At Sea from 1967 AB seaman to Captain in Ocean trade 1979,

As Captain until 1985,

Then cargo inspection Company Saybolt md , in Russian transit in Finland

As from 1988 Sjuzneftegas/Teboil operative manager,

1991-1995 SFAT Finland (Russian Railways - managing director,)

1995-1997 SGS inspector

1997 Falcon drilling-Chevron - Tengichevron logistic planning manager in Shipyard and in Tengis/Odessa oil and LNG transport

Harbour designer in Estonia as from 2001

Rautaruukki Steel factory logistic planning , sea and offshore constr. 2005

Managing director of Recycling §start up <u>Eu</u> req. logistics in Finland

Laffcomp Oy /ULIVES Proejct as from 2007 -

Work experience



Sea Captain

EMLog

(Post Graduated by European Commission Certification Board of Logistics to European Master Logistician 1997)



Veikko Hintsanen



EU Traffic Strategy implementation &

Laffcomp Oy Ultra Light Container Vessels





Tech, details can be found at :

"STATUSTAGUNG SCHIFFFAHRT UND MEERESTECHNIK"

Tagungsband der Statustagung 2012 As from page 165....

"Schriftenreihe Projektäger Julich"

EU Plans & requires:



By 2050, Driver, key goal and Result for seafaring will include :

No more conventionally-fuelled cars in cities.

A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport.

All of which will contribute to a 60% cut in transport emissions by the middle of the century.

Laffcomp ULV – river –arctic cargo vessel development



Wood chip & peat Transport at Jyväskylä power plant max 5 mill/m3 /year	2 ships 24hrs/day 365/days a Year	25 trucks 24hrs/day 365/days a Year	
Investment 30 years	22 mill €	37,5 mill €	
WILLIAM	17 persons. = 1,5 mill€/v.	136 persons= 7,5 milj. €/v.	
Distances to drive/sail / year.	142 000 km	7 mill. km	
Fuel consumption	1 000 000 litres (600 hv/0,13 lt/hp/hrs speed. 6 knots)	2 800 000 litres (40 litres / 100 km speed. 50 km/t)	
Loading /dischargin	Own equipment: pneumatitic system; no harbour facilities required.	Loaders required in each Ioadplace	
CO2 And LCA/LCC	Project with lappeenranta University shows corresponding results to energy con'sumption		



Laffcomp river container vessel studies

MAIN BENEFITS:

- More cargo capacity
- Better energy efficiency
- Evolving even to ship construction to car industry levels
 - Best industrial practicies for producing ship
 - From serial to parallel production

New materials and design

- taking account the whole lifecycle of the ship
- recycling of materials



Requirements for the vessel

- Able to operate throughout the year, also in icy conditions (max 80 cm ice)
- 2. Allows cargo to be loaded without conventional harbor infrastructure
- 3. Cost effective when compared with trucks



From Naval Architect Magazine July – August 2011:

Feature 1 | SHIPBUILDING TECHNOLOGY, MATERIALS & METHODS

Grasping shipping's Holy Grail

Aluminium foam sandwiches are set to revolutionise shipbuilding. Finnish yard LaffComp and its partner the Fraunhofer Institute in Germany have innovative designs for woodchip, passenger and bulk carrier vessels and a container ship equipped with its own loading and discharging system.







- Rolls Royce and Finnish State Research Center have announced last week for 15% volume increase when their plans to have unmanned ships are competed and in traffic.
- ULIVES Martec studies With Fraunhofer institute 2007-2013 indicates that we have possibilities to reach at least up to 16.7% by Aluminium foam composites.

Dwt	Hull weight conventional design -Bulk carrier -Ice Class 1 A super	Reduced weight 27% / New Hull weight	New DWT	Dwt increase in tons	DWT Increase % = Payload increase
2000	1200	876	2324	324	16,2

Targets with ULIVES vessels



Competition with trucking	Main concern	Solution
Economy	Transport cost lower than by chain trucking-harbour stroring - baltic sa vessel-harbour storing - trucking	Less container handling max water borne traffic to direct inland-sea- inland
Logistics	Transit time / container delivery to ships	City /Area distribution water borne hubs and new Fraunhofer/VW container system
Environment	Baltic sea and inland sulphur / energy consumption less than 50% including winter traffic	Inland navigation vessels (in arctic area) have already for years used non sulphur diesel.

Optimized EU container logistics 2050



Request	Laffcomp ULV solution	Veikko Hintsanen Helsinki 29.08.2013
 Maximize Sea voyage lengths in Baltic and inland navigation 	Combine inland and Baltic sea German inland goals set in the November 2011.	a vessel technique- see eir Hannover meeting
2) Minimize Harbour investments and personnel involment.	Make also container vessels self loading and discharging seacontainers directly to distribution trucks or river harbours . Make further loading and discharging of inner mini trucking containers from and to sea containers directly by truckdrivers.	
3) Minimize costs after last harbour & mile costs	Combine conventional contain requests to maximize sea pas Make containers further distri possible to factories, storing &	ner and EU trucking sage lengths. ibution from harbors retailshops in cities

New Container Ring

Great European Container Ring



Inland Water Transport Share

- Russia 2%
- Germany 11%
- Netherlands 34%
- France 10%

of total cargo turnover by all transport modes



• Length of Volgo-Baltic water way from SPb to Cherepovets is 861 km.

There is 10 navigable locks, 3 hydroelectric power stations, 25 dams, 9 bridges and 6 ferry crossings.

- Guaranteed depth 3,70 m.
- Lock dimensions no less then 265 x 18 m

Laffcomp serie of ULV s







