

Cork Institute of Technology

**PROGRAMMATIC REVIEW OF
NATIONAL MARITIME COLLEGE OF IRELAND (NMCI)**

**PHASE 2: PROGRAMME LEVEL REVIEW
(MAY, 2013)**

**FINAL REPORT OF THE
PEER REVIEW GROUP**

MEMBERSHIP OF THE PHASE 2 PEER REVIEW GROUP

All members of the Phase 1 Peer Review Group continued on to Phase 2 of the Programmatic Review.

Dr Joseph Ryan (Chair)

Registrar, Athlone Institute of Technology

Capt Fred Anstey

Head of School of Maritime Studies, Marine Institute of the Memorial University of Newfoundland

Capt Shane Begley

Principal, BIM Fisheries Training School, Castletownbere

Mr Fergus Britton

Deputy Harbour Master, Dublin Port Authority

Dr Stephen Cassidy

Dean of Academic Quality Enhancement, Cork Institute of Technology

Ms Aoife Hackett

Lecturer, Department of Management and Marketing, Cork Institute of Technology

Mr Brian McGrath

Head of Department of Management and Marketing, Cork Institute of Technology

Mr Pat Moriarty (via remote link)

Managing Director, CDGA Engineering Consultants Ltd, Cork

Professor emeritus Paddy Murphy

Head of Department of Electronic Engineering (retired), University College Cork

Dr Barry O'Connor

Registrar & Vice-President for Academic Affairs, Cork Institute of Technology

Prof Helen Sampson (Phase 1 follow-up)

Director,
Seafarers' International Research Centre, School of Social Science, University of Cardiff

Mr Ean Wallace

Engineer & Ship Surveyor, Marine Survey Office, Department of Transport, Tourism & Sport

FOLLOW-ON FROM PHASE 1 – THE STRATEGIC PHASE OF THE PROGRAMMATIC REVIEW

Present:

Mr. Michael Delaney, Acting Head of NMCI

Dr. Noel Barry, Acting Head of Academic Studies, NMCI

Mr. Bill Kavanagh, Chair of Strategic Planning committee, NMCI

Mr. Dermot O'Reilly, Lecturer Marine Engineering, NMCI

Mr. Vivion Gough, Chair of STCW Manila WP, NMCI

Mr. Cormac Gebruers, Research Co-Ordinator, NMCI

Mr. Conor Mowlds, Head of Commercial Services, NMCI

Strategic Plan

- Mr. Michael Delaney commented that perhaps insufficient credit had been given for the Strategic Plan as presented in Phase 1. The strategic plan, viewed as a dynamic document, was now presented in line with the CIT template. A five year strategy with annual priorities and sign-off. Each unit/sub-unit will have its own plan, to reflect the complexity of the sector in particular the requirements of professional qualifications and competences. The plan has also been circulated to the Industry Advisory Committee and feedback is awaited from these 'critical stakeholders'.
- Mr. Mowlds stated that CIT NMCI Services Corporate Plan was responsive to rapidly changing industry needs with five, three and one year plans in place. NMCI Services is self-financing with surplus invested in necessary infrastructure, simulator upgrades etc . NMCI Services interacts with NMCI through Academic Programmes, Student Experience and Research programmes, including contacts with Multinational Corporations such as BP and Chevron. NMCI Services would intend to part-finance the cost of Dynamic Positioning Equipment at the NMCI.
- NMCI Services business is growing by 30% annually and is serviced equally by full-time NMCI staff members and other staff (including some retired NMCI staff). Client companies include the MSO, Revenue Commissioners, Cork Fire Brigade, PSNI, Belfast Fire Brigade.
- CIT is a unique selling point for NMCI Services, seen by many client companies as a route to professional qualifications.
- In terms of branding of CIT at NMCI, the model of how the Defence Forces interact with NUI Maynooth and Carlow IT could be looked at.
- In line with the Strategic Plan, a number of actions were already underway including:
 - Establishment of a Student Liaison Committee
 - Weekly presence of a CIT Student Services representative
 - Sports Facility improvement on track

- A formal and extensive student induction programme will be in place for September, 2012
- Other planned improvements include a bus-stop outside NMCI, large-screen TV in Student Common Room, top-up facilities for student card.
- Research is also in line with NMCI Strategic Plan. As part of SFI MAREI programme, NMCI will have four PhD and two funded investigators. Resourcing research within context of heavy teaching loads is a difficulty given relatively small staff cohort.

Update on Staff Recruitment

- Currently eighteen WTE lecturing posts in NMCI, twelve full-time staff members. A cadet placement officer is now in place supported by an internal Training Provider Placement Group covering Nautical Studies, Nautical Science, Marine Engineering and ETO programmes. The appointment of a new lecturer Marine Engineering was also confirmed. The appointment process has commenced for a new Head of College. Under the new HOC, the NMCI will be integrated into the Faculty of Engineering & Science.

Conclusion: The Panel welcomed the significant progress that had been made since the Phase 1 visit and congratulated the staff not just on the further development and maturation of the NMCI Strategic Plan but also on the early implementation of measures recommended in the Phase 1 Panel report in particular in relation to enhancing the student experience at NMCI and in the career-readiness critical aspect of cadet placement. This latter aspect is also crucial to the industry interface profile of CIT, its students and graduates.

MEETING WITH NMCI STAKEHOLDERS

Present:

Mr. Darren O’Sullivan, SEFTEC
 Capt. Michael McCarthy, Port of Cork
 Ms. Catherine Giltinan, MAINPORT
 Mr. Brian Dempsey, Arklow Shipping (conference call)

- Stakeholders complimented the NMCI on the quality of graduates being produced in both Nautical Science and Marine Engineering and were confident that the new degree for ElectroTechnical Officers would also be a success. There was a general agreement that the industry demand for graduates was not being met by the current NMCI output. NMCI graduates were highly respected in the industry. NMCI were encouraged to look at increasing student numbers.
- The industry ‘point of contact’ through Mr. Conor Mowlds /NMCI Services has greatly enhanced industry interaction. Existing industry linkages were greatly strengthened and new contacts were also being forged.
- Industry stakeholders requested greater flexibility in the delivery of short courses at NMCI. With a 5-year expiry time on professional tickets there was a growing demand for refresher/ticket renewal courses.

There is a recognition that the NMCI has both an academic and commercial function and that trying to serve both objectives simultaneously creates some pressures from time to time.

- The Marine Survey Office should be invited to have a surveyor on the Industry Advisory Committee of the NMCI to keep Committee, and therefore NMCI, briefed on national and international regulatory and legislative developments.
- Developments in Oil & Gas, Wind farms and Renewables guarantee a demand for both short professional courses and graduate programmes into the future.
- A survey of recent graduates would aid in curriculum development particularly in terms of on-going relevance and currency of programme outcomes and syllabus content.
- Certain aspects of building upkeep need to be improved upon.

PHASE II – PROGRAMME LEVEL REVIEW

Programme Block 1: Nautical Programmes

Present:

Panel Members: Mr. Fred Anstey, Shane Begley, Fergus Britton, Stephen Cassidy, Joe Ryan

NMCI Staff:

Mr. Michael Delaney

Noel Barry

Conor Mowlds

Vivion Gough

Bill Kavanagh

Kim Mulcahy

Jane O’Keeffe

Peter Walter

Badiul Alam

The following programmes were reviewed by the panel.

Higher Certificate in Nautical Studies (NFQ 6)

Embedded Award - Certificate in Seamanship (NFQ 6)

Bachelor of Science in Nautical Science (NFQ 7)

Honours Bachelor of Science in Nautical Science (NFQ 8)

HIGHER CERTIFICATE IN NAUTICAL SCIENCE

- This programme was introduced in 1989 by CIT at the request of the Irish Chamber of Shipping, with the support of the Department of Transport, to provide an alternative (to the mainstream 1989 Diploma in Science in Nautical Science), applied training scheme for deck officers and ratings on small ships employed on the Near Continental routes. It was also designed to provide a route to professional qualification for persons transferring from the Fishery industry and for ship's ratings who wished to advance to an Officer of the Watch qualification. The programme has been amended over the years to accommodate the introduction of STCW95 Convention requirements for training ship's officers in the Merchant Navy and to offer a programme for International students to study for OOW 500+ Certificate of Competency (CoC). Applicants are non-CAO coming via a professional route with many students having extensive sea time prior to commencing the course. Students avail of the Institute's RPL processes for both advanced entry and gaining of credit. Some students may choose to exit prior to completing the entire programme and may be awarded the Certificate in Seamanship providing they have gained the required modules.

Programme Structure:

This is a two stage, 120 ECTS credit programme at Level 6 on the National Framework of Qualifications. The first semester contains a number of work-based modules. Currently students are registered as ACCS students and may take modules in any sequence at any time. This flexibility has led to a number of issues in relation to

- a) tracking and recording students' progress through the programme
- b) a number of students taking many years to complete the programme which may have undergone a number of programme revisions during the lifecycle of the student.

A proposal was discussed at the panel meeting to require students to complete Stage 1 of the programme before progressing to Stage 2. This, it was felt, would reduce the administrative workload associated with the programme whilst providing a more structured framework for the student's learning. The panel are sympathetic to the issues raised by the proposers in relation to the tracking and recording of student's achievements. However, given the nature of the student cohort and their need for flexibility, careful analysis should be undertaken by NMCI into the effects of this change on student recruitment and progression prior to any possible implementation.

Student Recruitment:

Student enrolments onto the programme are somewhat constrained by the availability of 'berths' or shipboard placements required by students to complete a number of the work-based modules. The panel notes that NMCI is making a concerted effort to increase the number of berths available to students across their range of programmes. This effort is being facilitated by an additional administrative person.

Recommendation NMCI should continue to further develop and expand its relationships with appropriate shipping companies to increase the number of berths available to its students.

Module Review:

A review of modules was undertaken. In general, module descriptors were well-written and conformed to Institute guidelines. The updating of module content was undertaken to address the requirements of STCW Manila.

Contact hours for a number of modules were higher than the norm expected for a programme of higher education study. NMCI should review proposed contact hours to ensure they conform to international good practice in relation to the balance between directed and self-directed study. A number of issues in relation to learning outcomes, possible over-assessment, updating of resource list etc. were also identified. These should be addressed prior to the programme being re-validated.

Recommendation NMCI review the number of contact hours associated with modules of the programme.

Requirement Module descriptors should be amended in light of feedback from the Module Moderator and the panel prior to re-validation of the programme.

Progression:

Students, having completed this programme, are required to undertake a number of bridging modules, primarily in mathematics and science, to be considered for admission to the Bachelor of Science in Nautical Science.

BACHELOR OF SCIENCE IN NAUTICAL SCIENCE

- This programme is provided to meet the demands of the Irish shipping industry for deck officers. It is designed to meet both the standards required of a Level 7 academic programme and the professional standards demanded by the Department of Transport for those wishing to serve as a junior navigator aboard vessels trading worldwide. The professional standards, agreed internationally, are set out in the Standards for Training, Certification and Watchkeeping (STCW) Code 2010 (as amended).
- Recent changes to the Code have brought with it the need for a review of the programme and many of the changes within the curriculum are driven by the need to comply with these new international requirements. The latest STCW agreement is STCW10 or STCW Manila. This agreement, to which Ireland is a signatory, has required numerous changes to the curriculum for the education of deck officers which Ireland must fully comply with by 2017.

Programme Structure:

The programme is a three stage, 180 ECTS credit programme at Level 7 on the National Framework of Qualifications. The first and third stage are college-based with the second year completed onboard ship during which two work placement modules are undertaken. The third year comprises of six modules corresponding to short courses required by the Department of Transport and six academic modules. Students may commence the third year of the programme in either September or January due to uncertainty regarding when students will complete their sea time. Short course and academic modules are offered in both semesters to facilitate the two enrolments.

Recommendation NMCI, in partnership with its shipping companies, review the operation and monitoring of the sea time element of the programme to determine if a single cohort entry is possible to ameliorate the requirement for duplicate provision.

Student Recruitment:

Student enrolments have remained consistently at approximately 38 students. The proposers stated that the need to foster relationships with shipping companies to obtain berths to satisfy the sea time requirements for the programme has placed an administrative burden on the academic staff. The panel noted that a Cadet Liaison officer is now in place to facilitate this process.

Module Review:

A review of modules was undertaken. In general, module descriptors were well-written and conformed to Institute guidelines. The updating of module content was undertaken to address some of the requirements of STCW Manila.

Contact hours for a number of modules were higher than the norm expected for a programme of higher education study. NMCI should review proposed contact hours to ensure they conform to international good practice in relation to the balance between directed and self-directed study.

A number of issues in relation to learning outcomes, possible over-assessment, updating of resource list etc. were also identified. These should be addressed prior to the programme being re-validated.

<u>Recommendation</u>	NMCI review the number of contact hours associated with modules of the programme.
<u>Requirement</u>	Module descriptors should be amended in light of feedback from the Module Moderator and the panel prior to re-validation of the programme.

Progression:

Students having completed this programme, generally undertake a period of sea service as ships' junior officers before enrolling in the Honours Bachelor of Science in Nautical Science.

HONOURS BACHELOR OF SCIENCE IN NAUTICAL SCIENCE

- This one year add-on programme is designed to meet the requirements of mariners embarked on careers leading to management positions at sea and ashore. It achieves the standards of knowledge, skill and competence relevant to the learner's personal development, participation in society and in the maritime industry, and affords access to additional educational and employment opportunities. It includes, but is not limited to, the provisions of Table A-II/2 of the Seafarers Training Certification and Watchkeeping (STCW) Code, for students following career paths in the commercial shipping and wider maritime industry. A number of modules, totalling fifty five credits, have been designed so that students successfully completing these modules gain exemptions in respect to elements of the Chief Mate/Master professional examination. A noticeable trend emerging is of students, having completed these modules, acquire the professional certification and opt not to complete the research dissertation element of the programme and hence not complete the programme.

Programme Structure:

This programme is a single stage 60 ECTS credit programme at Level 8 on the National Framework of Qualifications. To address the issue of non-completion of the research dissertation, the proposers wish to split the current 10 ECTS credit Research module into two 5 credit modules; Research Project Proposal delivered in Semester 1 and Research Dissertation delivered in Semester 2. The panel are supportive of this proposal.

Student Recruitment:

Student enrolments vary between 19 and 35 students per year. The number of graduates achieving the award is significantly lower as, every year, a cohort of students choose to leave the programme once they have secured the available exemptions.

Module Review:

A review of modules was undertaken. In general, module descriptors were well-written and conformed to Institute guidelines. The module, Navigation Instrumentation, was inadvertently omitted from the proposed schedule and should be re-instated. NMCI may wish to investigate the possibility of sharing modules on generic skills such as research methodologies across its range of Level 8 offerings.

Contact hours for a number of modules were higher than the norm expected for a programme of higher education study at Level 8. NMCI should review proposed contact hours to ensure they

conform to international good practice in relation to the balance between directed and self-directed study.

A number of minor issues in relation to learning outcomes, updating of resource list, possible over-assessment, indicative word count on essays etc. were also identified which should be addressed prior to the programme being re-validated.

Recommendation NMCI review the number of contact hours associated with modules of the programme.
NMCI investigate the possibility of sharing modules across its range of Level 8 programme offerings.

Requirement Module descriptors should be amended in light of feedback from the Module Moderator and the panel prior to re-validation of the programme.

Progression:

NMCI has plans to develop a Masters degree in Nautical Science or a related discipline. A needs analysis for this programme is to be undertaken shortly.

Programme Block 2: B.Eng. (Marine Engineering)

Present:

Panel Members:

Ms. Aoife Hackett

Dr. Paddy Murphy

Mr. Ean Wallace

Dr. Barry O'Connor

NMCI Staff:

Mr. Michael O'Donovan (Electrotechnology)

Mr. Dermot O'Reilly (Marine Engineering)

Mr. Gerry Horan

Mr. Jody Power

Mr. Stefan de La Cour

Dr. Tadhg Creedon

Mr. Pat Mohally.

The following programmes were reviewed by the Panel

B.Eng. (Marine Electrotechnology)

B.Eng. (Marine Engineering)

- Proposed change in programme title from Marine & Plant Engineering to Marine Engineering to more accurately reflect the content of the programme and the programme outcomes, the term 'Plant Engineering' being an outdated term in the industry.

The Panel approved this change of title

- The Panel recognized that factors which tend to militate against increasing intake numbers included restrictions on workshop group sizes. This has a particular impact in light of the significant workshop requirements in the course vis a vis professional certification. The challenge of securing sufficient berths for cadets is a further limiting factor. The panel believed that given the demand for high quality marine engineering cadets, and the particular reputation of NMCI graduates and world class facilities, every effort should be made to increase intake numbers and to ensure that an appropriate balance is achieved between theoretical and practical aspects of the course programme.
- The Panel approved all proposed changes in the programme and welcomed the increased emphasis on CAD, with a reduced emphasis on drawing. With *Marine Engineering & Electrotechnology Seaphase* going from 5 to 10 credit module, more specific assessment tasks need to be listed. In keeping with STCW 10, High Voltage applications have replaced some of the electronic engineering material.
- Changes in Simulation component of the *Marine Engineering Operations* module needs to be approved at Department of Marine level before being signed off.
- The Panel recognized the need for the College to develop a Level 8 option to allow BEng graduates a progression pathway. The College needed to be clear as to whether a BEng (Hons) award developed from the current degree base would be accredited by Engineers Ireland, for example, or grant graduates an exemption from the Chief Engineer's exam.
- The Panel queried if there was a significant skewing of module marks where given modules contained exam components which went to satisfying professional competence assessment where the Department of Marine specified a very high pass mark. Following discussion the Panel were satisfied that this was not an issue in Marine Engineering or ETO programmes.
- NMCI are encouraged to develop appropriate Level 8 progression pathways for the Level 7 engineering graduates.

The Panel recommended validation of the B.Eng. (Marine Engineering) for a period of 5 years. B.Eng. (Marine Engineering)

B.ENG. (MARINE ELECTROTECHNOLOGY)

- The NMCI staff were complimented on the complexity and relevance of this new programme offering. As with the Marine Engineering degree, certain electronic engineering material has been replaced with High Voltage topics to reflect the changing demands of the industry. The panel approved all proposed changes in modules and module schedule, as per the changes in B.Eng.(Marine Engineering).
- The majority of students on the course are from overseas. Proposals are in train to allow holders of the National Certificate (Electrician) direct entry onto the course. The Panel agreed that this would enhance the class dynamic on the programme and secure the sustainability of the programme. The Panel approved the proposal to allow direct entry to the programme to holders of the National Craft Certificate (Electrician).

The Panel recommended validation of the B.Eng.(ETO) for a period of 5 years.

Note:

The Panel recognizes the concerns of the CIT NMCI Engineering staff regarding the level of technician support which has a limiting effect in getting maximum educational value from a first class engineering plant room.

Programme Block 3: INS Programmes

Present:

Panel Members:

Cpt. Fred Anstey

Mr. Shane Begley

Mr. Fergus Britton

Dr. Stephen Cassidy

Dr. Joe Ryan

Irish Naval Staff

Cdr. Dave Barry

Lt Cdr Thomas Hobbins

Lt. Declan Fleming

The following programmes were reviewed by the panel.

Higher Certificate in Arts in Leadership, Management & Naval Studies (NFQ 6)

Bachelor of Arts in Leadership, Management & Naval Studies (NFQ 7)

HIGHER CERTIFICATE IN ARTS IN LEADERSHIP, MANAGEMENT & NAVAL STUDIES

- The HC LMNS programme is based on the Potential Non Commissioned Officer (PNCO) course syllabus (Defence Forces Syllabus TS NS 05/2010) and all core sub branch training the student undertook prior to undergoing the PNCO course. On completing initial recruit training, the student passes out as an Ordinary Rating and is then streamed into one of four sub-branches which are;
 - Seamans
 - Logistics
 - Communications
 - Engineering
- The ordinary rating undergoes the initial branch training in one of the four disciplines which forms part of the Higher Certificate process as this and subsequent sub-branch training is accredited and required for the student to advance in the Naval Service. Once all initial sub-branch training has been completed, the student goes to sea and completes a task book which is a check list of on the job and academic training the student carries out

in the course of their work. A subject matter expert (an NCO or a commissioned officer) on that Ship will examine and sign the sections of the task book to verify the student's proficiency. Completion of this task book enables the student to undergo further sub-branch training and eventually be examined for advancement to Able Rating.

- At the rank of Able Rating, the student will eventually undertake further sub-branch training, namely the Able Rating to Leading Rating course, in their particular disciplines. This course also attracts credits and is a pre-requisite for entry onto the Potential Non Commissioned Officers (PNCO) Course. Successful completion of the PNCO course will qualify the student for promotion to Leading Rating.

Programme Structure:

This is a two stage, 120 ECTS credit programme at Level 6 on the National Framework of Qualifications. In the first stage consisting of two thirty credit semesters, modules are grouped and aligned with the four sub-branch classifications. For instance, a student streamed in to the Communications sub-branch will take the modules Naval Communications 1 (5 ECTS), Naval Communications 2 (5 ECTS) and Naval Work Placement (Comms1) (20 ECTS) in Semester 1 and Naval Communications 3 (5 ECTS), Naval Communications 4 (5 ECTS) and Naval Placement (Comms2) (20 ECTS) in Semester 2. The second stage is common across all four sub-branches with students taking courses in more general areas appropriate to the naval service such as a firearms instruction, tactical leadership etc.

Recommendation Amend Semester 1 and 2 schedules to group appropriate modules using the Group Elective option.
Remove Survival Management (Naval) from the Semester 1 schedule.

Module Review:

A review of modules was undertaken. In general, module descriptors were well-written and conformed to Institute guidelines. Some general comments which the proposers may wish to consider when finalising the module descriptors.

- a) Review the Repeat option chosen in the module descriptors. A number of modules have Repeat Exam as an option which may not be appropriate given the nature and content of the module.
- b) The timing of the assessments could be staggered in the module descriptors. At present a number of module descriptors have all coursework with a submission date of end-of-semester.
- c) General updating of book resources. In particular, additional non-naval resources may be appropriate in modules such as IT etc.

Requirement Module descriptors and semester schedules should be amended in light of feedback from the Module Moderator and the panel prior to re-validation of the programme.

BACHELOR OF ARTS IN LEADERSHIP, MANAGEMENT & NAVAL STUDIES

- This programme is based on the Senior Non Commissioned Officer (NCO) course syllabus (Defence Forces Syllabus TS 70/2010) and recognises the core branch training of the students up to the point of completing the Senior NCO course. Core branch training is the training that seaman, communications, logistics, and engineering sub-branch enlisted personnel undergo over their careers. This is both continual professional development and also job-type specific training that each branch member must undergo to qualify for entry to the NCO courses, and by extension to this programme.
- Successful completion of the NCO courses allows personnel to compete for promotion. Completion of the BA LMNS also raises the students' awareness of higher management techniques and requirements, and educates them in critical thinking required of senior NCOs. Thus the Naval Service benefits by having a body of personnel educated and trained to this level.
- Completion of this programme is voluntary and close to 100% of students will attempt the degree submission. A supervisor (commissioned officer with at least a Level 8 honours degree) and a mentor (an NCO who has previously completed this programme or a subject matter expert or another third level qualification) are assigned to supervise and guide the student in his/her submission.

Programme Structure:

This is a one stage, 60 ECTS credit add-on programme to the Higher Certificate in Arts in Leadership, Management and Naval Studies and is at Level 7 on the National Framework of Qualifications. The stage consists of two thirty credit semesters. Semester 1 has four common modules with two additional modules to be chosen from grouped electives aligned with the four sub-branch classifications. The second semester consists of four mandatory 5 ECTS credit modules with a 10 ECTS credit research project.

Recommendation Remove the duplicate Semesters 5 and 6 from the schedule.
Amend Semester 1 schedule to group appropriate modules using the Group Elective option.

Module Review:

A review of modules was undertaken. In general, module descriptors were well-written and conformed to Institute guidelines. Some general comments which the proposers may wish to consider when finalising the module descriptors.

- a) Review the Repeat option chosen in the module descriptors. A number of modules have Repeat Exam as an option which may not be appropriate given the nature and content of the module.
- b) The timing of the assessments could be staggered in the module descriptors. At present a number of module descriptors have all coursework with a submission date of end-of-semester.
- c) General updating of book resources. In particular, additional non-naval resources may be appropriate in some modules.

Requirement Module descriptors and semester schedules should be amended in light of feedback from the Module Moderator and the panel prior to re-validation of the programme.

Programme Block 4: B.Bus.(Supply Chain & Transportation Management)

Present:

Panel Members:

Dr. Barry O'Connor,
Ms. Aoife Hackett,
Mr. Fergus Britton.

NMCI Staff:

Mr. Ger Lowney
Mr. Conor Mowlds
Ms. Jane O'Keeffe

- The Panel complimented the relevant staff on the design and delivery of this industry-focused programme. Attention was drawn to certain elements of instruction and assessment on the programme. Consideration should be given to using social media to enhance the learning experience of this flexible delivery mode award. Breakdown of marks should be more explicitly set out in module descriptors. A possible over-reliance on essay-based assessment was identified in the module descriptors. Reading lists should be updated to include relevant on-line resources.
- All proposed module changes were approved.
- There are many possibilities to further develop this course in collaboration with other units within CIT, not least NMCI Services, GAC, CAMMS and, in particular, in the context of the L7/L8 degrees in Transport Engineering.
- The panel recognizes the over-reliance on one staff member for the design and delivery of the course.

The Panel recommended validation of the B.Bus.(Supply Chain & Transportation Management) for a period of 5 years

Research in SCM

The Panel recognized the significant potential within this area to develop an active research portfolio and research links with industry.

Minor amendments proposed to reading lists and assessment components.

Programme board encouraged to develop SCM offering further in collaboration with cognate academic / industry units within CIT/NMCI.

The panel recognize the over-reliance on one staff member for the design and delivery of the course.

SUMMARY RECOMMENDATIONS

Commendations

The Panel wish to record its appreciation of the NMCI response to the Phase I Review, in particular the work of Mr. Michael Delaney, complimented by all, and the input of Dr Noel Barry.

There was a ready, effective and informed engagement by all in the Programmatic Review process.

The Panel see the enormous potential of NMCI, given the appropriate support structures, for staff to deliver on this potential across its diverse but integrated mission of teaching, industry interaction and research.

The Panel commend the work done by all parties in enhancing the Student Experience at NMCI and encourage further engagement with the INS to further progress this experience.

Recommendations

NMCI Governance: Greater integration and synergy should be effected as between NMCI/NMCI Services/INS/CIT. It was not clear to the Panel as to the distinct missions of NMCI Services and NMCI Research. Research should be integrated across all aspect of NMCI activities. NMCI should engage in active and on-going benchmarking against similar institutions on an international basis. Firm linkages should be made with comparable outside institutions.

NMCI in FES: The Panel supports the proposal that the NMCI academic management be integrated into the Faculty of Engineering & Science. This integration will greatly enhance the NMCI's academic support structure both for individual academic staff and in terms of the academic QA and programme development initiatives.

Marine Engineering/ETO: The potential of the marine engineering and plant/electrical workshops/laboratories is not being maximised. Relevant Marine Engineering modules should make optimum use of the resources available. This view of the Panel was also identified by the stakeholder group. The panel recognises the shortcomings of the current technical support provision in this area and would urge CIT/NMCI to seek an appropriate remedy.

Student Numbers/Sustainability: NMCI should actively pursue a plan to increase student intake. The Panel in their Phase I Review were concerned with the ongoing sustainability of the NMCI unless student numbers and the range of courses offered is increased and advised that increased student population and activity at Ringaskiddy was also important to deliver and sustain a vibrant student experience.

In Phase II, industry stakeholders were strongly of the view that the demand for NMCI graduates is not matched by the current supply. The 100% employment rate for current graduates supports this view.

The panel recommend that a structured scientific study be conducted to quantify the real demand for NMCI graduates both in national and international spheres.

Increased intake of international students could make a strong impact on sustainability and the student experience.

Industry Advisory Committee: The Marine Survey Office should be invited to have a nominee on the Industry Advisory Committee of the NMCI.

NMCI Services: There is a clear link between the success, sustainability and on-going relevance of NMCI academic programmes and the industry-facing activities of NMCI Services. The Panel recommends the resourcing of a stronger interface between NMCI academic activities and NMCI Services.