

Brief description, Cluster in Schleswig-Holstein / Hamburg
Maritime Cluster (Schleswig-Holstein, Hamburg)

Subject	Comments	Facts and Figures
Cluster focus		Maritime Cluster
Type of network	network, cluster, competence centre	Composite cluster, consisting of several segments with partial networks, great contentual spectrum spatial composite cluster: metropolis of Hamburg as centre of a Northern German maritime network
Cluster segments		Maritime navigation, port industry, maritime logistic, shipping companies shipbuilding, maritime equipment and suppliers, maritime service offshore technology (Offshore Wind) water engineering, hydrographs, marine- and coast protection oceanography, blue (marine) biotechnology fishing, maritime food, aquaculture maritime tourism (aquatic sports, cruises)
Cluster	Working, growing, emerging, as vision	Several networks within the composite cluster, differing in intensity Entire cluster („composite cluster“) under construction Combining networks in SH and HH as future strategy
Common ground		All about ocean, shipping, port industry, shipbuilding, offshore technology
Industries involved	Maritime industry M I Maritime industry M II	M I : explicit maritime industries shipbuilding, shipping, fishery, maritime food, maritime logistics, nautical instruments M II : industries which have only to some extent a maritime production line, e.g. sub-supplier for shipbuilding and ocean engineering. Industries: machine building, engineering, electronics, measuring- and control-instruments, telecommunication
Technologies	Technologies in large spectra	Maritime systems engineering, ocean engineering, (blue) biology technologies, ICT-technologies, safety, environment and traffic engineering, power engineering, mechatronics, radar technology, marine engineering, logistics and cargo handling technology
Adjoining clusters	Large intersection with other clusters	Large intersection especially with logistics cluster. logistics (port management), food cluster, aviation cluster, IT cluster, wind energy cluster
Specialization	Industry specialization	M I (segments clearly attributable to maritime industry) – strong specialisation in Hamburg and Schleswig-Holstein. HH strongly specialised on maritime services and maritime research. Whereas M II : no notable specialisation of SH and HH
Science fields		Maritime science, natural science, nutrition science, engineering science
Cluster-Management		Cluster management for SH from 2005, founded among others through KERN e.V. (Region Kiel), Kiel Chamber of Commerce, Investitionsbank SH, WTSH (Business Development and Technology Transfer Corporation SH). From 2007 Chambers of Commerce Lübeck and Flensburg as well. Change of management 2008: Located at WTSH (Kiel) Hamburg: no explicit cluster management (under devel-

		opment). Cluster management in the southern part of metropolitan region: Süderelbe AG
Main cluster agents for a complete cluster	Key enterprises	Howaldtswerke Deutsche Werft (HDW, Kiel) 2300 employees, Caterpillar Motoren (Kiel), FSG Shipbuilding (Flensburg), Raytheon Anschütz (Kiel), Nobiskrug Shipbuilding (Rendsburg), Lindenau Shipbuilding (Kiel), Blohm&Voss Shipyards, Repairs and Industries (HH), Sietas Shipyard (HH), SAM Electronics (HH)
	Qualification	TU Hamburg-Harburg (post graduate programmes in the maritime field), University of Hamburg, University of Kiel: natural sciences (marine biotechnology), Polytechnics: Flensburg, Kiel (Initiative maritime formation „Meer Jobs“), Westküste, Lübeck, Hamburg
	R&D (University)	TU Hamburg-Harburg: marine engineering, marine electronics et al. (overall 16 relevant institutes), University of Hamburg (7 relevant institutes), University of Kiel: Leibniz Institute for Marine Sciences (IFM-GEOMAR) Excellence Cluster „Future Ocean“ (University of Kiel) FTZ Forschungs- und Technologiezentrum Westküste, department of Kiel University (Büsum)
	R&D (institutions)	Hamburgische Schiffbau-Versuchsanstalt (HSVA) GKSS Research Centre (Geesthacht) EMB Fraunhofer-Einrichtung für Marine Biotechnologie (Lübeck) MariCube (Husum): competence centre for blue biotechnology GMA Gesellschaft für Marine Aquakultur (Büsum) FWG Forschungsanstalt der Bundeswehr für Wasser-schall und Geophysik (Kiel) Ca. 15 more research institutes with emphasis in Hamburg
	Business and financial services	Ship financing (e.g. HSH Nordbank), ship classification, Germanischer Lloyd (HH)
	Supporting institutions Network formation	Trade fairs: SMM “Shipbuilding, Machinery and Marine Technology“(HH); InWaterTec (SH). CMT Centre of Maritime Technologies (HH) – coordination of the Innovation network VSM Verband für Schiffbau und Meerestechnik (HH) Schiffbautechnische Gesellschaft (HH) GMT Gesellschaft für Maritime Technik (HH) Organizations of maritime economy (Ship-owners, shipbuilding, marine engineering, mechanical engineering and plant engineering) Working group „Maritime Wirtschaft“ (maritime industry) of the Chamber of Commerce Schleswig-Holstein Task force „Zukunft Meer“ (future ocean) of SH state government (Ministry of Economics) Business development corporations of the districts
	Complementary industries	Specialised suppliers: Propulsion systems, filter systems, navigation systems, marine systems, marine equipment. Maritime Services
Cluster size	Employees and firms	Metropolitan Region of Hamburg: 65.000 employees, including 27.000 in the industrial sector (25.000 in Hamburg), of these 14.000 maritime service employees, 6.300 maritime supplier employees and 3.200 in shipbuilding Maritime economy in the narrow sense (M I): SH: 17.500, Hamburg (city) 28.200, outside M I: ca. 10-15.000 employees (M II)

Regional focus		Metropolitan Region Hamburg as principal German maritime location Type M I: Hamburg, southern hinterland of Hamburg, SH: Regions of Lübeck, Kiel, Flensburg, west coast, north-western hinterland of Hamburg Region of Kiel: 6.000, Region of Lübeck-Ostholstein 4.000 employees
Regional significance		shipbuilding: regions of Kiel, Flensburg, Hamburg Maritime supplier: SH as an important German location (especially regions of Kiel, SH Southwest, Flensburg) Port industry, logistics: see Logistic-Cluster Offshore technology: Region of Kiel, north-western hinterland of Hamburg Offshore Wind, blue Biotechnology: SH West coast Maritime service providers: Hamburg
Regional identification		SH: strong identification with shipbuilding, shipping and ship technology especially in Lübeck, Kiel and Flensburg. HH: strong historical identification with port industry, logistics and maritime service providers
Innovation		High research intensity of firms belonging to maritime economy in SH and HH and especially within the maritime supplier industry Intensive cooperation with research facilities in SH Innovation fields: energy efficiency, environmental balance, security (shipping), commodities and alternative maritime energies
Competitive situation		New construction of ships: high international competitive pressure in several segments; threatened by strong fluctuation in demand and location shifting strategies Special shipbuilding (niches, e.g. submarines), special repairs and ship conversion: better chances if manufacturing and R&D are inseparable Highly specialised supplier: positive long-term development expected
Perspectives		Basis: In the long-run growing industry by progressive globalisation Vision for Metropolitan Region Hamburg: Leading location for technology and innovation for marine industry in Europe (shipbuilding, maritime technology, maritime science) Intensification of joint networks between SH and HH, joint logistical concepts (Lübeck-Hamburg), joint cluster management
External relations		"Maritime Allianz Ostseeregion" (MAO) (Maritime Alliance Baltic Sea Region) Network of maritime economy in MVP, connections to Rostock In Europe (EU) strongly orientated towards United Kingdom, Denmark, Norway and the Netherlands. Project Intermare C (EU-promotion): Region of Kiel with partner regions in France and Poland – development of an international maritime cluster
Further Comments		Chamber of Commerce Study: Cluster-rating (SH+HH) Maritime Cluster on third position following Life Science Cluster and Logistic Cluster
Sources	Reports and Internet Information	Sources (see list): 1, 2, 3, 7, 8, 11, 12, 14.