ABSTRACT: Ten years ago, maritime education and training in Ireland was seriously under-resourced. Cork Institute of Technology, as the designated national centre for maritime education and training, was responsible for seafarer training for the Merchant Marine. The Irish Naval Service, in addition to its military obligations, had an ongoing need to provide similar training for its personnel. In discharging their responsibilities each of those entities aimed to implement a range of multi-disciplinary training programmes designed to produce skilled seafarers, qualified to international standards. But neither organisation had the requisite scale of technical facilities or equipment needed to satisfy the growing aspirations under STCW 95. The solution was found in a partnership agreement between Cork Institute of Technology and the Naval Service, to establish a national centre for the conduct of common maritime training. The Irish Government agreed and decided that the new National Maritime College of Ireland (NMCI), should be funded and managed under a Public Private Partnership model.

1 BACKGROUND TO MERCANTILE TRAINING

1.1 Provision of qualified mariners

Historically, the national shipping line of Ireland, Irish Shipping Ltd, was the recruitment entity for the majority of new entrants to seafaring. The company, though not the sole recruiter, promoted a shipping and seafaring culture through its ‘Follow the Fleet’ programme for schools, and consistently recruited more deck and engineering cadets than were actually required for its own fleet needs. The policy ensured a stream of qualified mariners to meet the general demand of shipping and, in addition, it met the general maritime administration needs at the national level.

1.2 Designated training establishment

The shore training structure supporting this policy had been consolidated and centralised at Cork, at the Department of Nautical Studies in Cork Regional Technical College as it was then known, now thriving as the Cork Institute of Technology (CIT). Sadly, Irish Shipping Ltd, went into liquidation in 1984 and CIT, as the designated national centre for maritime education and training (MET), had to assume greater responsibility for seafarer recruitment and training. The Nautical Studies Department took up the challenge, instituting a new programme in 1985 (coincidentally, as a severe slump mauled international shipping!).
1.3 Employment output

Fortuitously, the first trainees qualified at the commencement of a sustained upswing in demand for deck officers and engineers and since then the training programmes have flourished; between 50 and 70 young school-leavers commence as trainee deck officers or trainee marine engineers each year. The officer training programmes conducted at Cork had then, and continue to achieve, a distinguished record of 100% career placement for all trainees who achieve primary qualifications as deck officers or as marine engineers.

1.4 Resource deficiencies

All of this was achieved with very limited resources; Nautical Studies was one of the smallest academic departments of CIT, located on the Bishopstown campus which is not adjacent to the sea. And relying on access to an old training vessel—the redundant liner tender, mv Cill Airne—to meet certain essential training needs simply highlighted the shortcomings and equipment deficiencies on campus at that time.

1.5 Pressure to move to new campus

Coming into the mid 1990’s the general maritime education and training situation confronting the Department of Nautical Studies was becoming critical, for a number of reasons. In the first instance, the mother Institute was growing dramatically, giving rise to intense pressure and competition for space on the Bishopstown campus. Moving the ‘sailors’ off campus was becoming a serious consideration in light of a strengthened case for more space and much increased investment. But the prospect of STCW 95 coming down the tracks was rightly identified as an instrument heralding major change.

1.6 Impetus from STCW 95

The 1995 Amendments called for standards of competence rather than knowledge, unlike the original 1978 Convention, which specified required knowledge but did not address the question of ability to put that knowledge into practice. Competence, being a measure of a seafarer's ability to perform a task safely and effectively, cannot be easily assessed at a shore establishment that lacks significant hardware and facilities. And what was very new in these 1995 amendments was the specific criteria for evaluating the competence of the individuals under training. To remain compliant with the STCW Code, considerable investment would be necessary, particularly in simulation and survival training facilities. Even without the pressure of the Code, the need for such upgrading was becoming more and more obvious. The Code simply made it critical.

2 NAVAL SERVICE EDUCATION AND TRAINING NEEDS

2.1 Naval training shortcomings

The Irish Naval Service, in addition to its military obligations, had an ongoing need to provide similar training for its seagoing personnel. At about the same time the Navy’s shore training facilities, located at the Haulbowline Naval Base in Cork Harbour, were under review. The training accommodation and equipment resources were in need of serious improvement. The buildings were old, small and in varying stages of disrepair, and the Base infrastructure gave rise to an overall training effort that was unavoidably fragmented; an operational base makes inevitable demands on the personnel resources of a co-located training establishment. The training environment was further weakened by the lack of simulation facilities.

2.2 Navy would seek to apply STCW

Though not constrained or bound by STCW the Naval Service management decided that naval training programmes should be compliant with the provisions of the Code, wherever possible. This policy would have the further merit of expanding the career possibilities for naval personnel in later civilian life, by affording them the opportunity to acquire STCW compliant qualifications. It was equally beneficial as a recruiting measure; new entrants are more likely to be attracted to a military organization where they see a realistic possibility of achieving a recognized civilian qualification.

2.3 Availability of green-field site

In order to address the problem, a 10-acre site at Ringaskiddy had been acquired by the Navy in 1993. The site, immediately south of, and convenient to, the Naval Base on Haulbowline Island, was part of a reclaimed land bank and possessed good harbour frontage. Outline plans had been formulated for a dedicated Naval School on this site, but funding for its development had not materialised. Lacking also at that time, was the necessary level of co-operation and interdependence between the mercantile and naval training entities, a relationship that was to flourish so productively some years later. Nevertheless, the procurement of state-of-art MET
facilities remained a key Naval Service training objective.

3 NEW CO-OPERATION

3.1 Common needs identified
In April 1997 a Joint CIT/INS Steering Group took a new look at the maritime education and training needs of each entity. A comparison of Mercantile and Naval training procedures flagged courses and programmes where economies of scale were thought possible, or where there was felt to be scope and potential to avoid unnecessary duplication of training effort and expensive resources. It was recognized that whether the training objective was to teach seafarers how to drive merchant ships or naval vessels, the fundamentals of safely navigating and propelling those ships were very similar.

3.2 Partnership approach
The Steering Group believed that by combining the training functions and requirements of both organisations in partnership on a common campus the primary education and training needs of each could be fulfilled, and in addition, specialist training services, not otherwise available, could be offered to the commercial sector and to various public and government agencies. The establishment of a common centre and the consolidation of training and related technological resources in a designated institution would undoubtedly provide the vehicle for greater cohesion and co-ordination of maritime training, offer a solid basis for future RTD, and make a strong contribution towards the implementation of national policy for maritime development.

3.3 Recommendation of the Steering Group
In a very short time the Steering Group reported and recommended that CIT, in partnership with the Naval Service, should establish a national centre for the conduct of common maritime training, and suggested that it be known as the NATIONAL MARITIME COLLEGE. With an eye to possible EU financial support, the military aspects of naval training would have to remain the exclusive responsibility of the Navy and not feature on the curriculum of a civilian establishment.

3.4 Further backing from the Task Force on Seafarer Training & Employment
The Steering Group recommendations were acceptable to both organisations, and more detailed studies and consultations were commenced. Around this time, several maritime stakeholders were lobbying the Government for structural support in the sector. The industry was concerned with issues such as ‘flagging out’, crewing costs, seafarer taxation, training and such like. And to address those issues, the Minister for the Marine and Natural Resources established a broadly based Task Force on Seafarer Training and Employment. The Task Force reported back in 1999, and came in strongly in favour of the NMC concept as “…an ideal innovative and essential venture’.

4 GOVERNMENT DECISION

4.1 Expert working group
The Government accepted the Task Force findings and agreed to the development of a National Maritime College “in principle”. But before any hard dec-isions would be made an Inter-Departmental Expert Working Group (IEWG) was established, to make an in-depth examination of the proposition with respect to costing, financing, and timing and to make suitable recommendations. Once again, a favourable outcome blossomed for the proposers.

4.2 Agreement to proceed under the Public Private Partnership model
The IEWG Report became the basis for the Government Decision, in May 2000, to build the new National Maritime College of Ireland (NMCI) on the Department of Defence green-field site at Ringaskiddy. But in financing the project the Government was taking the public partnership proposal between Cork Institute of Technology and the Irish Naval Service one step further by seeking the involvement of a private partner. The Public Private Partnership (PPP) funding model as a procurement mechanism for major public projects is a relatively new concept to Ireland. It has been used to fund some road and infrastructural projects and, in the education sector, to build and manage a pilot project of secondary schools known as the ‘Bundled Schools’ PPP. The NMCI project would be the first such PPP in the third level sector.
5  THE BIDDING PROCESS

5.1 Preliminary invitation to negotiate

The next stage in the procurement process, seeking ‘expressions of interest’ from potential bidders, required the publication, in April 2001, of a PIN (Preliminary Invitation to Negotiate) notice in the Official Journal of the European Communities. A potential bidder has to make a careful judgment at this point; an inadequate response to the PIN will most likely exclude that entity from selection to the short list, while a substantial response designed to ensure inclusion on the short list will lead to significant bidding costs at the ITN stage of the process, with no guarantee of any return.

5.2 Short list of bidders

The Invitation to Negotiate (ITN) document was issued to just three bidders; the short list was confined to this number in the belief that success odds of 1 in 3 were considered to be sufficiently attractive for bidding consortia, whereas greater odds of 1 in 4 or 1 in 5 were perceived to be a disincentive. Short-listed bidders must incur substantial expenditure in preparing their bids, but only one of them, the ultimate ‘preferred bidder’, can recover those costs. The unsuccessful bidders are left nursing their costs—an expensive lesson in the PPP exercise.

5.3 Bidder takes the risk

The ITN had to become a very substantial document, encompassing the output specifications, space data sheets, legal information and financial data. The tactic of writing an ‘output specification’ as distinct from the more usual ‘inputs’ transferred a great share of the risk from the public entities to the private bidder. But it did require the public partners to take the pain up front in the laborious compilation of the ITN document.

5.4 Bidders need to have common understanding

Three separate stage meetings were held with each bidding consortium to afford them the opportunity to present their design and architectural ideas, projected costs and timelines, and to ensure that each bidder received the same technical guidance. An evaluation process and marking criteria were agreed before any bid was received.

5.5 Attraction for the private partner

But what were the private interests bidding for? And why risk a probable €1 million outlay on a possible unsuccessful bid? The prize for the successful ‘preferred bidder’ would be a contract agreement to design, build, finance, operate and maintain the new College and manage the facility for a 25-year term. Very few commercial enterprises can project their earnings beyond the immediate short term, with any certainty. Having a guaranteed income stream for 25 years sets the prize in its proper context. There was further icing on this PPP cake in the form of Third Party Income (TPI). This means that any of the agreement partners have the qualified right to sell-on those College facilities that are not required for the core curriculum hours, to third party interests, and the profits from such TPI activity are shared 50/50 between the public and private partners. At the end of the 25-year agreement term the facility reverts to State ownership.

6  THE PUBLIC PRIVATE PARTNERSHIP SOLUTION

6.1 The successful bidder

In April 2002, a bidding consortium under the name of Focus Education were selected and appointed as the preferred bidder. The members of this consortium and its associated sub-contractors were:

− Bovis Lend Lease—FM, HBOS—Bankers,
− Pierse Construction—Builders, BDP—Architects, Nolan Ryan—Quantity Surveyors,
− ABROS—Financial advisers, Linklaters—Legal,
− Farrell Grant Sparks—Financial & Tax

It was to be another ten months before the formal contract agreement was signed, on 13th February 2003.

6.2 Construction

Construction, fitting-out and commissioning, to the cost of about €52 million, were scheduled to take 18 months, targeting the facility start-up for the commencement of the following academic year. But there was a little slippage to that scheduled which delayed the start of training activity until early October 2004.
7 FACILITY DELIVERED

7.1 Substantial modern college
The final outcome was an impressive, purpose-built, maritime college on the available ten-acre site, adjacent to harbour frontage. The buildings gave floor space of some 13,800 m2, with capacity for 750 students, accommodated in twenty classrooms, and extensive simulation and laboratory facilities.

7.2 Core features
The key education and training facilities of the College include:
− 20 Lecture Halls/Classrooms,
− 12 Laboratories,
− 6 Workshops,
− Engine Room
− Learning Resource Centre,
− Multipurpose Hall,
− Survival Centre with Environment Pool, HUET, Cold Water Training Tank and MER,
− Survival Craft Jetty and Pontoon,
− Fire Fighting and Damage Control Centre,
− 360° Full-Mission Bridge Simulator,
− 270° Full-Mission Bridge Simulator,
− 3 x 150˚ Secondary Bridges,
− 12-station part-task simulation suite for NARAS-O, Fleetwork and VTS,
− 12-station GMDSS Simulator,
− 8-station GMDSS (Navy) Simulator,
− 20-station Engine Room Simulation,
− 12-station Liquid Cargo Handling and Ship Stability Simulator.

As the list above clearly shows, the simulation suite was a major element of the project agreement. The public partners were rightly concerned to ensure that such key facilities should remain state-of-the-art for the 25-year term of the agreement, and to this end the specification included the requirement that all simulation software should be upgraded at least every five years and that simulation hardware should be replaced every ten years.

7.3 NMCI layout
The NMCI layout is arranged around three distinct structural blocks, all joined by the main concourse which accommodates the front-of-house services. Block A houses the Engine Room and M&E workshops, R&D laboratories, Seamanship Bay, Divers, Shipwrights, Firefighters and the Survival Training Centre. Block B is devoted to classrooms, laboratories, simulation facilities, and staff and administration offices on the upper floor, while Block C accommodates the canteen, library, computer laboratories, lecture theatre and management offices.

8 GOVERNANCE

8.1 Special character of NMCI
The governance of the National Maritime College of Ireland, as a publicly funded project procured by the Minister for Education and Science, is regulated under the Institutes of Technology Acts and the Higher Education Authority Acts. And under the provisions of the former, NMCI is subject to the administrative and financial control of Cork Institute of Technology. However, recognising and acknowledging the special character and cooperative nature of the project, the NMCI is described as “…a constituent College of Cork Institute of Technology in partnership with the Irish Naval Service and Focus Education.”

8.2 Need for MOU
The possible problems and frictions that might arise from this combination of cohabiting civil and military training entities exercised minds from an early date. It would have been foolhardy to ignore the tradition-al divisions and mutual suspicions between the mercantile and naval codes of service. The Irish authorities were breaking new ground with this project; so far as one could tell, there were no similar (combined mercantile and naval service) enterprises in Europe or elsewhere in the western world that might offer a benchmark model. With these and related considerations in mind, it would be necessary to agree a Memorandum of Understanding (MOU) for the day-to-day operation and utilization of the facility.

8.3 Executive Committee
The MOU provided for the establishment of an Executive Committee, operating as a committee of the Governing Body of the Institute (CIT) and in accordance with the same rules of good governance. The Executive Committee is required to advise on:
− policy, strategic planning and ongoing development of the NMCI;
− links with external stakeholders; and
− relationships within the NMCI, and between the NMCI and relevant Government Departments.

The Committee consists of the Head of College and two other persons, as nominated by the Governing Body of CIT, and the Associate Head of
College and two other persons, as nominated by the Irish Naval Service.

8.4 Common NMCI identity

While the NMCI has its own identity and all the manifestations of that identity, both CIT and the Navy are each restrained from promoting or maintaining a separate identity or image within the NMCI. Also, each entity is expected to conduct their education and training activities in a manner which is not materially detrimental to the best interests of the other party.

8.5 Management and ethos

The day-to-day management of the NMCI is primarily the responsibility of the Head of College in consultation with the Associate Head. The Executive Committee is required to protect, to the fullest extent practicable, the reputations and ethos of both the Navy and the Institute in the manner in which the NMCI is managed. If a conflict arises and remains unresolved at the local level it must then be referred to the Governing Body for resolution.

9 CONCLUSIONS

The NMCI project agreement has delivered a world-class maritime education and training facility broadly on time and within budget. The new College has the capacity to deliver any and all of the programmes that professional mariners, civilian or naval, may require, and the many related activities of which the general maritime community stands in need. Whether the project could have achieved the same measure of success as a purely public capital project rather than its PPP actuality is open to debate. But what cannot be disputed is the core success factor of the enterprise, the essential partnership arrangement between the two public agencies, Cork Institute of Technology and the Irish Naval Service. The NMCI has been regarded as a flagship project within the Irish public service: it is hardly stretching the point to hold that it could well stand as a benchmark model for the maritime sector within the European Community.