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TOWARDS ESTABLISHING NATIONAL STANDARDS FOR THE CLASSIFICATION OF CONSTRUCTION INFORMATION IN THE REPUBLIC OF SOUTH AFRICA

by

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DEVELOPING NATIONAL STANDARDS FOR THE CLASSIFICATION OF CONSTRUCTION INFORMATION IN THE REPUBLIC OF SOUTH AFRICA

by

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PROCUREMENT STRATEGIES

ABSTRACT

The South African construction industry lags behind countries that have already developed construction information systems or processes. This statement is especially true with regard to the specification process as local systems are still based on the traditional “trade format” classification and no allowance is made for electronic access or application

The primary objective of the study by the author was to investigate whether the development and adoption of national standards for the classification of construction information, on which specification and measurement systems can be based, would improve the effectiveness of the procurement process. The methodology adopted included the collection of information from secondary sources through an extensive review of related literature on systems in use in selected other countries, followed by a two-staged descriptive survey process for data generation and analysis. The first stage comprised structured interviews with a pre-selected sample of senior academic and practicing quantity surveyors in the UK, whilst the second stage comprised the design, pre-test and administration of a structured questionnaire that targeted architectural, quantity surveying and consulting engineering practices to obtain their view on the effectiveness of local procurement processes

.

The findings of the study indicated, inter alia, that should the aforementioned standards be adopted, the future path towards integrating construction information, via data integration, IT connectivity and interoperability, would be much smoother

KEYWORDS: Classification, specification, construction information technology, standards, integration, interoperability, procurement

SUMMARY

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The Republic of South Africa lags far behind countries that have started developing construction information classification systems over the last 50 years. During the past decade especially, much attention has been given in those countries to new classification systems and to spearheading the development of national IT standards for construction in international groups such as ISO TC59, CIB-W78, ICIS, EPIC, and the IAI. However, this is not the case with the local construction industry. The existing local classification/specification systems are still based on the traditional ‘trade format’ and not one allows for electronic access or application

The development of national standards for classification should have the local needs for improved procurement documentation in mind and such standards should suit the manufacturing companies which have to be persuaded to use it, and it should conform internationally to allow collaboration with other countries. Because of the absence of a local model on which the development could be

based it was decided to focus on certain other countries that had already introduced, or proposed, new classification systems, in an attempt to find out how the systems are organised and accepted

A study of contemporary building literature in the AEC/FM industries showed that in the field of organising product data information there is much diversity within countries and between them. It is generally accepted that it would be in everybody's interest to rationalise these diversities because of the global interrelationship that continuous to grow between countries, mainly as a result of the rapid growth in IT

It is envisaged that the results and conclusions reached in this research study will extend knowledge to the local construction industry about the need for national standards for classification and their relative importance and significance in structuring procurement documentation. Employers, consultants, contractors, subcontractors, manufacturers and suppliers of building products, and other building project participants such as real estate agents, property brokers, etc could all benefit by utilising and applying this knowledge to monitor, coordinate and control their requirements and operations, thereby ensuring that optimal project performance is achieved

The challenge for the local construction industry will be to manage the establishment of national standards for construction information and to promote the widespread adoption of these standards by the industry. Results from the surveys conducted in this research study indicate a positive attitude towards standards development, but full adoption of these standards is bound to meet with some resistance. Lack of incentives, few immediate benefits, costs to be incurred from re-classifying historical data and cross-disciplinary differences are some of the problems that will have to be overcome

If the local construction industry can view the proposed change to adopt national standards for classification as a necessity rather than a burden, the path towards integrating construction information, via data integration and IT connectivity and interoperability would be much clearer for the future. The adoption of national standards for classification should improve the quality and reliability of end products. This should be measurable in time and cost savings, enhanced procurement methods and improved relations in the industry

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