4. EXISTING SHIPPING SERVICES

4. EXISTING SHIPPING SERVICES

In this chapter, the existing conditions of domestic shipping services for the transport of passengers and cargoes are examined to identify the problems and issues for the basis of further improvement and development

4.1 Classification of Shipping Services

Currently, various types of services are available in the Philippine domestic shipping. The existing shipping services can be categorized as shown in Table 4.1.1.

In the Philippines, shipping service for passenger is mostly combined with cargo transport service. In terms of capacity, Ropax vessels and conventional cargo-passenger vessels are the most dominant service providers among the cargo-passenger shipping service. These types of vessels serve as liner for mainly mid/long-distance primary routes connecting major cities in the country. Wooden-hull banca vessels have the largest number and coverage. This type mainly serves short-distance tertiary routes connecting major islands and remote small islands. There are also pure passenger shipping services such as fast craft and tourism boat, etc.

For cargo shipping service, container vessels are supplying liner shipping service for containerized cargos. Capacity of container vessels is dominant and those are serving mainly for mid/long-distance primary routes connecting major cities in the country. General cargo vessels and tankers are serving mainly for primary and secondary routes, while bulk carriers (mostly barges) are serving for secondary and tertiary routes.

Table 4.1.1. Classification of Existing Domestic Shipping Services

Service Type	Vessels							Service Route	
	Type	No.	Total GT (000)	Ave. GT	Ave. Pax	Ave. Age	Hull	Type	Distance
Passenger-Cargo	Ropax / RoRo	149	484	3,250	1,019	29	Steel	Primary	Mid/Long
	Conventional Cargo-Passenger	116	35	302	325	26	Steel	Secondary	Short/Mid
	Wooden-hull Banca	2,503	53	21	37	10	Wood	Tertiary	Short
	Passenger and Fast crafts (incl. tourist boats)	150	32	216	216	16	Steel, Fiber glass	Secondary /Tertiary	Short/Mid
Cargo	Container	28	109	3,893	-	28	Steel	Primary	Mid/Long
	General Cargo	854	531	622	-	22	Steel/ Fiber glass	Secondary	Mid/Long
	Dry Bulk (barge)	178	97	543	-	22	Steel	Secondary /Tertiary	Short/Mid
	Tanker	205	184	900	-	21	Steel	Primary/ Secondary	Mid/Long

Source: MARINA 2003

Figure 4.1.1. Typical Domestic Vessels

Medium/Long-Distance Ropax Vessel

Conventional Cargo-passenger Vessel

Fast craft

Wooden-hull Banca

Container Vessel

General Cargo Vessel

Tanker

Short-distance RoRo Vessel

4.2 Cargo-Passenger and Passenger Shipping

4.2.1 Long-/Medium-distance Ropax Vessels

(1) BASIC SERVICES AND ENGAGED VESSELS

Ropax (RoRo passenger-cargo vessel) is one of dominant shipping service types in the Philippine for both of passenger and freight transport. Since the mid-1990s, Ropax has become a major player on primary domestic shipping routes which are connecting major regional centers in the country.

Most of the existing Ropax are Japanese-made vessels which used to serve the Seto Inland Sea in Japan and were sold abroad since 1987 after this sea was bridged between Main Island and Shikoku Island. When three bridges were finally constructed by 1998, most of the inter-island RoRo vessels disappeared in Japan.

There are 5 major shipping companies which are operating typical Ropax vessels in the long-/medium-distance the Philippine. Typical Ropax vessels are known as “Super Ferry” and “Our Lady of...” series of WG&A (now called ATS) and “Princess…” series of Sulpicio Lines, among others. Large scale Ropax vessels with more than 5,000GT are mainly operated by WG&A, Sulpicio Lines and Negros Navigation.

The characteristics of Ropax vessels are as follow:

- Average vessel size of all Ropax vessels is about 5,100GT with passenger capacity of about 1,350. The top 3 shipping companies operate long-distance route using bigger vessels with 4,000-15,000GT. The largest vessel is 15,233GT with passenger capacity of more than 2,000 operated by WG&A. Other companies operate smaller vessels with more or less 1,500GT and passenger capacity of about 500.
- Average vessel age is very old, about 31 years as of year 2005.
- Ropax vessels are registered in major cities of the country such as Manila, Cebu and Iloilo.

Table 4.2.1. Profile of Major Long-/Medium-Distance Ropax Operators and Vessels

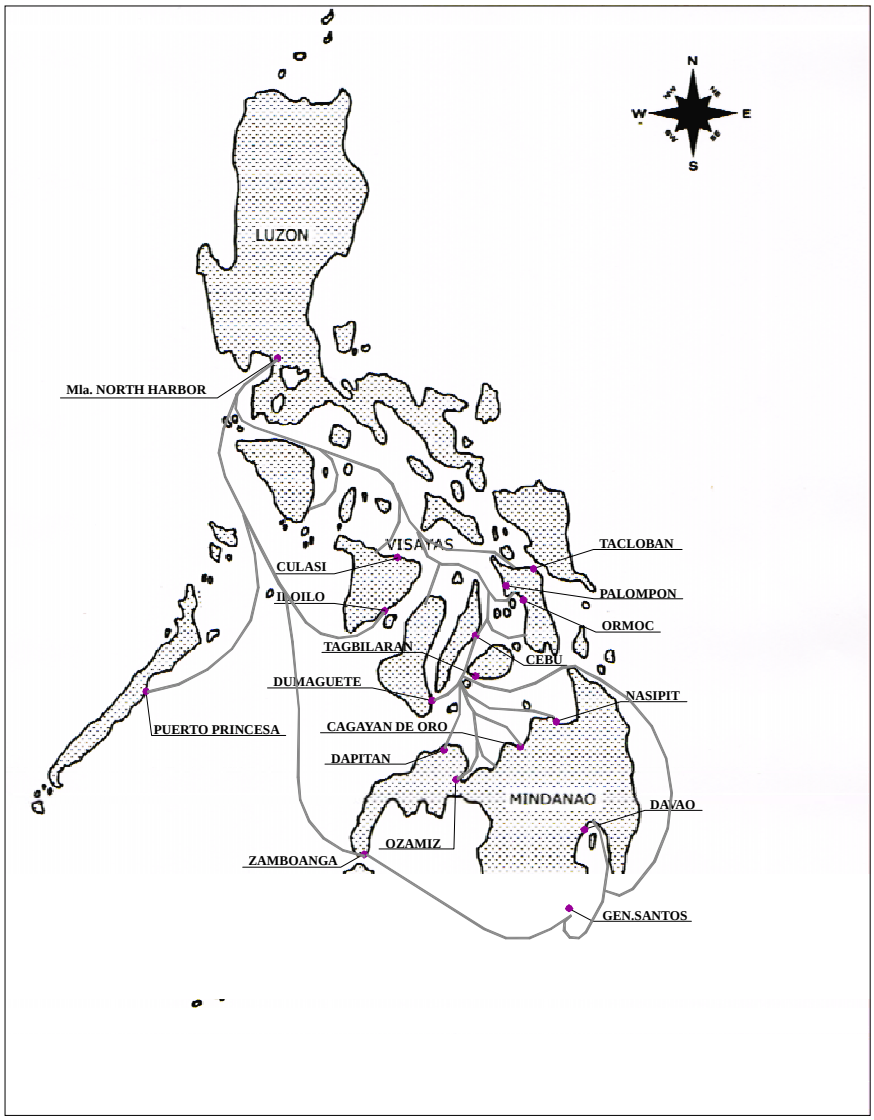
Shipping Company	Base Port	No. of vessels (built in Japan)	Total GT	Ave. GT	Ave. Pax Capacity	Largest Vessel (GT)	Ave. Age[1]
WG&A[2]	Manila/Cebu	22 (21)	148,922	6,769	1,543	15,223	29
Sulpicio Lines	Cebu	19 (18)	114,652	6,034	1,705	13,820	32
Negros Navigation	Iloilo	10 (10)	54,743	5,474	1,513	7,909	33
Trans Asia Shipping	Cebu	12 (12)	22,257	1,854	636	3,991	32
Cokaliong Shipping	Cebu	5 (5)	6,100	1,220	507	2,722	31
Total	-	68 (66)	346,674	5,098	1,347	15,223	31

Source: MARINA 2000
Note: 1) calculated as of 2005
2) WG&A has been renamed Aboitiz Transport System (ATS)

(2) SERVICE ROUTE NETWORK

Ropax vessels operate as liner service mainly for primary routes connecting between Manila. Cebu and other major cities in Visayas and Mindanao. Figure 4.2.1 shows the route network of Ropax vessel services. Basically, bigger vessels are used for longer distance routes, while smaller vessels for shorter distance routes.

Figure 4.2.1. Major Routes of Long-/Medium-Distance Ropax Service



Source: Port Master Plan Study, JICA 2004

(3) OPERATIONAL CHARACTERISTICS AND PROBLEMS

- Most of Ropax vessels are very old and continuously aging. Older vessels need to be replaced for safety and for more efficient operation. However, it is not anymore possible for Japan to be able to sell as many vessels to the second-hand market as it did in the 1990s.
- According to the analysis on operation data of 3 sample Ropax vessels, load factor of cargo is very low (14-27%) while that of passenger is relatively high but still less than half (19-54%).
- Ropax vessel is operated as liner, calling at several ports. Therefore, comparing to the direct shipping service, it needs more travel time on the sea and time for waiting for berthing and cargo handling at port, and load factor is different by section. It reflects to higher passenger and freight rates.

Table 4.2.2. Load Factors of Sample Ropax Vessels

Sample (Route)	Route	GT	Annual Cargo Load Factor (%)	Annual Passenger Load Factor (%)
Vessel 1	Cebu-Nasipit-Cebu	2,103	23.6	30.4
Vessel 2	Cebu-Ormoc-Cebu-Ozamis-Cebu	1,150	14.4	19.5
Vessel 3	Cebu – Cagayan – Jagna - Cebu	5,463	27.3	54.9

Source: MARINA 2003

4.2.2 Conventional Cargo-Passenger Vessels

(1) BASIC SERVICES AND ENGAGED VESSELS

Most of conventional cargo-passenger vessels are providing liner service for short/ medium-distance secondary routes connecting between major hub ports and other secondary ports in the country.

The characteristic of general cargo vessels are as follows:

- There are 116 conventional cargo-passenger vessels engaging in domestic shipping in the Philippines. All vessels are steel-hull type.
- Average vessel size is about 302GT. Vessels registered in Luzon are relatively bigger with average size of 620GT.
- Average vessel age is about 26 years as of year 2004.
- 53% of total vessels are registered in the Visayas Area, mainly in Cebu. The remaining shares for Mindanao and Luzon Areas are 15% and 31%, respectively.

Table 4.2.3. Profile of Conventional Cargo Passenger Vessels

Registry Area	No of Vessels	Total GT	Ave. GT	Ave. Pax Capacity	Ave. Age[1]
Luzon	11	6,819	620	380	20
Visayas	36	8,047	224	284	28
Mindanao	69	20,199	293	344	24
Total	116	35,065	302	325	26

Source: Updated MARINA database 2003
Note: 1) calculated as of 2004

(2) SERVICES ROUTE NETWORK

Conventional cargo-passenger vessels are mainly operating on secondary shipping routes connecting between major hub ports such as Manila, Batangas, Cebu, Iloilo, Bacolod, Cagayan de Oro, General Santos, Davao and other small port within the area.

(3) SHIPPING COMPANIES

There are 76 companies which operate conventional cargo-passenger vessels. Of which 67% own and operate only one vessel, most likely managed as family business. Other companies also own and operate a number of vessels but maximum is 4 vessels.

Table 4.2.4. Shipping Companies Operating Conventional Cargo-Passenger Vessels

No. of Operating Vessels	No. of Shipping Companies	Total No. of Vessels	Total GT	Ave. GT
1 vessel	51	51	13,152	258
2 vessels	14	28	10,159	363
3 vessels	8	24	8,393	350
4 vessels	3	13	3,361	259
Total	76	116	35,065	302

Source: Updated MARINA database 2003

(4) OPERATIONAL CHARACTERISTICS AND PROBLEMS

- Most of conventional vessels are old and continuously aging. Older vessels need to be replaced for safety and for more efficient operation.
- Conventional cargo-passenger vessels are serving mainly for secondary shipping routes and its service is very essential for the movement of people and cargoes to support the regional economy and development.
- Some of shipping routes are operated by only one shipping company. Therefore, there is no competitive environment to increase service level.

4.2.3 Wooden-Hull Bancas

(1) BASIC SERVICES AND ENGAGED VESSELS

Wooden-hull bancas are providing liner service for mainly tertiary shipping routes connecting between minor towns within the region. They serve not only for passenger but also for mixed use of cargoes and passengers.

The characteristics of bancas are as follows:

- There are 1604 wooden-hull bancas engaging in the domestic liner shipping in the Philippine. Of which half is used for passenger service and another half is for cargo-passenger service.
- Average vessel size is very small about 13GT. By type of service, average size of cargo-passenger bancas is relatively bigger about 16GT, while that of passenger bancas is very small, about 8GT. Average passenger capacity is about 37, 28 passengers for passenger Banca and 44 passengers for cargo-passenger Banca.
- Average age of bancas is relatively young about 10 years as of year 2005.
- 52% of total bancas are registered in the Luzon Area. The shares of Visayas and Mindanao are 22% and 25%, respectively.

Table 4.2.5. Profile of Wooden-hull Bancas

(1) Liner Operation

Service Type	Total No. of Vessels	Total GT	Ave GT	Ave Pax Cap	Ave Age[1)]
General Cargo	15	599	40	28	15
Passenger Cargo	874	14327	16	44	8
Passenger Ferry	715	6075	8	28	11
Total	1604	21001	13	37	10

Source: Updated MARINA database 2003
Note: 1) calculated as of 2004

(2) Tramper Operation

Service Type	Total No. of Vessels	Total GT	Ave GT	Ave Pax Cap	Ave Age[1)]
Dry Bulk	3	1770	590	0	15
General Cargo	880	28346	32	31	12
Passenger Cargo	9	95	11	181	9
Passenger Ferry	5	46	9	10	14
Tanker	2	1483	741	0	No Data
Total	899	31740	35	89	12

Source: Updated MARINA database 2003
Note: 1) calculated as of 2004

Table 4.2.6. Registry of Wooden-hull Bancas

Registry Area	Total No. of Vessels	Total GT	Ave GT	Ave Pax Cap	Ave Age[1)]
Luzon	1304	23494	18	31	11
Mindanao	554	14970	27	44	9
Visayas	645	14278	22	45	11
Total	2503	52741	21	37	10

Source: Updated MARINA database 2003
Note: 1) calculated as of 2004

(2) SERVICES ROUTE NETWORK

Wooden-hull bancas are vulnerable against hazardous waters. Therefore, it serves for coastal transport requirement such as on tertiary and development routes. It is still popularly used on many routes with limited traffic (less-commercial routes).

The two (2) maps below show network routes for wooden-hull bancas. The first shows the routes by GT Class, while the other by number of units.

Figure 4.2.2. Banca Routes by GT

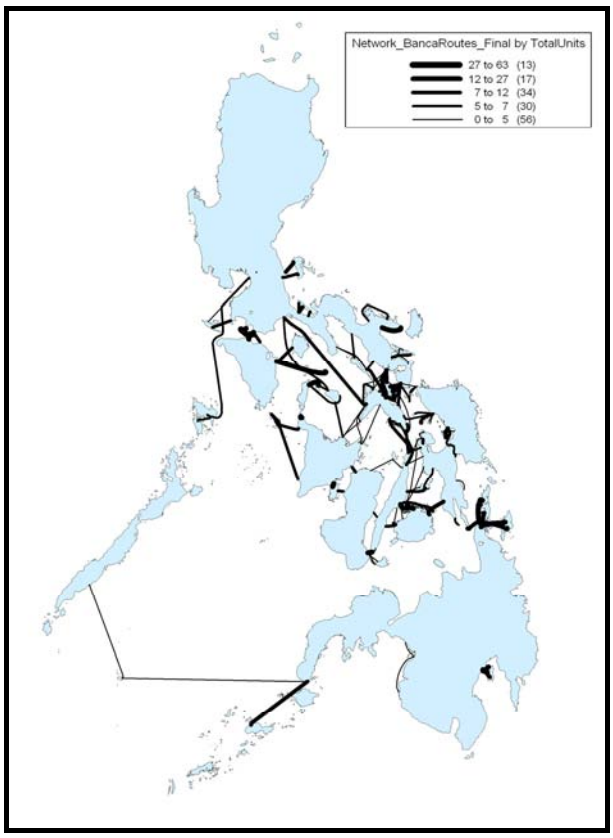
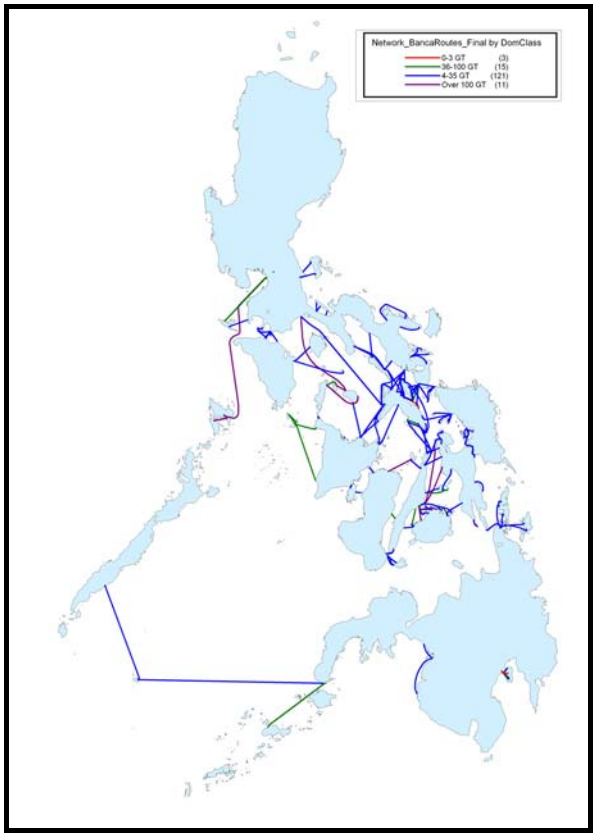


Figure 4.2.3. Banca Routes by Units



Source: MARINA 2002

(3) SHIPPING COMPANIES

There are 2,010 companies which operate 2,503 wooden-hull bancas. Of which 84% own and operate only one vessel. There are only 8 companies which operate more than 6 vessels with average size of 29GT.

Table 4.2.7. Shipping Companies Operating Wooden-hull Bancas

No. of Operating Vessels	No. of Shipping Companies	Total No. of Vessels	Total GT	Ave. GT
1 vessel	1,682	1682	35,262	21
2-5 vessels	320	758	15,676	21
6-8 vessels	8	63	1,803	29
Total	2,010	2,503	52,741	21

Source: Updated MARINA database 2003

(4) OPERATIONAL CHARACTERISTICS AND PROBLEMS

- Average age of bancas is not old but they are a safety concern. Therefore, the Government recently issued its phase-out program (MARINA's M.C. 190 in 2003). During this 3-7 years phase-out period, however suspension of locally indispensable services cannot be allowed. Thus, a well-coordinated shift from traditional to modern operation must be done in transition.

- Operating speed of bancas is slow comparing with fast crafts which are gradually introduced in competitive routes.
- It has difficulties to maintain service level due to low traffic of passengers and cargoes.
- Most of shipping routes are operated by only one shipping company. Therefore, there is no competitive environment to increase service level.

4.2.4 Passenger Vessels and Fast Crafts

(1) BASIC SERVICES AND ENGAGED VESSELS

Passenger vessels are providing a sort of intermediate level of shipping service between operations of conventional cargo-passenger vessels and wooden-hull bancas. Most of passenger vessels are operating as liner service for secondary and tertiary routes.

Passenger vessels include also high speed passenger vessel, known as “fast crafts”. This is one of major change in recent years in the domestic passenger shipping service. This service is particularly popular in Visayas.

The characteristic of pasenger vessels are as follows:

- There are 150 passenger vessels engaging in the domestic shipping in the Philippine. Of which 54% is steel-hull vessel, while the remaining is fiber glass (18%) and ferro cement (16%).
- Average vessel size is small about 216GT with passenger capacity of 216. By type of vessel, average size of steel vessels is relatively bigger about 270GT with passenger capacity of 240, while that of fiber glass vessels is very small about 31GT with passenger capacity of 56.
- Average age of passenger vessel is about 16 years as of year 2004. By type of vessel, average age of steel vessels is 20 years, while that of fiber glass vessel is 8 years.
- 50% of total passenger vessels are registered in the Luzon Area. The shares of Visayas and Mindanao are 17% and 32%, respectively.

Table 4.2.8. Profile of Passenger Vessels

Hull Type	No. of vessels	Total GT	Ave. GT	Ave. Pax Capacity	Ave. Age[1)]
Steel	81	21898	270	240	20
Aluminum	6	1015	169	129	7
Ferro Cement	24	7531	314	255	15
Fiberglass	28	881	31	56	8
Others	11	1009	92	129	17
Total	150	32335	216	216	16

Source: Updated MARINA database 2003
Note: 1) calculated as of 2004

Table 4.2.9. Registry of Passenger Vessels

Hull Type	Luzon	Mindanao	Visayas	Total
Steel	37	19	25	81
Aluminum	1		5	6
Ferro Cement	13	1	10	24
Fiberglass	19	5	4	28
Others	5	1	5	11
Total	75	26	49	150

Source: Updated MARINA database 2003

(2) SERVICES ROUTE NETWORK

Passenger vessels are serving mainly on the secondary and tertiary shipping routes in the country.

(3) OPERATIONAL CHARACTERISTICS AND PROBLEMS

- In some routes, it is very difficult to maintain service level due to low traffic of passengers and cargoes.
- The fast crafts, sailing over 35knot per hour, must navigate under sound safety regulation. Since they are non-conventional vessels under the IMO-SOLAS, safe navigation regulation is based domestically. The High Speed Crafts Code governs their operations.
- Most of shipping routes are operated by only one shipping company. Therefore, there is no competitive environment to increase service level.

4.2.5 Short-distance RoRo Shipping

(1) EXISTING SHORT-DISTANCE RORO SERVICES

Short-distance RoRo services is very essential in an island country like the Philippines. This services could influence not just business and agriculture, but also domestic tourism. It enhances the accessibility by minimizing handling expenses and travel time for goods, resulting in reduced prices for consumers. There is less need for loading goods on and off barges or bancas, as cargo trucks themselves can get on the RoRo vessel.

RoRo vessels, unlike other modern shipping vessels, do not require large port infrastructure and equipment. Instead, they only require orderly parking space, a good access road and efficient and dedicated port services.

Short-distance RoRo routes are mainly located in Southern Luzon, Visayas and Northern Mindanao Areas.

According to the statistics of the selected 4 RoRo operators which mainly operate for short-distance RoRo routes, the characteristics of RoRo vessels are as follow:

- Average vessel size of all Ropax vessels is about 540GT with passenger capacity of about 350.
- Average vessel age is very old, about 31 years as of year 2005.
- Most RoRo vessels are registered in Batangas, Cebu and Iloilo.

Table 4.2.10. Profile of Selected Short-distance RoRo Operators and Vessels

Shipping Company	Base Port	No. of vessels (built in Japan)	Total GT	Ave. GT	Ave. Pax Capacity	Largest Vessel (GT)	Ave. Age[1)]
VIVA Shipping	Batangas	11 (10)	7,154	650	512	1,287	33
Montenegro Shipping	Batangas	12 (12)	5,154	430	175	836	28
George & Peter Lines	Cebu/Iloilo	4 (4)	2,897	724	602	1,110	36
Starlite Ferry	Batangas	4 (4)	1,535	383	200	574	27
Total	-	31 (30)	16,740	540	352	1,287	31

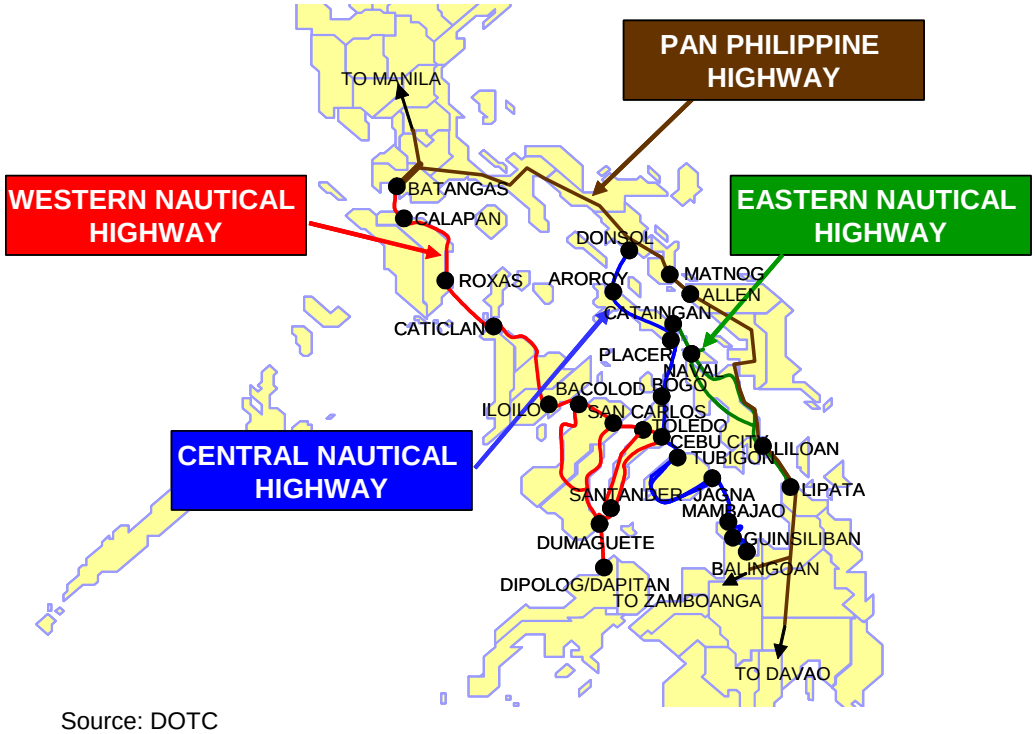
Source: MARINA 2000
Note: 1) calculated as of 2005

(2) CURRENT INITIATIVES

Taking into account the country's geographic features such as strings of islands at narrow intervals, a contribution of short-distance RoRo operation and highway network is effective to develop the national spines of the Philippines. This concept is being demonstrated as the Strong Republic Nautical highway (SRNH) project as shown in Figure 4.2.4. This program is one of President Arroyo's 10-points agenda. In April 2003, the Western Nautical highway from Batangas in Luzon to Dapitan in Mindanao through Visayan islands of Mindoro, Panay and Negros was opened to the public, while other central and eastern highways are being prepared for implementation.

As one of the components of the Sustainable Logistics Development Program (SLDP), the Road-RoRo Terminal System (RRTS) shows the possibility of a unique corridor development by its seamless nature such as tourism development by tourist bus and fast delivery of perishable food products by reefer truck. The DBP has pre-identified 48 RRTS links in the country.

Figure 4.2.4. Nautical Highways



Source: DOTC