



# Energy Efficient Safe SHip OPERAtion

## SHOPERA 2<sup>nd</sup> PMC Meeting

April 3 – 4, 2014

Administrative Issues

A. Papanikolaou, NTUA

venue: DNV-GL, room Saraholmen-Veritas I, Høvik, Oslo, Norway





# Agenda – Day 1, 3/4/2014



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9:00	9:30	Welcome & Introduction. Approval of agenda. Objective(s) of this meeting. Administrative issues.	A. Papanikolaou E. Bitner-Gregersen
9:30	10:30	Progress in WP 1.1: Met-ocean description	E. Bitner-Gregersen
10:30	11:00	Coffee Break	
11:00	12:00	Progress in WP 1.2: Identification of ships and risk analysis of relevant marine accidents Progress in WP 1.3: EEDI and safety criteria	A. Papanikolaou V. Shigunov
12:00	13:00	Lunch	
13:00	14:00	Progress in WP 2: Development and refinement of numerical hydrodynamic tools	C. Guedes Soares
14:00	15:00	Progress in WP 5: Identification of cases to be investigated	G. Zaraphonitis
15:00	15:30	Coffee Break	
15:30	16:30	Progress in WP 6: Identification of cases to be investigated	Reddy Devalapalli
16:30	16:45	Follow-up and Discussion	A. Papanikolaou
19:00	22:00	Dinner, Frognerseteren restaurant	

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# Agenda – Day 2, 4/4/2014



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9:00	10:00	Progress in WP 3.1: Experiments Specification	F. Sprenger
10:00	10:30	Coffee Break	
10:30	11:30	Progress in WP 4.1: Test Matrix	O. El Moctar
11:30	12:30	Any other business – Next Meeting	A. Papanikolaou
12:30	13:30	Lunch	Buffet Lunch on site
13:30	16:00	Finalization of Test Matrix details	

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# Distribution of 1<sup>st</sup> Instalment



	Participant	RTD	MGMT	Other	Total	EU contribution	1 <sup>st</sup> Installment	Status
1	NTUA	465,873.09	108,263.20	16,000.00	590,136.29	473,667.45	355250.59	OK
2	GL	640,740.00	0	10,000.00	650,740.00	330,370.00	247777.50	OK
3	DNV	689,500.00	0	0	689,500.00	344,750.00	258562.50	OK
4	LR	218,350.00	0	10,000.00	228,350.00	119,175.00	89381.25	OK
5	MRTK	567,191.84	3,000.00	0	570,191.84	428,393.88	321295.41	
6	IST	528,504.64	3,000.00	10,000.00	541,504.64	409,378.48	307033.86	OK
7	UDE	366,000.00	0	0	366,000.00	274,500.00	205875.00	OK
8	RINA	307,205.00	0	0	307,205.00	153,602.50	115201.88	OK
9	FSG	180,900.00	0	0	180,900.00	90,450.00	67837.50	OK
10	ULJ	175,150.00	0	0	175,150.00	87,575.00	65681.25	OK
11	VTT	290,852.15	0	0	290,852.15	218,139.11	163604.33	OK
12	EVFH	280,892.00	0	0	280,892.00	210,669.00	158001.75	OK
13	CEHIPAR	251,802.29	0	0	251,802.29	188,851.72	141638.79	OK
14	SU	275,599.81	0	0	275,599.81	206,699.86	155024.90	OK
15	DTU	176,400.00	0	0	176,400.00	132,300.00	99225.00	OK
16	TUB	404,616.00	0	0	404,616.00	303,462.00	227596.50	OK
17	DUT	133,822.50	0	0	133,822.50	100,366.88	75275.16	OK
18	NAP	218,588.16	0	0	218,588.16	163,941.12	122955.84	OK
19	DAN	98,736.00	0	0	98,736.00	49,368.00	37026.00	OK
20	FNK	66,912.00	0	0	66,912.00	50,184.00	37638.00	OK
21	CAL	96,240.00	0	0	96,240.00	48,120.00	36090.00	
<b>TOTAL</b>		<b>6,433,875.48</b>	<b>114,263.20</b>	<b>46,000.00</b>	<b>6,594,138.68</b>	<b>4,383,964.00</b>	<b>3287973.00</b>	



# Reporting on the progress of work



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In the kick-off meeting it was decided that intermediate financial and work progress reports should be prepared every 6 months.

NTUA proposes that each WP leader prepares a report presenting the activities, achievements, problems and corresponding corrective actions and the overall progress of the corresponding WP.

This report should be submitted to the coordinator not later than three weeks from the end of each six-months period.

For the preparation of the progress report, the WP leader may be assisted by the Task leaders or by individual partners as appropriate.

A template for the WP progress report has been prepared by the coordinator.

The overall progress report will be prepared by the coordinator based on the received WP reports, not later than three weeks from the submission of the reports from the WP leaders.

The report on the use of personnel should be prepared by each partner using the corresponding excel file prepared by the coordinator and should be submitted to the coordinator not later than three weeks from the end of each six-months period.



# Deliverables

Del. no.	Deliverable name	Date
D1.1	Report on specification of adverse conditions	9
D1.2	Report on revisited specifications of adverse conditions	24
D1.3	Report on database of ships	6
D1.4	Report on risk analysis of accidents related to manoeuvring in adverse weather condition	12
D1.5	Report on EEDI and safety criteria	9
D2.1	Developments in the potential flow methods for seakeeping and loss of stability in extreme seas	15
D2.2	Developments in the potential flow methods for manoeuvring in waves	15
D2.3	Developments in the potential flow methods for manoeuvring in confined waters	15
D2.4	Developments in the field methods to determine ship hydrodynamic characteristics	15
D2.5	Developments in the field methods for direct predictions of ship motions	15
D2.6	Potential flow methods for seakeeping and loss of stability in extreme seas	30
D2.7	Potential flow methods for manoeuvring in waves	30
D2.8	Potential flow methods for manoeuvring in confined waters	30
D2.9	Field methods to determine ship hydrodynamic characteristics	30
D2.10	Field methods for direct predictions of ship motions	30



# Deliverables

<b>Del. no.</b>	<b>Deliverable name</b>	<b>Date</b>
D3.1	Specification of model tests	6
D3.2	Mid-term review of tank tests results	18
D3.3	Report on model tests at MRTK	24
D3.4	Report on model tests at CEHIPAR	24
D3.5	Report on model tests at TUB	24
D3.6	Report on model tests at EVFH	24
D4.1	Test Matrix	6
D4.2	Validation results of numerical tools	24
D4.3	Benchmarking of numerical tools	33
D4.4	Steering devices	24
D4.5	Engine dynamics	24
D4.6	Level 1 methods for manoeuvrability in adverse conditions	30
D4.7	Intact Stability	30
D5.1	Set-up of integrated optimization platform and definition of optimization problem	12
D5.2	Development and implementation of parametric models	24
D5.3	Optimisation studies – Evaluation of results in view of EEDI requirements	30



# Deliverables

Del. no.	Deliverable name	Date
D6.1	Definition of case studies	12
D6.2	Results of case study on bulk carriers	31
D6.3	Results of case study on containerships	31
D6.4	Results of case study on tankers	31
D6.5	Results of case study on cruise ships	31
D6.6	Results of case study on ferries	31
D6.7	Results of case study on offshore support vessels	31
D6.8	Results of case study on fishing vessels	31
D6.9	Results of case study on tugs	31
D6.10	Results of case study on gas carriers	31
D6.11	Consolidated report on the overall results and conclusions	33
D6.12	Assessment and Analysis of Results	35
D7.1	Proceedings of 1 <sup>st</sup> workshop	12
D7.2	Proceedings of 2 <sup>nd</sup> workshop	24
D7.3	Proceedings of 3 <sup>rd</sup> workshop	30
D7.4	Proceedings of 4 <sup>th</sup> workshop	36
D7.5	Interim report on dissemination activities and planned exploitation of results	18
D7.6	Final report on dissemination activities and planned exploitation of results	36
D7.7	Submission of Information Paper to IMO	36





# Milestones

	<b>Milestone name</b>	<b>Date</b>
M1	Specification of Environmental Conditions and requirements for different ships	6
M2	Ships and accidents databases completed	12
M3	Revisited specifications of adverse conditions completed	24
M4	Initial developments in the potential flow and field methods completed	15
M5	Final developments in the potential flow and field methods completed	30
M6	Model Tests completed	24
M7	Test matrix completed	6
M8	Validation of numerical methods completed	24
M9	Sensitivity studies: Steering devices completed	24
M10	Set-up of integrated optimization platform & definition of optimization problem	12
M11	Development and implementation of parametric models	24
M12	Optimisation studies – Evaluation of results in view of EEDI requirements	30
M13	Case studies defined	12
M14	Case studies completed	31



# Milestones

	<b>Milestone name</b>	<b>Date</b>
M15	Organisation of 1 <sup>st</sup> workshop	12
M16	Organisation of 2 <sup>nd</sup> workshop	24
M17	Organisation of 3 <sup>rd</sup> workshop	30
M18	Organisation of 4 <sup>th</sup> workshop	36
M19	Submission to IMO	36
M20	Kick-off Meeting	1
M21	Mid Term Assessment Meeting	18
M22	Final Project Meeting	36



# Dissemination Activities



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Abstracts submitted to:

- RINA Conference on Influence of EEDI on Ship Design (24-25/9/2014, London, UK)
- The 14<sup>th</sup> International Ship Stability Workshop (29/9-1/10/2014, Kuala Lumpur, Malaysia)

Deadline for submission of full paper: 7/6/2014



# Plan of Future Meetings



a/a	Project Meeting	Date	Place	Participants
1	1 <sup>st</sup> Plenary Meeting (Kick-off Meeting)	10-11/10/13	Berlin	All + AC
2	PMC and Invited Partners Meeting	16-17/01/2014	Athens	PMC & Invited Partners
3	Project Management Committee Meeting	3-4/04/14 (M6)	OSLO	PMC members, WP meetings
4	2 <sup>nd</sup> Plenary Meeting	7-9/10/14 (M12)	Hamburg	All + AC
5	1 <sup>st</sup> Project Workshop	7-9/10/14 (M12)	Hamburg	Open
6	Mid Term Assessment Meeting	15-16/04/15 (M18)	Trondheim	PMC, AC, all other (optionally)
7	3 <sup>rd</sup> Plenary Meeting	?/10/15 (M24)	Lisbon	All + AC
8	2 <sup>nd</sup> Project Workshop	?/10/15 (M24)	Lisbon	Open
9	Project Management Committee Meeting	?/04/16 (M30)	London/ Southampton	PMC members
10	3 <sup>rd</sup> Project Workshop	?/04/16 (M30)	London/ Southampton	Open
11	4 <sup>th</sup> Plenary Meeting	?/10/16 (M36)	Athens	All + AC
12	4 <sup>th</sup> Project Workshop	?/10/16 (M36)	Athens	Open