

Self-spreading trawls are a hit in Norway

Seven trawls to Norway

In January 2000 the multipurpose fishing vessel Hardhaus from Austervoll in Norway bought its first self-spreading trawl from Hampidjan for Blue whiting fishing. The skipper and crew are delighted with the results which have lived up to all the expectations they made of it. Good performances by Icelandic vessels last year and this year have also generated a lot of attention and another six trawls have now been ordered for Norway and will be ready for delivery in December 2001.

In all, seven vessels will be using self-spreading trawls in Norway and it will be exciting to see how they perform in the coming blue whiting season, which begins at the end of January 2002. Estimated value of the six self-spreading trawls and other gear scheduled for delivery at the end of December 2001 is roughly USD 705,000.

Norwegian vessels that have ordered Gloria self-spreading trawls (SST):



Hardhaus from Austervoll 2048 m Gloria SST

40 self-spreading trawls sold in two years

Self-spreading trawls have certainly proved to be a hit and 40 of them have now been sold since the first was sold and rigged on board the Thorsteinn EA from north Iceland in April 1999. They've proved their worth in no uncertain terms. Hampidjan's share in gear for the Icelandic pelagic fishery was 11% in 1999 and is now 70%, which is a very impressive result over only two years. Competition is tough in this

segment of the fishing gear business. Development of self-spreading technology is continuing with the design of new self-spreading ropes over the next few months, which will boost the trawls' self-spreading properties considerably from current levels. Hampidjan is a world leader in design of self-spreading trawls today and is committed to continuing to develop them in the years to come. Self-spreading trawl technology is protected by international patent.

Haraldur Arnason



**Gunnar Longva from Ålesund:
2048 m Gloria SST**



**Gerda Marie from Austervoll:
1800 m Gloria SST**



**Rodholmen from Alteidet:
896 m Gloria SST SB for argntines**



**Sæbjørn from Ålesund:
2048 m Gloria SST**



**Knester from Austervoll:
1800 m Gloria SST**



**Tromsø Buen from Finnsnes:
1664 m Gloria SST**

PACKED WITH ICE!

*Report by Captain Kristian Skjong
of a/s Hafi Ltd, Bergen, Norway.
a/s Hafi Ltd. is a member of the
HAMPIDJAN Group, Iceland.*

I arrived in Pusan on February 16, 2001, to join Captain Sergei Gavrilchenko and his crew on the Russian trawler M/V Selikhino, heading for the pollock fisheries in the Okhotsk Sea. Selikhino is a 51 metre, CT 1320 catcher boat, which delivers the catch to a processing/mother ship.

The reason for boarding the vessel was to assist and provide technical information to the crew on a complete new trawl rig, recently purchased from Hafi/Hampidjan. The rig consists of a 640-metre Gloria Wide Body midwater trawl, codend, sweepstakes, hardware and 5m² El Cazador trawl doors, weighing 1200 kg.

Packed with ice

We left Pusan the same afternoon and entered the Okhotsk after seven days cruising, and – believe me – the entire ocean was covered with ice! People with experience and knowledge of this area said such conditions hadn't been seen for the past 30 years.

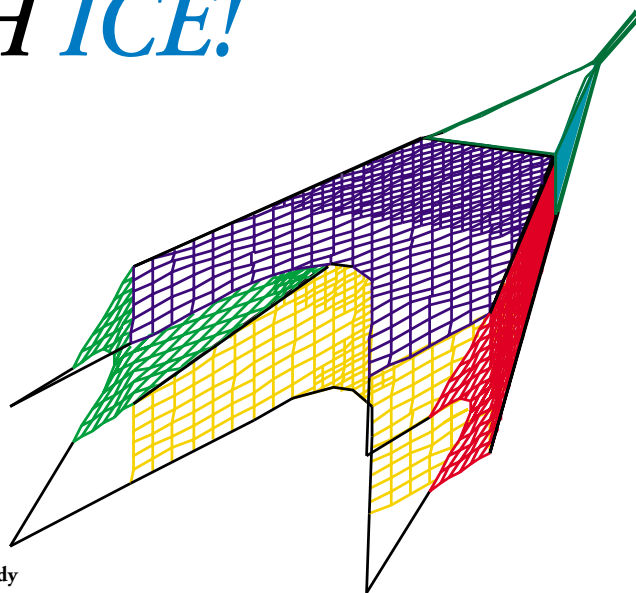
After a further three days, we finally arrived at the fishing ground. I do have some experience of fishing in ice, but in my view it was virtually impossible to fish under those conditions.

However, after a few hours Captain Sergei Gavrilchenko found a small opening in the ice, big enough to set out the trawl. It was the same procedure every day – the whole ocean was covered by ice, but somehow Sergei always managed to find somewhere to fish there!

We started the trip by using a Russian trawl, but after a few days we switched over to the Gloria trawl.

Made from top-quality Hampidjan materials, the trawl was very easy to handle and repair. The front part is a combination of Nyllex and Gloria ropes with Dynex head- and sidelines and chain for the footrope. The belly is made of Dynex, and polyethylene nettings.

The trawl proved easy to tow for the 1320 hp vessel. We got a steady headline height of 35 metres and a door



Gloria Wide Body

spread of 160 metres on 160 metres of sweepstakes.

The trawl doors are built from "Weldox" steel. Three times stronger than regular steel, it gives the doors a longer lifespan than regular models.

Scanmar catch control system

Scanmar sensors were mounted to the trawl gear. We mounted distance and transponding sensors to the doors and a "Trawl Eye" and catch indicators to the trawl. All the Scanmar gear worked 100% from the first time we set it out.

The "Trawl Eye" enabled us to balance the trawl very closely to the bottom where most of the fish were concentrated, and the symmetry sensor informed us if the net was correctly adjusted according to the speed of the vessel and the bottom currents.

The captain was very happy with the

catchability of the trawl gear and said he was getting very good results compared with other vessels of same size.

It is clear that this combination of good quality fishing gear from Hampidjan and the Scanmar Catch Control System (cable-free) has convinced the owners that this is the way to go to achieve good results.

Satisfied customers

The company have bought another fishing gear package from Scanmar and Hafi to use next season in the extreme conditions of the Okhotsk Sea and are confident they will improve the efficiency of their trawler fleet by deploying this type of fishing gear combination.

After 25 days on board the Selikhino I left my friends to go back to land. I'd like to take this opportunity to thank the crew for their hospitality during my stay.



Captain Skjong looks at the icepack. Selikhino's sister ship is in the background.

SPUTNIK – Yet another new model of Poly-Ice trawl doors

Yet another new model of Poly-Ice trawl doors is now on the market. Known as Sputnik, it is a midwater trawl door for use in pelagic fisheries.

Sputnik combines the outstanding properties of the FHS midwater doors and El Cazador doors. FHS doors have displayed the most powerful performance recorded for any type of midwater door and are used by more than 90% of the oceanic redfish fleet. El Cazador doors have produced excellent results for midwater fisheries – many pairs are in use in Alaska and the Okotskh Sea, and most vessels in Chile engaged in both midwater and demersal fisheries use El Cazador.

Beta and Alpha, two vessels from Sjólaskip of Hafnarfjörður, Iceland, use El Cazador doors for pelagic fisheries off Morocco and Mauritania. Skippers Magnús Guðmundsson on the Beta and Thorvarður Jónsson on the Alfa are very pleased with the doors' performance for fishing close to the surface. For fishing mackerel and sardinella at a speed of 5.7-5.8 miles the doors stay right at the surface and are very stable. Magnús describes them as "incredibly stable" with all the turning that targeting the sardinella shoals involves.

Sputnik doors were designed to combine the spreading power of FHS doors and the stability of El Cazador.

Initial responses

The first pair of Sputnik doors, S 10.5m² and 3200 kg, went on board the Heinaste where skipper Páll B. Eyjólfsson has mainly been fishing mackerel at a depth of 200-250 metres. They've also tried the doors at shallower depths, but have little experience of their performance so far.

Compared with earlier doors of the same size, Sputnik give 12-15% greater spread between the doors and Páll says they are noticeably more stable than other models he has used.



Sputnik and El Cazador doors loaded on the Sjóli for delivery to the Heinaste and Alfa

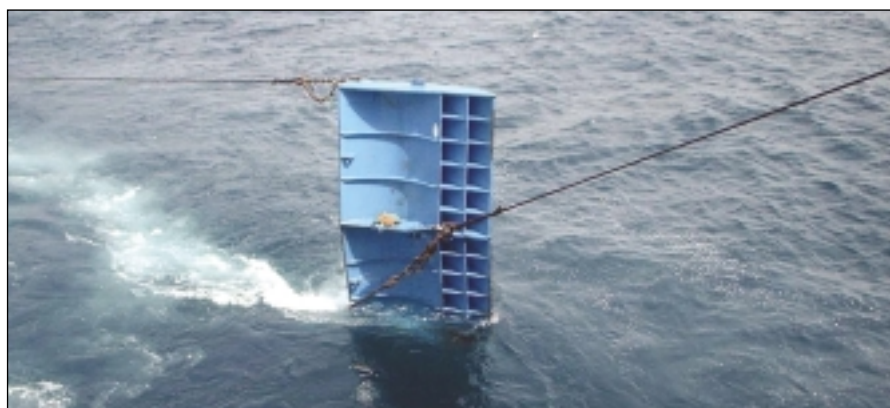
Another pair of Sputnik doors is on its way to Seattle, where Seattle Enterprise takes delivery of the S 14.0m² and 3800 kg size.

And of course Icelandic vessels have been using them too. The first pair (S 13.0m² and 3400 kg) is going aboard the Vilhelm Thorsteinsson and an S 11.0m² and 3400 kg pair on the Hákon. Both pairs will go into service before the end of November, so results from home grounds will be reported shortly.

At the end of November, an S 14.0m² and 2900 kg pair will be delivered to the Irish giant trawler Atlantic Dawn which is fishing mackerel off Morocco and Mauritania. It will be interesting to see what results they produce in the capable hands of Kevin McHugh and his crew.

Atli Már Jósaftsson

POLY-ICE



The SPUTNIK door 10.5m²

NEW

Cosmos – nylon sorting grid: “lighter and safer”...

In collaboration with fishermen in the North Atlantic Region, Cosmos Trawl has recently designed a nylon sorting grid for shrimp trawlers, which weighs a fraction of standard stainless steel grids.

The new sorting grid consists of a main frame fitted into a special four-panel net cylinder and a frame containing the grid itself bolted on to it. The grid is produced in standard PA6 nylon material and the round bars in fibre-glass/polyester material, providing an optimal combination of strength, stiffness, viscosity and wearing qualities, which allows a wide surface pressure as well as striking and vibrating working conditions.

The grid is about one-third of the standard grid in air, and in water the difference is even greater at about one-tenth of the normal weight. Its light weight makes the grid easier and safer to handle on deck, and far more flexible. The grid provides an exceptional water flow (securing optimal selection of fish and shrimp) and it is a big improvement, as steel grids often twist over, making it hard to get the turns out of the belly when shooting the gear.

Another advantage is that each bar in the grid can be removed, pulled free and quickly replaced in the event of being damaged by rocks – “no need to call an engineer up from below to do a welding job on deck”. In addition, you can easily change the grid frame when moving between fishing grounds where you need to alter the legal space between the bars from, for example, 19mm or 22mm to 28mm.

The nylon grid is today in use on several shrimp trawlers in Denmark, Greenland, Canada, the Faroe Islands and Norway except for the grounds around Svalbard, which is the only fishing area where it is still awaiting approval from the authorities.

Knud Nielsen, skipper on board the Canadian shrimp trawler Ocean Prawns, mailed the following report to “CATCH ON” to describe his experience using the new nylon grid:

“The new nylon grid is light and very easy to work with. Even when shooting two nets and the grids cross each other, turning upside down, we have never experienced the net sections being torn when pulling aboard.

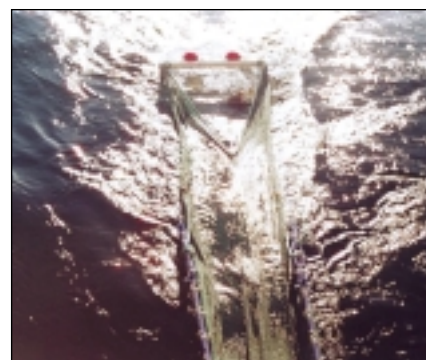
During fishing we have had stones going into the trawl, even in large quantities, without any damage to the grid. The grid is very stable during towing and keeps the correct shape, even though we have been using it for 5 months now.

Naturally we keep some spare bars on board for replacements in case of damage. But so far there's been no need for replacements – the grid and bars are incredibly strong!

Due to its light weight and flexibility, the new grid is an important precaution for the deck crew compared with traditional steel grids. Even in bad weather conditions, the crew can easily hold and manage the grid, ensuring that neither the crew nor the grid itself get hurt.

– In short, a huge step in the right direction!” Knud Nielsen (oprawns@thezone.com), July 2001.

In order to continue optimising the sorting effect and water flow in this particular area in trawl design, Cosmos Trawl have also been making a number of tests on the construction and shape of leading tunnels, grids and codends,



Grids can be supplied in various sizes and for different species with different legal space between the bars. At present Cosmos Trawl are handling inquiries from the Pacific, Indian and South Atlantic Oceans – for tailor-made solutions to each area and customer.

which have yielded quite significant results. Trials at sea are the next step ahead and the results will be published afterwards.

NEW Trawl Design from SWAN NET

Development work

After many hours of design work and testing, the new wide-aspect Pelagic trawl from Swan Net is ready to go into battle.

As with all models from the vast range, extensive testing is seen as being a very important element in the development of a successful product, and what better place to test it than in the real-life environment of the Atlantic Ocean?

Veronica

The trawl has been put through its paces on board the freezer factory trawler Veronica, working at first on and off the bottom southwest of Ireland, and later on mid- and surface-fishing in African waters. In both applications the trawl worked exceptionally well, and a glowing report from the skipper on the ease of towing and handling, lack of damage when worked on the bottom, plus the most important thing – the extra fish in the cod end – confirmed we were on the right track.

Western Endeavour

The next trial was on board the 4000 horse power, 70 m Western Endeavour, fishing for horse mackerel on very hard ground and pinnacles west of Ireland. Again the results were very impressive right from the start, with the skipper reporting over a half a knot more speed using the same power, which coupled with better ground coverage led to a marked improvement in catches, even on very scratchy and spread shoals. The skipper was also very pleased with the performance of the trawl, on ground that was traditionally very tough on bellies and footropes. The fact that he worked a full season without even a broken mesh convinced him that this was the way to go.

Neptune

The third of the new trawls tested went on board the Neptune, a 50 m pair trawler working from Killybegs. Yet again the results were positive and the



skipper reported the same advantages seen on the single trawls: a big increase in speed using less power, resulting in a significant saving in fuel and higher catch levels.

The success of this trawl has led to orders from two other pairs for exactly the same model.

What is the secret recipe behind the success of this trawl?

We believe it's a combination of things, starting with a carefully thought-out design and selection of the very best materials available, plus an experienced and dedicated workforce, and last but not least the intensive testing of the product before it is put on the market.

Add to this more than a quarter of a

century designing and manufacturing pelagic trawls for vessels from 100 to 15,000 horse power, and you can see this is no accident.

The design can be adapted to any size or horse power of vessel and to any fishery in any ocean of the world.

Each vessel is treated as a separate

entity, and depending on its parameters and fishing requirements it will have the trawl designed and built to meet them.

As usual the materials are sourced from only the highest quality suppliers, with Hampidjan supplying most of the high-tech materials used in the construction.

Martin Howley

HAMPIDJAN'S ENVIRONMENTAL POLICY

Responsible fisheries

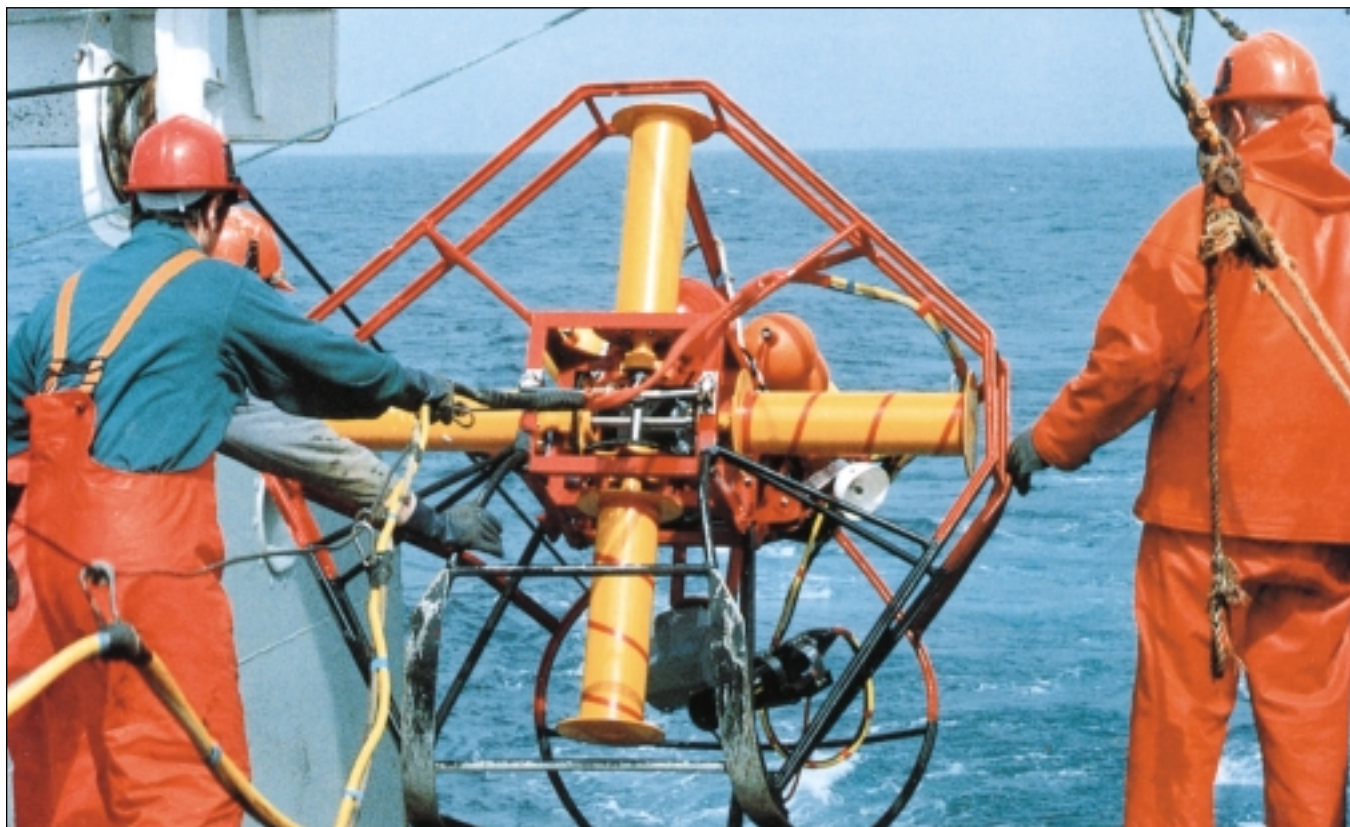
Hampidjan will seek to influence public opinion and decisions relating to economic and environmental issues, with a particular emphasis on stability, sustainable utilization of fish stocks and the purity of the oceans.

Fishing gear needs to be observed in action in order to understand its impact on the environment.

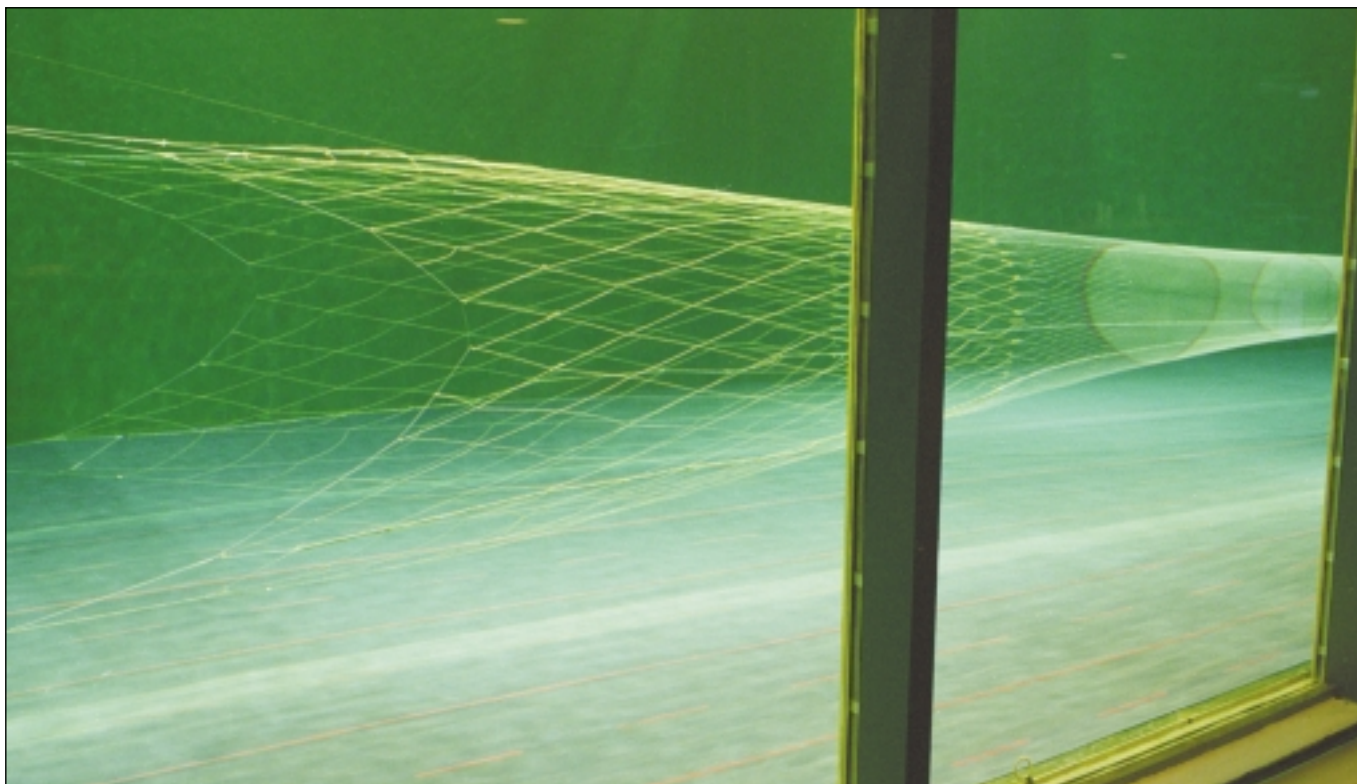
For many years, Hampidjan has conducted studies of fishing gear using underwater cameras, in cooperation with the Marine Research Institute and

Netagerd Vestfjarda netmaking company.

Recordings of these studies have then been distributed to fishermen and other interested parties. This has had enormous educational value for emerging generations of fishermen and netmakers, and enhanced understanding of the way



ROV underwater vehicle and camera



The trawl model test in a flume tank

fishing gear behaves and its impact on the environment.

Hampidjan has also taken part in preparations for increasing the mesh size of bottom and midwater trawls, and compared the properties of selective and conventional codends.

Hampidjan has been a leading innovator in fishing gear design in Iceland and abroad. It purchased the first shrimp separator used in Iceland, and was involved in trials of the first fish separator for cod and haddock.

Hampidjan cooperates closely with the University of Iceland on fishing gear tests and research. Excellent results have been achieved in trawl door design – the El Cazador range of doors are one example of positive results in enhanced care for the sea bottom, showing much lower bottom resistance than other doors in the market. Work is now in progress on developing a trawl simulator for use in trawl design, in cooperation with the University's hydrography department. The trawl simulator will increase understanding of fishing gear



The EL CAZADOR trawl door

and its behaviour, and prove useful in assessing the environmental impact of fishing gear in specific cases, such as bottom trawls.

Hampidjan's aim is to develop and manufacture high-quality fishing gear,

with a particular emphasis on stability, sustainable utilization of fish stocks and the purity of the oceans.

New organizational chart

The main aim behind the new organizational chart is to reflect the fact that a large part of Hampidjan's operations now involve the activities of overseas subsidiaries, creating more need for coordination, support and supervision. Operations of the parent company in Iceland have been divided into three profit centres: Nets and Ropes, Trawl Doors and Fishing Gear Technology, each responsible for its respective product development, manufacture, marketing and sales of its products, and for the profitability of its operations. In addition, there are three support units: Finance, Marketing and Corporate Development, whose task is to coordinate and support the activities of profit centres and of overseas subsidiaries.

Hampidjan Board of Directors.

The Hampidjan Board of Directors comprises Bragi Hannesson (Chairman), Árni Vilhjálmsson, Kristján Loftsson, Sigurgeir Gudmannsson and Unnur Thórdardóttir.

The Board and management of Hampidjan hope that this new organizational structure will lead to more effective utilization of the human resources and knowhow represented by the many employees of Hampidjan and its subsidiaries around the world in order to strengthen the company's product development and customer services.

New Managing Director at the Hampidjan Group



Jón Gudmann Pétursson will take over as Managing Director of Hampidjan on January 1, 2002.

Jón Gudmann, 41, is a graduate in business administration. On graduating he spent a year with a Reykjavík accounting firm and four years with the Iceland Defence Force Financial Division. He joined Hampidjan in 1987 as Financial Director and has been Deputy Managing Director for the past two years.

Hjörleifur Jakobsson, who has been Managing Director of Hampidjan since 1999, will become Managing Director of Olúfúlagid oil company in the New Year. Hjörleifur, 44, is an engineering graduate. After a year with Iceland's National Energy Authority he joined Eimskip shipping line in 1984 and was Senior Director of Domestic Transport Services there from 1994-1999 before he moved to Hampidjan.

