

S-101 Electronic Navigational Chart Project Team

# Status of S-101 FC update

**S-101PT5 / KHOA**

Presented by KHOA



# Introduction

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- **S-101 FC 1.0.0 progress of KHOA**

- S-101 FC 0.9.1 based on S-101 DCEG(ver. July 2018) - TSM6, 2018
- S-101 FC 0.9.2 based on S-101 DCEG(ver. November 2018) - S-100WG4, 2019
- S-101 FC 1.0.0 based on S-101 DCEG(ver. 1.0.0 December 2018) - S-101PT4, 2019

- **New S-101 FC (1.0.1) based on 3<sup>rd</sup> generation S-100 GI Registry**

- New version S-101 FC was created following S-100 GI Registry's latest Register DB
- Needs an update for support S-101 DCEG 1.1.0 official release after S-101PT5



# Updated information

- **Consistency with GI Registry**

- Clarification of name and definition
- Clarification of label(name of listed value)

Before - S-101 FC 1.0.0 (Apr. 2019)

```
▼ <S100FC:S100_FC_SimpleAttribute>
  <S100FC:name>Buoy shape</S100FC:name>
  <S100FC:definition>The shape a buoy exhibits</S100FC:definition>
  <S100FC:code>buoyShape</S100FC:code>
  <S100FC:remarks>The principal shapes are those recommended in the International Association of Lighthouse Authorities – IALA Aids to Navigation Guide to Buoyage</S100FC:remarks>
  <S100FC:alias>BOYSHP</S100FC:alias>
  <S100FC:varDataType>enumeration</S100FC:varDataType>
  <S100FC:listedValues>
    ▼ <S100FC:listedValue>
      <S100FC:label>based on a system of fixed marks</S100FC:label>
      <S100FC:definition>a straight route (known as a recommended track, range or leading line), which may carry lights and/or top-marks. The structures/features are positioned so that the structures/features are visible from a specified bearing which can be followed with safety. (S-57 Edition 3.1, Appendix A)
      </S100FC:definition>
      <S100FC:code>1</S100FC:code>
    </S100FC:listedValue>
    ▼ <S100FC:listedValue>
      <S100FC:label>not based on a system of fixed marks</S100FC:label>
      <S100FC:definition>a route (known as a recommended track or preferred route) which is not based on a system of fixed marks.
      <S100FC:code>2</S100FC:code>
    </S100FC:listedValue>
  </S100FC:listedValues>
</S100FC:S100_FC_SimpleAttribute>
```

After - S-101 FC 1.0.1 (Sep. 2020)

```
▼ <S100FC:S100_FC_SimpleAttribute>
  <S100FC:name>Buoy Shape</S100FC:name>
  <S100FC:definition>The principal shape and/or design of a buoy.</S100FC:definition>
  <S100FC:code>buoyShape</S100FC:code>
  <S100FC:remarks>The principal shapes are those recommended in the International Association of Lighthouse Authorities – IALA Aids to Navigation Guide to Buoyage</S100FC:remarks>
  <S100FC:alias>BOYSHP</S100FC:alias>
  <S100FC:varDataType>enumeration</S100FC:varDataType>
  <S100FC:listedValues>
    ▼ <S100FC:listedValue>
      <S100FC:label>Based on a System of Fixed Marks</S100FC:label>
      <S100FC:definition>A straight route (known as a recommended track, range or leading line), which may carry lights and/or top-marks. The structures/features are positioned so that the structures/features are visible from a specified bearing which can be followed with safety. (S-57 Edition 3.1, Appendix A)
      <S100FC:code>1</S100FC:code>
      <S100FC:definitionReference>
        <S100FC:sourceIdentifier>1518</S100FC:sourceIdentifier>
        <S100FC:definitionSource>IHO:DDR</S100FC:definitionSource>
      </S100FC:definitionReference>
    </S100FC:listedValue>
    ▼ <S100FC:listedValue>
      <S100FC:label>Not Based on a System of Fixed Marks</S100FC:label>
      <S100FC:definition>A route (known as a recommended track or preferred route) which is not based on a system of fixed marks.
      <S100FC:code>2</S100FC:code>
      <S100FC:definitionReference>
        <S100FC:sourceIdentifier>1519</S100FC:sourceIdentifier>
      </S100FC:definitionReference>
    </S100FC:listedValue>
  </S100FC:listedValues>
</S100FC:S100_FC_SimpleAttribute>
```



# Updated information

- **Addition of definition reference to track version information**

## Before - S-101 FC 1.0.0 (Apr. 2019)

```
<S100FC:S100_FC_SimpleAttribute>
  <S100FC:name>Category of recommended track</S100FC:name>
  <S100FC:definition>Classification of track based on defining navigational marks</S100FC:definition>
  <S100FC:code>categoryOfRecommendedTrack</S100FC:code>
  <S100FC:alias>CATTRK</S100FC:alias>
  <S100FC:valueType>enumeration</S100FC:valueType>
  <S100FC:listedValues>
    <S100FC:listedValue>
      <S100FC:label>based on a system of fixed marks</S100FC:label>
      <S100FC:definition>a straight route (known as a recommended track, range or leading line), which
      features, which may carry lights and/or top-marks. The structures/features are positioned so tha
      </S100FC:definition>
      <S100FC:code>1</S100FC:code>
    </S100FC:listedValue>
    <S100FC:listedValue>
      <S100FC:label>not based on a system of fixed marks</S100FC:label>
      <S100FC:definition>a route (known as a recommended track or preferred route) which is not based
      <S100FC:code>2</S100FC:code>
    </S100FC:listedValue>
  </S100FC:listedValues>
</S100FC:S100_FC_SimpleAttribute>
```

## After - S-101 FC 1.0.1 (Sep. 2020)

```
<S100FC:S100_FC_SimpleAttribute>
  <S100FC:name>Category of Recommended Track</S100FC:name>
  <S100FC:definition>Classification of track based on defining navigational marks.</S100FC:definition>
  <S100FC:code>categoryOfRecommendedTrack</S100FC:code>
  <S100FC:definitionReference>
    <S100FC:sourceIdentifier>273</S100FC:sourceIdentifier>
    <S100FC:definitionSource>IHO:DDR</S100FC:definitionSource>
  </S100FC:definitionReference>
  <S100FC:valueType>enumeration</S100FC:valueType>
  <S100FC:listedValues>
    <S100FC:listedValue>
      <S100FC:label>Based on a System of Fixed Marks</S100FC:label>
      <S100FC:definition>A straight route (known as a recommended track, range or leading line), which
      features, which may carry lights and/or top-marks. The structures/features are positioned so that
      (Adapted from International Association of Lighthouse Authorities - IALA Aids to Navigation Guide
      topmark, and a specified bearing which can be followed with safety. (S-57 Edition 3.1, Appendix /
      <S100FC:code>1</S100FC:code>
      <S100FC:definitionReference>
        <S100FC:sourceIdentifier>1518</S100FC:sourceIdentifier>
        <S100FC:definitionSource>IHO:DDR</S100FC:definitionSource>
      </S100FC:definitionReference>
    </S100FC:listedValue>
    <S100FC:listedValue>
      <S100FC:label>Not Based on a System of Fixed Marks</S100FC:label>
      <S100FC:definition>A route (known as a recommended track or preferred route) which is not based c
      <S100FC:code>2</S100FC:code>
      <S100FC:definitionReference>
        <S100FC:sourceIdentifier>1519</S100FC:sourceIdentifier>
        <S100FC:definitionSource>IHO:DDR</S100FC:definitionSource>
      </S100FC:definitionReference>
    </S100FC:listedValue>
  </S100FC:listedValues>
</S100FC:S100_FC_SimpleAttribute>
```



# Updated information

## • Addition of Text Placement to all Geo-features

### Before - S-101 FC 1.0.0 (Apr. 2019)

```
▼<S100FC:S100_FC_FeatureType isAbstract="false">
  <S100FC:name>Coastline</S100FC:name>
  <S100FC:definition>The line where shore and water meet. Although the terminology
  </S100FC:definition>
  <S100FC:code>Coastline</S100FC:code>
  <S100FC:alias>COALNE</S100FC:alias>
  ▼<S100FC:attributeBinding sequential="false">
    ▼<S100FC:multiplicity>
      <S100Base:lower>0</S100Base:lower>
      <S100Base:upper xsi:nil="false" infinite="false">1</S100Base:upper>
    </S100FC:multiplicity>
    ▼<S100FC:permittedValues>
      <S100FC:value>1</S100FC:value>
      <S100FC:value>2</S100FC:value>
      <S100FC:value>6</S100FC:value>
      <S100FC:value>7</S100FC:value>
      <S100FC:value>8</S100FC:value>
      <S100FC:value>10</S100FC:value>
    </S100FC:permittedValues>
    <S100FC:attribute ref="categoryOfCoastline"/>
  </S100FC:attributeBinding>
```

### After - S-101 FC 1.0.1 (Sep. 2020)

```
▼<S100FC:S100_FC_FeatureType isAbstract="false">
  <S100FC:name>Coastline</S100FC:name>
  <S100FC:definition>The line where shore and water meet. Shoreline and coastli
  <S100FC:code>Coastline</S100FC:code>
  <S100FC:alias>COALNE</S100FC:alias>
  ▶<S100FC:definitionReference>
    ...
  </S100FC:definitionReference>
  ▶<S100FC:attributeBinding sequential="false">
    ...
  </S100FC:attributeBinding>
  <S100FC:featureUseType>geographic</S100FC:featureUseType>
  ▼<S100FC:featureBinding roleType="association">
    ▼<S100FC:multiplicity>
      <S100Base:lower>1</S100Base:lower>
      <S100Base:upper xsi:nil="false" infinite="false">1</S100Base:upper>
    </S100FC:multiplicity>
    <S100FC:association ref="TextAssociation"/>
    <S100FC:role ref="identifies"/>
    <S100FC:featureType ref="TextPlacement"/>
  </S100FC:featureBinding>
  <S100FC:permittedPrimitives>curve</S100FC:permittedPrimitives>
```



# Conclusion

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- **KHOA is planing to:**
  - a. Update S-101 FC 1.0.1 following S-101 DCEG 1.1.0 (end of Sep.)
  - b. Release S-101 FC 1.1.0 to S-101PT members (end of Oct.)
  
- **The S-101PT5 is invited to:**
  - a. Note this paper
  - b. Discuss the S-101 FC issues reported by this paper
  - c. Discuss publication plan of S-101 FC 1.0.1 and 1.1.0

