

Northern Maritime University North Sea Region



# Northern Maritime University (NMU)

### **DELIVERABLE D5.4.1**

# **EVALUATION OF NMU-1 PILOT COURSES**

Due Date:December 2010 (End date)Submitted:20 February 2011Main Author:Harald M. Hjelle, HiMoldeDissemination:Consortium



## NMU Document Control Sheet

Project Number:								
Document short name:	Evaluation	Evaluation of NMU pilot courses						
Workpackage:	WP 5							
	Task 5.4 E	valuation of pilot courses						
Deliverable :	D5.4.1	D5.4.1						
Version:	1.1							
Document History:	Version Issue Date Distribution							
	0.1 28 September 2010 Consortium							
	1.0 22 December 2010 Consortium							
	1.1	20 February 2011	Consortium					

#### Classification

This report is:

Draft	
Final	Х
Confidential	
Restricted	
Public	

Partners Owning:	All
Main Editor:	HiMolde
Partners Contributed:	TRi, GU, Kiel-UAS, Jacobs, IVL, HiMolde
Made Available To:	All NMU Partners



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# CONTENTS

1	1 INTRODUCTION 2									
2	ov	ERVIEW OF THE NMU PILOTS	3							
	2.1	TARGET AUDIENCES FOR THE PILOTS	6							
3	FEI	EDBACK, FACTS AND COMMENTS RELATED TO EACH PILOT RUN	9							
	3.1	GOTHENBURG (SWEDEN) – 5 MODULE ELEMENTS (F1 – F5) IN SEPTEMBER-								
(	Эстс	DBER 2009	9							
3	3.2	ÅLESUND AND SORTLAND (NORWAY) – 2 PILOTS AND 1 MODULE ELEMENT (D3) IN								
[	Dece	MBER 2009-MAY 2010	12							
	3.3	Kiel (Germany) – 1 module element (C3) in March 2010	15							
3	3.4	BREMEN (GERMANY) – 1 MODULE ELEMENT (G1) IN MARCH-APRIL 2010	18							
	3.5	GOTHENBURG (SWEDEN) – 1 MODULE ELEMENT (B3) IN MARCH-MAY 2010	21							
	3.6	Molde (Norway) – 1 module element (D2) in April 2010	24							
3	3.7	Molde (Norway) – 2 module elements (A1 and A3) in August-September								
2	2010		25							
3	3.8	GOTHENBURG (SWEDEN) – 5 MODULE ELEMENTS (F1-F5) IN SEPTEMBER-								
(	Эстс	DBER 2010	28							
3	3.9	SVENBORG (DENMARK) – 1 MODULE ELEMENT E1 IN OCTOBER 2010	29							
	3.10	BREMEN (GERMANY) – 1 MODULE ELEMENT (C3) IN NOVEMBER 2010	32							
4	٥V	ERALL ASESSMENT OF THE PILOT EVALUATION	35							
2	4.1	A WIDE VARIETY OF LEARNING APPROACHES AND CONTENT DEVELOPMENT	35							
2	4.2	PARTICIPANTS ARE IN GENERAL VERY CONTENT	37							
5	LE	SSONS FROM THE NMU-1 PILOT PROGRAMME	40							



### 1 INTRODUCTION

This deliverable summarizes and evaluates the NMU pilot courses run between September 2009 and December 2010. Facts about the pilot runs are presented, and a summary of the feedback given from coordinators, teachers and students is included. Finally we have tried to evaluate the feedback and focus on lessons learnt from these trials.

In the original part of the NMU project, 7 full modules (7.5 ECTS) have been developed. Each of the modules has been divided into 5 module elements, constituting 1.5 ECTS each. The NMU pilots represent a subset of the modules and module elements developed under the NMU project. The full modules developed are:

- Module A "Applied Maritime Transport Management"
- Module B "Applied Maritime Economics"
- Module C "Maritime Transport and the Environment"
- Module D "Logistics and Global Supply Chain Management"
- Module E "International Maritime Human Resource Management"
- Module F "Intermodal Freight Transport"
- Module G "Ship Technology"

The development and full description of the content of the modules and module elements belongs to WP3. This is a WP5 document and will address the module elements nominated as pilots, and the experiences from the pilot runs.

More information about the concept for the pilot runs and evaluation could be found in NMU Deliverable 5.1.1.



# 2 OVERVIEW OF THE NMU PILOTS

A total of 21 NMU pilots have been run between August 2009 and December 2010 (Table 1). These pilots represent a wide variety of teaching methods and target audiences, thus providing a valuable background for evaluating the alternative concepts to include in the final NMU offering.

#### Table 1 Overview of NMU pilots run between August 2009 and December 2010

Module	Module	Responsible	Info	Teaching	Pilot	Target	Pilot Run
Element	Element Name	partner(s)	Contact	method	venue	group	Timeframe
ME A.3	Strategic Management in Maritime Transport	TRI	Alf Baird	Face2Face	Molde	HiMolde Master's students	Aug-Sep 10
ME A.1	Maritime Transport Business Environment	TRI	Alf Baird	Face2Face	Molde	HiMolde Master's students	Aug-Sep 10
ME B.1	International Trade and Maritime Geography	TRI	Gordon Wilmsmeier	Blended	GU	GU Students	March- May 10
ME B.3	Bulk shipping Economics	TRI	Kevin Cullinane	Blended	GU	GU Students	May 10
ME C.3	Emissions to air from maritime transport and emissions cleaning	IVL	Susanne Neumann	Blended	Kiel	Industry – Satori & Berger	March 10
ME C.3	Emissions to air from	IVL	Susanne Neumann	Blended	Bremen	Industry	Nov 10



Module	Module	Responsible	Info	Teaching	Pilot	Target	Pilot Run
Element	Element	partner(s)	Contact	method	venue	group	Timeframe
	Name						
	maritime						
	transport						
	and						
	emissions						
	cleaning						
ME D.2	Maritime	HiMolde/TRI	Harald M.	Blended	HiMolde	HiMolde	April 10
	Value		Hjelle			Master's	
	Chains					students	
					¥ .		
ME D.3	Analysing	HiMolde	Harald M.	Face2Face	Alesund	Industry	Dec 09-
	cases of		Hjelle			-	Apr 10
	maritime					coldstore	
	value chains					operators	
ME D.3	Analysing	HiMolde	Harald M.	Face2Face	Sortland	Industry	Jan-May
	cases of		Hjelle			– reefer	10
	maritime					and	
	value chains					coldstore	
	0	0011		<b>F</b> 0 <b>F</b>	<b>0</b>	operators	
ME E.1	Shore-based	SDU	Elin	Face2Face	Svenborg	SDU	Oct-Nov
	HRM		Kragesand			students	10
ME F.1	Introduction	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	to intermodal					students	09
	transport				0.1		
ME F.2	Intermodal	Jacobs	Bergqvist	Mainly e-	GU + e-	Mainly	Sep-Oct
	transport			learning	learning	students	09
	technologies			-			
ME F.3	Intermodal	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	system					students	09
	management						
	and .						
	economics						



Module	Module	Responsible	Info	Teaching	Pilot	Target	Pilot Run
Element	Element	partner(s)	Contact	method	venue	group	Timeframe
	Name						
ME F.4	Analytical	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	frameworks					students	09
	for strategic						
	intermodal						
	system design						
ME F.5	Intermodal	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	legal and	00	Dergqvist		00	students	09
	security					otadonto	00
	frameworks						
ME F.1	Introduction	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	to intermodal					students	10
	transport						
ME F.2	Intermodal	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	transport					students	10
	technologies						
ME F.3	Intermodal	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	system					students	10
	management and						
	economics						
ME F.4	Analytical	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	frameworks					students	10
	for strategic						
	intermodal						
	system						
	design						
ME F.5	Intermodal	GU	Bergqvist	Face2Face	GU	Mainly	Sep-Oct
	legal and					students	10
	security						
	frameworks						



Module	Module	Responsible	Info	Teaching	Pilot	Target	Pilot Run
Element	Element	partner(s)	Contact	method	venue	group	Timeframe
	Name						
ME G.1	Ship	JacobsUni	Indah R.	E-learning	JacobsUni	Students	March-
	Knowledge		Lengkong			also from	April 10
						Kiel and	
						Molde	

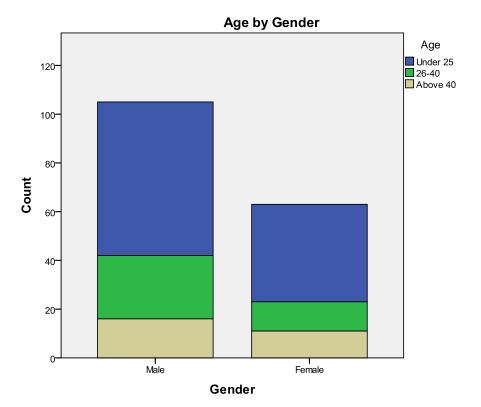
# 2.1 Target audiences for the pilots

Some pilots have been aimed at traditional students at partner universities, either at Bachelor's or at Master's level. Some pilots have been aimed at various stakeholder groups (industry), including agents, shippers, coldstore operators, ship operators and other actors from maritime industries. A few pilots have been open both to students and industry representatives. The total number of participants and their background is presented in Table 1. These numbers are based on completed ex ante evaluation forms. A total of 193 participants had completed such forms, but not all of them have filled in the required background information, therefore there is a varying number of missing observations in this table.

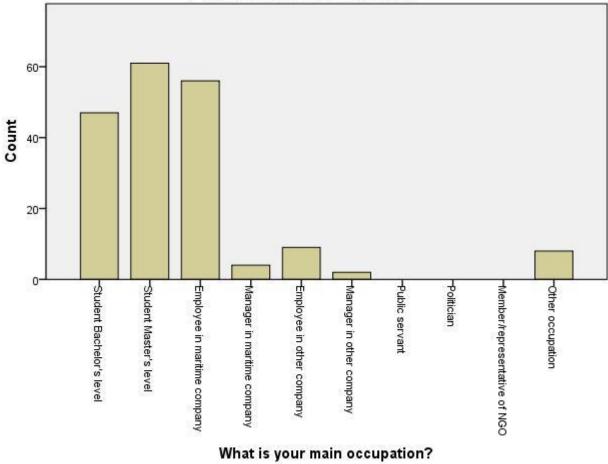
Table 2 Distribution of participants by age, gender and main	occupation for NMU pilots run between August 2009 and
December 2010	

	Male	Female	Total
Age < 25 years	63	40	103
Age 26-40 years	26	12	38
Age > 40 years	16	11	27
Bachelor's students	30	11	41
Master's students	33	22	55
Industry participants	34	29	63
Other participants	7	1	8
Total	105	63	193 (missing included)





Participants who completed Ex Ante evaluation form



#### Participants main occupation

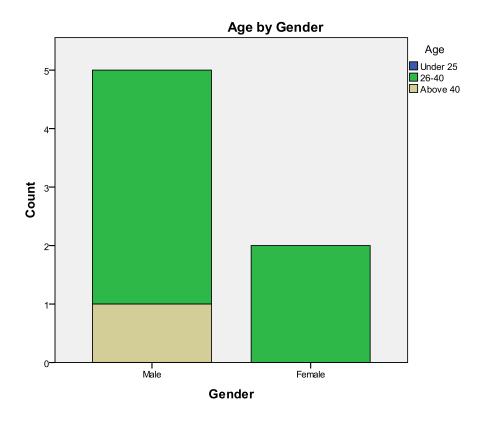


### 3 FEEDBACK, FACTS AND COMMENTS RELATED TO EACH PILOT RUN

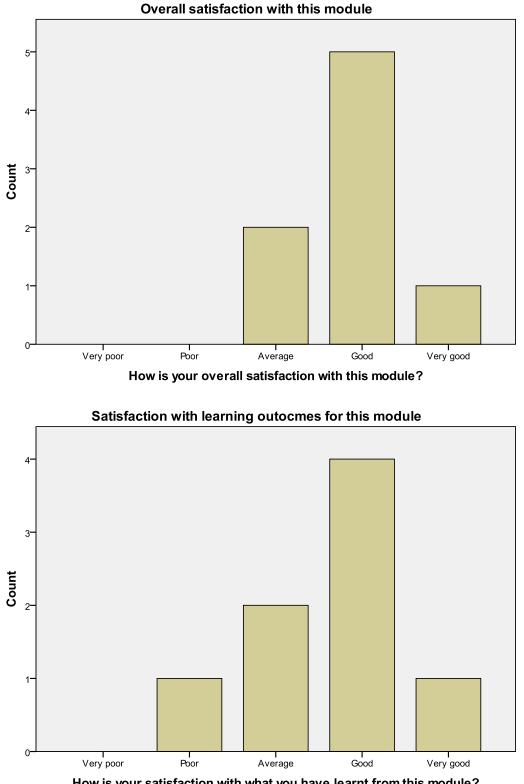
In the following sections we present key elements of the feedback given by participants in the respective module elements offered. Not all participants handed in their ex post evaluation forms, so the numbers presented in the graphs represent a varying proportion of the participants. With a few exceptions the response rates are very high.

As the graphs should be quite self-explanatory, we refrain from commenting upon these specific statistics. In section 4 we give some general comments on the feedback given.

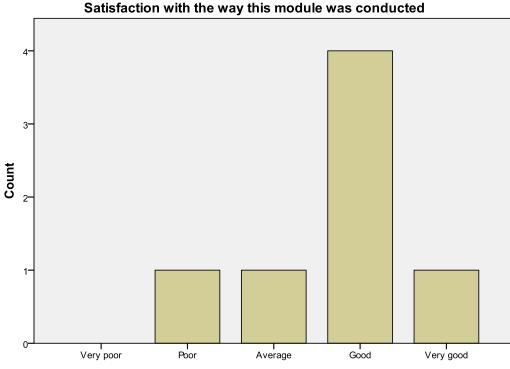
# 3.1 Gothenburg (Sweden) – 5 module elements (F1 – F5) in September-October 2009



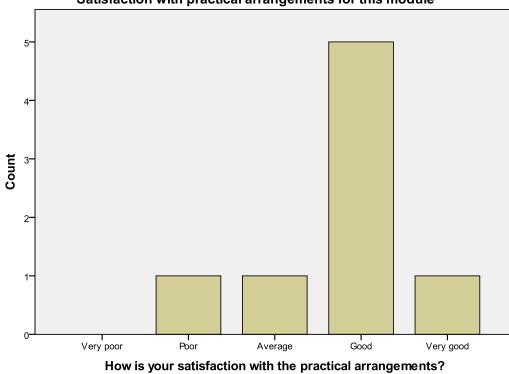








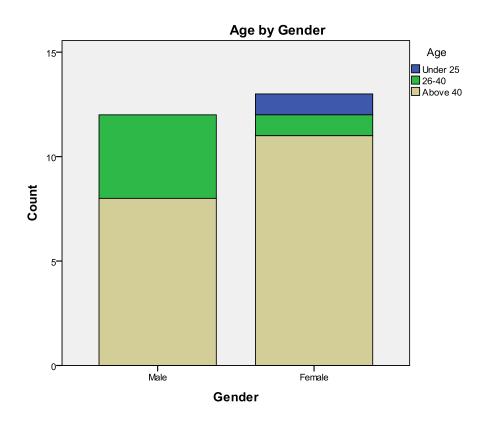
How is your satisfaction with the way this pilot module was conducted?



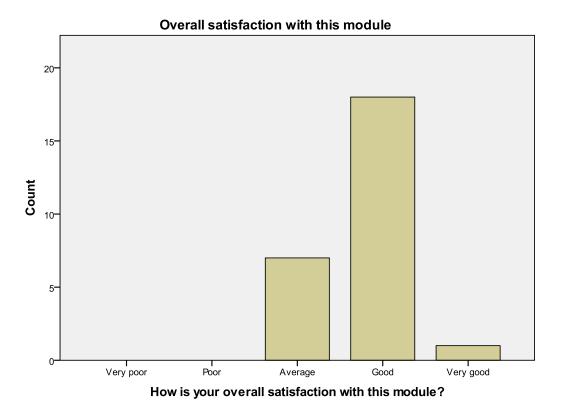
Satisfaction with practical arrangements for this module

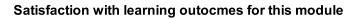


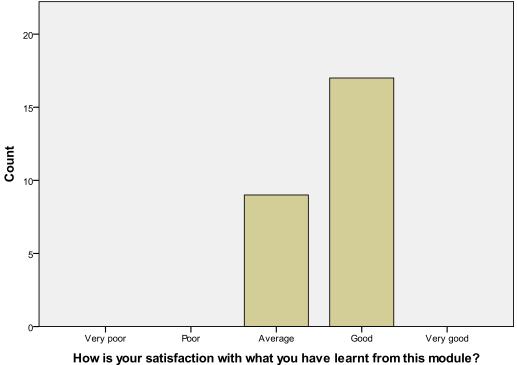
# 3.2 Ålesund and Sortland (Norway) – 2 pilots and 1 module element (D3) in December 2009-May 2010



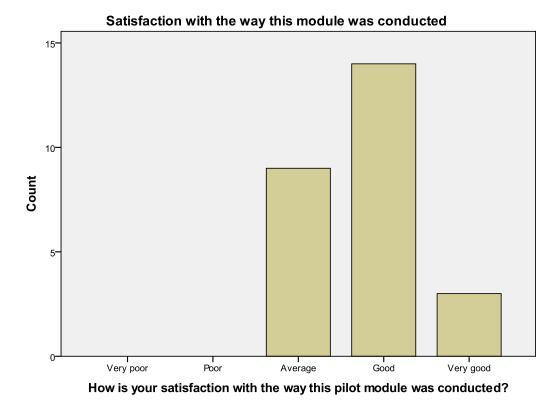


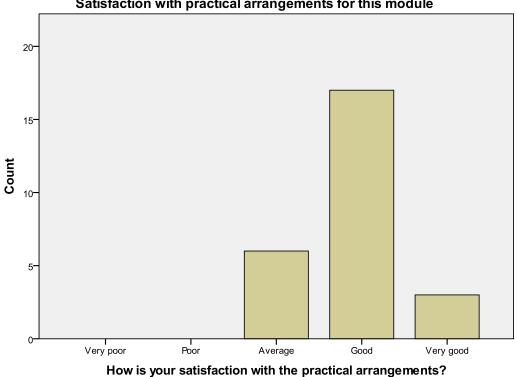








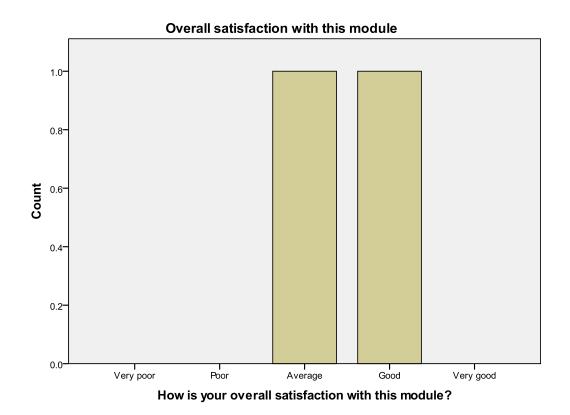




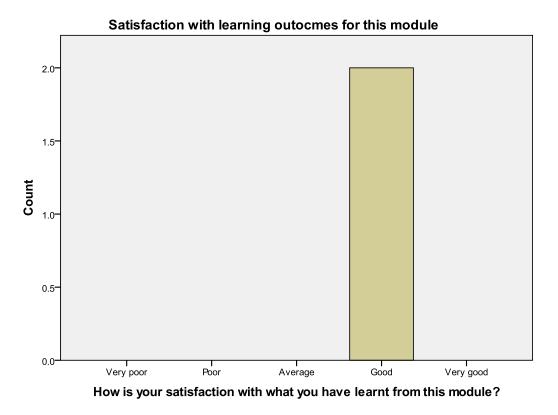
#### Satisfaction with practical arrangements for this module



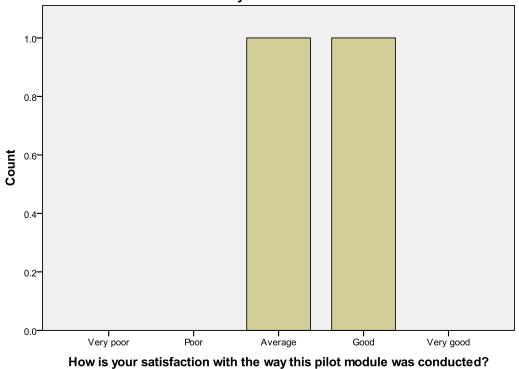
# 3.3 Kiel (Germany) – 1 module element (C3) in March 2010



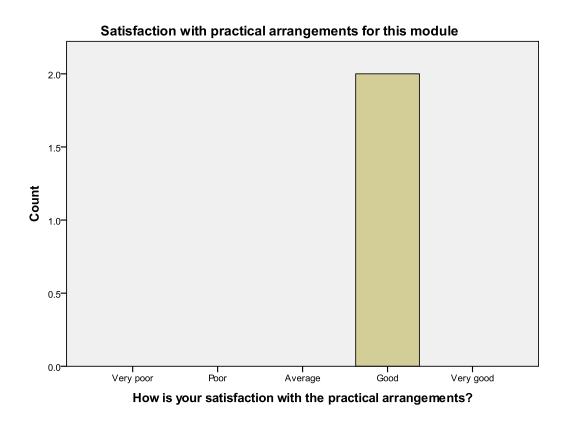




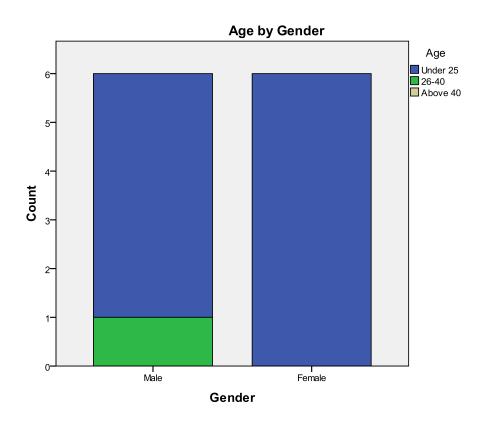
Satisfaction with the way this module was conducted

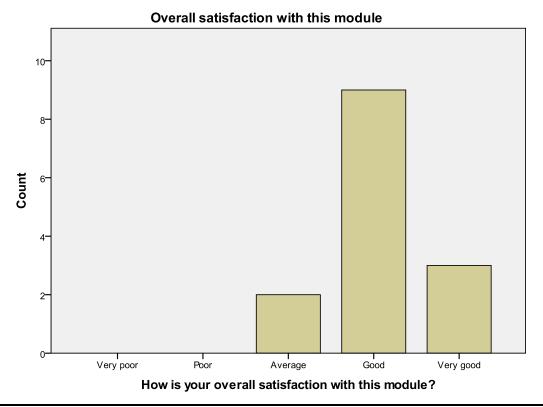




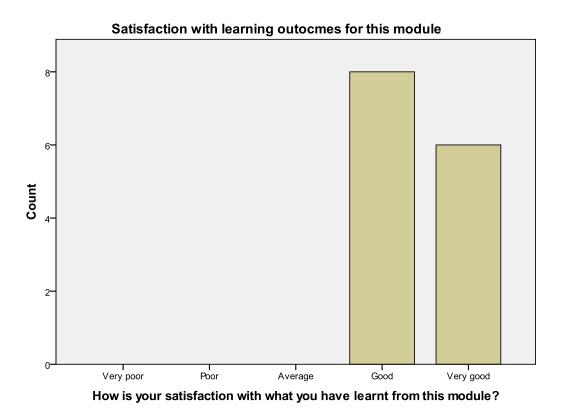


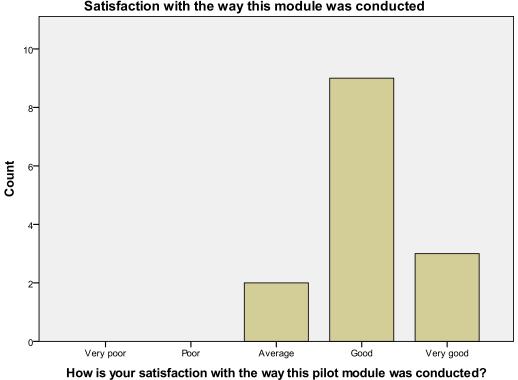






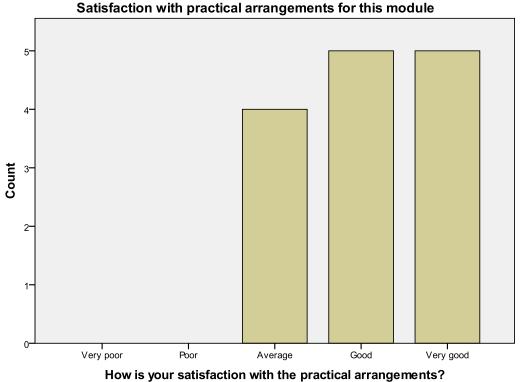




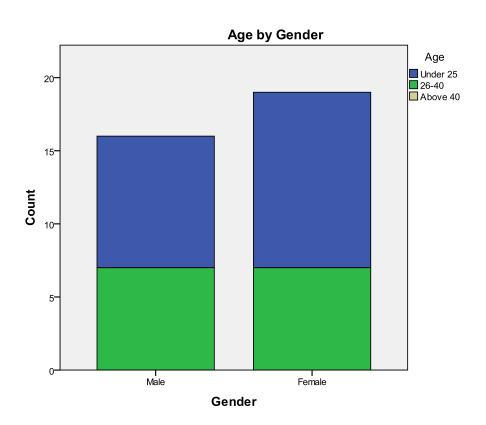


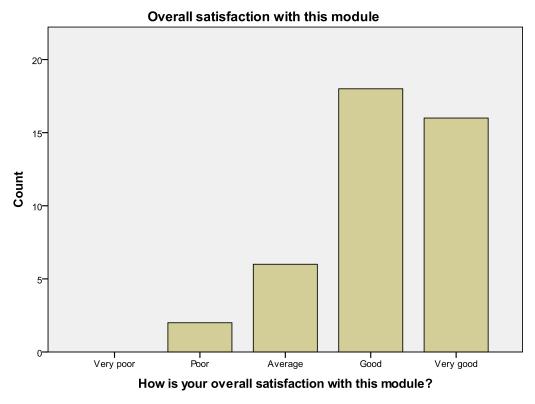
#### Satisfaction with the way this module was conducted



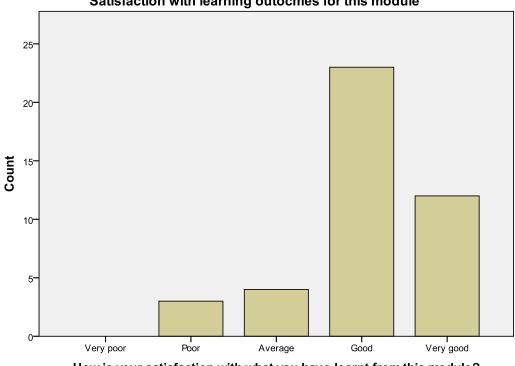




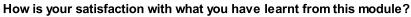


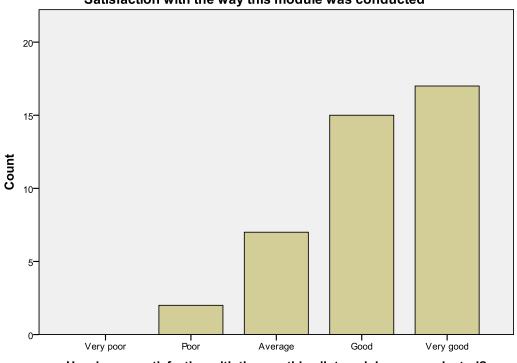






#### Satisfaction with learning outocmes for this module

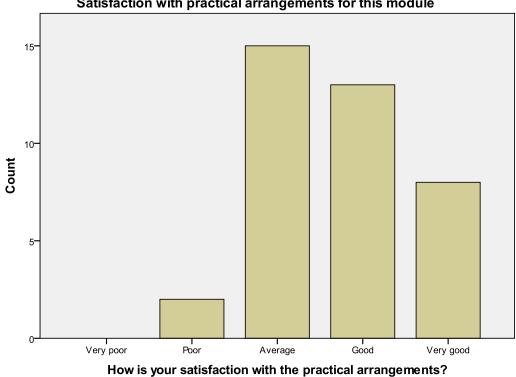




Satisfaction with the way this module was conducted

How is your satisfaction with the way this pilot module was conducted?



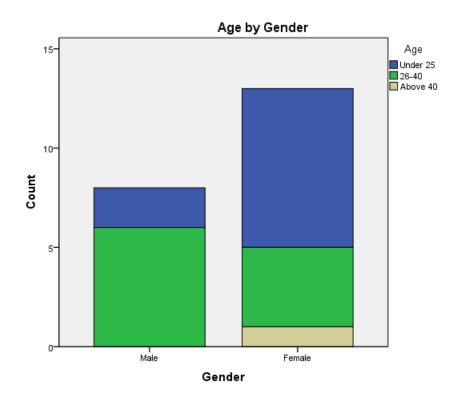


#### Satisfaction with practical arrangements for this module



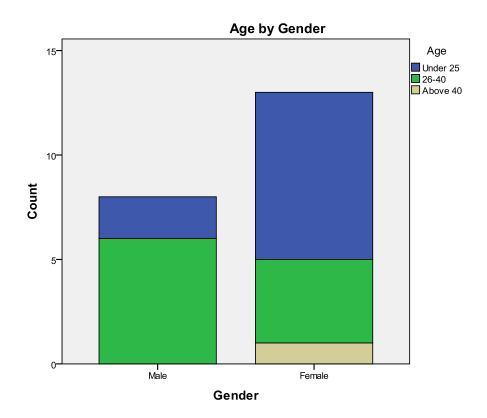
# 3.6 Molde (Norway) – 1 module element (D2) in April 2010

This module element was incorporated in a module in International Shipping offered to 2<sup>nd</sup> semester MSc Logistics students at Molde University College. Due to an unforeseen cancellation of the last lecture no ex post evaluation forms were completed for this element. The following graph is therefore based on ex ante forms.

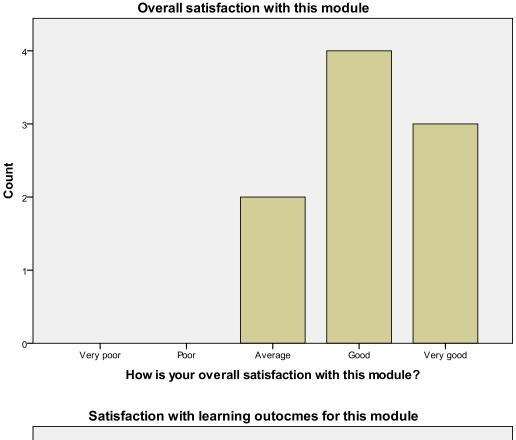


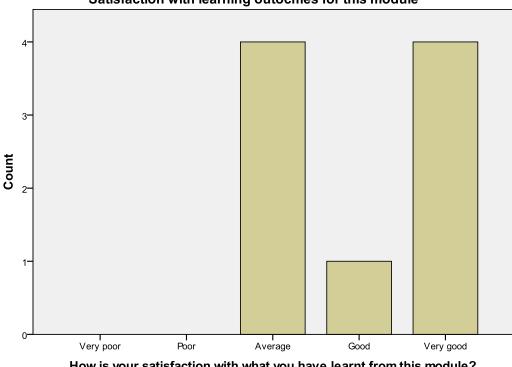


# 3.7 Molde (Norway) – 2 module elements (A1 and A3) in August-September 2010

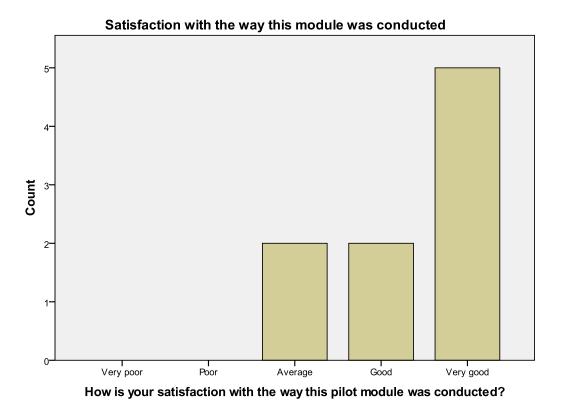


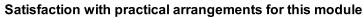


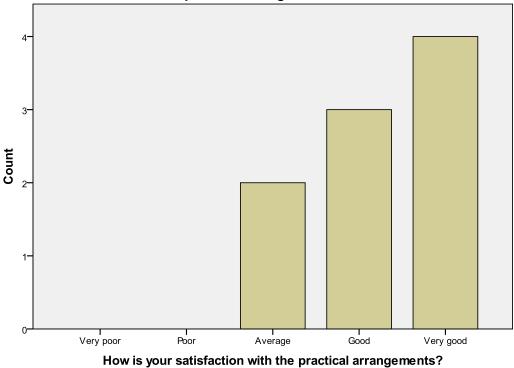












February 2011



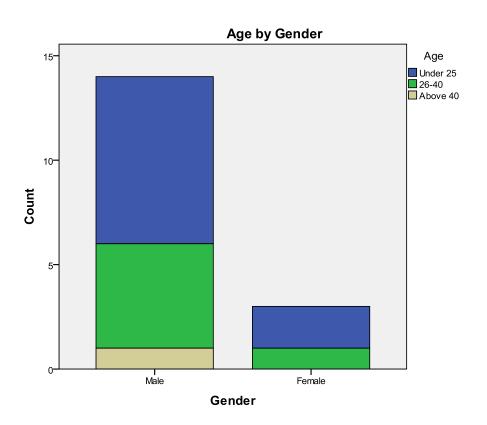
# 3.8 Gothenburg (Sweden) – 5 module elements (F1-F5) in September-October 2010

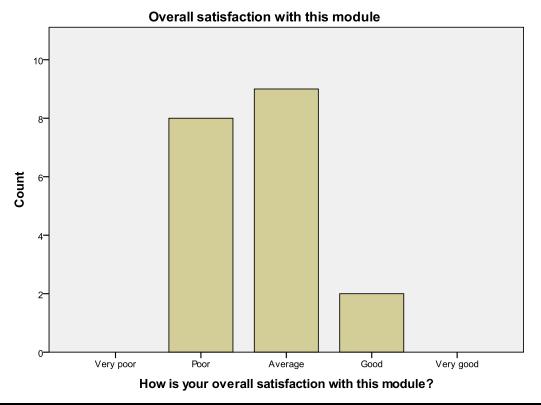
This was a 2nd run of the F1-F5 module elements offered for the first time in September-October 2009 in much the same setting, only this time it was a pure face-to-face setting, not applying the elearning platform.

The standard NMU evaluation forms were not used this time, but a total of 26 students started the module, and 23 completed it. 90% were international Master's students and the rest were exchange students. The average age of the students were 26.1 years and 30% were female students.

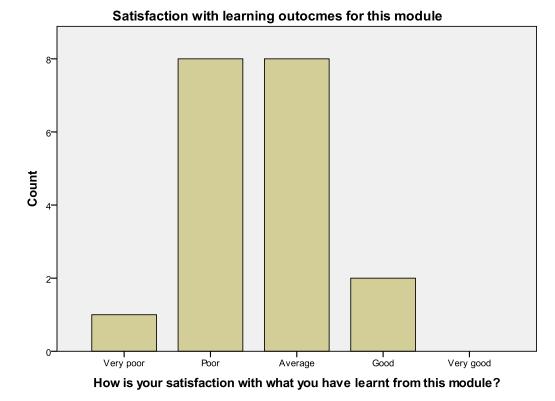
A thorough evaluation was conducted, using standard Gothenburg University forms – and a report from this is available upon request (rickard.bergqvist@handels.gu.se). The general impression is that students were very positive about learning outcomes and other arrangements.

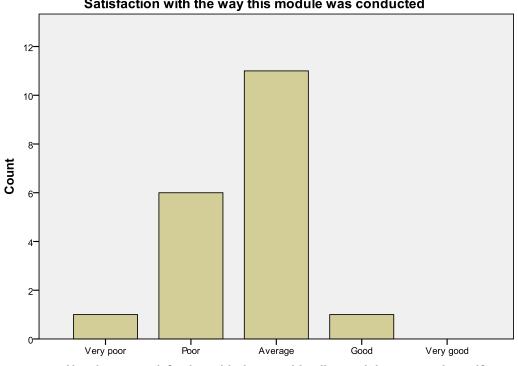








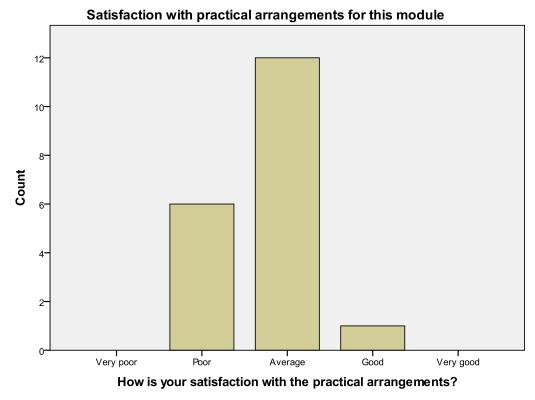




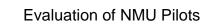
Satisfaction with the way this module was conducted

How is your satisfaction with the way this pilot module was conducted?



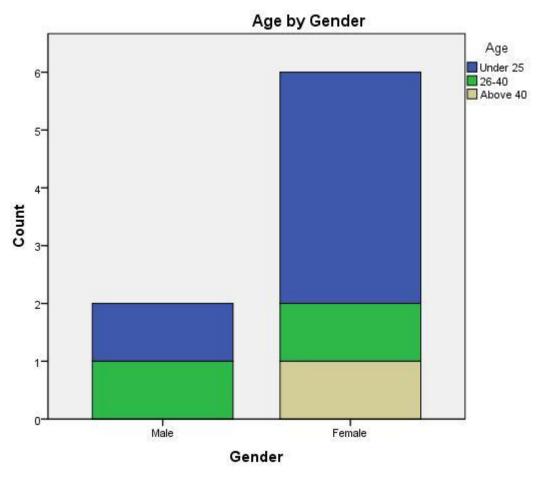


Participants who completed Ex Ante evaluation form



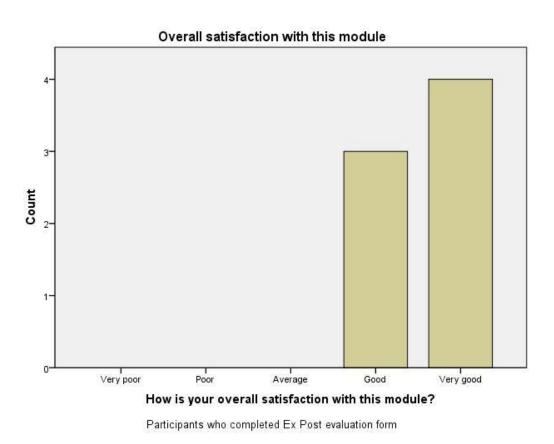
# 3.10 Bremen (Germany) – 1 module element (C3) in November 2010

This module was run with 10 students from the industry and now we have received the feedback from 8 of the participants.

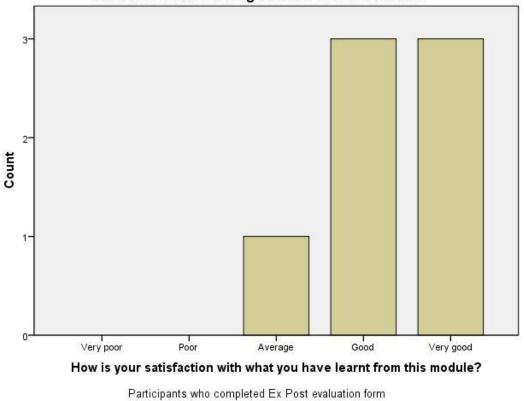


Participants completing Ex Post evaluation form





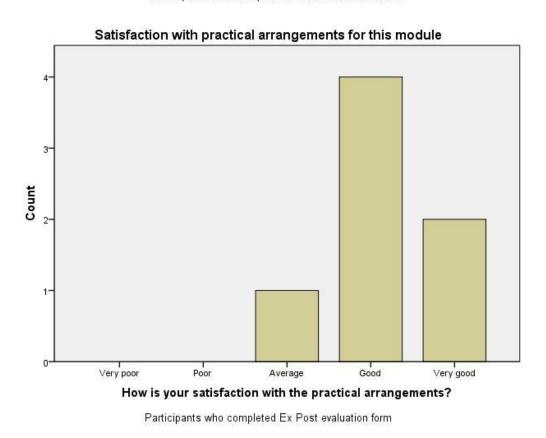
#### Satisfaction with learning outocmes for this module







Participants who completed Ex Post evaluation form



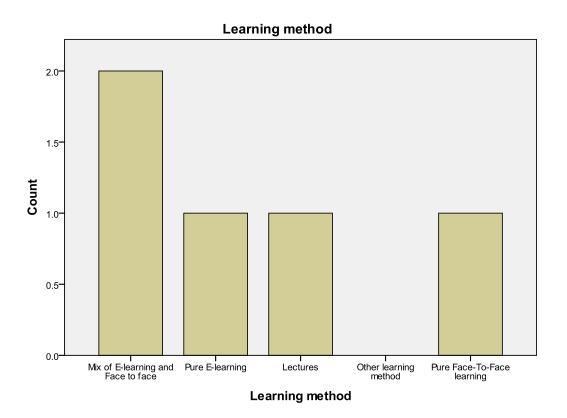


## 4 OVERALL ASESSMENT OF THE PILOT EVALUATION

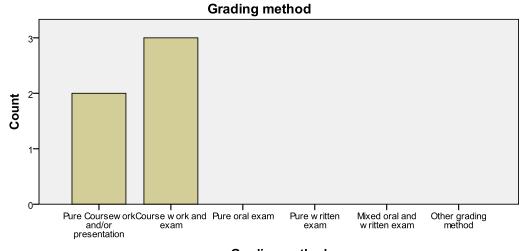
In Section 3, we have presented detailed graphs related to the individual courses offered. In this section we assess the output of the evaluations on a more general level.

## 4.1 A wide variety of learning approaches and content development

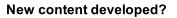
Based on the feedback from the module leaders, the following four graphs indicate that the modules offered are quite diverse and represent different learning and assessment methods. Both traditional face to face teaching and pure e-learning modules have been developed and offered. In some modules all the content is new, whereas others are to some extent based on already existing material. The same goes for the development of pedagogical approaches.

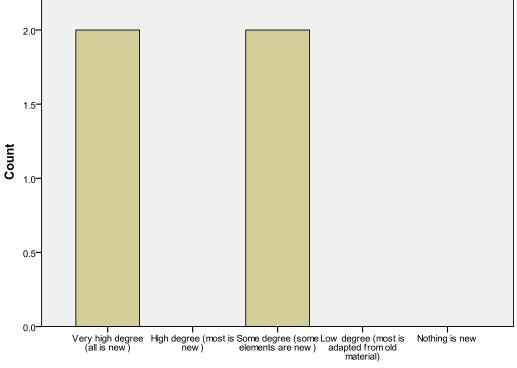






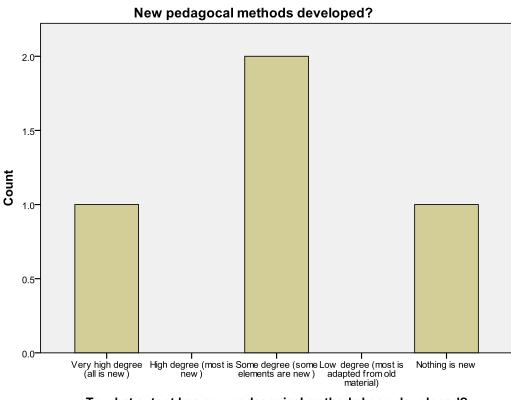
### Grading method









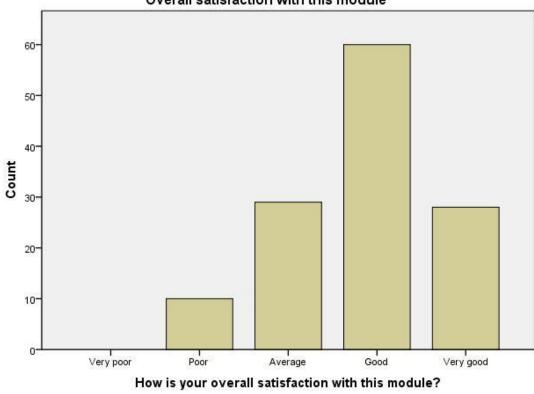




# 4.2 Participants are in general very content

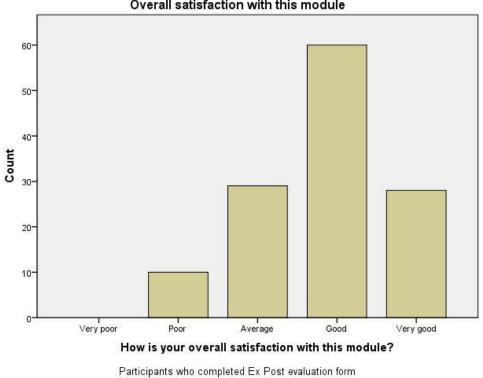
The next four graphs show various aspects of participant satisfaction with the module elements offered in the pilots. Very few respondents have ticked "poor' or 'very poor'. Judging from the specific feedback given to the individual modules the only quality problems seems to have been related to some practical challenges with the e-learning platform (e.g. in the first run of the F-module in Gothenburg) and a mismatch of student group and contents in the E-module offered in Svenborg.





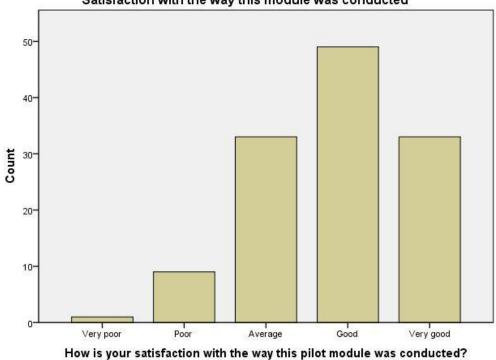
Overall satisfaction with this module

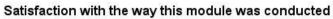
Participants who completed Ex Post evaluation form



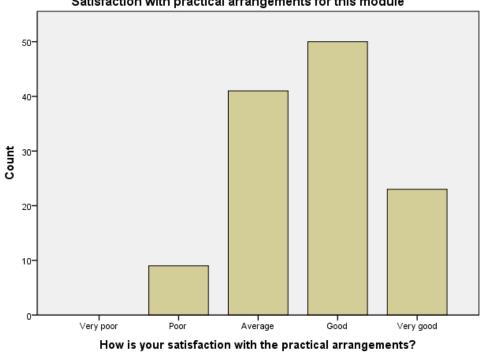
Overall satisfaction with this module







Participants who completed Ex Post evaluation form



Satisfaction with practical arrangements for this module





# 5 LESSONS FROM THE NMU-1 PILOT PROGRAMME

We have conducted a very thorough evaluation of the pilots. The statistics presented in this report is based on a SPSS database containing 358 forms, partly ex ante and partly ex post. The database also contains much more detail e.g. related to textual comments given by the participants, and the database is available to members of the consortium for further analysis (<u>harald.hjelle@himolde.no</u>). Most module leaders have also conducted a short self-assessment which we have chosen not to publish in this report. These will still form an important element when the respective modules are to be further developed.

#### **MODULE MARKETING**

A few module leaders have also responded to our request to report on the kind of marketing efforts that were made related to the pilots. It seems that these fall into two categories: Modules offered to stakeholder groups are usually marketed through direct contacts between the academic institution or individual professor and the companies affected. It seems that the content of the modules have, to a large degree, been adjusted to the needs of a specific audience of stakeholders, and that participation of the employees has been more or less mandatory or heavily promoted by the management of the companies.

Modules offered to students are marketed through ordinary information channels within the academic institutions, or they are simply included in the study programmes as obligatory elements. We have not received any reports indicating that any of the modules have been advertised to the general public or a wider audience.

The only exception may be the 2<sup>nd</sup> run of the C3 module element (maritime environment) offered in Bremen in November 2010. Here the module element was marketed through personal contacts in maritime companies who in turn forwarded e-mails within their company. Here participants suggested that one asked local shipowner's associations to further spread such information, because they felt more participants would have registered if they were informed.



#### ENTERING INTO THE $2^{\text{ND}}$ PHASE OF THE NMU-PROJECT

The NMU-project is now entering into it's second phase with more pilots to be developed, and possibly re-runs of the already developed pilots. It seems that the consortium has to a large degree succeeded with the first set of pilots. We have had a good mix of participants, both with respect to gender, age-groups and main occupation. However, we have had very few politicians (a few are hidden in the 'other' category, since they had a mix of occupations), and no NGO participants.

The pilots also represent a variety of pedagogical approaches, but It seems that we have had a smaller degree of (pure) e-learning based material than what we anticipated. Probably this is due to time-constraints related to the scheduled pilots. It is difficult to develop new contents, and to have this ready for adaption to the e-learning platform early enough to make it available at the start of the pilot. Maybe phase two of the NMU project could offer time to develop more modules for the e-learning platform. The added complexity of entering students with the right credentials into the e-learning platform makes module leaders revert to 'local solutions' in some cases.