



Northern Maritime University (NMU)

DELIVERABLE 4.2-4.4 NMU BUSINESS STRATEGY

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Main Author: Arne Jensen, University of Gothenburg, Chapter 1 - 5
Co-author: Rickard Bergqvist, University of Gothenburg, Appendix

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NMU Project Office

Transport Research Institute Edinburgh Napier University Edinburgh, UK

Tel: + 44 131 455 2976

E-mail: g.wilmsmeier@napier.ac.uk

Web: www.tri-napier.org



Prologue

In writing this conceptual report, the intention has been to develop some concise strategic guidelines for the NMU network after a market launch. The report is based on my own ideas and several NMU sources such as "NMU marketing platform and strategy" (Jensen, 2008), "Dissemination and use plan" (Zuesongdham, 2009), "Concept for a service product portfolio" (Kiel University, 2009), "SME and Stakeholder Study" (Wagtmann 2009), and my impressions from meetings and discussions with several persons in NMU. This report integrates deliverable 4.2-4.4.

The aim is to present a strategic framework for goal directed managerial guidance combined with enough flexibility for individual member responses to changing internal and external conditions. Flexibility is also necessary considering the fact that the NMU network consists of independent members over which strictly centralised management would be difficult. The strategic guidelines in this document are designed and formulated for the life of the NMU network after its "market introduction", but most of the content will, hopefully, be relevant also to NMU activities during the remaining project period.

A couple of remarks about writing style and strategy terminology:

This report must be read as a proposal for a business strategy. However, following a common writing style for strategy documents being in force, parts of it have been written using the present tense. This makes it simpler to use the text later if a market introduction will actually become reality.

This report has been termed "NMU Business Strategy". Business strategy is conceptually very close to "Competitive strategy", a term that could have been used as a synonym. They are both conceptual tools for strategic market management, or simply, strategic management. Their purpose is to create a competitive fit between an organisation's products, customers and delivery methods; to outline the basis for communicating the organisation's offer to the market by marketing strategies; and to establish the most fundamental operating principles and policies of the organisation.

Another remark concerns the use of product terminology. Following Kotler (e.g. Kotler, 2006, p.373)¹ and general marketing literature, products can be classified into goods and services. This classification simplifies terminology such as the use of established words like "product line" and similar, which cover services as well. Deeper categorisations of goods and services exist, but are unnecessary for the present purpose. All NMU's main products are services.

In this document, the terms "partner" and "member", referring to NMU partners, are used as synonyms.

Chapters 1 – 5 have been written by me and Appendix by Rickard Bergqvist.

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Arne Jensen

¹ Kotler, P. and Keller, K.L. (2006), "Marketing Management", 12 ed., Pearson-Prentice Hall, Upper Saddle River, N.J.



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The Northern Maritime University (NMU)

The Northern Maritime University (NMU) is a network of independent universities from countries in the North Sea Region involved in maritime business education and research and cooperating according to the NMU network agreement for the progress of the maritime transport sector. In this context, the maritime transport sector is taken to comprise key actors involved in door-to-door maritime transport chains such as water carriers, ports, and hinterland carriers as well as supporting service providers and public regulators and policy makers.

1 Mission

The mission of the NMU is to co-ordinate, pool and utilise NMU partners' key resources collectively for strengthening the sustainability, competitiveness and innovativeness of the maritime transport sector of the North Sea Region and beyond by

- offering students and course providers at universities and in industry a broad range of innovative courses and course components of high academic quality in maritime business management and according to the Bologna criteria (Mission 1)
- offering the sector and universities improved access to scientific expertise in subjects supporting business management and public regulation in the maritime transport sector (Mission 2)
- organising the skills, experiences and competences of NMU members for undertaking common industrial and educational R&D projects in business management and public regulation related to the maritime transport sector (Mission 3)
- linking the output of graduates from the NMU university network to the sector's demand for academically educated labour (Mission 4)

Continuous collaboration among partners is a fundamental driving force for accomplishing the NMU missions as described above. It can, therefore, be considered as an important mission in itself.

2 Organisation and principles of operation

2.1 Organisation

The NMU network is proposed to be led by a coordinating unit, the task of which is to utilise, develop, and manage the physical and intellectual resources and rights that the members place at NMU's disposal according to the NMU network agreement. There are several ways of organising the coordinating unit. It is suggested here to have a board responsible for policy and decision-making and a secretariat for implementation and administration led by a NMU coordinator. The central coordinating unit should be either placed with one NMU partner or decentralised by placing the secretariat and the coordinator with one NMU partner the web site with another.

Borrowing a term from modern retailing, the NMU network can be regarded as a central service unit of a voluntary chain which is owned by the chain members, the universities. These are "selling" and using a few products bought from the central service unit, but their dominating output is made "in house" under their own label.

In functional terms it is suggested here to organise NMU in two strategic business units (SBUs) under the central coordinating unit, SBU1 and SBU2. SBU1 is responsible for fulfilling Mission 1 and SBU2 for Mission 2-4. SBU1 represents the main activities of the NMU and SBU2 three important support activities for the organisation and its customers. The activities of the two strategic business units are interrelated and they will both, in a longer perspective, contribute to making NMU a leading academic network for innovative maritime education and R&D. In other organisational contexts, a strategic business unit is an independent profit centre having a strategy of its own. This model, when



applicable, should be imitated by NMU. Business unit strategies, however, must support overall NMU strategy. It is the responsibility of the board of the NMU network to harmonise strategy implementation if necessary.

Figure 1 shows the proposed NMU governance structure and the organisation of the main NMU activities.

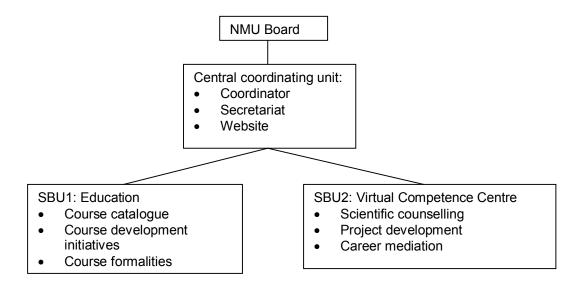


Figure 1. Proposed NMU organisation.

The SBUs are functions responsible for coordinating various fixed and virtual resources to a basic preparedness for service production and marketing as defined in the NMU network agreement. Most service provision will be carried out decentralised by NMU partners, either individually or in small groups. The central unit and the SBUs can be located either together or at different partners and rotated between them in order to stimulate collaboration.

2.2 NMU as subcontractor

It is important to understand that NMU services will be delivered by NMU members to their final markets as one of perhaps several components in the members' service packages. These packages will normally be marketed and delivered in the name of the members, the universities, in their on-going activities and not primarily in the name of NMU. In this sense, the NMU will be a subcontractor to its members. NMU will work in direct transaction channels (NMU to final user/consumer) only to regional or global markets² and only if agreed upon among all NMU members. This role of NMU as being a "subcontractor" to its members has two important implications. The first implication is that NMU will not deliver services directly to the final markets in competition with its members. The second implication, which is partly a consequence of the first, is that it is important to develop a strong NMU brand³.

2.3 The NMU brand

In order for the NMU network to survive in a longer perspective, its brand must be well known and attractive to both customers and final markets. This can only happen, if the services of the NMU network simultaneously are capable of adding value to both NMU customers and the final markets. NMU members must consider it as cost efficient, flexible and demand creating to integrate NMU

² An example could be a course in port management on a global scale agreed upon by NMU board members or similar

The meaning of "strong brand", in this context, is a "label" that many customers and consumers want to be associated with because it represents superior design and delivery of the core services (= high quality).



services in their output where relevant, and the final users, the consumers, must find NMU members' service outputs more valuable and useful with, than without, NMU services.

This calls for high quality in both the design and delivery of NMU services. It also calls for high quality of the context, the service packages, in which NMU services are integrated. There may be quality interdependencies between the NMU services as such and their delivery contexts which must be addressed, if the ambition is to build and maintain a strong NMU brand. These quality aspects will have to be under continuous review

The NMU web site is an important tool for communicating the NMU brand, for marketing, and for operational order mediation and service delivery. Therefore the responsibility for the website is placed at the central coordinating unit.

3 Product mix

The NMU product mix consists of services organised in four product-lines: Education, scientific counselling, project development, and career mediation. Scientific counselling, project development, and career mediation are components of the NMU Virtual Competence Centre, the design of which is developed in the present chapter.

3.1 Education

Education is the key product-line in the NMU product mix. The educational offer consists of a system of modules. A module has a natural coverage and content in terms of learning objectives, as well as in terms of theoretical origin and practical relevance. A module thus constitutes what is normally understood as a course in the language of the academic community.

3.1.1 Module structure and content

The NMU modules follow the requirements of the Bologna principles. NMU modules have a size of 7.5 ECTS credit points and are made up from five module elements (MEs) of 1.5 ECTS credit points. The MEs are the smallest elementary components in the course system. MEs are normally developed and used in the context of a module, but a given ME may occasionally also have a stand-alone use for other educational purposes or be used in more than one module. NMU will only develop and offer modules and MEs of size 7.5 ECTS and 1.5 ECTS respectively. All modules and MEs in the NMU product-line for courses have to follow NMU quality criteria, among them the Bologna principles and requirements.

A set of NMU modules can be used for designing course programmes for specific careers or labour markets. NMU modules exist for both the Bachelor level and the Master level. Each ME is developed, owned, and provided on demand by one ore more of the NMU university members as long as it exists in the NMU product mix. It is the responsibility of ME owners to update their MEs over time. NMU members will develop new MEs and modules according to the standards prescribed in the NMU network agreement when sector needs and member capabilities coincide.

3.1.2 Course delivery

There are three basic modes of delivery by which a ME owner can deliver the content of a ME:

- Conventional face-to-face classroom teaching at the ME owner's campus
- Via the Internet as e-teaching
- Conventional face-to-face classroom teaching by the ME owner as a visiting lecturer travelling lectures concept.

⁴ E.g., if a teacher is using a NMU course component as part of a badly managed, and badly taught, course for industry.



In many cases, a combination of two or three of these modes of delivery will be used which leads to a forth category: Blended teaching. Blended teaching differentiates the NMU brand from many competing alternatives.

The combination of modes actually offered for a given ME is the choice of the ME owner. These modes of delivery can be combined with exchange of students between universities where students study one or several MEs at another campus during a short period of time. This kind of flexible, goal-oriented student exchange will add a new dimension to the regular intra-European student exchange programmes.

The ME owner must take responsibility for examining and grading students of a ME according to NMU requirements. However, the formal use of these grades in a wider educational context such as in various academic degrees is the responsibility of the university or organisation issuing the degrees and not of the ME owner that delivers the ME.

3.1.3 Customers

NMU customers refer to organisations to which NMU partners sell course services. These organisations can be considered as resellers or distributors in the NMU marketing channel for courses. The services are delivered by NMU ME owners at locations chosen by the resellers and delivered there to the service consumers. A consumer is a recipient of the educational act or process. In commercial terms we have two transactions, between NMU partners and their customers and between NMU customers and the final consumers. NMU partners will normally also distribute courses directly to consumers (direct distribution) in their own consumer segments such as to their own students.

In production terms the service is provided and delivered by the NMU ME owner to the final consumer in an interactive process. The consumer is the NMU customer's customer if distribution is indirect. The actors in the NMU marketing channel for courses are summarised in Table 1, where the terms target customers and target consumers refer to both existing and potential such actors.

Table 1: NMU marketing channel actors

NMU target customers	NMU target consumers
University customers: Course developers and course leaders in logistics and transport economics and management and other subjects relevant to the maritime transport sector	University students in Logistics and transport Other subjects relevant to the maritime transport sector such as international trade and international business
Industry customers: Competence managers and developers in the maritime transport sector	Industry students from the maritime transport sector in need of competence development

3.1.4 Value added

The task of the NMU course services is to deliver educational value to customers and consumers by increasing the competitiveness of both in their respective market places. In a generic sense, the NMU network can deliver value to customers by increasing their ability to offer such courses and educational programmes which they are unable to produce themselves without access to the kind of subcontractor services offered by NMU. There can be several explanations for their difficulties. NMU can deliver added value to customers and consumers by offering:

- Specialised modules and module elements (MEs) of high quality for the maritime sector, courses that target customers are unable to produce themselves because of lack of expertise or financial resources for developing and running such courses
- Modules and MEs made available to customers when and where they need them. This means that NMU education services must be possible to integrate in a flexible way in the educational production cycles of the customers



- Modules and MEs that consumers find interesting and stimulating to study
- Modules and MEs that are expected by consumers to be competitive in their labour markets
- Flexible and differentiated teaching and learning methods

These characteristics can be seen as specific generic "value adders" which are important for future NMU course development and delivery. They differ in importance for different customer and consumer segments. They have been applied so far in the development processes of the NMU project. In addition to these specific factors as "value adders", a strong NMU brand will in a more general sense add value to any customer/consumer who is permitted to distribute/consume NMU products.

3.2 Scientific counselling

Scientific counselling is one of the services of the NMU Virtual Competence Centre, strategic business unit 2 (SBU 2). It is a manifestation of the second mission of the NMU.

3.2.1 Service definition

The NMU scientific counselling service offers external and internal users to draw on the collective skills, experiences and competences of the NMU members as scientific experts in subjects related to business management in the maritime transport sector. Possible services include inputs to maritime transport decision processes in industry and public management as well as advisory educational services to universities and companies such as development of in house management training programmes in industry and supervision of thesis work at universities.

3.2.2 Service delivery

NMU partners appoint their own experts within a predefined set of scientific fields of competence according to their internal policies and NMU requirements. Names of experts of each NMU partner are available on the online portal of the NMU Virtual Competence Centre under "Part A, Scientific Counselling". Experts are categorised in a way which facilitates for clients to identify and contact the correct expert. The predefined set of scientific fields of competence is shown in Table 2.

Table 2: NMU Virtual Competence Centre. Part A, Scientific Counselling. Template for expert identification. NMU member: _____

Application	Scientific fields of competence	Names of experts
Company	(1.1) Analysis of freight markets	
strategy	(1.2) Analysis of competition	
	(1.3) Company overall and functional	
	strategies	
Government	(2.1) Regulation/deregulation and	
strategy	efficiency	
	(2.2) Transport policy measures	
	(2.3) Environmental policy measures	
	(2.4) Maritime and transport law	
Transport	(3.1) Port management	
chain design	(3.2) Technologies of shipping	
and	segments and ship types	
management	(3.3) Intermodal maritime transport	
	chains	
Other	(4.1-)	

Each NMU partner university wanting to participate in NMU scientific counselling will be offered a template for expert identification like the one shown in Table 2. It is the responsibility of the partner to maintain and update the template. A unique key to the template will be given to each participating partner by the NMU secretariat. The technical details of the scientific counselling and its presentation on the NMU web site are described in Appendix A 1.



3.2.3 Customers

Operationally, customers could be defined as anyone in need of scientific advice or knowledge related to business management in the maritime transport sector. In nominal terms, the potential clients for scientific counselling are widespread over several sectors in society and therefore difficult to specify. Table 2 gives an overview of target customer categories and target customer representatives for scientific counselling.

Table 3: Customers and their representatives for scientific counselling

Target customer categories	Target customer representatives
Industry: Companies in the commercial part of the maritime transport sector	Board members, top managers, and transport and logistics analysts
Government: Regional, national, and supranational authorities and public organisations in the maritime transport sector	Politicians, policy makers, and transport analysts
Academia: Universities and similar institutions providing education in logistics and transport	Programme and course developers
<u>Media</u>	Journalists reporting on logistics and transport

3.2.4 Value added

The objective of NMU scientific counselling as defined above is to deliver value to customers by offering scientific knowledge and expertise that

- can be found directly without long search processes
- is supported by theory and/or scientific studies
- provided by researchers who meet NMU and member quality criteria
- is objective and free from vested interests and following NMU and university rules of ethics

3.3 Project development

Project development is another service of the NMU Virtual Competence Centre, strategic business unit 2 (SBU 2). It represents the third mission of the NMU. Technical details and the web site presentation are described in Appendix A 2

3.3.1 Service definition

Project development is an expert service providing advisory support for various steps in the project development process in the maritime transport sector such as initiating, funding, organising, carrying through and reporting R&D. The aim of such projects is to create new knowledge for maritime transport management and education.

3.3.2 Service delivery

Project development advisory services are provided by the NMU project development group, lead by the NMU project development co-ordinator. The role of the group and its co-ordinator is to give advisory and administrative support to all steps in the project development process. Information and contact details for users are available on the online portal of the NMU Virtual Competence Centre under "Part B, Project Development". The demand for service can be communicated to the co-ordinator via the portal or at personal meetings, and the service can be delivered either via the Internet or through personal contact. The project development co-ordinator will continuously follow the development in the maritime transport sector and its needs for R&D and inform NMU partners about



such needs via the internal area of the NMU web site. Two kinds of project development services will be provided:

- Continuous surveillance of the maritime sector's needs for R&D made by the project development co-ordinator
- Advisory and administrative project support on an ad hoc basis

3.3.3 Customers

Project development initiatives can be taken by researchers or teachers from individual or groups of NMU partners. Such initiatives refer in particular, but not only, to common projects supposed to be carried out by all or some of the NMU partners. This means that customers are internal NMU customers. Only employees in NMU partner organisations, who are entitled to plan and lead R&D projects in their own organisations, can be authorised to use the project development service. This does not, of course, exclude NMU members from involving non NMU members as participants in such projects. Communication to all members of project development going on in the project development group is required, even if not all NMU members are involved.

3.3.4 Value added

The objective of the NMU project development advisory service is to add value to internal NMU customers' project development processes by

- Identifying project ideas
- Identifying sources for project financing
- Offering expertise for organising and monitoring project work
- Giving support to reporting project results to the scientific community, the industry and the public

3.4 Career service

Career service is the third set of services provided by the NMU Virtual Competence Centre, strategic business unit 2 (SBU 2). It is a manifestation of the fourth mission of the NMU. Technical aspects and the web site presentation are described in Appendix A 3.

3.4.1 Service definition

All NMU members and such organisations from the maritime sector that have been admitted by the NMU career service admission unit of the Virtual Competence Centre are accepted as authorised users. The NMU career service offers the users access to the following services:

- NMU universities can present the personal competence profiles of their graduated students (Bsc, MSc, MBA and PhD levels) in a standardised manner to the labour market
- Employers in the maritime transport sector can identify and contact graduates with adequate competence profiles for specific positions and, at the same time, define and promote their needs for qualified academic labour in a partly standardised manner
- NMU analysts can collect data by data-mining in the career service database for developing or adapting educational strategies, courses and programmes to conform to the demand for labour from the maritime transport sector.

Each NMU partner will be responsible for presenting and up-dating its list of graduated students in a dedicated section of the portal and given a unique key to the section. Another key will allow partners access to the entire data base for data-mining. Each authorised employer will be given a unique key for communicating with the employer section of the NMU career service.

3.4.2 Service delivery

Career services are provided by a web based information system for linking the output of graduates from the NMU universities to the maritime transport sector's demand for academic labour. Authorised users can search for graduates with desired profiles using pre-defined search categories in the NMU



web portal. This input can be stored in the data base for future data mining and other uses. The NMU career service will, if suitable, use existing systems and softwares for its service delivery.

3.4.3 Customers

All authorised users are customers of the NMU career service. Customers and consumers of the various career service elements are categorised in Table 4.

Table 4: Career service customers and consumers.

Service elements	Customers	Consumers
Graduate competence profile display	Internal PR and marketing units in NMU partners' organisations	Employers and graduates
Employer portal for competence search	Employers' HR departments in the maritime transport sector	Employers and graduates
Career data mining	NMU partners	NMU partners' analysts

3.4.4 Value added

The objective of the NMU career service is to deliver value to

- NMU educators by informing employers about the competence profiles of their graduates which will strengthen the image of the educator among employers and students
- Employers in the short run by making it possible for them to identify and contact graduates with required profiles for specific jobs and in the long run by the impact their registered demand for labour may have on the design of educational programmes
- Graduates by reducing the time between date of graduation and date of appointment and by improving the fit between graduate profile and employer requirements.

4 Marketing strategies

4.1 The aim of marketing and the importance of brand development

The aim of marketing is to create interest, awareness and demand for the products of the NMU product mix. Formulated in this way, the aim reflects a lot of methodological wisdom about the marketing task. It points to the dynamic problem of moving from the present situation, where the NMU concept is almost unknown by the market, to the ideal situation where there is a sufficient and lasting demand for the NMU products characterised by customer and market loyalty. The NMU products are complicated knowledge services, and thus intangible. They are produced by a virtual organisation which is also rather intangible. This makes it necessary to create a set of image dimensions in which potential customers and consumers can create a mental picture of the NMU and its output, a picture that is in line with both the slogan "The academic network for innovative maritime education and R&D" and the NMU mission. This mental picture is the NMU brand, a perceived intangible concept.

If the NMU succeeds in creating a strong brand, the brand will automatically carry out a lot of the marketing work.

In the beginning of the brand building process, marketing communication between NMU members and potential customers, consumers and communication mediators will be the most important method for marketing and brand building. Personal communication in particular will be extremely important for NMU brand building in the beginning of the NMU life-time. The NMU slogan and the four components of the NMU mission provide general promotional content to the personal communication. Non



personal written communication using the NMU web site, the NMU logo and the various marketing artefacts that have been produced can support and facilitate personal communication, but the latter will be the most important marketing method considering the products and target groups of the problem.

However, in the longer perspective a strong NMU brand will first and foremost be created by offering the market a relevant product mix and delivering this mix in a way that meets the expectation of the customers. There is no escape from that. Since this will take time, NMU brand development will need support from marketing communication between NMU members and potential customers, consumers and communication mediators.

4.2 Organisation of the NMU marketing work

An important implication of the discussion so far is that marketing, and especially personal marketing communication, has to be decentralised to the NMU members. The reason for this is, firstly, that most market contacts will be based on NMU members' personal and organisational relationships with existing and potential customers and, secondly, that contextual knowledge about markets and customers makes the solution of marketing problems more efficient and effective. This is true for the industry segment of employees as students. For university students the conclusion is the same but for a slightly different reason. Here student populations, in particular newcomers, are all part of the local catchment areas of NMU universities. This also calls for decentralisation of marketing to the NMU members. However, in both cases the decentralised marketing task will become easier over time since it will be possible to draw on the, hopefully, increasing strength of the NMU brand. NMU marketing will be relationship marketing.

4.3 Communication strategies

4.3.1 Courses

NMU marketing communication will take place in a complicated social system with possible transmission of information and influence through series of face to face dyadic contacts. In such diffusion processes it will be efficient to identify two target groups for the NMU communication strategy, target customers and target consumers. The customers are the decision makers who have the power to choose or not to choose NMU as a supplier, but the consumers may influence these decisions for or against NMU in the complicated social system that is at work here. Therefore, possible communication channels to both customers and consumers of courses are shown in Tables 5 and 6.

Table 5. Possible communication channels to target customers of NMU courses

NMU target customers	Possible communication channels
University customers: Course developers and course leaders in logistics and transport economics and management and other subjects relevant to the maritime transport sector	Personal: Organisation of scientific conference sessions about NMU Short seminars about NMU at universities Informing about NMU in all contexts where NMU representatives meet members from target markets
	Non personal: Articles in scientific journals Articles in newspapers and magazines written by journalists Posters at trade fairs, exhibitions etc. Internet communication (written and photographic)
Industry customers: Competence managers and developers in the maritime transport sector	Personal: Organisation of industry conference sessions about NMU Short seminars or presentations about NMU in industry



NMU target customers	Possible communication channels
	Personal communication at face to face
	meetings with industry managers
	Non personal:
	 Articles in industry journals
	Articles in newspapers and magazines
	written by journalists
	 Posters at trade fairs, exhibitions etc.
	 Project leaflets, newsletters, press releases
	Internet communication

Table 6. Possible communication channels to target consumers of NMU courses

NMU target consumers	Possible communication channels
University students in:	Personal:
Logistics and transport	Presentations about NMU at course and
Other subjects relevant to the maritime	programme information meetings
transport sector such as international trade	 Information to student unions etc.
and international business	Non personal:
	Articles in industry journals
	Articles in newspapers and magazines
	written by journalists
	Posters at trade fairs, exhibitions etc
	Project leaflets, newsletters, press releases
Industry students;	Personal:
Employees in the maritime transport sector in	Presentation of NMU at industry conference
need of competence development	sessions
	 Information to labour unions etc.
	Non personal:
	Articles about NMU in industry and company
	journals
	Articles in newspapers and magazines
	written by journalists
	 Posters at trade fairs, exhibitions etc
	Project leaflets, newsletters, press releases

4.3.2 Scientific counselling

Communication strategies for scientific counselling are easier to develop than for courses since the target group is much smaller, more homogeneous and easier to identify. Table 7 below presents possible communication channels for various target groups.



Table 7. Possible communication channels to target customers for scientific counselling

Target customer categories	Target customer representatives	Possible communication channels
Industry: Companies in the commercial part of the maritime transport sector	Board members, top managers, and transport and logistics analysts	Personal: Organisation of industry conference sessions about NMU Short seminars/presentations about NMU in industry Personal communication at face to face meetings with industry managers Non personal: Articles in industry journals Articles in newspapers and magazines written by journalists
Government: Regional, national, and supra-national authorities and public organisations in the maritime transport sector	Politicians, policy makers, and transport analysts	Personal: Organisation of conference sessions about NMU Short seminars/presentations about NMU in Government Personal communication at meetings Non personal: Articles in industry journals Articles in newspapers and magazines written by journalists
Academia: Universities and similar institutions providing education in logistics and transport	Programme and course developers	Personal: Organisation of scientific conference sessions about NMU Short seminars about NMU at universities Non personal: Articles in scientific journals Articles in newspapers and magazines written by journalists
<u>Media</u>	Journalists reporting on logistics and transport	Personal: Organisation of industry conference sessions about NMU Short seminars/presentations about NMU in industry Personal communication at face to face meetings with industry managers Non personal: Pre-written contents or drafts for articles

4.3.3 Project development

Since the customers of the NMU project development service are internal individuals in the NMU member universities, there are no difficulties with communication channels. All communication will be internal.

4.3.4 Career service

The customers of the NMU Career Service are relatively easy to identify. The possible communication channels for to the customers are shown in Table 8 below. Since influence from consumers to customers can be assumed to be weak, only communication to customers is shown in the table.



Table 8. Possible communication channels to Career Service customers

Service elements	Customers	Possible communication channels			
Graduate competence profile display	Internal PR and marketing units in NMU partners' organisations	Personal: Organisation of scientific conference sessions about NMU Short seminars about NMU at universities Personal information to representatives from student unions Non personal: Articles in industry journals Articles in newspapers and magazines written by journalists			
Employer portal for competence search	Employers' HR departments in the maritime transport sector	Personal: Short seminars/presentations about NMU in industry Personal communication with industry managers Non personal: Articles in industry journals Articles in newspapers and magazines written by journalists			
Career data mining	NMU partners	All internal			

4.4 Pricing strategies

The aim of the NMU pricing strategies is to design principles and a structure for pricing so that the revenues from selling the NMU services can be expected to give a predetermined contribution to cost coverage, and also, perhaps, to generate a surplus that can be used for further development of NMU. Pricing must be simple and transparent.

4.4.1 Cost coverage

Two categories of costs must be covered: Common costs and separable cost.

Common costs represent the use of resources that are required to maintain a minimum NMU production preparedness and marketing activity according to the NMU mission. The costs of the central coordinating unit (coordinator, secretariat, and web site) and part of the costs of SBU 1 and SBU 2 can be regarded as common costs. They are by definition independent of the volume of output of the four service categories in the product mix. There are at least three possible alternatives for covering the common costs:

- Alternative 1: From external funding
- Alternative 2: From fixed yearly contributions from NMU partners
- Alternative 3: From a fixed proportion of NMU revenues (OH rate)

Sources for external funding according to alternative 1 could be the EU as well as national financiers. NMU stakeholders could also be a source. Alternative 2 requires that the partner universities are willing to cover the cost of a fixed minimum capacity. Alternative 1 and 2 can of course be combined. They require that the yearly common costs can be estimated, at least approximately. Alternative 3 is a little more complicated since it makes the contributions to common costs dependent on revenues that



are difficult to estimate in advance. Alternative 3 probably means that invoices either have to be issued centrally by the NMU secretariat or possible to check by auditors if issued by partners. An interesting solution could be to combine the three alternatives so that they together will generate a reasonable surplus that can be saved as a reserve for consolidation or paid back to the NMU members.

Separable costs refer to costs that are specific and identifiable for separable activities such as the delivery of services to customers by NMU members. Such services are proposed to be priced by the service supplier in an agreement between supplier and customer, and the supplier can use the revenues for cost coverage and contribution to profit (after deduction of contributions to NMU common costs, if required).

4.4.2 Education

The NMU modules and MEs will be described in a standardised manner on the NMU web site. This description will also provide information about the module "owner", e.g. addresses for communication. The cost of delivering a module or a ME will vary between modules and MEs depending on a lot of factors such as teaching hours, mode of delivery, travel expenses etc. Therefore, the price of course delivery will be decided in an agreement between the provider and the customer for each specific delivery. Any profit will be owned by the course provider. A NMU partner providing a course may of course need to buy one or more MEs from other NMU partners in an internal supplier-customer relation.

Within SBU 1 there will be a common cost for updating and maintaining the MEs to secure a basic production preparedness of the system. This may be the case for MEs containing e-learning elements. The principles for covering common costs of updating and maintaining MEs will be defined in the NMU network agreement, and yearly budgets for these activities will be decided by the NMU network board.

If alternative 3 is chosen by NMU for common cost contributions, then a payment system for OH rates has to be developed so that the necessary contributions to NMU common costs from course revenues will be paid to the central coordinating unit at about the same rate as the revenues are received.

4.4.3 Scientific counselling

Each partner will pay a fixed amount per year for the right to a template on the NMU website as described in section 3.2 in this report. The price to customers of the service itself is assumed to be determined in direct negotiation between the service provider and the customer, and the payment for the service rendered will be made directly from the customer to the provider. The fixed OH rate for common cost coverage will not be applied for scientific counselling.

4.4.4 Project development

The continuous surveillance of the maritime sector made by the project development co-ordinator will be a service which is available to all NMU partners. The cost of producing this service is a common cost and covered by the alternative that is chosen for covering such costs. The price of ad hoc project support on demand will be determined in a negotiation between the customer and the provider(-s), and the payment will be made directly from customer to provider. Use of the fixed OH rate could be discussed for ad hoc project development.

4.4.5 Career service

The NMU career service will be available for all NMU partners. Consequently, the cost of the career service is a common cost which will be covered through the chosen alternative for common cost coverage. The price of the career service for employers as customers will be set as a fixed price for access to the employer services. The career service, thus, represents a revenue source for covering common costs.

4.4.6 Dynamic price strategy implementation



The first step in implementing the price strategy is to calculate the yearly common costs of the central coordinating unit and the two SBUs. Given this cost, it is reasonable to require that it must be covered mainly from alternatives 1-2 for cost coverage year 1 and that the income expected from applying the OH rate on revenues (alternative 3) and from career service fees for employers are underestimated with a reasonable safety margin. Any NMU profit will be carried over to the budget for year 2 for reducing partners' own contributions to the coverage of common cost or as profit for partners at the end of year 2. This strategy can be followed in subsequent years.

5 Decisions for implementation

The market introduction and development of the NMU network after the market introduction will gain from following a business strategy, particularly considering that it is a virtual network. The implementation of the NMU business strategy as proposed in this report requires that a number of strategic decisions are made. This section will summarise the most important decisions that have to be made as a start of the implementation of the business strategy.

- Decision on market launch: The members of the present NMU project steering committee decide to launch NMU in the market on behalf of their respective principals, and the steering committee members continue in the role of board.
- Decision on principles and criteria for accepting new partners in the NMU network.
- Decision on governance structure and organisation with a central coordinating unit and strategic business units (SBUs) according to section 2.1
- Decision on principles for covering common costs according to section 4.4.1, 4.4.2, 4.4.4, and 4.4.5
- Decision on price levels for cost coverage after a calculation of expected common costs
- Decision on individual partner pricing of courses (Section 4.4.2), scientific counselling (Section 4.4.3), and ad hoc project support (Section 4.4.4)
- Decision on dynamic price strategy implementation (Section 4.4.6)
- Decision on principles for appointing experts for scientific counselling (Section 3.2.2)
- Decision on appointment of project development coordinator and project development group
- Decision on the career service admission unit (3.4.1) and employers' access to the career service notice board (Appendix A 3)
- Decision on the use of the NMU Business Strategy as a general guideline for the development and operation of NMU after its market launch



Appendix – Structure of the Virtual Competence Centre

This appendix describes some technical aspects of the NMU Virtual Competence Centre and its presentation on the NMU web site. In the following, italics are used for the proposed web site presentation.

A1: Scientific counselling

Scientific counselling is one of the services of the NMU Virtual Competence Centre (SBU 2). It is a manifestation of the second mission of the NMU.

NMU partners appoint their own experts within a predefined set of scientific fields of competence according to their internal policies and NMU requirements. Names of experts of each NMU partner are available on the E-Collaboration Platform of the NMU Virtual Competence Centre under "Part A, Scientific Counselling". Experts are categorised in a way which facilitates for clients to identify and contact the correct expert. The predefined set of scientific fields of competence is shown in Table A1. One table will be arranged for each NMU member.

The customer may scroll the website by partner or by scientific fields following the structure of Table A1.

Each NMU partner university wanting to participate in NMU scientific counselling will be offered a template for expert identification similar to the one shown in Table 2. It is the responsibility of the partner to maintain and update the template in the E-Collaboration Platform of NMU. A unique key to the template will be given to each participating partner by the NMU secretariat.

Table A1, Template

Table 1 tr, Table 1	
Name of partner university	
Contact information	
Link to university webpage	

Application	Scientific fields of competence	Names of experts	Contact information
Company strategy	(1.1) Analysis of freight markets		
	(1.2) Analysis of competition		
	(1.3) Company overall and functional		
	strategies		
Government	(2.1) Regulation/deregulation and		
strategy	efficiency		
	(2.2) Transport policy measures		
	(2.3) Environmental policy measures		
	(2.4) Maritime and transport law		
Transport chain design and	(3.1) Port management		
management	(3.2) Technologies of shipping		
	segments and ship types		
	(3.3) Intermodal maritime transport		
	chains		
Other	(4.1-)		

Scientific Counselling of the Virtual Competence Centre will contain:

1. Introduction to the services offered. Introduction should look something like (Italics are used for the proposed web site presentation):



Introduction

The NMU scientific counselling service offers external and internal users to draw on the collective skills, experiences and competences of the NMU members as scientific experts in subjects related to business management in the maritime transport sector. Possible services include inputs to maritime transport decision processes in industry and public management as well as advisory educational services to universities and companies such as development of in house management training programmes in industry and supervision of thesis work at universities.

2. Target customers

Target Customers

NMU Counselling Service offers support to anyone who needs scientific advice or knowledge related to business management in the maritime transport sector.

Scientific counselling service includes:

- Inputs to maritime transport decision processes in industry and public management
- Advisory educational services to universities and companies. For example:
 - o Development of in house management training programs in industry
 - o Supervision of thesis works at universities, etc.

Target customer categories	Target customer representatives
Companies in the commercial part of the maritime transport sector	Board members, top managers, and transport and logistics analysts
Regional, national, and supra-national authorities and public organisations in the maritime transport sect	Politicians, policy makers, and transport analysts
Universities and similar institutions providing education in logistics and transport	Programme and course developers. PhD thesis committees.
Media	Journalist reporting on logistics and transport

3. Types of scientific counselling

Types of Scientific Counselling

Consultancy for industry

- Advisory services
- Business research for strategic and operational management

Consultancy for national governments

- Advisory services
- Research for policy development

Consultancy for regional governments

- Advisory services
- Research for policy development

Common academic research projects for scientific knowledge development

- For NMU members only
- For all interested academies



Consultancy for universities

- Advisory services regarding course development, programme development, and thesis tutoring (BSc, MSc, MBA and PhD)
- Advisory services for academic quality management
 - 4. Scroll opportunities of scientific fields in accordance to table 2.

Scroll by scientific field:

"scroll-list of scientific field specified in table A1"

5. Scroll opportunities based on partners

Scroll by NMU partner:

"scroll-list of NMU partners"



A2: Project development

Project development is another service of the NMU Virtual Competence Centre, (SBU 2). It represents the third mission of the NMU.

Project development advisory services are provided by the NMU project development group, lead by the NMU project development co-ordinator (for example, the lead beneficiary of NMU). The role of the group and its co-ordinator is to give advisory and administrative support to all steps in the project development process. Information and contact details for users are available on the E-Collaboration Platform of the NMU Virtual Competence Centre under "Part B, Project Development". The demand for service can be communicated to the co-ordinator via the contact information on the platform.

Project Development of the Virtual Competence Centre will contain:

 Introduction to the services offered. Here the introduction should tell the viewer that he or she could seek contact either with individual NMU partners or project development co-ordinator. Proposal for introductory text:

Introduction

The central objective of the **NMU** project development advisory service is to provide expert support to internal **NMU** customers' project development processes by:

- · Identifying project ideas
- · Identifying sources for project financing
- Offering expertise for organising and monitoring project work
- · Giving support to reporting project results to the scientific community, the industry and the public

The aim of such projects is assumed to be scientific in the sense of creating new knowledge for maritime transport management and education by means of studies based on scientific methods. If you are interested in having a joint project within the **NMU** network or to find information about any ongoing or coming projects, please contact:

2. Contact information to the NMU project development co-ordinator

Contact Information

Gordon Wilmsmeier, TRI, Napier, Email, Tel.



A3: Career service

Career service is the third set of services provided by the NMU Virtual Competence Centre (SBU 2). It is a manifestation of the fourth mission of the NMU.

Career service of the Virtual Competence Centre will contain:

1. **Introduction** to the services offered. Proposal for introductory text:

Introduction

NMU Career Service fulfils the following purposes:

- NMU universities can present the personal competence profiles of their graduated students to the labour market.
- Employers in the maritime transport sector can identify and contact graduates with adequate competence profiles for specific positions.
- Employers can define and promote their needs for qualified academic labour.
- Educators can use it as a data source for developing or adapting educational strategies, courses and programs to conform to the demand for labour from the maritime transport sector.

Graduated students associated with **NMU** are encouraged to post their profiles at existing systems and software for career services, for more information click on the links below. **NMU** and its partner universities do not take responsibility for profile accuracy and content.

2. **Notice boards** where partners and approved organisations (admitted by the NMU career service admission unit) can post available positions and list of graduate students. All information posted is date specific and listed based on when it is posted. "Older" information will automatically be deleted (e.g. 12 months).

Notice boards

Notice Board "available positions"		

Notice board "graduate students"									
Name	Degree	University	Email	Content	Nationality	Gender	Age	Year of	Etc.
				of degree				degree	
				A, B or C					
				(see					
				below)					

Content of degree:

A: Mainly logistics and supply chain management

B: Mainly Transportation management

C: Balanced mix of A and B

3. **Links to existing systems** and software for career services and profile editing.

Links to existing systems



Link 1 Link 2 Etc.