



*International Centre for Organisational Management*

## DIPLOMA IN PORT MANAGEMENT

### INTRODUCTION

The international seaport business has changed radically. Ports are now the core of the global supply chain, the hub of the value adding system of international trade, the critical link between global suppliers and their worldwide customers.

Ports have become businesses which have to differentiate themselves from their competitors within a rapidly changing environment. The selection of hub ports and the promotion of regional feeder services have developed as have the design of ships and cargo handling methods. Ship and port owners have limited the number of ports of call and developed integrated transport services and new logistical support functions and alliances between shippers has intensified competition between ports.

Port ownership structures have changed. Corporatisation and privatisation have loosened government controls and led to the need to acquire new skills and knowledge and develop a culture of innovation and responsiveness to customer needs.

Management practice must become more professional, strategic and marketing orientated and old norms of hierarchy and centralisation must give way to more co-operative relationships combined with decentralisation. Ports have to achieve best international standards in areas such as cargo-handling and overall cost of operations to justify capital expenditure on new plant, equipment and facilities.

Faculty of ICOM have helped two ports in Malaysia (Westport and Northport) to respond positively to these challenges. Both programmes were 15 months long and led to a Cambridge University (UCLES) Diploma in Port Management. The team who delivered this programme and put together the state of the art materials covering all aspects of port management included consultants in port management from organisations such as Belgium's International Port Consulting, Holland's Container-Terminal Advisory Group and Cetima Consulting B.V. the National Sea Training Centre UK and academics from Cardiff University School of Maritime Studies. Recently we have added the Institute of Transport and Maritime Management of Antwerp University and APEC Port Consulting Antwerp to our advisory group.

The programmes were based on the action learning model already described. In Westport, which is both a container and a conventional port, we had participants from all the operational and support areas on a programme designed to integrate the support departments with their internal customers in the line activities. The group projects focused on improving the "total factor productivity" of both the container and the conventional terminals and on improving the service given in the "Distripark". The Individual Projects dealt with improving the performance of the parts of the Terminal participants were responsible for, such as the quay operations, the container yard, port planning, equipment maintenance, finance, H.R., I.T. etc.

As with all our programmes, considerable effort went into producing state of the art materials for the 3-day workshops.

### Workshop 1 - The Learning Process

- Ø What is action learning compared to traditional training? How it fits into training methodologies. Its unique selling proposition.
- Ø Group projects and the action learning "set". Solving real business issue. Group dynamics, team building.
- Ø Individual projects and the business improvement plan for the "students" department.
- Ø Personal development plans. How to improve leadership and general management competencies. The reflective mindset.
- Ø The customised new knowledge workshops and the University material and assessments.
- Ø The learning organisation.

### Workshop 2 - Business Strategy

- Ø Basic concepts of strategy; vision, mission, strategy, objectives, implementation plan products/services, markets, customers, competitors, suppliers, strategic models, CSFs, competitive advantage, shareholder/stakeholder value, impact of financial drivers (e.g. cost reductions, cash flow, budgets), corporate governance, diversification, mergers and acquisitions, strategic alliances, merging cultures and people, globalisation.
- Ø World trade; globalisation and container port developments. Shifts in economic power centres, the China effect, opportunities and threats, shifts in transport distribution, imbalances in the foreland-hinterland continuum, new transport technologies.
- Ø Logistic integrations in the container industry; challenges faced by container port operators, emergence of global terminal networks, integration along the supply chain, global/regional hubs and spake systems, pure transshipment ports, importance of dedicated terminals.
- Ø The Resource-based Strategic Model; strategic intent, mission and vision, competitive advantage, core competence, privatisation, port capacity, utilisation and productivity, competition, benchmarking, coherent port development.
- Ø Case studies as appropriate, e.g. Port of Antwerp and the European container terminal business in transition.

## Workshop 3 - Operations Management

- Ø Background to containerisation, container ships and containers, impact of containerisation on port operations, specialised terminals (dry bulk, Ro-Ro, containers, hybrids).
- Ø Operations strategy and its link into business strategy.
- Ø The Terminal as a System; ship operations, quay transfer operations, storage operation, receipt/delivery operations, the CFS operation, the interdependencies.
- Ø Terminal design and layout and exercises.
- Ø Terminal operations. Details of five main operational systems (ship, quay transfer, container yard, receipt/delivery and CFS). Choice of terminal operating systems. Terminal and ship control systems and planning.
- Ø Equipment selection and performance.
- Ø The measurement of port performance and exercises; production measures (e.g. quay, storage, gate, equipment), service quality measures (e.g. ship turnaround time, road vehicle turnaround time).
- Ø Performance Reviews and exercises; operational reviews (e.g. shift performance, vessel performance), shift review process (e.g. crane log, gate log), daily operations meetings, terminal performance reports.
- Ø How to improve terminal performance. Customised to the clients experiences.

## Workshop 4 – Managing People, Quality and Organisational Behaviour

- Ø HR input into the strategic planning process; existing resources, realisation of resources (e.g. recruit, retain, motivate), employee relations, pay, benefits, job flexibility, structure, partnerships, out-sourcing, e-HR etc. How HR can add value.
- Ø Strategy into action via the People Plan; CSF, KBP, KPI, linking pins and leadership, process based organisation, performance management, role of the HR Director. HR as business partners and learning as competitive advantage.
- Ø Perspective on leadership; leadership theories, what is leadership? What do leaders do? Characteristics of leaders. How to create a learning organisation, learning as the key source of competitive advantage.
- Ø HR as business partners and leaders of change; focus on productivity and process management. Why change programmes fail, the leader as change agent, understand the internal customer.
- Ø Organisational design.
- Ø Reward systems.
- Ø Performance development; competence, appraisals, career development, assessment techniques, mentoring, coaching etc.

## Workshop 5 – Improving Financial Performance

- Ø Introduction;
  - The organisation of financial information; purposes of management accounting, basic accounting principles, relationship between management accounts and other financial data.
  - Container terminal costs; the basic building blocks, variation with throughput, variation with location and time.
  - The costs of individual activities; cost and revenue centres, cost allocation principles.
  - The costs of individual customers; relationship of costs to customer requirements, costs to be taken into account when setting tariffs.
  - Introduction to capital expenditure needs; replacing existing assets and expanding the asset base.
- Ø Introduction to budgeting; objectives of budgeting and its relationship to long-term planning, incremental budgeting versus zero-based budgeting, fixed versus flexible budgeting, how to organize the budgeting process, monitoring and follow-up, conditions for success.
- Ø Business planning and budgeting procedures; Tanjung Palepas input.
- Ø The control of working capital; the importance of working capital, how working capital is recorded, methods of reducing working capital requirements (inventory management, payment terms for debtors and creditors, short-term liquidity), procedures for controlling working capital requirements.
- Ø Improving the utilisation of fixed assets; calculating individual asset costs, relating asset utilisation to demand, maximizing operational flexibility, asset leasing, planned maintenance.
- Ø Reducing operating costs; downsizing (relating marginal costs to marginal output), upsizing (increasing inputs more slowly than outputs), benchmarking (“best of class” comparators), management audits, use of quality circles to identify business improvements, improvement of customer-supplier chains, outsourcing, business process re-engineering.
- Ø How well is the business really doing; business objectives, financial performance indicators, communication of results.
- Ø How well is your department doing?

## Workshop 6 – Business Information Systems

- Ø Electronic Data Interchange, applications between shippers, freight forwarders, line agents, customs and port authorities, and for intra and inter port operations, examples of EDI message implementation according to freight operation and geography, integration of EDI with other port applications and logistic planning.
- Ø The internet, applications within the port industry (e.g. marketing, bookings, etc), EDI over the Internet, Web Forms.
- Ø Electrical Commerce, description of services including e-mail, desktop video conferencing, hybrid EDI, convergence of applications and communication systems.
- Ø Radio Frequency Identification (RFID) in transport. Changing the transport world.