

ARM7-6.3

IALA ARM7 Committee

# Guidance on breakwater and submerged breakwaters

-Review MBS incorporate into Recommendation

October, 2017

IALA Headquarters, Saint Germain en Laye, France

**Korea Association of Aids to Navigation(KAAN)**

**JunKi BAE**

# Introduction

Guidance on Breakwater & submerged breakwaters

## □ Purpose of presentation

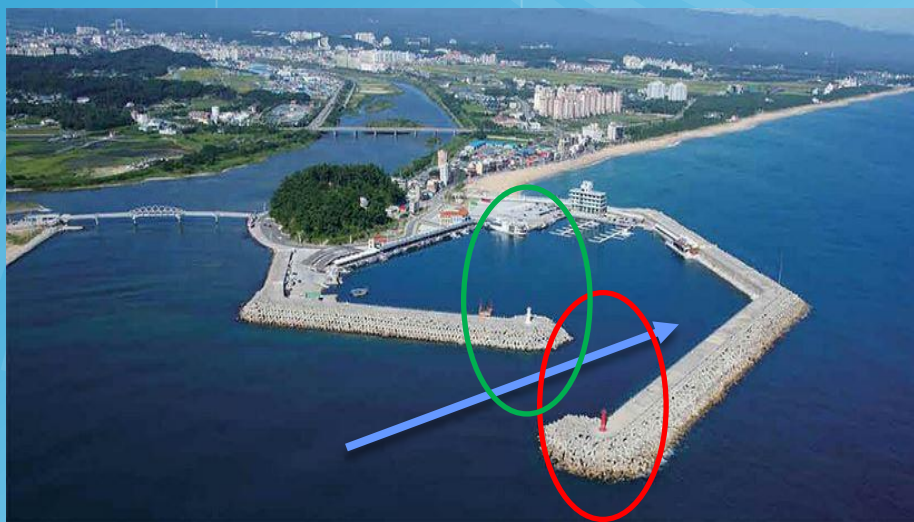
To introduce 2018-2022 ARM Committee work programme “Review MBS incorporated into Recommendation include guidance on breakwater and submerged breakwaters”

## □ Related documents

- ❖ Maritime Buoyage System(MBS), NAVGUIDE
- ❖ IALA Recommendation O-139 “The marking of Man-Made Offshore Structures”

# Background

## □ Breakwater



## □ Submerged breakwater



# Background

Guidance on Breakwater & submerged breakwaters

## Comparison between IALA Region A and B



# Background

Guidance on Breakwater & submerged breakwaters

## ■ IALA MBS Chapter 8.7 Port or Harbours Marks

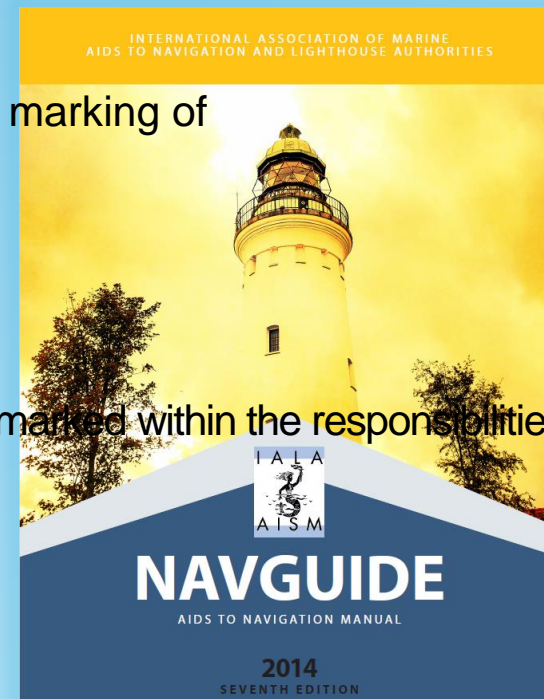
Mariners should be careful to take account of any local marking measures that may be in place and will often be **covered by Local Regulations or by-laws**.

Before transiting an area for the first time, mariners should make themselves aware of local marking arrangements.

Local AtoN may include, but not be restricted to, marking of

❖ Breakwaters, quays and jetties;.....

And other river, channel, canal, lock and waterways marked within the responsibilities of competent authorities.





# Discussion

Guidance on Breakwater & submerged breakwaters

## Example No. 1 : Yeong Pyong Island Port, Incheon

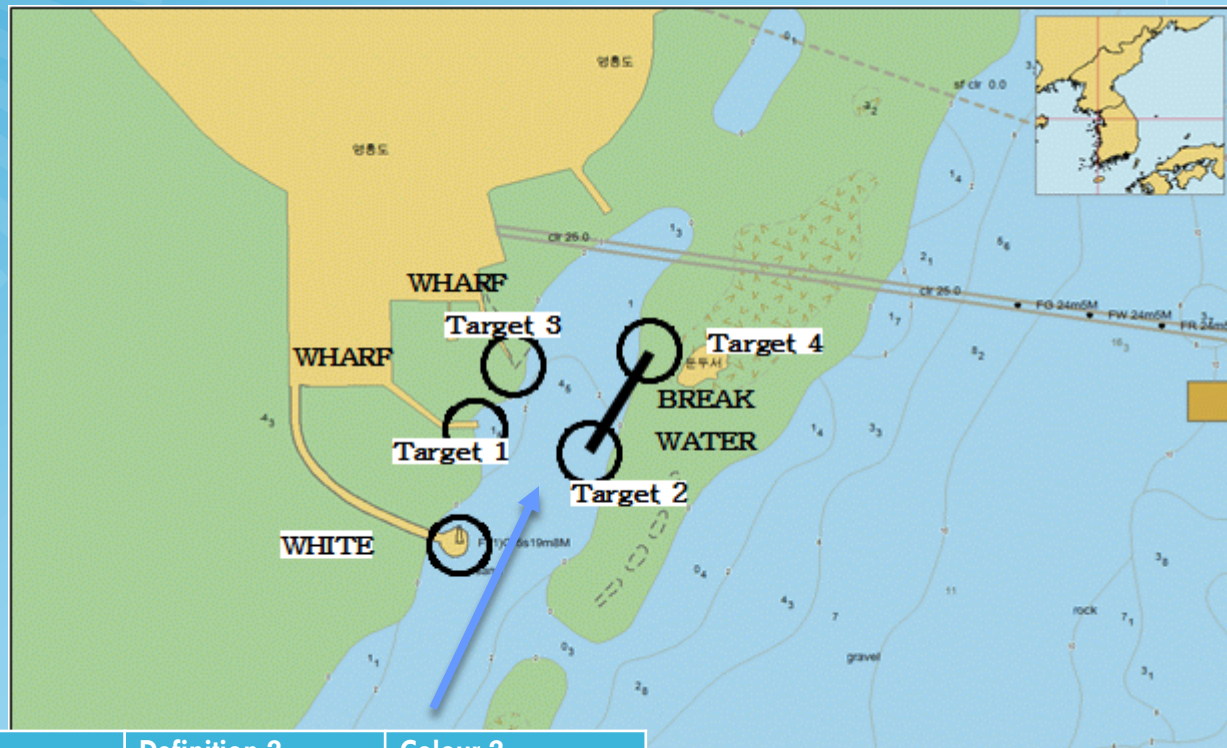


Target	Definition 1	Colour 1	Definition 2	Colour 2
1	Obstacle(danger)	Yellow	Port passage	Red

# Discussion

Guidance on Breakwater & submerged breakwaters

## Example No. 2 : Jin Doo Port, Young Heung Island



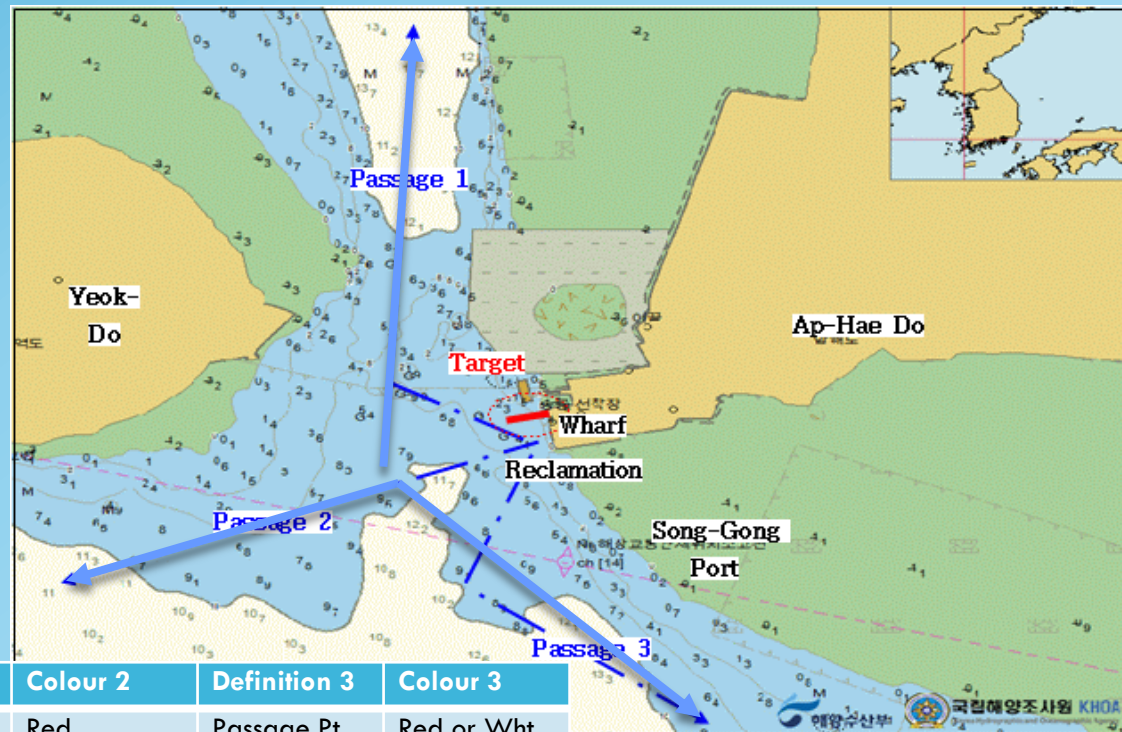
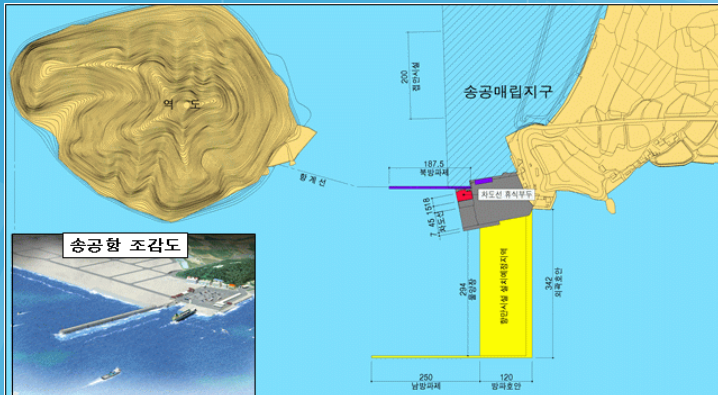
Target No.	Definition 1	Colour 1	Definition 2	Colour 2
1	Obstacle(danger)	Yellow	Port passage	White
2	Obstacle(danger)	Yellow	Port Passage	Red
3	Obstacle(danger)	Yellow	Port Passage	White
4	Obstacle(danger)	Yellow	Port Passage	Red



# Discussion

Guidance on Breakwater & submerged breakwaters

## Example No. 3 : Song Gong Port, MokPo



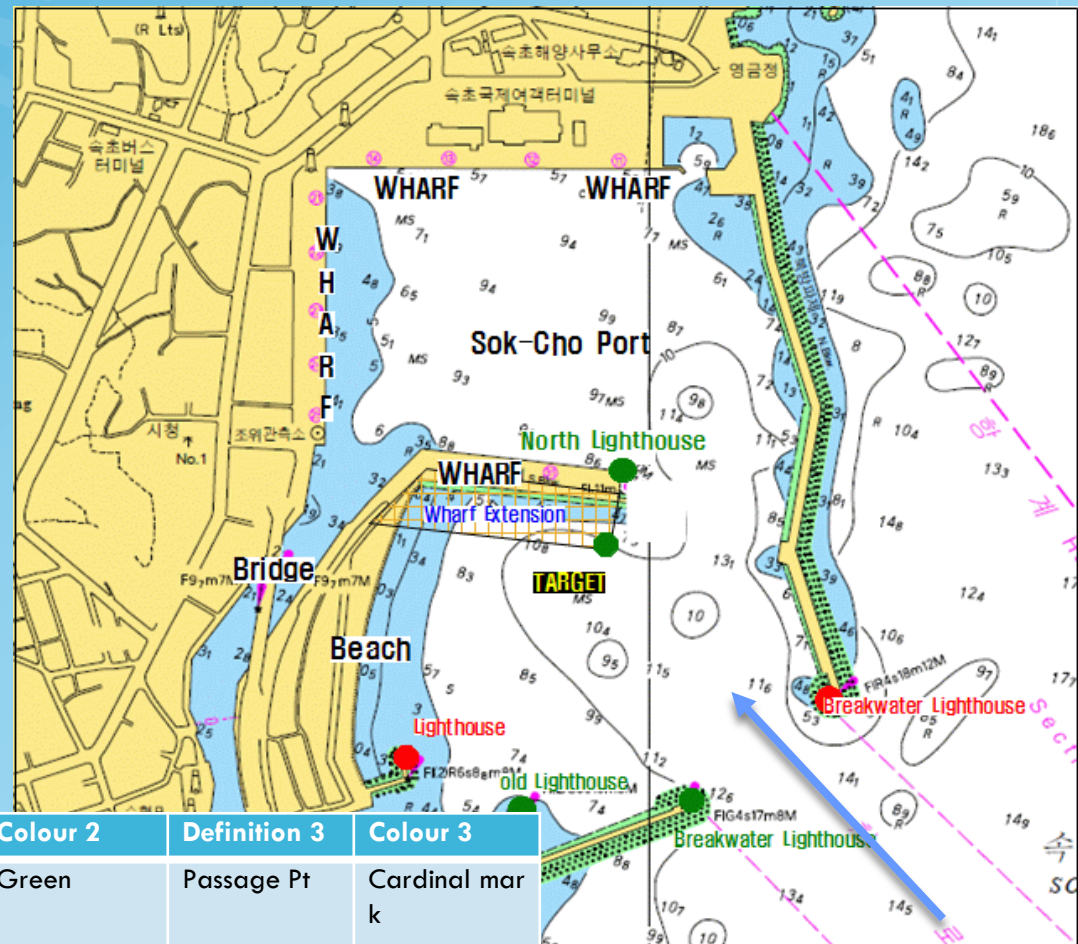
Target No.	Definition 1	Colour 1	Definition 2	Colour 2	Definition 3	Colour 3
1	Obstacle	Yellow	Port Entry	Red	Passage Pt	Red or Wht.



# Discussion

Guidance on Breakwater & submerged breakwaters

## Example No. 4 : Sok Cho Port, Sok Cho

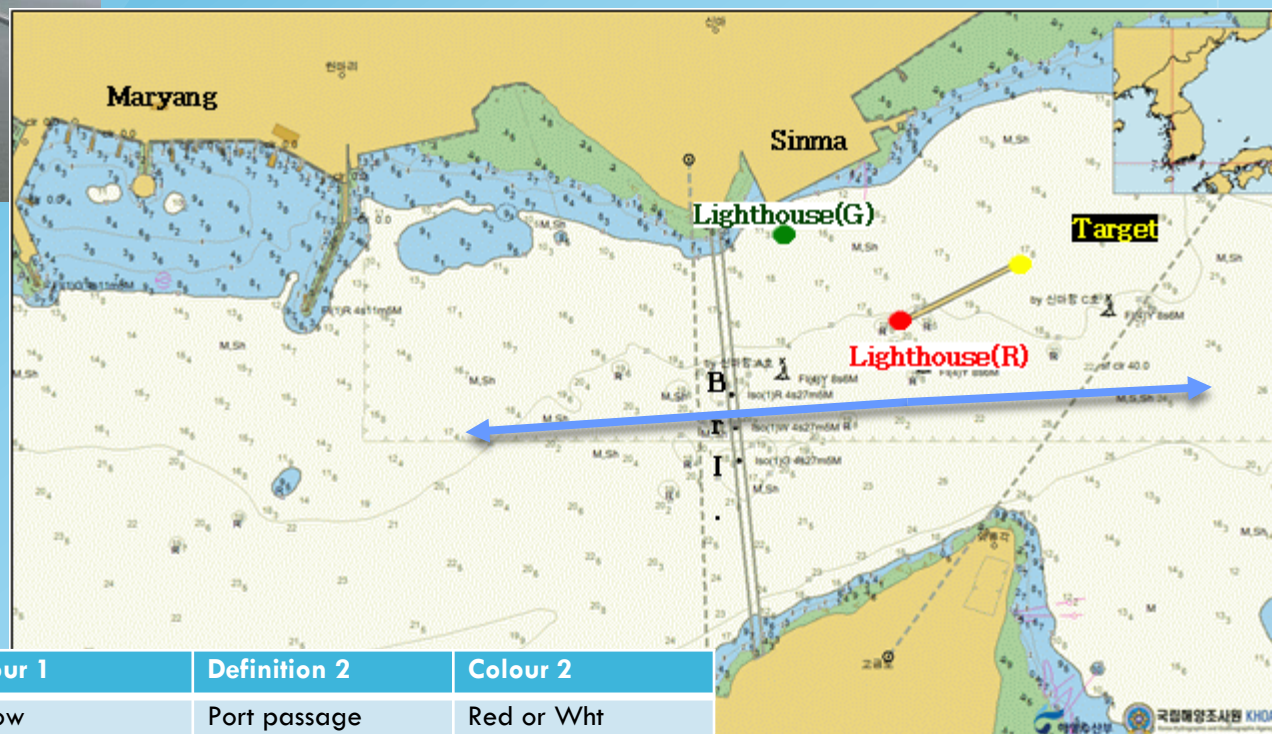


Target No.	Definition 1	Colour 1	Definition 2	Colour 2	Definition 3	Colour 3
1	Obstacle (Beach area)	Yellow	Port Entry	Green	Passage Pt	Cardinal mark

# Discussion

Guidance on Breakwater & submerged breakwaters

## Example No. 5 : Sinma Port, Gang Jin



Target No.	Definition 1	Colour 1	Definition 2	Colour 2
1	Obstacle(danger)	Yellow	Port passage	Red or Wht

# Summary

- ❑ To protect port and coastal facilities, breakwater and submerged breakwaters installation has been increased
- ❑ Complex breakwaters can make obstacle and confuse to install new AtoN on their
- ❑ Especially for decide light colour or painting



The background is a solid light blue. On the left side, there is a large, semi-circular graphic composed of many thin, parallel, light blue lines that curve around the edge. In the top-left corner, there is a small, bright starburst effect. In the bottom-left corner, there is another small, bright starburst effect. In the bottom-right corner, there is a third small, bright starburst effect. The text "Thank you for your attention" is centered in the lower half of the image.

**Thank you for your attention**