Strategic Research For Innovative Marine Propulsion Concepts

From 2010-03-01 to 2014-02-28, closed project | STREAMLINE Website

Objective

Increasing environmental concerns and soaring oil prices are creating a new focus on fuel efficiency for the marine industry. Combining low emissions with demands for more advanced vessels than ever before drives the need for radically new propulsion concepts delivering a step-change in efficiency. STREAMLINE is the response of the marine community to this demand that will be addressed through four key objectives. The first objective of STREAMLINE is to demonstrate radically new propulsion concepts delivering an increase in efficiency of at least 15% over current state-of-the-art. The concepts will be designed for maximisation of energy conversion combined with low levels of cavitation, noise and vibration. The research will look at novel applications of large area propulsion, a biomechanical system and distributed thrust (via multiple propulsors). As its second objective, STREAMLINE will investigate methods to fully optimise current SoA systems including conventional screw propeller systems, pods and waterjets. The key here is exploitation of new CFD methods to pursue improvements without dramatic vessel configuration changes. The third objective of STREAMLINE is to develop advanced CFD tools and methods to optimise the hydrodynamic performance of the new propulsion concepts, particularly by analysis of integrated hull and propulsor. Finally, STREAMLINE will characterise the operational, economic and classification aspects of each of the new propulsion concepts. STREAMLINE will demonstrate solutions for a wide range of applications. Short sea shipping and inland waterway operation will be focussed on specifically, as they are identified as key components of transport that can provide a means of coping with the growing congestion of road and rail infrastructure and tackling air pollution. The STREAMLINE consortium, led by Rolls-Royce, is made up of 30 partners from 8 Countries, providing world leading expertise and capability from the EU marine Industry.

Related information

Report Summaries

Final Report Summary - STREAMLINE (Strategic Research For Innovative Marine Propulsion Concepts)
Coordinator

ROLLS-ROYCE POWER ENGINEERING PLC
MOOR LANE
DE24 8BJ DERBY
United Kingdom

EU contribution: EUR 279 555

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Administrative contact: Paul Robert Greaves
Tel.: +44 1332 667308
Fax: +44 1332 242424

Contact the organisation

Participants

Rolls-Royce AB
Båtbyggarevägen
681 29 Kristinehamn
Sweden
EU contribution: EUR 270 044

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Administrative contact: Patrik Kron
Tel.: +46 550 844 88
Fax: +45 550 844 70

Contact the organisation

Walvisstaart BV
Scheepmakerij 150
3331 MA Zwijndrecht
Netherlands
EU contribution: EUR 549 625

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Administrative contact: Joop Elias
Tel.: +31 61 3294976
Fax: +31 165 506110

Contact the organisation
CONSIGLIO NAZIONALE DELLE RICERCHE
PIAZZA ALDO MORO 7
00185 ROMA
Italy

EU contribution: EUR 980 784

Activity type: Research Organisations
Administrative contact: Enrico De Bernardis
Tel.: +39 06 50299328
Fax: +39 06 5070619

ENTWICKLUNGSZENTRUM FUR SCHIFFSTECHNIK UND TRANSPORTSYSTEME EV
OSTSTRASSE 77
47057 DUISBURG
Germany

EU contribution: EUR 366 429

Activity type: Research Organisations
Administrative contact: Heike Fischer
Tel.: +492039936915
Fax: +49203361373

STICHTING MARITIEM RESEARCH INSTITUUT NEDERLAND
Haagsteeg 2
6708 PM WAGENINGEN
Netherlands

EU contribution: EUR 1 252 705

Activity type: Research Organisations
Administrative contact: Henk Prins
Tel.: +31 317 493456
Fax: +31 317 493245

CHALMERS TEKNISKA HOEGSKOLA AB
- 
41296 GOETEBORG
Sweden

EU contribution: EUR 735 363

Activity type: Higher or Secondary Education Establishments
Administrative contact: Birgitta Oscár
Tel.: +46 31 7722666
Fax: +46 31 7722647

Contact the organisation
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS
RUE MICHEL ANGE 3
75794 PARIS
France
EU contribution: EUR 571 194

Activity type: Research Organisations
Administrative contact: Florence Morineau
Tel.: +33 2 99 28 68 12
Fax: +33 2 99 28 68 03
Contact the organisation

HAMBURGISCHER SCHIFFBAU-VERSUCHSANSTALT GMBH
BRAMFELDER STRASSE 164
22305 HAMBURG
Germany
EU contribution: EUR 526 391

Activity type: Research Organisations
Administrative contact: Imke Michelsen
Tel.: +49 40 69203214
Fax: +49 40 69203345
Contact the organisation

TECHNISCHE UNIVERSITAT HAMBURG
AM SCHWARZENBERG CAMPUS 1
21073 HAMBURG
Germany
EU contribution: EUR 295 790

Activity type: Higher or Secondary Education Establishments
Administrative contact: Monica Schofield
Tel.: +49 40 76629 6351
Fax: +49 40 76629 6359
Contact the organisation

LLOYD'S REGISTER EMEA IPS
FENCHURCH STREET 71
EC3M 4BS LONDON
United Kingdom
EU contribution: EUR 44 488

Activity type: Other
Administrative contact: Jennifer Wellard
Tel.: +44 207 423 1778
Fax: +44 207 423 1564
Contact the organisation
SSPA SWEDEN AB.  
Chalmers Tvaergata 10  
40022 GOETEBORG  
Sweden  

**Activity type:** Research Organisations  

**Administrative contact:** Ann-Kristin Cederholm  
Tel.: +46317729011  
Fax: +46317729124  

[Contact the organisation](#)

---

Stena Rederi AB  
Masthuggsterminalen  
405 19 Gothenburg  
Sweden  

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)  

**Administrative contact:** Harry Robertsson  
Tel.: +46 31 855000  
Fax: +46 31 123438  

[Contact the organisation](#)

---

UNIVERSITY OF NEWCASTLE UPON TYNE  
KINGS GATE  
NE1 7RU NEWCASTLE UPON TYNE  
United Kingdom  

**Activity type:** Higher or Secondary Education Establishments  

**Administrative contact:** Nicola Place  
Tel.: +44 191 222 8984  
Fax: +44 191 222 5920  

[Contact the organisation](#)

---

ARTTIC  
RUE DU DESSOUS DES BERGES 58A  
75013 PARIS  
France  

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)  

**Administrative contact:** Eric Papon  
Tel.: +33 153 94 54 64  

[Contact the organisation](#)
KONGSBERG MARITIME CM AS
BORGUNDVEGEN 340
6009 ALESUND
Norway
See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Administrative contact:** Per Egil Vedlog
Tel.: +47 70103717
Fax: +47 70103701

Contact the organisation

ROLLS-ROYCE PLC
BUCKINGHAM GATE 62
SW1E 6AT LONDON
United Kingdom
See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Administrative contact:** Dave Bone
Tel.: +44 1332 249842
Fax: +44 1332 249646

Contact the organisation

SCITEK CONSULTANTS LIMITED
10 STADIUM BUSINESS COURT, MILLENIUM WAY PRIDE PA
DE24 8HP DERBY
United Kingdom
See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Administrative contact:** Marios Christodoulou
Tel.: +44 1332 365 652
Fax: +44 1332 200 130

Contact the organisation

TOTALFORSVARETS FORSKNINGSINSTITUT
Gullfossgatan 6
164 90 STOCKHOLM
Sweden
See on map

**Activity type:** Research Organisations

**Administrative contact:** Mattias Liefvendahl
Tel.: +46 85550 4170
Fax: +46 85550 4144

Contact the organisation
ZF MARINE KRIMPEN BV
Zaag 27
2931LD Krimpen aan de Lek
Netherlands

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Administrative contact:** Bart Petrus Maria Van Den Broek
Tel.: +31180 331046
Fax: +31 180 331099

**EU contribution:** EUR 43 577

---

CENTRUM TECHNIKI OKRETOWEJ SA
UL SZCZECINSKA 65
80 392 GDANSK
Poland

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Administrative contact:** Danuta Kowalska
Tel.: +48 58 3074270
Fax: +48 58 3074212

**EU contribution:** EUR 120 286

---

Wilhelmsen Marine Consultants
Strandveien 20
1366 Lysaker
Norway

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Administrative contact:** Per Brinchmann
Tel.: +4767 58 40 00
Fax: +47 67 58 47 60

**EU contribution:** EUR 25 200

---

ISTITUTO NAZIONALE PER STUDI ED ESPERIENZE DI ARCHITETTURA NAVALME
VIA DI VALLERANO 139
00128 ROMA
Italy

**Activity type:** Research Organisations

**Administrative contact:** Enrico De Bernardis
Tel.: +39 06 50299328
Fax: +39 06 5070619

**EU contribution:** Participation ended

---

**Last updated on** 2019-07-16
**Retrieved on** 2019-09-08