standards (Aust Stds), but SA will not accept responsibility for it, despite previously doing so (see Tables 1 & 2) and despite the rest of the developed world doing so. The result is manufacturer's risk is being unfairly passed onto customers, as is currently being witnessed with fasteners.

Conformity in Transition: Recently Stds Aust appears to be shifting to two part standards, as sometimes used by EN, however that's where the comparison stops. As shown below for AS/NZS 4672 (draft), Part 1 remains as usual, void of conformity assessment and Part 2 addresses both conformity assessment and conformity evaluation. However as Part 1 contains the "informative" HB 162, Annex F, customers remain at risk unless additional clauses are prepared to overwrite it and link the two parts. For world trade, reciprocity is required, and SA's narrow view is frustrating that process.

"Do" & "Don't Do" Costs: The following notes are aimed at putting conformity costs into perspective:

- **Conformity testing**, as already noted in our Submission, "when compared to the cost of infrastructure, testing costs are trivial, and formalise what is, or what should already be done".
- **"Third party product certification** is a small additional cost which is passed back to customers", a comment from JAS-ANZ, at a recent meeting with DITR and CCURG.
- In project management, a commonly used rule to impress the importance of fixing things early in the project is the "Rule of Fives". This emiprical rule states that the cost of rectification of a defect increases by a factor of five with the passing of every stage of a project. For example, if a defect is found in the manufacturing process for bolts which will cost \$1 to fix, that same defect found in the finished bolt will cost \$5 to fix, at the site it will cost \$25 to fix, after installation it will cost \$125 to fix and if found after the work is in operation, \$625 to fix.
- "Don't do" examples: In Canberra about 30 years ago, a bank building had to be demolished because the concrete was faulty (under-strength) making the building unsafe. Addressing the problem during construction would have only been a small percentage of the cost of the concrete in place. But fixing the fault after project completion involved the demolition and reconstruction of the whole building, plus loss of profits, and so forth. The current fastener issue on the Queensland transmission line, also well demonstrate the flow-on cost. Bolts purchased for a few thousand dollars, will now have to be replaced at a cost exceeding a million dollars.
- **"Don't do" penalty:** Often the cost of rectification of a product in place is so costly for all involved that the commercial decision is made to accept the faults and try to live with the limitations.
- If rectification of defects are to be addressed as early as possible, and hence as cheaply as possible in the process, Aust Stds need the teeth of conformance criteria. The lowest cost mechanism for achieving conformance is in the standard itself.

SA Comment 1 (see Table 2): SA's comment is strongly challenged. Conformity assessment is a fundamental part of any product standard, for without it, the standard is simply a series of tests and to which compliance has no value. To suggest that the NATA and JAS-ANZ secretariates have this responsibility, is in conflict with international conformity infrastructure models (see Table 3) and the reason for having standards committees. Perhaps Fig 1.1 of the PC Draft Report needs to be revisited? Nor should individual certifiers, competiting for business, prepare their own conformity requirements, as to do so requires considerable time, skill and resources. Also to achieve balance or fairness so that technical barriers are not erected, views of all stakeholders, particularly industry, need to be heard and standardisation achieved. Clearly this is the role of standards bodies, as is done throughout the world. (see PC Issues Paper 5).

SA Comment 2 (see Table 2): Again we strongly disagree. The present issue is not about regulation but simply making manufacturer's responsible for their products. Also the "UK Experience" below, is at odds with the comment. Despite being a member of the EU, the UK does not require "mandatory certification of products". The introduction of QA into Australia in the early 90's was all about a fairer distribution of risk and responsibility. The traditional

practice of customers approving products and services was dropped in favour of manufacturers and contractors rightly taking responsibility for their work. Hence the fundamental shift has occurred, Project Quality Plans, Inspection & Test Plans driving the process. However the element not yet addressed is manufactured products, the absence of conformity in Aust Stds has effectively frozen efforts to address this long outstanding issue.

UK Experience: Historically, Australia has aligned with the UK on many aspects of procurement including standards, and to the best of our knowledge, conformity assessment, varied to suit the product, has been an integral part of UK Standards. In joining the EU, the UK position is not as implied in Comment 2, but can be found in the following notes obtained from UK Office of the Deputy Prime Minister (ODPM):

"Compliance with the Construction Products Directive (CPD) and its essential requirements has been mandatory in the UK since its implementation by the Construction Products Regulations 1991 (SI No. 1620/1991 www.legislation.hmso.gov.uk/si/si1991/Uksi_19911620_en_1.htm).

The UK regulations were subsequently amended as a result of the CE Marking Directive in 1994. It is the UK position that the provisions in the CPD do not explicitly make CE marking mandatory. Consequently, the Construction Products (Amendment) Regulations 1994 (SI No. 3051/1994 -

www.legislation.hmso.gov.uk/si/si1994/Uksi_19943051_en_1.htm)

did not make CE marking mandatory. We believe UK's implementation of the CPD is 100% faithful. Although the UK operates an 'open market' as regards construction products, our Building Regulations require that products have to be shown to be fit for their intended purpose and/or use in building works under Regulation 7 (SI No. 2351/2000 - www.legislation.hmso.gov.uk/si/si2000/20002531.htm).

Regulation 7 deals with materials and workmanship and provides alternative routes to compliance with the Building Regulations when establishing the fitness of materials. We have produced guidance in support of Regulation 7 that suggests ways in which compliance with the Building Regulations can be shown. They include:

- the appropriate use of a product bearing CE marking; or
- a product complying with an appropriate technical specification;
- a British Standard or an alternative national technical specification of any state
- in the European Economic Area; or
- a product covered by a national or European certificate issued by a European
- Technical Approval Issuing body.

Other means of establishing the fitness for purpose include compliance with a recognised independent certification scheme and past experience of products and materials. The ODPM does not have a position paper on procurement of construction products. However, we have produced a series of "Approved Documents" in support of the Building Regulations which provide practical guidance and recommends codes, standards (British, European, etc.,) and other references for structural design and construction for example. Our Approved Documents can be viewed on the ODPM website at: www.odpm.gov.uk/stellent/groups/odpm buildreg/documents/divisionhomepage/br0041.hcsp or purchased from The Stationary Office online bookshop at: www.tso.co.uk/. For information on roads, dams and other critical infrastructure, you would need to contact the responsible department directly. For example, I am aware that the Highways Agency, which has responsibility for our roads, details its product conformity requirements in its Specification for Highway Works which is contained in Volume 1 of their Manual of Contract Documents for Highway Works (MCHW) http://www.official-documents.co.uk/document/deps/ha/mchw/index.htm."

Note: Volume 1 of the Manual of Contract Documents for Highway Works is separately attached. These schemes are very relevant to Australia, as they show how far we have fallen behind best practice and also for international trade, they offer options for the purchase of fasteners and other imported products.

Jeff Gleeson CCURG Chairman 28 August 2006

On behalf of CCURG Participating Government Agencies

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TABLE 1CONFORMITY IN TRANSITION

| ITEM | DATE | AUST STD NO | TITLE | DESCRIPTION OF CONFORMITY ASSESSMENT | | |
|---|------|---------------------------|--|--|--|--|
| 1 current | 1987 | AS 1310 | Steel wire for tendons in prestressed concrete | Conformity req'mts are included within the main text of the std & | | |
| (to be | 1987 | AS 1311 | Steel tendons in prestressed concrete - 7 wire stress relieved steel strand | "independent assurance provided by the StandardsMark which is a | | |
| replaced by 5) | 1987 | AS 1313 | Steel tendons in prestressed concrete - Cold-worked high-tensile alloy steel bars | owned by Stds Aust" is offered. | | |
| John Henry article in TAS, Mar 1991 (previously sent) | | | | | | |
| 2 | 1991 | AS 1302 | Steel reinforcing bars for concrete | Conformity relocated to become an | | |
| | 1991 | AS 1303 | Steel reinforcing wires for concrete | "informative" version of present HB | | |
| (replaced by 3) | 1991 | AS 1304 | Welded reinforcing fabric for concrete | the main text and the generic offer of StandardsMark is retained. | | |
| Adoption of normative conformity for water industry products, see papers 1994 & 96 (previously sent). | | | | | | |
| 3 current | 2001 | AS/NZS 4671 | Steel reinforcing materials | Conformity still an "informative" version of present HB 162, Annex F. Normative "manufacturing control" introduced but no link to conformity. StandardsMark not mentioned. | | |
| 4 current | 2003 | AS/NZS 1314 | Prestressing anchors | "Informative" HB 162, Annex F used Also normative "manufacturing quality control of wedges" introduced with a note linkage to conformity | | |
| SAI float, Dec 2003 | | | | | | |
| 5 (soon to replace 1) | 2006 | AS/NZS 4672 (draft) | Project No.189 Steel prestressing materials Part 1: General requirements Part 2: Conformance requirements | HB 162, Annex F, retained in Part 1 and referenced from Part 2. Also reference is made to the EN Stds where Part 1 includes conformity, & Part 2 is <i>conformity evaluation</i> . | | |

TABLE 2

SUBMISSION NO: 115 INDIVIDUAL/ORGANIZATION:

CEMENT AND CONCRETE USERS REVIEW GROUP

| Page/Claus | Statement | Factual Comment |
|---|---|--|
| e/Paragraph | | |
| Page 1, paragraph 1 and following | the absence of conformity requirements in many Aust Stds for strategic products, is putting lives at risk and poses a serious threat to the integrity and longevity of buildings and civil infrastructure. | Assessing whether or not a product meets a standard (commonly known as 'conformity assessment') is a separate issue to the requirements in the Standard itself. Bodies such JAS- ANZ and NATA have been established specifically to be responsible for a range of valid approaches to conformity assessment that both protect the community and meet Australia's treaty obligations not to erect technical barriers to trade. As indicated in the submission, guidance is provided in many Standards on the roles of these bodies and the conformity assessment options. |
| Page 3, paragraph 2 | Recent Europeans Stds have generally inserted the conformity requirements (ie: the sampling and testing frequency plans) in Part 1 (eg: EN 197), with audit requirements in Part 2 (ie: tasks for the certification body and conformity marks). | Euronorms are drafted in quite a different way to national standards outside Europe because they form part of the European regulatory system. Within the European Union, each member state is required to introduce uniform legislation requiring mandatory certification of products offered for sale against the Euronorms wherever this is specified in the relevant EU Directive. The onus of proof of compliance is thus on the supplier not on the regulator. Such a fundamental shift in Australian law would require agreement between the States and Territories and the Federal Government. Creating something like the European regulatory system has been considered in previous PC Inquiries, for example in relation to consumer product safety, but has not been recommended. |

