

NATIONAL PRODUCTIVITY AND QUALITY SPECIFICATION INDUSTRY TRAINING BY SINGAPORE INSTITUTE OF ARCHITECTS

INTRODUCTION

National Productivity and Quality Specification is the product of a convergence of interest and supported by Spring Singapore, Building Construction Authority, Singapore Institute of Architects, Institution of Engineers, Singapore, and Association of Consulting Engineers. The development of the NPQS involved various institutions from the building industry and many players in the construction value chain. The task of writing in consultation with players has been completed and was launched sometime in the middle of 2004. It is now time to actively promote the use of NPQS to achieve maximum penetration of usage in order to bring about the result impetus for NPQS to the next stage of editorial initiative to keep this document alive and relevant to the industry.

To further enhance productivity and facilitate the use of NPQS by the industry, the electronic National Productivity and Quality Specifications (eNPQS) was developed. The eNPQS is a software that enables easy access to the base NPQS and PSD templates for the preparation of project specifications, while providing an interface to electronic product catalogues. Any additions, changes and omissions to the NPQS can be tracked and compiled by the eNPQS software for effective project tendering and management.

COURSE OBJECTIVE

1. To disseminate the concept of NPQS and eNPQS and its familiarization in the vertical relationship of the value chain. That is to create awareness at all levels of the construction value chain so as to achieve maximum acceptance.
2. To train a body of individuals in all organizations to be competent with the usage of NPQS and to integrate it as part of the building process,
3. To equip users with the skills and knowledge to navigate and use the eNPQS for efficient preparation of project specifications.
4. To create an interest group such that NPQS will continually be updated and refined to meet the needs of the industry.
5. To refine the document structure to achieve a cognitive structure to facilitate easy penetration and use, such that it can be used by Singapore's building professionals in their export drive. This may be achieved by seeking industry feedback and suggestions on how to arrive at an adaptable information structure which does not require extensive training for understanding of the specification requirements in building projects.

TRAINING

1. A **half day** session with the objective of familiarization with NPQS and eNPQS for those who are expected to be receiving Specifications by Specification writers using the NPQS as the basis for the production of Building Specifications. It is anticipated that these persons will be :
 - a) Senior members of Architectural firms and institutions who will need to vet specifications produce by design staff.
 - b) Quantity Surveyors who will be vetting specifications produce by the design team for the purpose of incorporation of the specifications into tender documents and construction contract documents.
 - c) Contractors who will be relying on contact specifications for building and procurement of trades and materials in compliance with the requirements of the building contract.

All the above members of the building team will require an appreciation of the structure of NPQS, its information organization and functionalities of the eNPQS in order to rapidly focus on particular items which are peculiar to each building project. A knowledge of the information structure of NPQS and functionalities of eNPQS will allow rapid cross referencing and ability to 'GOTO' the relevant sections of the NPQS document for relevant information.

2. A **full day** session for members of the project team who will be responsible for the production of project specifications. These are expected to be:
 - a) Design Staff and project Architects who having completed design drawings will need to create a specification documents to communicate the requirements of the design which are best expressed in specifications in addition to drawings.
 - b) It has become quite pervasive where quantity surveyors have actively assisted design office in the production of standard specifications for tender and contract documents. It is anticipated that this trend will still continue and thus it is essential that quantity surveyors be familiar with the structure and technical content of the NPQS

These persons named above will be required to use the NPQS document with the eNPQS software to create a coherent specification document to which will form an integral part of the full set of documents contained in any building project. The emphasis for this group of persons will be in the usage of the eNPQS software to write and select built in options to produce technical specifications for specific projects.