



MINISTRY OF TRANSPORT
VIETNAM INLAND WATERWAY ADMINISTRATION (VIWA)

**INLAND WATERWAYS TRANSPORTATION IN VIETNAM
*CURRENT AND FUTURE: CHALLENGE AND SOLUTION***



February 2017



MINISTRY OF TRANSPORT

VIETNAM INLAND WATERWAY ADMINISTRATION (VIWA)

CONTENT

1

OVERVIEW OF TRANSPORT SECTOR IN VIET NAM

2

CURRENT STATUS OF IWT

3

DEVELOPMENT TARGES OF IWT

4

CRITICAL MEASURES

5

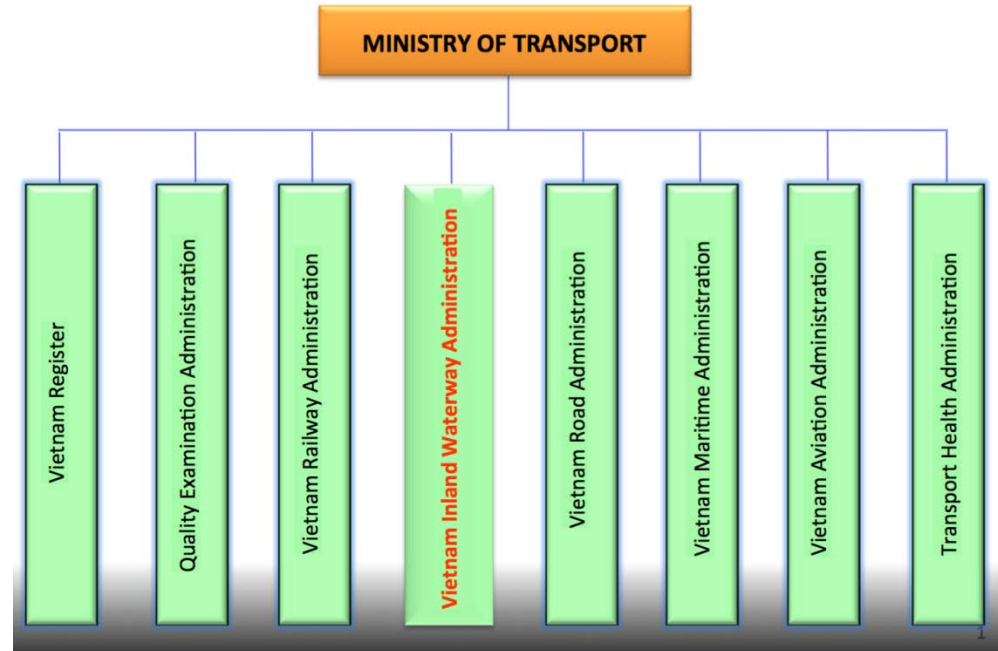
ARCHIEVEMENTS AND CONCLUSION

1. OVERVIEW OF TRANSPORT SECTOR

1.1 Administration system:



MOT's ORGANIZATION STRUCTURE



1.2 Infrastructures:

- **3.260** km coastal lines;
- Over **17.000** km road (**647** km highway);
- Over **3.200** km railway (1.0m wide track);
- **42.000** km inland waterways,
- 224 river port & 8,800 landing stages;
- **55** sea ports ; **23** airports.

ROAD

Total 258.200 km, 104 highway routes, 07 express way route (647,8 km)

Transport market share:

- 75,6% cargo transported.
- 94,09% passenger transported

INLAND WATERWAY

Total 80.000 km, (41.900 km navigable)

- 224 river port & 8.000 landing stages

Market share:

- 17.8% cargo transported
- 4.7% passenger transported

RAILWAY

- Length 3.143 km
- 2 types of rail:
1.000 mm wide track (85/%),
1.435mm (15%);

Share:

- 0,64% cargo.
- 0,42% pass

AVIATION

-23 air port

Share:

- 0,08% cargo
- 0,6% passenger

MARITIME

- 44 sea port (219 terminals)

Share:

- 5.8% in cargo transport
- Passenger transport is negligible

1.3 Transport volume (2015):

Cargoes: Total: 1133.9 mil. Tons (+6%) and 226.8 bil Tons.km (+3.1%) whereas

+) Domestic: 1102 mil tons (+6.1%) and 98.8 bil tons x km (+6.9%)

+) International: 31.9 mil tons (+3.8%) and 128 bil tons x km (+0.3%)

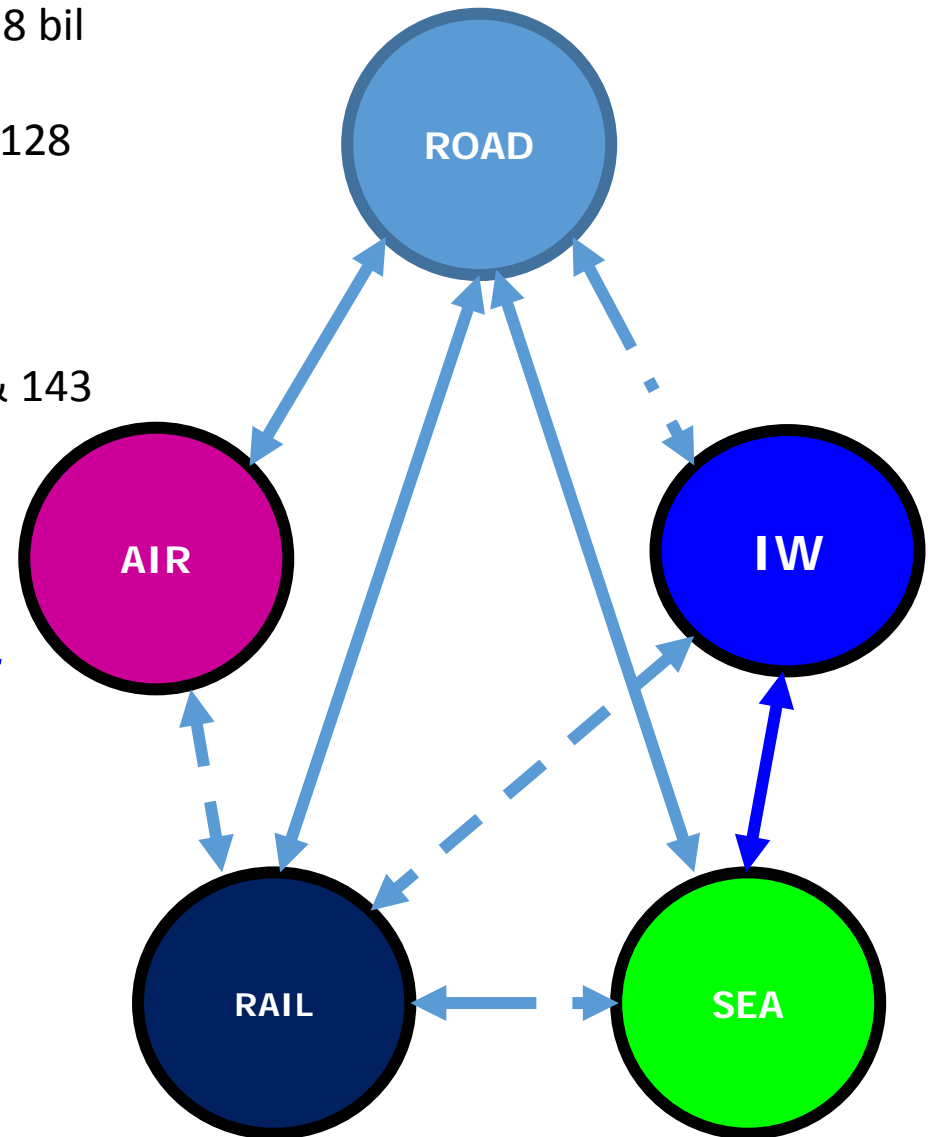
Shares: Road: 75.6% ; IWT: 17.8%; Railway: 0.64% ; Maritime: 5.8%

Passengers: 3283.1 mil passengers (+7.7%) & 143 bil passengers x km (+7.9%)

Shares: Road: 94.1% ; IWT: 4.7% ; Railway 0.4% ; Sea: 0.2% ; Air: 0.6%

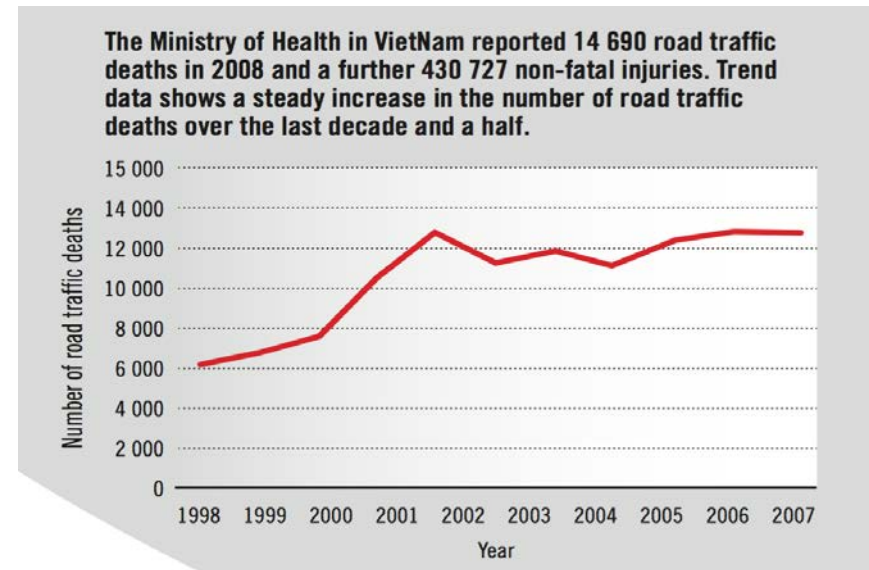
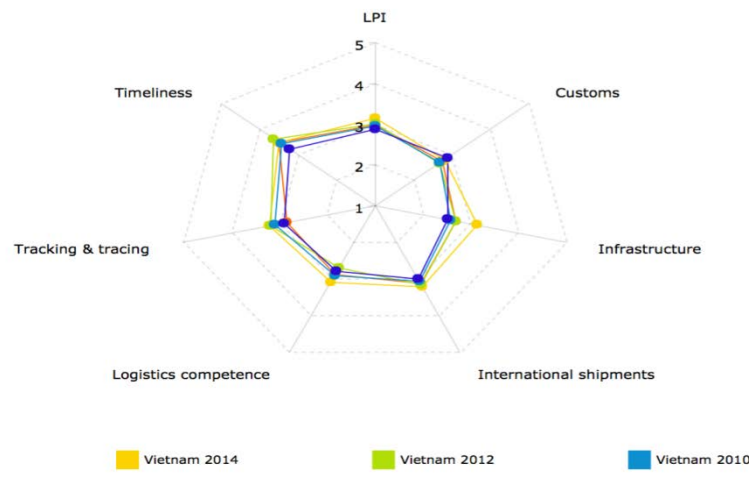
1.4. Links between modes of transport

- Weak
- Tri-modal connections not developed
- Domination of road transport
- Poor cargo handling system



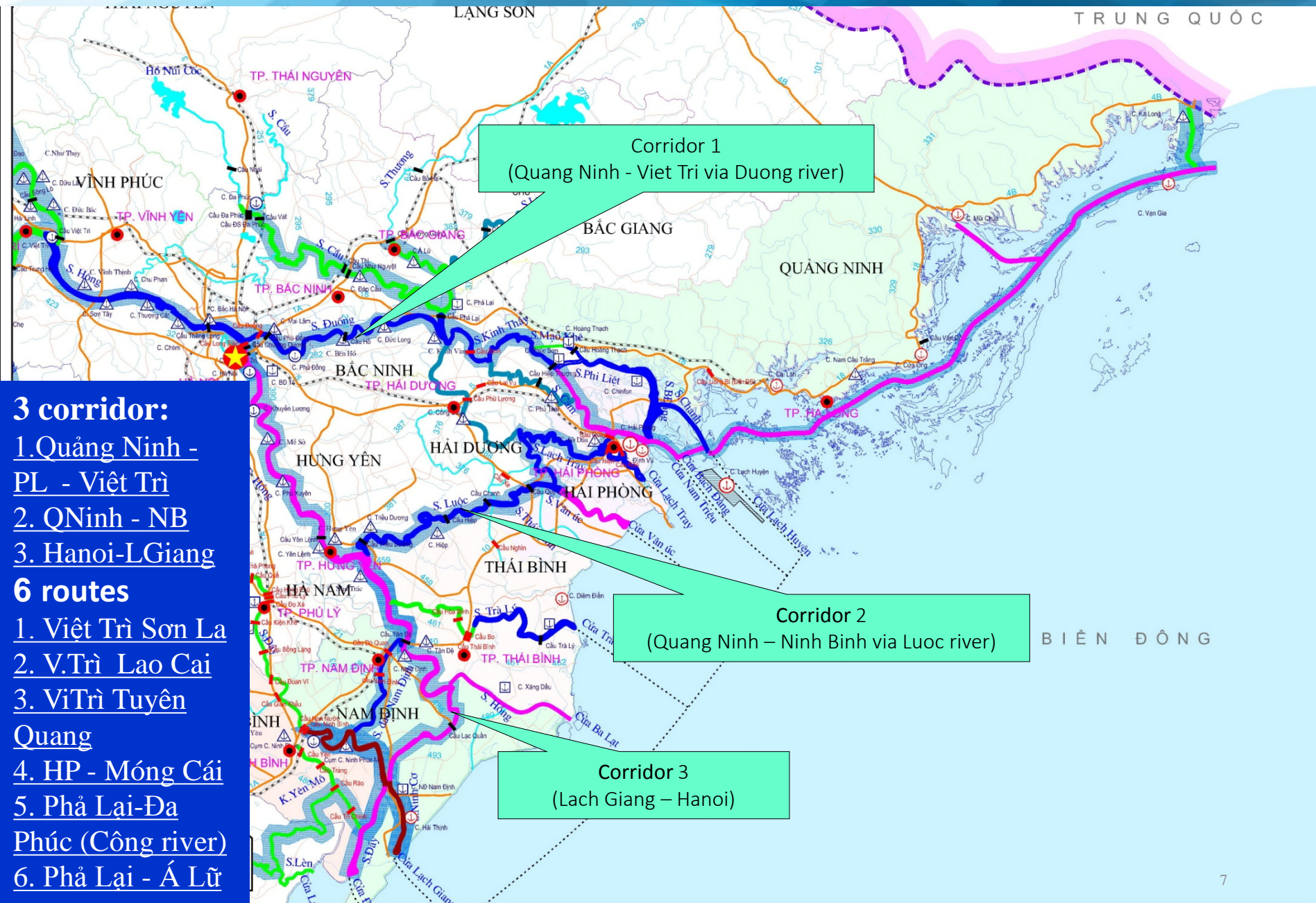
1.5 Quality indicators:

- An average 9.000 dead people by traffics accident per year (24dead/day).
- Average Logistic Performance Index (compares to Asean Countries).
- Logistic cost of Vietnam is about 25% of annual GDP (China 18%; Malaysia 13%; US 9.9%)
- Transportation cost is 50% of logistic cost
=> High logistic cost => Lower business's competitiveness



The transportation system must be improved: efficiency, safely, bigger

INLAND WATERWAY IN THE NORTH OF VIETNAM



INLAND WATERWAY IN THE SOUTH OF VIETNAM

MINOR ROUTES

1. Sài Gòn – Bến Súc
2. SG - Hiếu Liêm
3. Sài Gòn – Bến Kéo
4. SG – Mộc Hóa
5. Thị Vải – Soài Rạp

VERTICAL: 2 ROUTES

1. Mekong river
2. Bassac river.

HORIZONTAL: 5 ROUTES

1. Sài Gòn – Hà Tiên (Thapmoui1)
2. Sài Gòn – Hà Tiên (Thapmoui2)
3. Sài Gòn – Kiên Lương
4. Sài Gòn – Cà Mau
5. Sài Gòn - Cà Mau

QUY HOẠCH CÁC TUYẾN VẬN TẢI CHÍNH VÀ HỆ THỐNG CẢNG ĐƯỜNG THỦY NỘI ĐỊA KHU VỰC PHÍA NAM ĐẾN NĂM 2020

Shortcomings & limitations

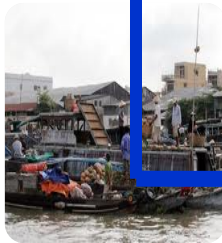
- 20% of total length of IW routes under VIWA's management → very small proportion compared to total length of IW rivers and canals.

- North: steep & winding rivers, floods occur regularly.
- Central: difficulties in using IW transport due to short and narrow rivers & canals.

- South: Rivers greatly influenced by flood season → difficulties in using. Main rivers: wide & deep, canals: deep but narrow, lots of living around.

- Not same technical classification IW routes; limited investment in dredging, expanding channels; existing low bridge clearance, limited ship span, etc.
- Violation in sand & gravel exploiting → channels changed → landslides.

- Transport routes: still highly dependent on natural conditions of channels, some routes with narrow channels & dense vessels operation.



INLAND PORT (11/2016)

- On the river systems: **251** ports and **8.668** landing stages
- Cargo landing stage: **6,396**, in those, **4.576 (85%)** have operation permit; **1.820 (15%)** without permission or lack of safety condition.
- Passenger landing stage: **2.272**, in those, **1.898** legal landing stage **(83%)**.



LIMITATIONS

Shortcomings & Limitations

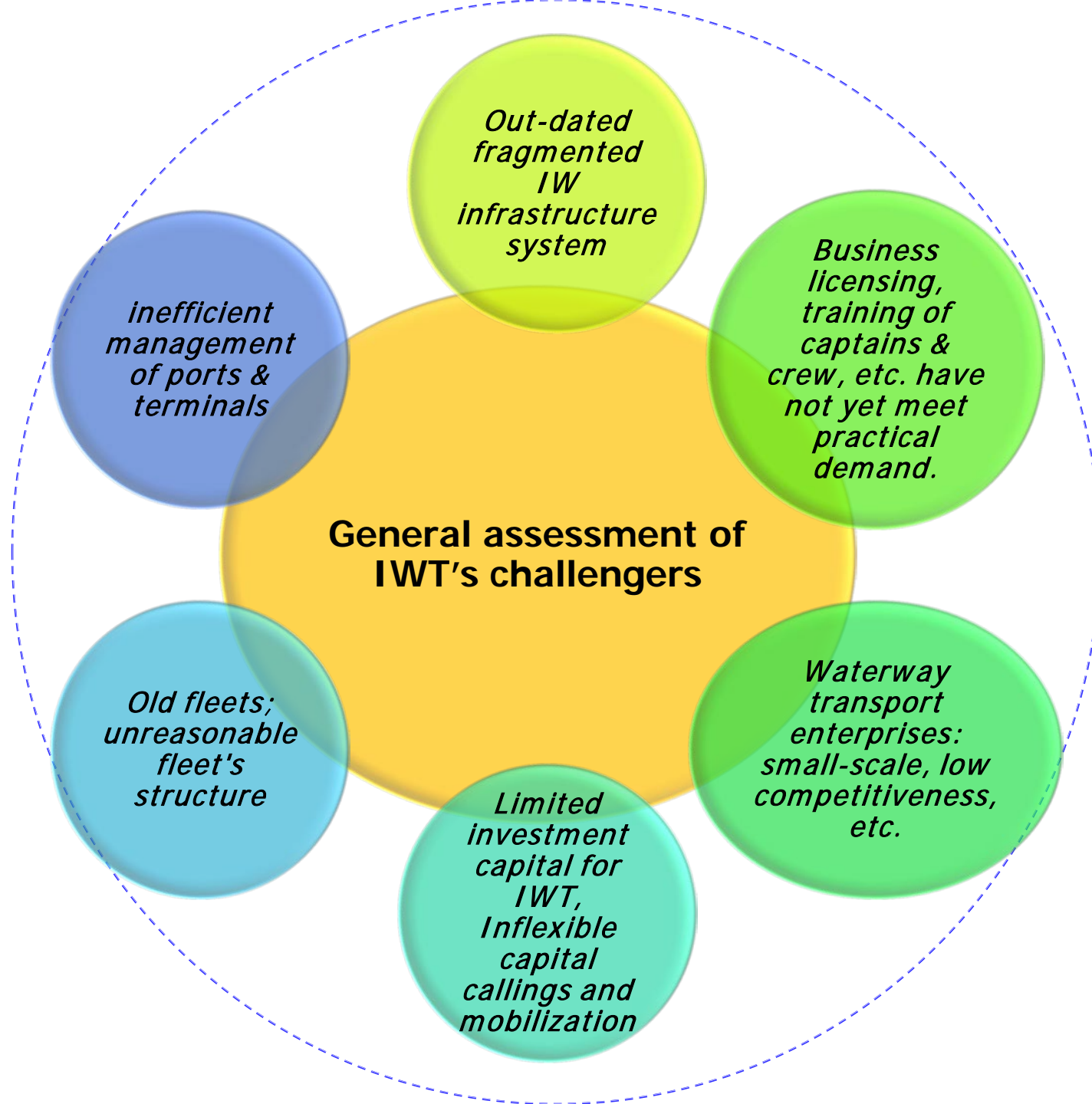
The planning of IW ports was not completed due to limited investment. Local ports were constructed under planning: **dispersed and fragmented**. **Coefficient of use of terminals & warehouses: low**. IW port & terminals was well - planned in 6/63 provinces only.

Connections between major ports and national roads: overloading, lack of investment for upgrading. **Generally poor connections.**

- IWT management: **overlapped due to many sectors involved in management**. The inspection & control of IW terminals: still inadequate.
- Investment in construction of ports & facilities: limited.

Northern Ports outside dikes → exploitation & handling influenced by water level in flood & dry seasons. Southern ports affected by tides.





3. DEVELOPMENT TARGETS

❑ Why should develop the IWT in Vietnam?

- IWT is cleaner and more economical than road transport.
- The investment in waterborne transport goes well beyond the need to match demand and supply.
- Larger barges not only result in lower transport costs but also lower emissions of pollutants and greenhouse gases per ton-kilometer- a major benefit to Vietnam, given the country's disproportionate exposure to the risks caused by climate change.
- Most of the expected benefits of investments in inland waterway transport will be intersectoral rather than driven by modal shift away from the roads sector.

(Blancas and El-Hifnawi, 2013 – World bank's report)

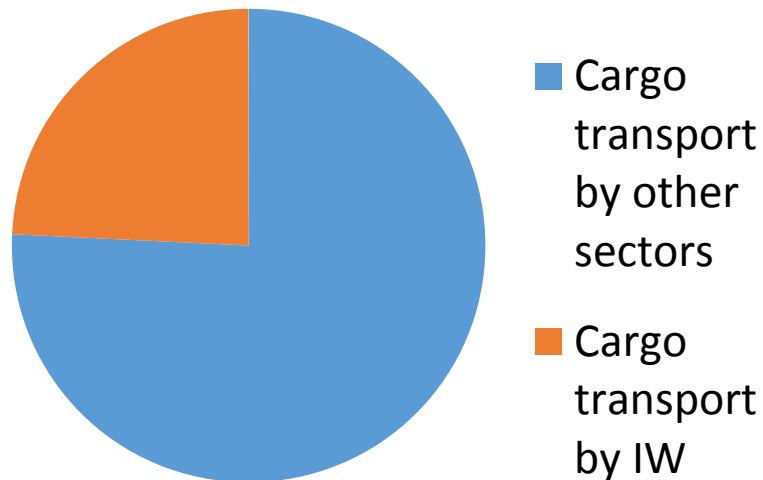
- ✓ IW transport: lower cost & less fuel than other transport sectors → very important element especially when fuel prices increase → attract Enterprise's attention.
- ✓ The economic growth of the country increases transportation needs → road system: overloaded with serious traffic jams, → invest in IW infrastructure to save land for agriculture & protect environment

3. DEVELOPMENT TARGETS

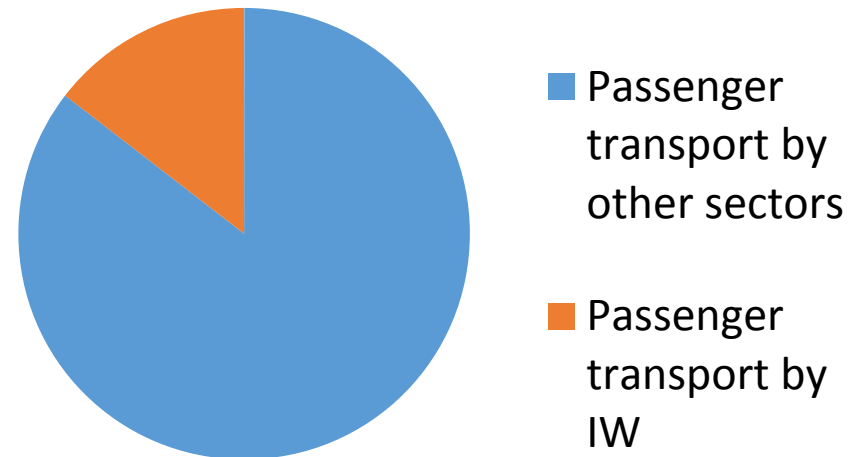
□ Shares target to 2020- vision 2030

Maintain the growth rate in cargo & passenger transport capacity. By 2020 should be 356 million ton in Cargo transported **(32% in total transport volume)**, 540 million passenger transported **(0.17% in total transported passenger)**.

Growth rate of cargo transport by IWT

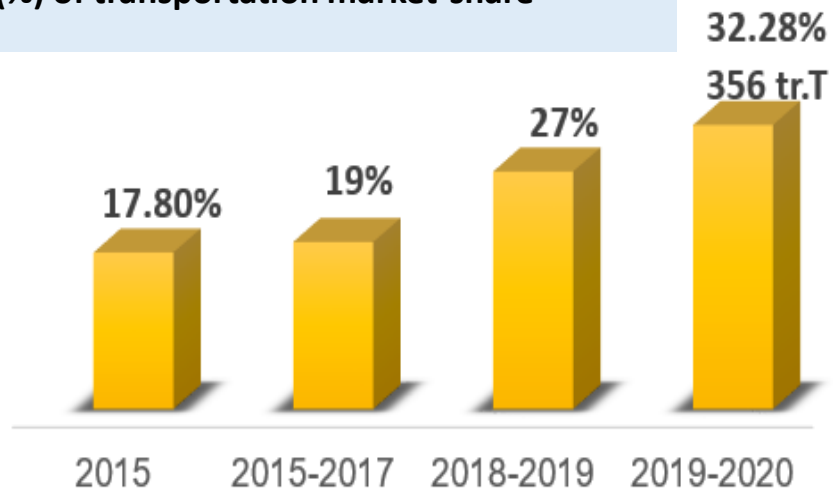


Growth rate of passenger transport by IWT

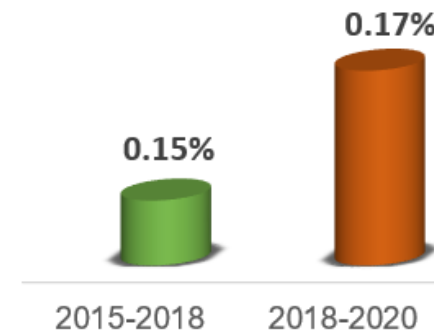


3. DEVELOPMENT TARGETS (cont.)

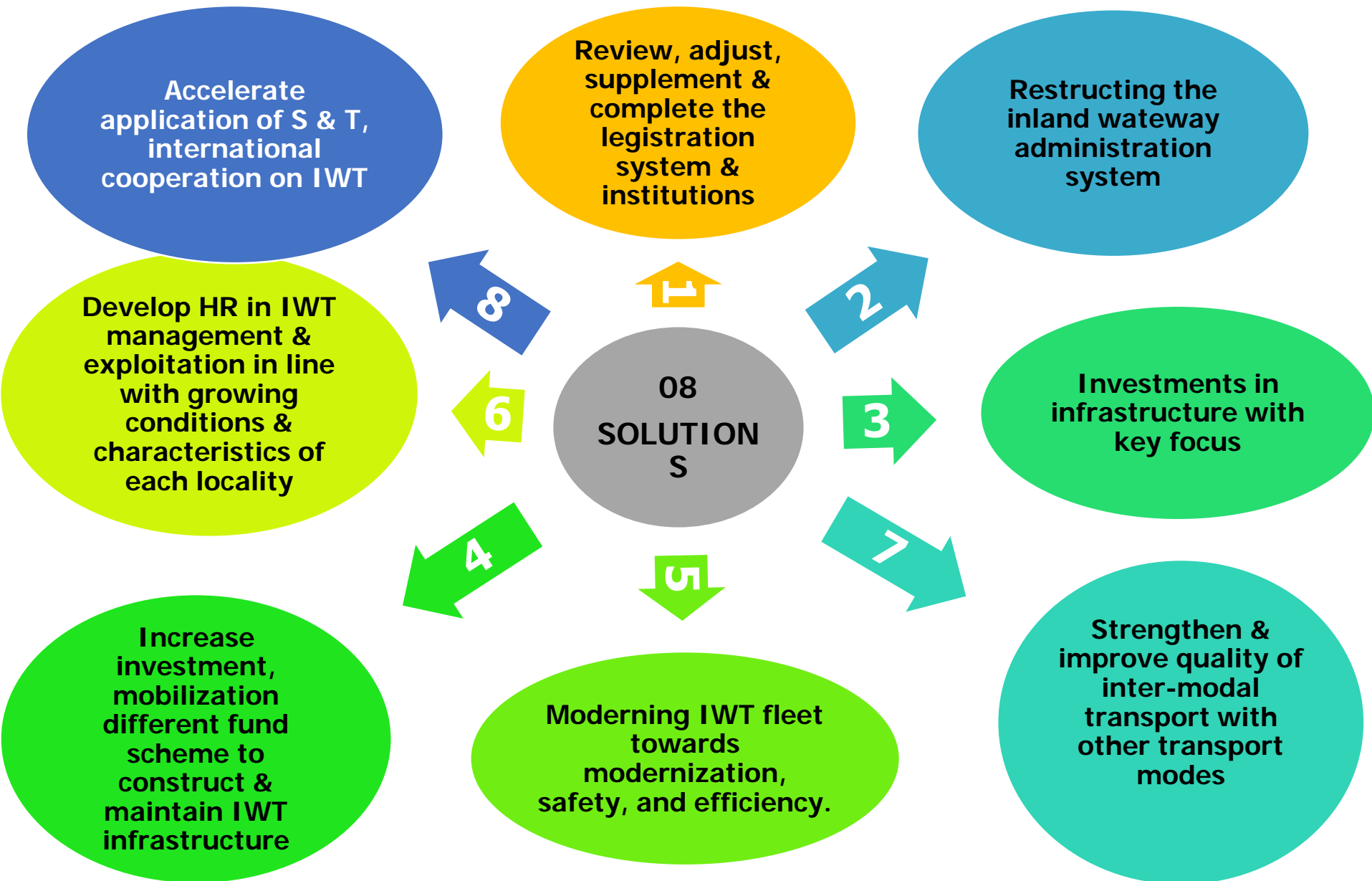
Output of goods transportation:
(%) of transportation market-share



Output of passenger transportation:
(%) of transportation market-share



4. CRITICAL MEASURES



4. CRITICAL MEASURES (cont.)

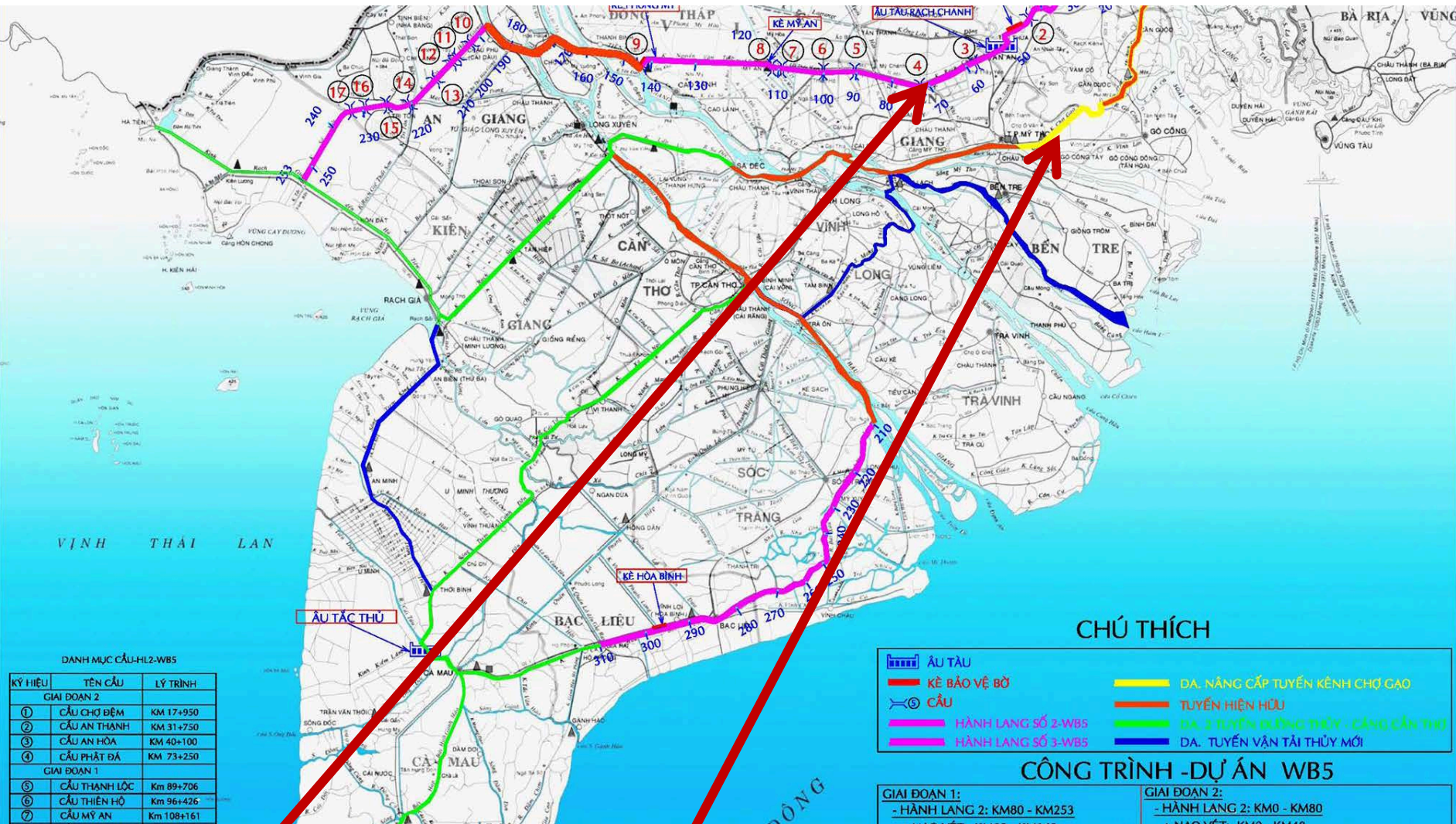
4.1. Amended the legislation and policy

- Launching the new IWT law (2014)
- Released of PM's decision no.47/2015 to promote IWT: priority in infrastructure development (raise capital fund from 0.75% to 2.5% of investment funding of MOT); give tax incentive to IWT; free land for terminal investment ...)
- Updating of masterplans for IWT developments (2015-2016): IWT corridors/routes, ports/terminal, vessels, estuaries, river basins.
- Opening the new coastal route for coastal going river-barges (2014): 3200km connect North and South VN

4. CRITICAL MEASURES (cont.)

4.2. Investment in new infrastructures:

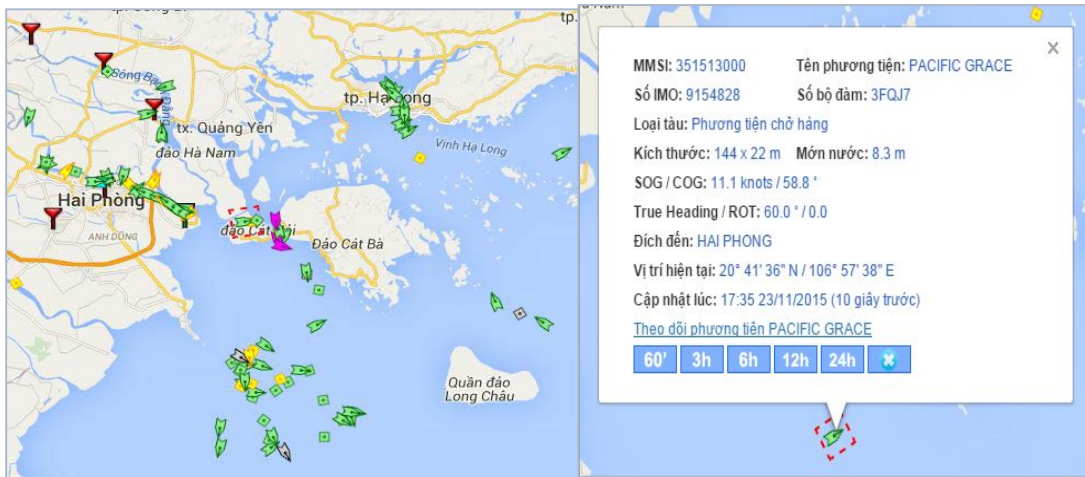
- Northern Delta Transport Develop Project (WB6) financed by WB (200 mil USD) implemented in 14 provinces and cities
- Mekong Delta Transport Infranstructures Development Project(WB5) financed by WB (555 mil USD) implemented in 13 provinces of Mekong delta.
- 02 PPP investment projects: Upgrading Cho Gao Cannal, Lift up the Binh Loi railway bridge for WT route between Ho Chi Minh city and Mekong Delta.
- 45 maintenance dredging projects funded by private investor to deepening navigation channel and re-cumulate the sand as construction material.



WB5 project

3. Application of new technology in IWT:

- E-Gov via I-River software (daily operation, public services).
- Electronic port authority system allows skipper to enter and leave the port via sms messages.
- Promote the AIS and VHF on board; 55 AIS base stations.
- Infrastructures management and daily reporting via GIS applications.
- Inland Electronic Navigation Chart (3 routes in Mekong river)



Application of new technology in IWT:

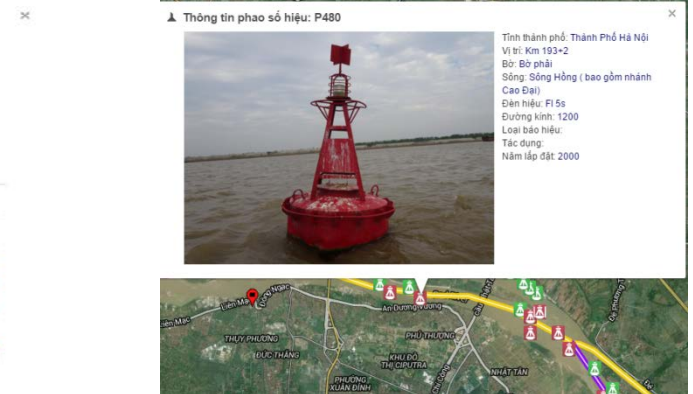
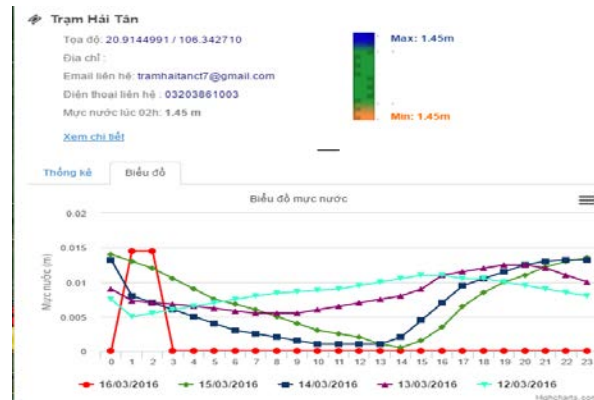
⚓ Cảng Bình Đoàn 11



Quận Hoàng Mai, Thành Phố Hà Nội
 20.9965/105.894

Từ km: 175+950 đến km: 176
 Thuộc sông: Sông Hồng (bao gồm nhánh Cao Đại)
 Chiều dài: 50 m Chiều rộng: 30 m
 Phạm vi vùng nước: 4890 m²
 Lượng hàng hóa thông thông qua: 100000 tấn
 Trọng tải tiếp nhận max: 650 tấn
 Phương tiện đang ở trong cảng: 2
 Phương tiện dự kiến đến cảng: 0

Chi tiết



5. ARCHIEVEMENTS AND CONCLUSION

Achievements of 2015-2016:

1. Cargo throughput increase 6.5 %
2. Passenger transport increase 4.3%
3. Number of barges using Cho Gao Cannal is increasing 3 times compares to 2013
4. The volume transport in coastal route increases 230 %, number of vessel is 800 barges from DWT 1000 tons to DWT 10.000 tons
5. Government pay more attention to develop the IWT (annual capital State funding increase 1.3 times till 2020).

Conclusion:

1. Vietnam should enhance to make uses of IWT system as it is a special natural resource of the country.
2. Besides the State funding scheme, it is necessary to mobilize the private funding both local investment and Foreign direct Investment.
3. To be success with the target that IWT will take 32% cargoes shares by 2020, requires a huge investment in infrastructures (2 bil. USD) and continuously modernize the IWT.
4. Investing in the IWT is benefit both the public and private sector with reasonable Rate of Return (15%)



MINISTRY OF TRANSPORT
VIETNAM INLAND WATERWAY ADMINISTRATION

THANK YOU!

