

Commonwealth Infrastructure Partners

Training programmes for ports & marine engineering

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Introduction

Commonwealth Infrastructure Partners (CIP) provides specialist training programmes for managers and engineers in the ports and marine engineering sector. The programmes provide the practical knowledge and resources to develop international best practice in project design and implementation, as well as in all aspects of project management.

Commonwealth Infrastructure Partners (CIP) capacity building and training programmes are designed to equip professionals with the best practical knowledge and strategic tools in their sector, and to develop the ability to understand and anticipate new developments in their field.

Outcomes and benefits

All CIP capacity building programmes focus on outcomes and benefits for both the client organisation and individual participants. This is accomplished by:

- i. A dialogue in advance of the programme with senior managers in the client organisation to determine:
 - a. Priorities for organisational development in the organisation
 - b. Specific challenges and training requirements for the participants in the programme
- ii. Interactive structure for the programme, focusing on practical learning outcomes
- iii. Ongoing dialogue and feedback with senior managers and participants
- iv. Modification and refinement of the programme as necessary to optimise results

Outcomes and benefits in training programmes in the ports & marine engineering sector

CIP and its partners offer best practice and international standards in port & harbour design and marine engineering. Our sector-specialist partners have global experience in countries including the UK, Ireland, France, Netherlands, Malaysia and India.

CIP training programmes can introduce the benefits of this experience in areas including:

- i. Harbour & port design and master plans
- ii. Innovative engineering solutions for harbour and port elements, including
 - a. Jetties
 - b. Wharfs
 - c. Linkspans
 - d. Gangways

- e. Docks
- f. Dolphins
- g. Fenders
- iii. Roll-on roll-off technology
- iv. On-shore civil and structural engineering

Individual benefits

Engineers and project managers become familiar with the latest innovations and best practice in port engineering and management. They develop the capacity to integrate the many elements involved in the development and operation of ports and harbours.

Organisational benefits

Government departments and private sector operators gain the benefit of international experience in key elements of port development and management, including:

- o Optimum modern design
- o Optimum management and technical specifications
- o Best practice in construction, operations and operation management
- o Feasibility studies
- o Assessment of existing facilities
- o Integration of legacy structures with new facilities
- o Extension of the useful life and load capacity of existing structures
- o Opportunities to visit and evaluate comparable facilities elsewhere

The organisation benefits from enhanced organisational efficiency and competence. There is better communication and understanding between managers and engineers, and senior personnel are better equipped to manage and improve standards of performance in the work force.

Improved capability in project planning and execution result in better project management and stakeholder management.

Capacity building programmes with sector specialists

CIP engages sector specialists to design and deliver customised programmes for each sector. Wherever practical, CIP's partners are not only familiar with international best practice but also have high-level experience relevant to the country where a project will be implemented.

CIP's core team and partners have experience across a broad range of infrastructure sectors, and are therefore able to integrate the needs and challenges of a particular sector with the overall development requirements of the country.

Integrating management and technical capability

CIP capacity building programmes focus on integrating management and technical capabilities. Lack of such integration can often be identified as the cause of inadequate

project planning or of projects failing to achieve their target. Our specialists have experience in project management in addition to their sector expertise.

Capacity building programmes in ports & marine engineering

CIP partners have over 30 years of experience in this sector, including projects in the UK, Ireland, France, the Netherlands, Malaysia and India. CIP has expertise in capacity building programmes for project management, professional engineering and other relevant topics.

Training programmes for engineers and managers

CIP training programmes in this sector aim at a balance between the development of individual professional competence and the overall short- and long-term needs of the organisation.

Programmes focus on the specific sector and projects in which the organisation is engaged, and/or in capacities they want to develop. These include:

- Strategic planning
- Port and harbour design
- Inland waterway infrastructure
- Procurement
- Contract management
- Project management
- Engineering expertise
- Quality assurance
- Stakeholder management, including consultants, contractors and client
- Integration with other elements of the transport network
- Integration with other infrastructure sectors

Other topics can be included according to organisational and project requirements.

Duration and level of programmes

CIP can customise the duration and level of programmes to suit the requirements of the public or private sector client organisation.

- From one- or two-week workshops
- To three- or six-month postgraduate level work-based learning programmes

Programme structure

Programmes are structured to give a combination of knowledge and practical experience.

Short workshops include field visits to give practical exposure to the knowledge gained in classroom sessions.

Longer programmes follow a work-based learning structure. Where feasible, practical classroom sessions are based near a project location so that participants can observe working practice under the supervision of the programme leaders.

Participants then have a period of work-based experience in actual projects in their work environment.

Programme timetable

The programme timetable can be adjusted to fit the needs of the client organisation and the work schedule of participants.

Integration with international best practice

As with all other infrastructure sectors, local expertise and implementation methods have to match international best practice. Nearly all major projects involve international collaboration, whether with commercial partners, sources of funding or international consultancy partners. CIP uses its international experience in assisting local partners to incorporate best practice in their project design and implementation.

Professional Engineering programmes

All engineering sectors face challenges arising from a lack of engineering competence at the required professional level. CIP Director Jonathan Ling has pioneered Masters' and Bachelors' Degree Programmes in Professional Engineering, working with the UK Engineering Council and UK universities. CIP offers programmes in Professional Engineering customised for the ports and marine engineering sector.

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