AN INTERVIEW WITH MR ANDREW WRIGHT, EXECUTIVE DIRECTOR, WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

Below is the reproduction (with permission) of an interview with Islands Business (reporter Dionisia Tabureguci), given by Mr Andrew Wright, Executive Director of the Western and Central Pacific Fisheries Commission.

IB: What are some challenges faced by the Commission in carrying out its task to help conserve tuna stocks?

AW: This is a hard question because the challenges are different depending on who you speak to. Apart from the challenges caused by rising oil prices, which impacts everyone involved in the fishery, for many years the coastal States in the region, effectively the FFA member countries and the American and French territories, have aspired to develop their domestic tuna fishing industries. At the same time, distant water fishing nations are anxious to secure long-term access to the fishing grounds to support the activities of their national fleets. Balancing these interests is challenging. Pacific countries are becoming increasingly actively engaged in the fishery. I think there are mounting pressures for the distant water fishing nations to change traditional ways of operating, which were essentially over-the-horizon modes of fishing with minimal engagement or investment in shore-based services in the region, to one where local investment is probably going to determine access to long-term fishing opportunities. Of course, an overarching concern is being able to support the development aspirations of Pacific islands countries and territories without jeopardising the ability of regional tuna stocks to sustain fishing. It is not much use promoting development, securing major investment, which most tuna fishery development initiatives require, and find that tuna stocks become over-exploited and so jeopardise those investments.

The objective of the WCPF Convention acknowledges the need to ensure our fish stocks are used sustainably. I think this is a second major concern, managing fishing effort throughout the WCPO within sustainable limits. Scientists have been telling us for some time that bigeye tuna, and to a lesser extent yellowfin tuna, are probably being over-fished and these stocks will not be able to support such high levels of fishing indefinitely.

Unfortunately, the indications in 2007 are that fishing effort in the purse-seine fishery is expanding and new vessels continue to enter the fishery. Excess capacity, or when the catching power among all vessels in the fishery exceeds that which can support sustainable fishing operations, is a major concern in nearly all fisheries around the world. In some cases, it is supported by governments which provide subsidies to vessels to enable them to continue uneconomic operations and it invariably leads to industry pressure being applied in management organisations like the WCPFC to take decisions that don't limit catch or fishing effort when over-fishing is obviously occurring. This results in stocks becoming over-fished and collapsing. World fisheries are littered with examples of this. I would hate to think we in the WCPFC will not learn by those experiences. Now some of the island countries, those making up the grouping known as the Parties to the Nauru Agreement (PNA), have developed a tool to manage purse-seine fishing effort within their national waters. This tool, known as the Vessel Day Scheme (VDS), is scheduled to become operational on 1 December 2007. It is quite a complicated arrangement which involves close coordination among the eight PNA members to manage purse seine fishing effort within agreed limits.

IB: Is illegal fishing increasing?

AW: Yes, and I am still concerned about that. Illegal, unregulated and unreported (IUU) fishing is a concern to fisheries management agencies everywhere. Given the general deterioration of fish stocks in other oceans, the relatively productive fishing grounds here, the large geographic area covered by the WCPO, and a limited capacity to carry out monitoring and surveillance throughout this region, the WCPO probably experiences very high levels of IUU fishing. This not only involves fishing by fleets which do not participate in the work of the commission but no doubt includes the activities of some vessels that belong to members of the commission-particularly in respect

Drew Wright, *Executive Director of the Western and Central Pacific Fisheries Commission.*

of, for example, the under-reporting of catches. The challenge with IUU fishing is that, because it is generally unreported, we really do not know the extent of it. Some experts estimate it could account for an additional 10% on top of the estimated reported catch; so for the WCPO, that could amount to an additional 200,000 metric tonnes of tuna caught each year in the WCPO that we know very little about! Not only does IUU fishing result in lost revenue opportunities, but those operations do not provide data to assist in assessing the status of local fish stocks and they undermine the sacrifices that those that comply with the decisions of the Commission make in their efforts to achieve sustainable use. In relation to the migration west of some Latin American vessels as a result of poor fishing conditions in the eastern Pacific, yes, we have received reports of illegal activities from the zones of both Cook Islands and French Polynesia and of course the majority of their activities on the high seas are unreported. In addition, the licensing of some of these vessels by any Forum Fisheries Agency (FFA) member is in contravention of agreements both within the FFA (which relates to the licensing of vessels that are not on FFA's Regional Register of Foreign Fishing Vessels) and within the Commission (and an undertaking not to support the activities of vessels in the WCPO that are not flagged to a member of the WCPFC). This creates some major challenges for this organisation that will hopefully be addressed at its meeting in Guam in December.

IB: What is the Commission doing to try and better regulate fishing in the WCPO?

AW: The Commission's efforts to better regulate fishing fleets includes: the development and implementation of a satellite-based vessel monitoring system for vessels operating on the high seas that will complement that being managed by the FFA secretariat for vessels operating in the national waters of FFA members; the development of a regional observer programme that will involve the placement of observers on fishing vessels operating in the region to collect independent information; procedures to support the boarding and inspection of fishing vessels on the high seas; procedures to verify transshipment when vessels transfer their catch to other vessels such as carriers; means to more effectively encourage compliance with the decisions of the Commission, including means to deter the support of any activity associated with IUU fishing; and efforts to improve the detail and scope of data that is provided by fishing vessels in respect of their fishing operations.

A recent paper by Professor Tom Kompas of the Australian National University warned of the dangers of the region being over-exploited by exposure to more open foreign fishing vessels and the use of effective modern technology.

In the early 1980s the average purse-seine vessel was catching 3500 mt in a good year; around 15 metric tonnes (mt) per fishing day. Today, although small vessels still harvest this amount, larger, high-tech vessels are averaging closer to 30 mt/day and 8500 mt a year. Some vessels now operate almost continuously for three or four years before going for major maintenance on a slip. Other than the Japanese seiners, which supply niche markets in Japan, most seiners transship their catch to carrier vessels on the fishing grounds rather than undertaking long voyages to deliver their catch to distant canneries or home ports. In places, like Solomon Islands and Papua New Guinea, canneries have been established close to the major fishing grounds-which also results in increased periods fishing. Modern seiners have sophisticated equipment such as bird radars (to detect birds associated with schools of fish), side scanning sonar that can extend several thousand meters each side of the vessel, helicopters and sensitive depth sounders and fish finders. In addition, in the last decade there has been an increase in the use of man-made rafts or fish aggregating devices (FADs) and fishing on naturally occurring logs which aggregate schools of tuna. Not only does FAD fishing generally result in higher catch rates of tuna but tuna schools associated with FADs generally consist of smaller, juvenile bigeye.

IB: What is your reading of the Pacific tuna industry so far and how it has contributed to development of Pacific islanders?

AW: Approximately 45% of the WCPO tuna catch is taken from within the exclusive economic zones of FFA members, and so they do control access to a significant proportion of the total WCPO tuna fishery. For 20 years or more, observers have suggested that they have the capacity to establish a cartel type arrangement and so dictate supply to world markets, including influencing prices. The challenge to achieve this among such a diverse group of countries is to be able to satisfy the individual needs and development aspirations of all of these countries-or at least those responsible for the lion's share of the catch. It has not proven possible to do that and so some countries continue to licence fleets under bilateral access agreements while others are pushing ahead with aggressive development of their domestic industries. While the development of the domestic industries in some Pacific countries does involve Pacific Island nationals,

by and large, domestic development is driven by foreign interests. There are some good reasons for that, among them the significant investment required to establish and operate these ventures plus the fact that local experience is still at its early stages of development.

IB: Annex B of the Vava'u Declaration on Pacific Fisheries Resources, a result of this year's Pacific Islands Forum Meeting in Tonga, indicated a move by member countries to try and consolidate the region's tuna fishing industry. What are your views on this move?

AW: The Leaders' recognition of the significance of fisheries as the region's premier renewable resource requiring concerted efforts to establish conservation and management arrangements to support sustainable fisheries is overdue and to be commended. I do believe that there are already trends towards a restructuring of the regional tuna industry that will see a gradual decrease in the proportion of fishing operations that are supported under bilateral access arrangements and an increase in operations based in the region. My only hope is that the substance of the Vava'u Declaration is not lost on administrators and managers and that the over-arching principle of supporting development within sustainable limits is in fact applied.

One of the highlights of the governments' proposed actions (Communique of Vavau Forum meet) is to: "Fully implement without delay the conservation and management measures developed and endorsed by the Western and Central Pacific Fisheries Commission (WCPFC)" and "seeking the urgent adoption of additional measures by the WCPFC to address over-fishing of bigeye and yellowfin, including a reduction in longline catches and addressing purse seine fishing, and specific steps to reduce the catch of juvenile bigeye and yellowfin."

Source: Islands Business, December 2007:
http://www.islandsbusiness.com

GLOBALIZATION AND SCALING IN ECOSYSTEM-BASED MANAGEMENT

The inaugural issue of Marine Ecosystems and Management (MEAM, Vol. 1, No. 1) was interesting reading and should provoke a healthy exchange of ideas over the months and years to come. I particularly like Jake Rice's essay on ecosystem-based management (EBM) titled, "Investigating the roots of confusion". I want to extend Jake's investigation by addressing another source of confusion about EBM. It is the issue of scale. A closely related issue is fragmentation.

Some think of EBM at the scale of the MPA that's important to them (as a manager, researcher, or stakeholder). Others have promoted EBM at much larger regional scales, such as the scale of large marine ecosystems (LMEs). However, with globalization, even the LME scale is not large enough for some aspects of EBM.

Globalization affects people, institutions and ecosystems on all scales from local to global, and is enabled by advances in technology that allow rapid communication, and movement of people and commodities. As a result, products that were once exchanged only locally are now bought and sold on global markets. Globalization is also a natural feature of our biosphere, connecting local environmental conditions to global processes that regulate climate, ocean circulation, and ocean and atmospheric chemistry.

Globalization is a reality that presents new challenges for EBM. Globalization can increase demand for some ecosystem goods and services, such as increasing the demand for fish products as a result of global markets. One new challenge is that not only must conservation and management of these resources balance local needs and desires with sustainability of ecosystems, but they must also respond to global pressures. Even locally, culture and traditional values are evolving rapidly in response to globalization of communications and information, which challenges institutions for conservation and management to be flexible and adaptive so that they can keep pace.

So what is the proper scale for implementing EBM in a globalized world? Ultimately, EBM needs to be implemented at a nested hierarchy of scales from global to regional to local. The appropriate scale of a particular EBM project within the nested hierarchy depends on the (a) characteristics of the ecosystem that are priority considerations for EBM, (b) natural processes that are most relevant to the priority ecosystem characteristic, (c) anthropogenic drivers of change in the priority ecosystem characteristics, and (d) the

governance institutions that are available to implement EBM. It is interesting that three of the four factors related to the appropriate scale for EBM are determined by humans, not nature. Let me elaborate.

(a) Characteristics of the ecosystem

In general, EBM is aimed at conserving and sustaining ecosystem services to benefit current and future human generations. No one disputes such a generic goal for EBM or something like it, but it does not give practical guidance for implementing EBM, setting priorities or deciding on scale. In practice, EBM is usually implemented to protect a place that many people value, such as an estuary, bay, gulf or the site of a coral reef. In such cases, practical or operational objectives are formulated usually focusing on a few characteristics, such as aesthetics, recreational opportunities, fishery production, and factors that affect public health and safety. I refer to this type of EBM as place-based, and the size of the place of interest determines scale.

Ecosystem-based management can also be sector-based. For the fisheries sector, it is often referred to as an ecosystem approach to fisheries (EAF). Of course, EAF also occurs in a place. But there is an evolution from traditional fisheries management (which usually has the goal of a large sustainable yield) to EAF, which takes account of non-fishing factors that affect fisheries, as well as direct and indirect impacts of fishing on ecosystem services other than fishery yield. Like traditional fisheries management, the starting point of EAF is typically at the scale of fish stocks. But it may evolve from there to take account of non-fishery factors that impact fisheries, and impacts of fisheries on non-fishery services of ecosystems.

Place-based EBM and sectoral approaches such as EAF should not be viewed as competitive, or either superior to the other. Depending on the specific situation, they will evolve at different paces. For example, the legal framework for traditional fisheries management may also allow progress to be made with EAF in situations where there is not a framework for place-based EBM. This is generally the case in the US, although there are some specific places that are exceptions. Ultimately, place-based EBM and sectoral approaches, such as EAF, should converge and be mutually supportive.

(b) Natural processes

Marine ecosystems do not have impenetrable barriers that create closed ecosystems. Regardless of the location of ecosystem boundaries established for the purpose of EBM, there are almost always some biotic and abiotic exchanges across the boundaries. However, boundaries can be chosen to minimize these exchanges based on topography and ocean circulation.

(c) Anthropogenic drivers

In some cases, the anthropogenic drivers that affect priority characteristics of ecosystems occur on the same scale as the ecosystem characteristic. For example, fish productivity may be primarily affected by fisheries that take place at the same scale as the range of target fish stock. However, there are many cases where the scale of priority ecosystem characteristics and anthropogenic drivers of change do not match. For example, the health of a coral reef may be more affected by anthropogenic ocean acidification at the global scale, or sedimentation resulting from coastal development, than by any of the activities that occur in the vicinity of the reef. Globalization is a generic anthropogenic driver that affects ecosystems at all scales.

(d) Governance institutions

Governance includes both (i) non-binding arrangements that facilitate communication, priority identification and goal setting, and coordinated planning, and (ii) legally binding instruments that can be used to regulate human activities. Legally binding instruments are often available to implement sectoral EBM, such as EAF. Non-binding arrangements may be a useful vehicle for harmonizing sectoral approaches. In practice, the scale at which EBM is implemented will depend on the scale of available governance instruments (local, regional, global). It will often be necessary to decide if it is better to use existing governance institutions even if their scale is not very appropriate, or to delay EBM until a governance institution with a more appropriate scale can be created.

The scale for EBM will usually require a compromise between considerations of factors (a–d). These compromises should not be much of a problem if there is good connectivity (in terms of communication and integration) among the elements of the nested hierarchy of EBM implementations. This connectivity needs to be both vertical and horizontal. An example of horizontal connectivity is adjacent community-based EBM projects taking account of how their actions impact their neighbors. Vertical connectivity needs to be two-way. EBM at lower levels needs to fulfill higher-level policies and goals. Higher-level EBM needs to control anthropogenic drivers that impact lower levels. Unfortunately, there is relatively little experience creating effective connectivity between EBM at a hierarchy of scales. This could lead to fragmentation. In a globalized

world, fragmentation has the potential to undermine even well-executed EBM at any particular scale.

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Editor's note: The goal of the following feature, The EBM Toolbox, is to promote awareness of technology tools that can facilitate EBM processes, and provide advice on using those tools effectively. It is brought to you by the EBM Tools Network (www.ebmtools.org), a voluntary alliance of leading tool users, developers, and training providers to promote awareness, development, and effective use of technology tools for EBM in coastal and marine environments and the watersheds that affect them. The EBM Toolbox will be a recurring feature in MEAM.

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THE EBM TOOLBOX

Ecosystem-based management of coastal and marine environments requires the integration of information about a vast array of environmental and human systems. Many different kinds of technology tools have been developed to help policymakers and managers collect, visualize, and analyze this information and engage stakeholders in the EBM decision-making process. For example, EBM tools can help:

- **Collect local knowledge on resource use, such as favorite areas for fishing or diving;**
- **Visualize the impact of development on a coastal community and coastal ecosystems;**
- **Select optimal areas for conservation, restoration, or development; and**
- **Collect stakeholder feedback on management alternatives.**

When you get started using EBM tools, you should determine what you want to get from using tools, what resources you have available to use them, and how you will integrate tools in your management decision-making process. The EBM Tools Network provides a series of questions to help with these decisions at www.ebmtools.org/using_tools.html. The webpage also offers several best practices for using EBM tools, gathered from practitioners worldwide (scroll down to "Using EBM Tools Effectively").

Research the available EBM tools and what each can and cannot do for your project. On the ebmtools.org website, click on "Find Tools" to access a searchable database of EBM tools. Once you have located tools that might be useful, you should contact the tool developers and other tool users for more detailed information and advice.

Learn more about EBM tools and the EBM Tools Network at www.ebmtools.org

ULTRA-LOW FREEZING LEADS TO HIGHER QUALITY SEAFOOD

Transportation and storage of seafood products at ultra-low temperatures is a growing business. The writer visits two Danish companies that are leading the way in technological development.

Maersk Line, which claims to be the biggest container ship operator in the world, has been spearheading the further development of reefer container technology to meet the demands of its global customer base.

"Constant care for the cargo we carry is the driving philosophy of Maersk Line, and seafood accounts for a very large chunk of our business," Henrik Lindhardt, Maersk Line's senior general manager in charge of reefer management, operations, technical sales and innovation within reefer management, tells Seafood Processor.

In order to meet its customers' demands, Maersk has put together a team of more than 100 dedicated reefer specialists. Today, it also owns the largest fleet of new state-of-the-art reefer containers.

"There is no major shift in our transportation protocols for seafood, but our reefer containers have got better and better. We have more capacity and can freeze down to much lower temperatures," reveals Lindhardt.

Certain types of products require transport at ultra low temperatures and this is why, in 1998, Maersk developed a new type of refrigerated container specifically for such products. The Maersk Super Freezer container is able to maintain temperatures as low as -60 deg C, which makes it ideal for transporting frozen tuna into the demanding Japanese sushi and sashimi market. The cargo can be loaded as loins or as whole fish.

By utilising a special Stuffie container, also supplied by Maersk, stuffings direct from the fishing vessel can be carried out. The Stuffie is connected to the Super Freezer and insulated with an airtight membrane to avoid ambient air entering the Super Freezer container. The cargo of fish is then loaded into the Stuffie through a hole in the roof, sorted and transferred into the Super Freezer. While high-priced sashimi-grade tuna is currently by far the biggest commodity transported in Maersk Super Freeze containers, other deep-frozen species known to benefit from being transported at -60 deg C include swordfish, sea urchins and salmon.

And with the rise of the sushi bar phenomenon in many countries in Europe, North America and elsewhere around the world, Japan will surely not be the only destination for Super Freezer containers in the years ahead. Transportation of seafood products at ultra-low temperatures is a growing business, according to Lindhardt, adding that Maersk is presently the only shipping line operating Super Freezers. Benefits of using the Super Freezer container include global coverage; limited re-handling of the products to ensure optimum quality at destination; an unbroken cold chain to the final place of delivery; and fast delivery, since the products can be shipped in smaller quantities, which also yields a higher market price and improved cash flow.

Bluefin tuna transported in Maersk's Super Freezer containers is one of the most expensive loads, so the company has special procedures in place to ensure safe and effective handling of this cargo. Other important benefits include departures and arrivals with fixed schedules which enable a more reliable, steadier supply; reduced cold storage costs; and extended season because less cargo is required to make a shipment.

Trials with farmed salmon

Maersk has also been looking at the ultra low temperature freezing and transport of salmon from Norway. This has included blast freezing the fish to -60 deg C immediately after slaughter at the processing plant, packaging then transporting it by Super Freezer container to destination via a distributional terminal.

A test shipment from Norway to South Korea, including sensory testing, has been carried out with good results, as also has a static trial and test shipment to Japan. The Norwegian institute SINTEF has documented the product quality. "The Norwegian salmon project is something we have been looking into to develop a concept we are able to offer to customers," explains Lindhardt.

Most of the processing plants do not have -60 deg C freezing capability, so they can use our special Blast Freezer, which is a transportable, containerised freezing tunnel. After being frozen and packed, the fish is then transferred into a Super Freezer and sent off. We've been testing out this concept with SINTEF on salmon over the last one and a half years, and the results on the quality side have been excellent. To prove the concept SINTEF has documented the quality and the super frozen salmon, when thawed, compares favourably with air-freighted fresh salmon.

The quality of the fish is as good or even or better than fresh when frozen and distributed at minus 60 degrees Celsius [-60deg C]. SINTEF has also been testing the minus 60 degrees Celsius freez-

ing and distribution of mackerel, rainbow trout and shrimp, and in all cases you achieve very good quality - but you need our freezers and containers to do it. Maersk describes its Blast Freezer as a portable, flexible and economical solution for freezing fresh seafood. The company has developed this special unit capable of freezing seven tonnes of fresh fish from 30 deg C down to -60 deg C within 24 hours at an ambient temperature of maximum 35 deg C.

The size of the Blast Freezer (some as a 40ft/12m high cube reefer) allows easy positioning on site. After freezing the fish down to the required ultra-low temperature, it is transferred into a Super Freezer container for direct delivery to the final destination. These Blast Freezer are available worldwide and can be delivered with power-pack and external fuel tank, making it completely self-sustaining.

And, with Maersk's Super Freezer containers, a complete freezing/transport package is therefore available. Transporting fish in Super Freezer containers is a continuously growing business. Today, these containers are predominantly used for tuna shipments, but Maersk Line's bid to expand the business by offering this type of freezing and distribution solution to other seafood sectors looking for increased revenues from the quality advantages it can bring, could pay off big time.

As a service to catchers of brine frozen tuna, Maersk Line has developed a special container loading system that facilitates efficient discharging and loading of fish from fishing vessel to standard reefer containers. Explains Lindhardt: "The tuna, mainly skipjack and yellowfish, is fished by purse seiners that come into port and take the fish out of their brine tanks. The issue then is how best to get that fish into a reefer container. You could of course lip the container on its end so that the opening is on top, but that is not the best option!" Maersk's solution - developed on the company's behalf by Bennetts Engineering of Cape Town, South Africa - is designed to fill up to two containers at the same time. It comprises a large loading hopper equipped with a chute feeding each container, and a telescopic conveyor that extends into each 40ft reefer container.

For loading, the hoppers and containers are placed directly on the quay alongside the fishing vessel. The hoppers are ful1y mobile if required in a new location. "With the new system, you simply empty the net onto the hopper, and loose frozen fish first slides towards and is then conveyed into the container until it is full," says Lindhardt. "The fish is typically at minus 11-12 degrees Celsius when it comes out of the seiner's brine tanks, so we are also freezing it down further to minus 18 degrees Celsius." Productivity of the new lending system is 350-500 tonnes of fish per nine hour shift. "Exposure to the ambient air, humidity, rain and wind is minimised with the fast loading," explains Lindhardt.

"On completion of container stuffing, the doors are shut and the container is quickly put on to power." Once the brine frozen tuna is loaded, the shipper can enjoy the benefits of shipping in containers versus bulk cargo. These benefits, according to Maersk, include reduced handling, better maintenance of the cold chain, shipside to door delivery at processing plant, ability to ship small lots of fish to multiple locations, and the ability to pre-sort (thereby allowing shipment by size and variety). First roll-cut of Maersk's new brine frozen fish container loading system was made recently in the Seychelles, an important transhipping port for tuna purse seiners fishing the Indian Ocean. Heinz has a tuna canning factory in the Seychelles, but a lot of the fish unloaded in this small island nation north east of Madagascar is transferred to Mauritius and Vigo, in northwest Spain, for canning.

Another very practical innovation introduced a few years ago by Maersk is the Sortie. This is a reefer container modified to serve as a sorting area for frozen products. The cargo of fish loaded into the Sortie through a hole in the roof directly from the reefer vessel or fishing vessel. This is to minimise exposure to ambient temperatures during the sorting and/or stuffing operation. "Holes have been made in the side walls of the container, where up to five reefer containers can be attached by use of an airtight membrane," explains Lindhardt. "This operation prevents any ambient air from entering the container, and the whole compartment remains under full refrigeration during the entire operation." Sea-going container boxes have one of the toughest roles in the cold chain.

Not only do stacked reefer containers have to withstand heavy loads, but they must also cope with severe storms. Maersk's reefer containers are therefore manufactured to strict specifications and on the basis of extensive research. Before delivery, the containers undergo rigorous testing and are subjected to extreme weather conditions; from tropical to arctic environments. Basically four different companies supply the refrigeration units for Maersk's standard reefer containers: Carrier, Daikin, Maersk Container Industri (Star Cool) and Thermo King.

But only Thermo King, which helped Maersk develop the spe-

cial Super Freezer, supplies the customised refrigeration units for the ultra low temperature reefer containers. All Maersk's reefer containers have bottom-air delivery. This means that the cold air is supplied from the bottom of the container through the specially designed T-bar floor. Maersk Line also contributed to the development of the datalogger, the microprocessor that monitors the temperature of the cargo en route. Temperature probes are inserted directly into the fish to measure its core temperature and records are stored by the datalogger. The probes measure the temperature to a degree of accuracy of ± 0.25 deg C. Gensets, most of them clip-on, are used to power Maersk reefer containers, thereby maintaining the set temperature for up to five days during rail or road transportation.

Maersk has about 200,000 reefer containers on disposal worldwide, and seafood in many different varieties and product forms is transported in the company's containers. "Seafood is a very important segment for Maersk and we are trying to provide as many shipping solutions as we possibly can," says Lindhardt, hinting that yet another innovation of interest to our industry will soon be launched.

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Maersk reefer technicians and highly trained staff at the terminals and on board the vessels make sure the containers carrying the cargo are carefully monitored.