

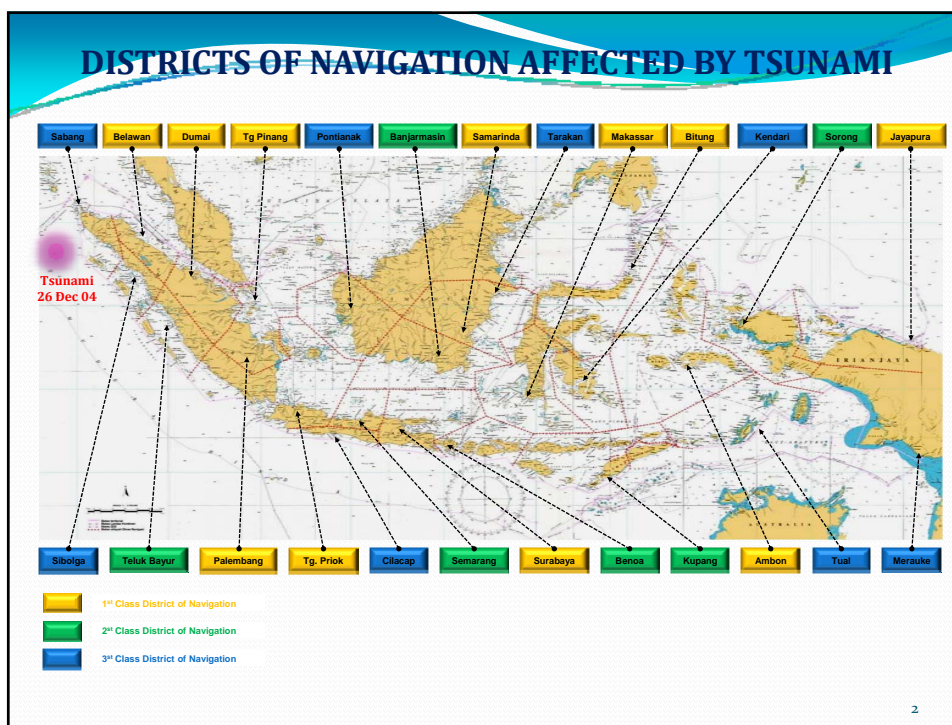


**DIRECTORATE GENERAL OF SEA TRANSPORTATION  
THE INDONESIAN MINISTRY OF TRANSPORTATION**



**PROJECT 6**  
*Replacement of Aids to Navigation  
Damaged By Tsunami Incident*  
(Status Report)

**1st Cooperation Forum  
Under Cooperative Mechanism in the Straits of Malacca & Singapore  
Kuala Lumpur, 27-28 May 2008**

## ATN AFFECTED BY TSUNAMI DEC 2004

### North Sumatera & Nangroe Aceh Darussalam

#### District Navigation of Sabang

No	Type of ATN	Unit	Remark
1	40M Lighthouse	1	Damage
2	40M Lighthouse	1	Collapse
3	30M Light Beacon	2	Collapse
4	15M Light Beacon	2	Collapse
5	10M Light Beacon	11	Collapse
6	Day mark	3	Collapse
TOTAL : 20 Units			



Breueh Lighthouse

#### District Navigation of Sibolga

No	Type of ATN	Unit	Remark
1	40M Lighthouse	1	Damage
2	10M Light Beacon	2	Collapse
3	30M Light Beacon	1	Collapse
4	25M Light Beacon	1	Collapse
5	20M Light Beacon	2	Collapse
6	15M Light Beacon	4	Collapse
TOTAL : 11 units			



Karang Panjang Sinabang Light Beacon



Uj. Sirih Light Beacon



Karang Banyak Light Beacon

#### District Navigation of Belawan

No	Type of ATN	Unit	Remark
1	40M Lighthouse	1	Collapse
2	40M Lighthouse	1	Damage
TOTAL : 2 unit			

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## THE 7 ESSENTIAL AIDS



NO	LOCATION	ILL	Type of AToN	POSITION
1	P. Bunta	77	Lighthouse	05° 33' 15.00" N / 095° 09' 05.00" E
2	Breueh	50/60	Lighthouse	05° 45' 00.00" N / 095° 03' 00.00" E
3	Ulee Lheue	---	Lightbeacon	05° 33' 22.35" N / 095° 17' 01.21" E
4	Malahayati	83	Lightbeacon	05° 35' 50.00" N / 095° 31' 25.00" E
5	Uj. Pidie	84	Lighthouse	05° 30' 20.00" N / 095° 52' 50.00" E
6	Tg. Jambo Aye	120	Lighthouse	05° 14' 51.21" N / 097° 29' 17.34" E
7	Uj. Tamiang	233	Lighthouse	04° 25' 18.00" N / 098° 16' 42.8" E

Site Survey was conducted on Feruary 2007 by a Team that consist of Indonesian & China Experts

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## Current Condition of The 7 AtoN

In general, the current condition of the 7 AtoN are as follows:

- Tower are collapsed
- AtoN equipment are missing or damage
- Power house and generator are damaged
- Housings for lighthouse guard are collapsed



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## OBJECTIVES

To replace aids to navigation of the Coast of Sumatra Island in the Straits of Malacca and Singapore (Straits) that were damaged by the tsunami incident in December 2004 to ensure continued safety of navigation for vessels.

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## Needs

- The tsunami incident in December 2004 caused a huge impact on the northern part of Sumatra Island, in particular in the area of Aceh Nangroe Darussallam in which several important AtoN along the eastern coast of Sumatera (5 LH & 2 LB) were seriously damaged.
- These AtoN are not only are important for vessels transiting the eastern coast of Sumatra but are also used by vessels transiting the Straits of Malacca and Singapore. These aids are important to be replaced to ensure continued safety of vessels navigating within the impacted area.

### *Preferred type of new AtoN construction*



Concrete



Cast Iron



Drum Steel



GRP

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## Benefits & Scope of Project-6

### **POTENTIAL BENEFITS**

- Ensuring the safe passage of vessels in the Straits. In particular those vessels that ply near the eastern coast of Sumatra Island.
- In the long run this project will be important for the Straits to continue to be safe and open to international shipping.
- Reducing the number of shipping incidents that may be detrimental to the marine environment.

### **SCOPE OF PROJECT**

- Renewal of the identified aids to navigation that are damaged by the installation of new aids to navigation to replace the damaged 5 lighthouses and 2 light beacons.
- Soil investigation and detailed engineering to determine exact structure to be built to replace the damaged aids.

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## Requirement

### **RESOURCES REQUIRED**

Resources and funding will be required to conduct:

- Detailed survey of the locality of the aids to navigation
- Preparing the design of the aids, construction
- Installation of the aids to navigation
- Training of personnel
- Maintenance of the aids to navigation.

**ESTIMATED COST : USD 6.000,000.-**

### **PROPOSED SCHEDULE : 3 YEARS**

- ➔ Considering the importance role of the 7 aids, the reconstruction of the aids is required to be completed in next to no time.

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## Cooperation & Implementation

### **POSSIBLE COOPERATION AREAS**

- One or more user State or other interested stakeholders may cooperate and provide assistance in the form of:
  - Contributing of funds of the replacement and maintenance of aids to navigation; and
  - Contribution in-kind by directly replacing the aids to navigation and providing a scheduled maintenance service for those aids.
- In this regard the modality used by the Malacca Straits Council may provide a useful model to emulate.

### **PROJECT IMPLEMENTATION**

*Project-6 is to be implemented under the framework of Cooperative Mechanism.*

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