ENG2-10.9

Formerly ENG2-11.2.8

**Sub Working Group: Maintenance of AtoN Structures**

**Task Register References**

* 5.1.2 - Review of IALA documents.

**Summary**

**During the review of Task** 4.1.2 *“Maintenance of AtoN Structures”,* the following guidelines were reviewed for information related to structure maintenance and a table below provides some recommendations.

Guidelines reviewed:

* Guideline 1007 Lighthouse Maintenance
* Guideline 1076 Building Conditioning
* Guideline 1077 Maintenance of AtoN

Recommendations on the related sections are either:

* Modify – modify content and transfer to the new guideline
* Remove – remove totally
* Transfer - transfer to new guideline
* Wiki – move content to the IALA Wiki such as case studies.

Guideline 1007 : lighthouse maintenance

| Number | Section | Modify/remove  transfer/wiki | Comments |
| --- | --- | --- | --- |
| 1 |  | modify | Introduction must be adapted in the new guideline |
| 2 |  | modify | Generalities, To be inserted in a global scope |
|  | 2.1 | Transfer | To section 3 structures and building types ; maybe to simplify with drawings |
|  | 2.2 | Transfer | To section 4.1.2 masonry behaviour and risk/issues |
|  | 2.3 | transfer | To section 4.1.3 masonry durability and additional protection systems |
|  | 2.4 | transfer | To section 4.1.5 masonry repair techniques |
| 3 |  | wiki | Case study concrete construction |
| 4 |  | transfer | To section 4.4.1 composite material description and properties |
| 5 |  | wiki | Case study metal construction |
| 6 |  | transfer | To section 4.5.2 metal behaviour and risk/issues |
| 7 |  | transfer | To section 4.5.1 metal material description and properties |
|  | 7.1 | wiki | Case study metal construction |
| 8 |  | wiki | Case study, some elements can be used for section 4.5 metal but need to be reworded |
| 9 |  | wiki | Case study metal construction |
| 10 |  | remove | specific about accessibility, do not particularly concern civil engineering |
| 11 |  | remove | Concern manned lighthouse and inhabitations and other accommodation facilities ; it is not a priority at this time ; to check |
| 12 |  | transfer | This section is about physical and environmental effects, it can be transferred in section 5 building conditioning |
| 13 |  | remove | Maintenance scheme, Too general and included in maintenance program of each country |
| 14 |  | modify | Refer also to IALA lighthouse conservation manual |
| 15 |  | remove | bibliography |

Guideline 1077: maintenance of ATON

This guideline concerns all the equipment used in ATON (buoys, moorings, power equipment, monitoring, etc) and need to be reviewed and discontinued. Content not concerning structures should be examined by other working groups.

Only annex 3 is relevant to structures and only reviewed by this group.

| Number | Section | Modify/remove  transfer/wiki | Comments |
| --- | --- | --- | --- |
| 1 |  | modify | Introduction must be adapted in the new guideline |
| 2 |  | transfer | To section X.1.4 periodic maintenance/ inspection and survey |
| 3 | 3.1 | transfer | To section 4.2.4 timber periodic maintenance/ inspection and survey |
|  | 3.2 | transfer | To section 4.5.4 metal periodic maintenance/ inspection and survey |
|  | 3.3 | transfer | To section 4.3.4 concrete periodic maintenance/ inspection and survey |
| 4 | 4.1 | transfer | To section 4.1.4 masonry periodic maintenance/ inspection and survey |
|  | 4.2 | transfer | To section 4.5.4 metal periodic maintenance/ inspection and survey |
|  | 4.3 | transfer | To section 4.4.4 composite periodic maintenance/ inspection and survey and 4.4.5 composite repair techniques |
|  | 4.4 | transfer | To section 4.4.4 composite periodic maintenance/ inspection and survey |
|  | 4.5 | remove | About rubber used in boat fendering |
| 5 |  | remove | This section is about structure components |
| 6 | 6.1 | remove | Perhaps, this could be inserted in section 3 structures and building types |
|  | 6.2 | transfer | To section 3 structures and building types |
| 7 |  | transfer | To section 4.5.2 metal behaviour and risk/issues |
| 8 |  | remove | Interesting subject, consider rewriting |

Guideline 1076 : building conditioning

|  |  |  |  |
| --- | --- | --- | --- |
| Number | Section | Modify/remove  transfer/wiki | Comments |
| 1 |  | transfer | To Section 5 building conditioning |
| 2 | 2.1 | transfer | To Section 5 building conditioning |
|  | 2.2 | wiki | Case study building condition indicatory |
|  | 2.3 | transfer | To Section 5 building conditioning |
|  | 2.4 | remove | Too much detailed |
|  | 2.5 | wiki | Case study station exposure status |
|  | 2.6 | wiki | Case study examples of building conditioning |
|  | 2.7 | transfer | To Section 5 building conditioning |
| 3 |  | wiki | Case study monitoring |
| 4 |  | modify | Many examples to split in each section of materials |
| Appendix 1 |  | wiki | Glossary of terms to put with the case studies |
| Appendix 2 |  | Remove | Psychometric chart |
| Appendix 3 |  | transfer | To section 4.1.1 masonry material description and properties and section 4.1.2 masonry behavior and risk/issues |
| Appendix 4 |  | wiki | Case study asset rating specification |
| Appendix 5 |  | wiki | Case study examples of information sheets |
| Appendix 6 |  | Wiki | Case study map showing exposure categories |