



WONDERMARI TN



PUBLIC WORKSHOP

Meaning of European RTD for the Polish Maritime Industry

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Entities and Employment

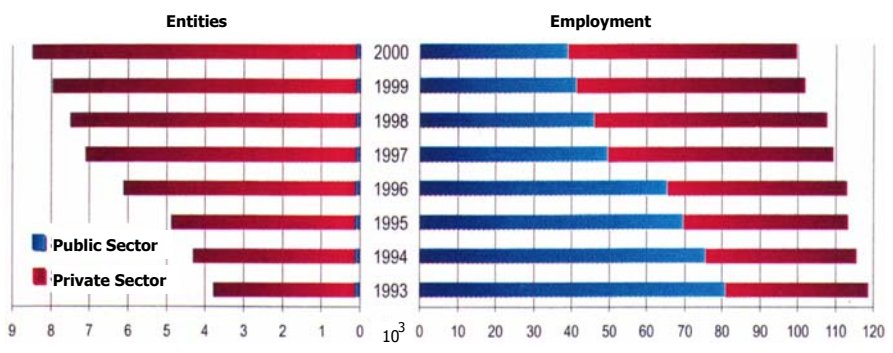


Figure 1



Investment Outlets (at Current Prices)

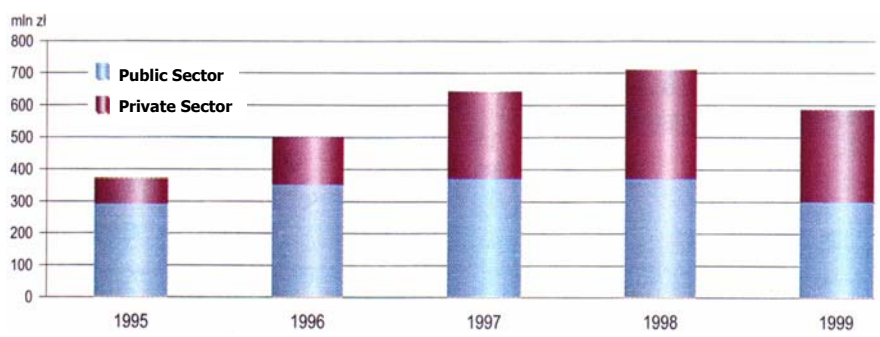


Figure 2



Sales Revenues of Products

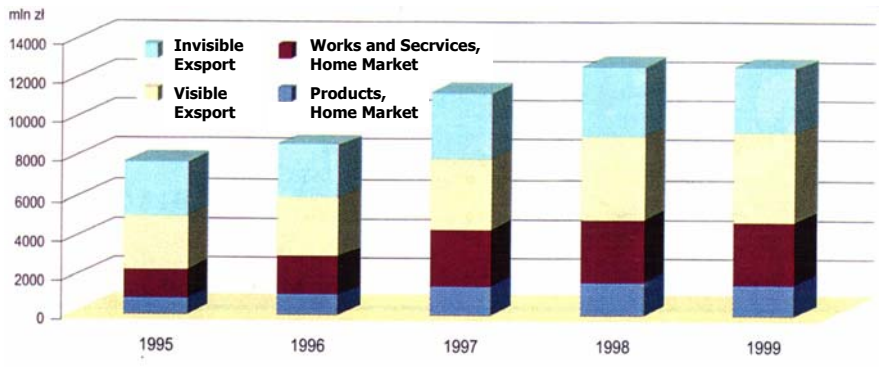


Figure 3



Polish Seaport Cargo Handling

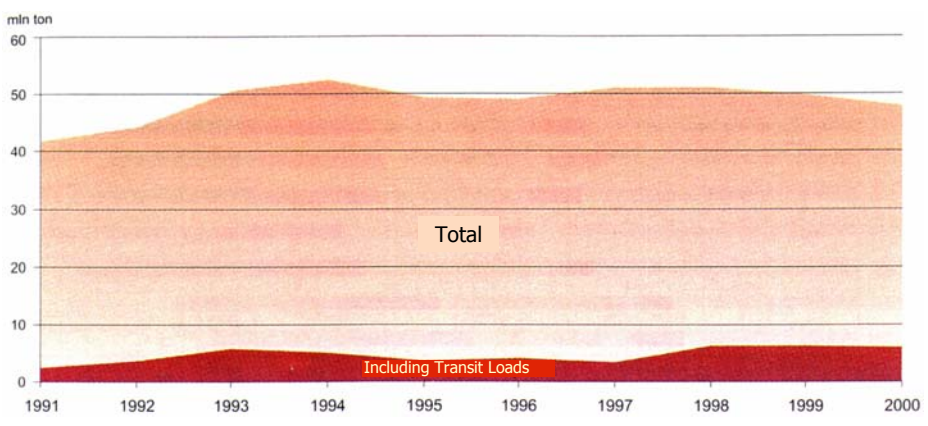


Figure 4



International Traffic in Polish Seaports

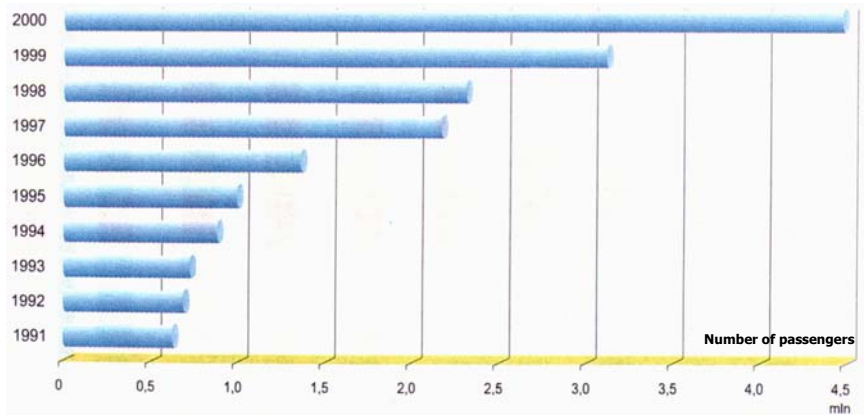


Figure 5

International Ships Entering to the Polish Seaports

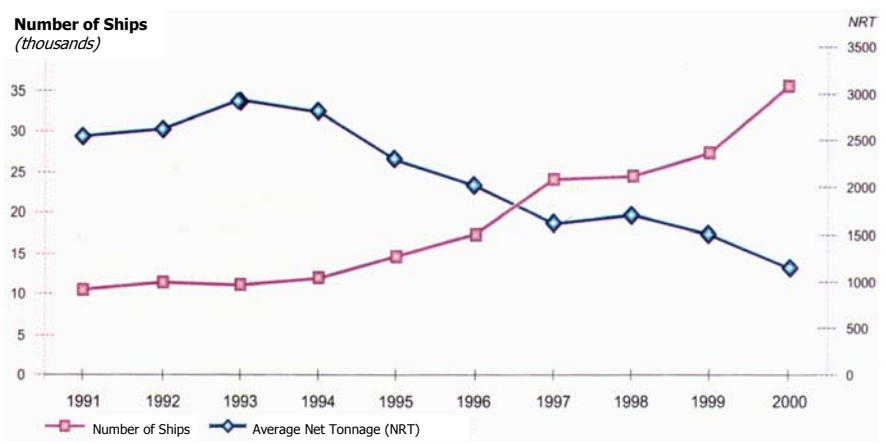


Figure 6

Share of Sea Transport in PFT

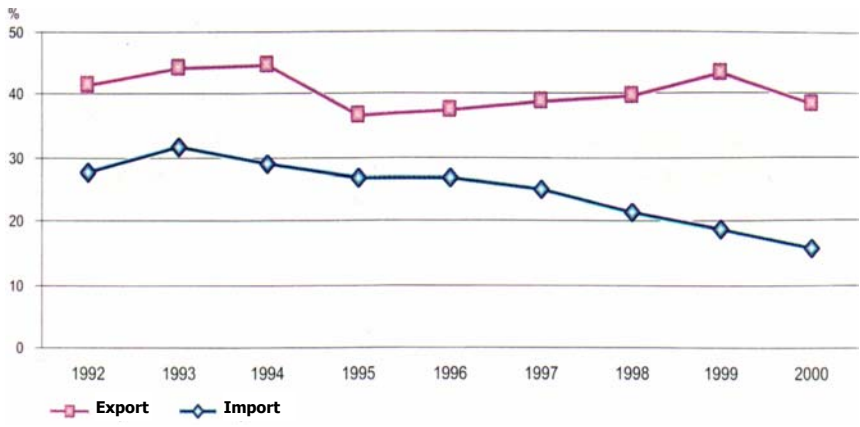


Figure 7



Polish Transport Fleet

Situation in 31 XII

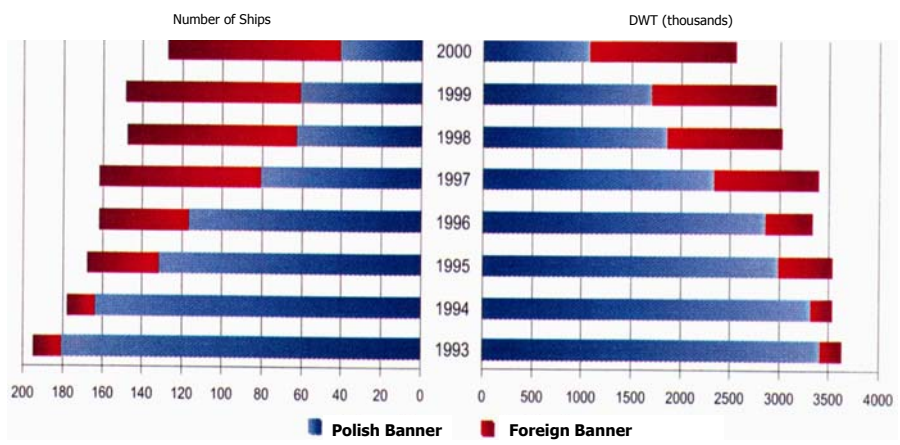


Figure 8



The Built Sea Transport Vessels by Polish Shipyards

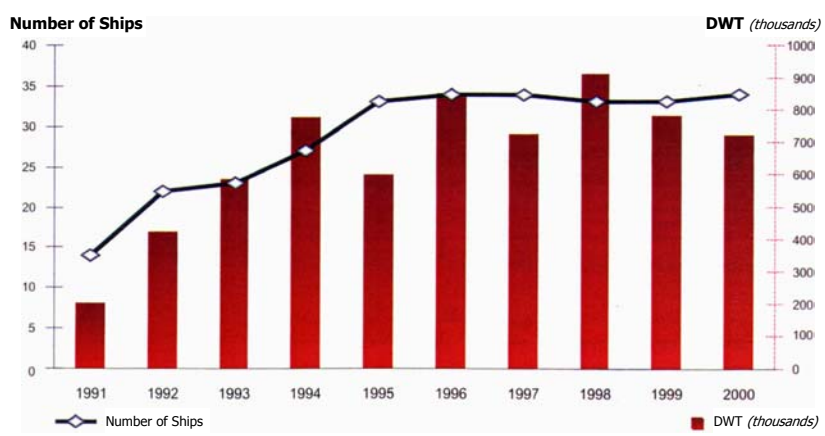


Figure 9

Polish Fishing Fleet*

Situation in 31 XII

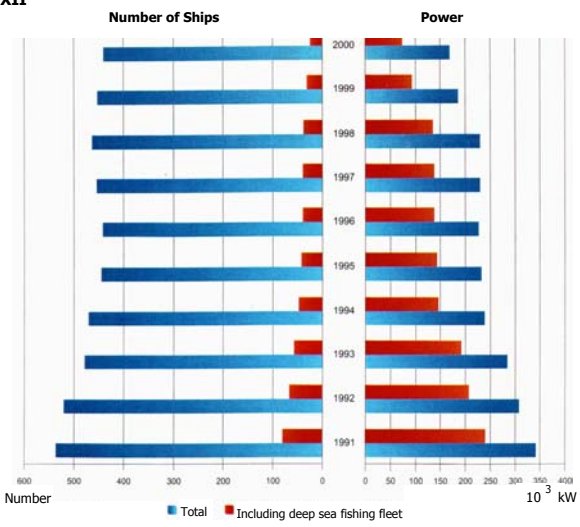


Figure 10

*) without fishing boats

Fishing and Other Sea Organisms Haul

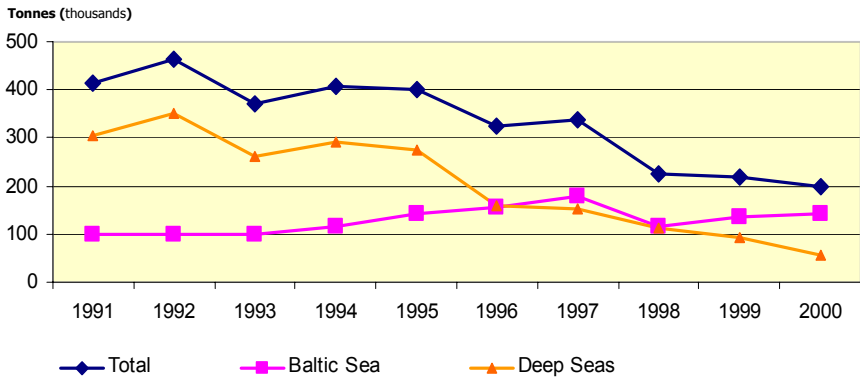


Figure 11

Domestic Oil Output

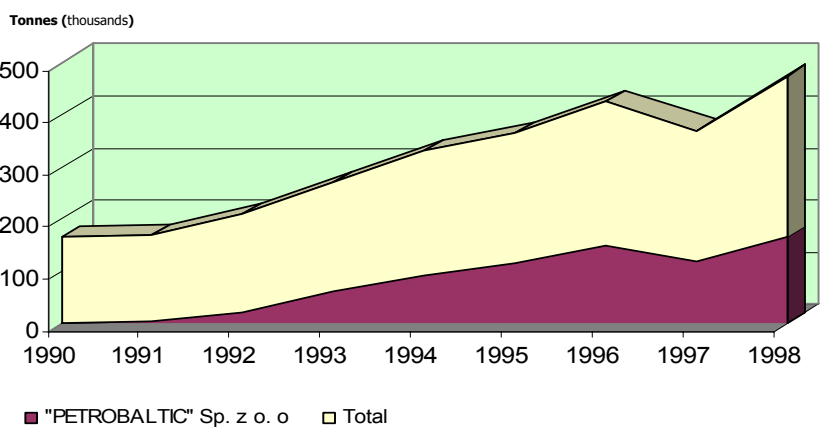


Figure 12

In „Science-Technology-Economy“ book edited by KBN in 1995, Prof. Antoni Kukliński, who was undersecretary at this

committee, *“In the turn of XX and XXI centuries the Polish society and economy do not amass their abilities within creation and absorption of the innovations, then in the next millennium we will function as a peripheral country. The problem of innovative thinking and activity will become dramatic at the moment, when Poland joins the European Union as full member. The Poland’s space will become open in the European and global scale. The open space that is not considered as innovative one will turn to the dependent space in economical, political and scientific sense of meaning.”*



Research and Development Priorities Delivered by the Fourth KBN Cadence (2000-2003) - 1

TRANSPORT – SYSTEMS AND MEANS

BASIC RESEARCHES

1. Modeling of transport systems by applying the theory of systems, intelligent structures, probability methods, chaos theory, heuristic methods, neural network methodology, operational researches and mass service theory.
2. Integration of surveying activities in transport – principles and models
3. Environment impacts of transport and environment protection methods against such an influence.
4. Investigation on heat-flow phenomena in the mono and multiphase mediums by applying computer-based simulation methods.

RESEARCH AND DEVELOPMENT PROBLEMATICS

1. Establishing the knowledge bases and monitoring of worldwide and domestic transport systems, emphasizing on multi-modal transport.
2. Investigation on mobility processes and development of modern transport infrastructure.
3. Traffic control methods and organization and management in the integrated transport systems.
4. The means of safety, reliability and organizational efficiency enhancement in transport.
5. Electronics and telecommunication systems in transport.
6. Development of new agricultural, disposable, transport and uninhabited plains and gliders.
7. Modernization of air plains and helicopters, used in civil and military Polish aviation sectors.
8. Development and improvement of modern means of land, railroad and marine transports.
9. Adaptation of transport means with required international standards and particularly European Union ones.

Figure 13a



TRANSPORT - PROPULSION

BASIC RESEARCHES

1. New fuels for engines, processes of treatment of combustible mixtures, unconventional combustion methods and computer-based simulation of these processes.
2. New measurement, diagnostic and control methods related to vibration and noise and dynamic methods of reduction of the hazards.

RESEARCH AND DEVELOPMENT PROBLEMATIC

1. Unconventional propulsion systems (stationary, traction, aero and spaceship propulsion).
2. Adaptation of existing propulsion systems – improvement of their exploitation, operational and ecological features.
3. Engine operation control – methods and technologies.

Figure 13B

- Exploitation of the Polish scientific-research potential and intensification of the co-operation with the European Union,
- Possibility of obtaining the essential financial sources for the researches execution,
- Access – on the basis of the knowledge ownership – to research projects' results of the strong multinational consortiums,
- Usage of experiences regarding the research results' implementation and of marketing activities.

Polish Maritime Economy in the 1st and 2nd Calls of KA3 „Land Transport and Marine Technology”, TP „Growth”

<i>Polish Partner</i>	<i>First Call: 30.06.1999</i>		<i>Second Call 31.03.2000</i>	
	Approved	Submitted	Approved	Submitted
Szczecin Shipyard S.A.	1	3	1	5
Gdynia Shipyard S.A.	1	2	1	3
Technical University of Gdańsk	1+1*	1+1*	-	-
Technical University of Szczecin	-	-	1	1
Technical University of Wrocław	-	-	1	1
ODRATRANS S.A.	-	-	1	1
NAVICENTRUM Service and Design Company Ltd., Wrocław	-	-	1	1
CTO	2	7	3	6

*) as the subcontractor of CTO

Table 1

Situation of Polish Maritime Economy Participation in FP5 under KA3 of TP „Growth” after the Second Call

<i>Acronym</i>	<i>Coordinator</i>	<i>Polish Partners</i>
OPTIPOD	ALSTOM CHANTIERS DE L'ATLANTIQUE	Gdynia Shipyard S.A., CTO
HARDER	Det Norske Veritas, Moevik	CTO, TU Gdańsk*
SANDWICH	Jos. L. Meyer GmbH, Papenburg	TU Gdańsk, OE&ST Fac
MOBISHIP	Kvaerner Masa Yards, Inc.	Szczecin Shipyard S.A.
DYCONET	BALance Technology Consulting GmbH, Bremen	Gdynia Shipyard S.A.
INBAT	EUROPÄISCHE ENTWICKLUNGSZENTRUM FÜR BINNEN-KÜSTENSCHIFFFAHRT VBD	CTO, TU Szczecin, TU Wrocław, ODRATRANS S.A., NAVICENTRUM Ltd.
EROCAV	HSVA, Hamburg	CTO
VRSHIPS-ROPAX2000	University of Strathclyde, Dept. Of Ship and Marine Technology	Szczecin Shipyard S.A., CTO

*) as the subcontractor of CTO

Table 2

Polish Maritime Economy Participation in Proposals Submitted under the Last Calls of FP5

<i>Acronym</i>	<i>Type of Action</i>	<i>Coordinator</i>	<i>Polish Partners</i>
ADISMOS	RTD	STN ATLAS	Gdynia Maritime Academy (GMA), CTO
EFFORT	RTD	MARIN	CTO
ESHIPSS	RTD	MARIN	CTO
FASTPOD	RTD	Univ. of Newcastle	CTO
LEADING EDGE	RTD	MARIN	CTO
REAL IMPACT	RTD	Fincantieri	CTO
SAFECRAFTS	RTD	TNO	Gdynia Maritime Academy (GMA), CTO
UMMA	RTD	DNV	CTO
INTEGRATION	TP	CETENA	CTO
ERASTAR	TN	COREDES	CTO, Gdynia Shipyard S.A., Szczecin Shipyard S.A.
SSPNET	TN	INSEAN	CTO
SAFERELNET	TN	IST	Gdynia Maritime Academy (GMA), Institute of Fundamental Tech. Research (IPPT), CTO
MAREXPLOIT	DP	BALance Tech. Consulting	CTO
ENCONA	AM	FDS	CTO
CEMTAR	AM	CTO	-
ISORMS	AM	University of Cádiz	CTO

Table 3