Korea response to questionnaire

This questionnaire is designed to gather information from IALA members on their experiences with the use of plastic buoys. This will then be collated and used to enable members to make informed choices on the selection of the most appropriate material for their specific buoy application.

1,64748

1. How many buoys do you have in your current buoy fleet ? ………………………………..…
2. Regarding the materials of construction, how many are:

1,61001

Steel …………………………………………………………………………..……………….

0

Composite metal &plastic ………………………………………………………..…………

37

Plastic ……………………………………………………………………………………..…..

Other (please specify) ……………………………………………………………………….

1. Buoy fleet by buoy body diameter and material, please complete the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| Material | 1m dia or less | 1 to 2.2 m dia | Greater than 2.3m dia |
| Steel |  | 168 | 1,442 |
| Composite metal & plastic |  |  |  |
| Plastic |  | 37 |  |
| Other (please pecify) |  |  |  |

1. For your plastic buoy fleet, what type of plastic material is used ?

PE

1. Are the plastic buoy bodies filled or empty ?

x

Filled Empty

Please specify filler type : Expanded urethane foam …………………………………………………………………………………...

1

1. How many years have you been using plastic buoys ? …………………………………...….
2. Regarding the location / conditions of service for your plastic buoys, check the boxes that apply:

|  |  |
| --- | --- |
| Inshore | X (inland) |
| Offshore |  |
| Exposed |  |
| Sheltered |  |
| Breaking waves |  |
| Dries at low tide |  |
| Severe UV exposure |  |
| Severe sub zero temperature |  |

1. Are your plastic buoys a commercial design or your own authority’s design ?

x

Commercial Design Own Design

1. How often do you visit your buoys at sea ?

|  |  |  |  |
| --- | --- | --- | --- |
| Material | 1m dia or less | 1 to 2.2 m dia | Greater than 2.3m dia |
| Steel |  | 12 times and more/ Year | 12 times and more / Year |
| Composite metal & plastic |  |  |  |
| Plastic |  | 12 times and more / Year |  |
| Other (please specify) |  |  |  |

1. For your plastic buoys, what is the main reason for inspection / maintenance at sea ?

1. Check the lantern, batteries, solar panel and position every a month

2. Check the mooring chain and cleaning marine fouling to prevent the buoy every 2 years

1. How often do you return your buoys to shore for maintenance ?

|  |  |  |  |
| --- | --- | --- | --- |
| Material | 1m dia or less | 1 to 2.2 m dia | Greater than 2.3m dia |
| Steel |  | 2 years | 2 years |
| Composite metal & plastic |  |  |  |
| Plastic |  | Not yet |  |
| Other (please specify) |  |  |  |

1. For your plastic buoys, what is the main reason for inspection / maintenance ashore ?

The plastic buoys are installed on 2011.

1. What experience do you have in modifying plastic buoys to take new navigation aids, such as AIS ?

No experience yet

14. Have you experienced any in service defects with plastic buoys (such as colour retention, mechanical failure, mechanical damage, mooring lug wear) ?

No experience yet

1. Please detail any experience you have of repairing or re-painting plastic buoys ?

No experience yet

1. Can you provide any cost comparisons between plastic buoys and traditional steel buoys(this may include initial cost, use of a smaller ship to support the buoy fleet, reduction in buoy maintenance facilities, reduction in overall maintenance costs)

We don't yet repair or re-painting plastic buoys

1. Are you planning to purchase more plastic buoys in the near future ?

x

Yes No

Not sure, still under consideration

1. What is the anticipated life of your plastic buoys ? ………………………………………
2. What is your disposal policy for plastic buoys at the end of their life ?

Recycling

1. With your experience, what is your general opinion of the use of plastic buoys ?
2. Please provide some photographs of your plastic buoys with sizes & weights (please resize and compress any photographs before insertion)