Paper for Consideration by [SNPWG]

[Extension of the Category of Restricted Area values]

Submitted by:	SNPWG.
Executive Summary:	Extend the values of CATREA to improve the completeness.
Related Documents:	S-101
Related Projects:	S-101 DCEG.

Proposal Type

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	
New/Amended Feature	
New/Amended Complex Attribute	
New/Amended Simple Attribute	
New/Amended Information Type	
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	X

26.53 Category of restricted area (CATREA)

Attribute Name: Category of Restricted Area <u>IHO Definition:</u>

1) **31) coral sanctuary**

<u>IHO Definition:</u> a place where coral is protected

Justification for any proposed action or recommendations. :

In response to a proposal from The World Bank and USA-NOAA paper CHRIS 19-08.1b, CHRIS19 directed TSMAD to develop a Marine Environmental Protection Programme. The task was passed to SNPWG. Exchange of environmental information and the protection of coral ecosystems were a key drivers. The addition of this enumerated value fills a gap and provides greater precision than is possible using other enumerated values.
Benefits:
- Completion of the CATREA values to the widest possible extent.

Required Resources:
- Email exchange
- no extra funding

Involved HSSC WG
- TSMAD

Due date:
- Next version of the S-101 DCEG

Priority:
- high

Impact on work:
- update S-101 DCEG

Related activities:
- S-101

- any other product specification using CATREA information

Action required of TSMAD
The TSMAD is invited to:
      a.   consider the proposal.

Paper for Consideration by [TSMAD]

[Harmonisation of the contact information] REV1

Submitted by:	SNPWG
Executive Summary:	The harmonisation of the model used for the S-101 DCEG and the model used by SNPWG for different NPUB ProdSpec.
Related Documents:	http://www.fuerstenberg-dhg.de/mediawiki/index.php/Telecomunications
Related Projects:	S-122, S-123 and other S-12x under SNPWG responsibility.

Proposal Type

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	x
New/Amended Feature	x
New/Amended Complex Attribute	x
New/Amended Simple Attribute	x
New/Amended Information Type	x
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	
New/Amended Code List	x

Justification and Impacts

Benefits:
- Expandability and greater flexibility of the new information type use
- Improvements of the definitions
- Improvements of the communication information model
- Improvements of the web address model
- Improvement of the data handling for the modellers who have to serve different products

Required Resources:
- Email exchange
- no extra funding

Involved HSSC WG
- TSMAD
- SNPWG

Due date:
- 30 September 2014

Priority:
- High

Impact on work:
- Completion of the S-123 UML and the GML for S-122 and S-123 depends on the outcome of the discussion

Related activities:
- Revision of the current DCEG PILBOP section and accompanied attributes

Action Required of TSMAD

The TSMAD is invited to:
a.   consider the proposal
b.   dependent on the outcome of the discussion, revise the current S-101 DCEG agree

ANNEX A :

Proposed change of the feature class PILBOP

IHO Definition: **PILOT BOARDING PLACE.** A location offshore where a pilot may board a vessel in preparation to piloting it through local waters. (Defence Geospatial Information Working Group; Feature Data Dictionary Register, 2010).

S-101 Geo Feature: Pilot boarding place (PILBOP)

Primitives: Point, Surface

Real World	*Paper Chart Symbol*	*ECDIS Symbol*

S-101 Attribute	**S-57 Acronym**	**Allowable Encoding Value**	**Type**	**Multiplicity**
Category of pilot boarding place (unchanged)				
~~Communication information~~				
Feature Name (unchanged)				
Fixed date range			C	0,1
Date end	(DATEND)		(S) DA	0,1
Date start	(DATSTA)		(S) DA	0,1
Periodic date range (unchanged)				
Status (unchanged)				
Scale minimum (unchanged)				

Feature associations				
Role Type	**Association Name**	**Role**	**Features**	**Multiplicity**
Association	District boarding locations (unchanged)			

Information associations				
Role Type	**Association Name**	**Role**	**Information types**	**Multiplicity**
Association	Additional Information (assuming TSMAD wants to use this for ALL feature/info associations)	Provided by	Contact Details	0,1

INT 1 Reference: Add clause describing how contact information is encoded: X.Y.Z. Pilot and Pilot service contact information   Contact information for the pilot, pilot boat, or pilot service is encoded using an associated Contact Details information object.   All other information remains unchanged at this section

New Information Feature

IHO Definition: **Contact Details:** Definition. Information on how to reach a person or organisation by postal, internet, telephone, telex and radio systems.

S-101 Information Feature: Contact details

Primitives:				

Real World	*Paper Chart Symbol*	*ECDIS Symbol* .		

S-101 Attribute	**S-57 Acronym**	**Allowable Encoding Value**	**Type**	**Multiplicity**
Call name (unchanged from the current DCEG draft)	(CALNAM)		S(TE)	0,1
Call sign (unchanged from the current DCEG draft)	(CALSGN)			
COMCHA (it is proposed to use it not exclusively for VHF Channels; see below)	(COMCHA)		TE	0..*
Maritime Mobile Service Identity (MMSI) Code			I	0,1
Category of channel or frequency preference			E	0,1
Contact Instructions			S(TE)	0,1
Contact Address			C	0,*
Delivery Point			S(TE)	0,*
City Name			S(TE)	0,1
Administrative Division			S(TE)	0,1
Country			S(TE)	0,1
Postal Code			S(TE)	0,1
Frequency pair			C	0,*
Frequency shore station transmits			I	0,*
Frequency shore station receives			I	0,*
Contact Instructions			S(TE)	0,*
Online Resource			C	0,*
Linkage		ISO 19115:2014	S(URL)	1,1
Protocol		ISO 19115:2014	S(TE)	0,1
Application Profile		ISO 19115:2014	S(TE)	0,1
Name of Resource		ISO 19115:2014	S(TE)	0,1
Description		ISO 19115:2014	S(TE)	0,1
Online function		ISO 19115:2014	E(CL)	0,1
Protocol Request		ISO 19115:2014	S(TE)	0,1
Telecommunications			C	0,*
Telecommunication Identifier			S(TE)	1,1
Telecommunications Service Carrier			S(TE)	0,1
Contact Instructions			S(TE)	0,1
Telecommunications Service			E(CL)	0,*
Date end	(DATEND)	ISO 8601: 2004	(S) DA	0,1
Date start	(DATSTA)	ISO 8601: 2004	(S) DA	0,1

Comment [rmm1]: To do: Add Codelist (CL) the list in DCEG clause 2.4.2

Feature associations (not applicable for Info types?)

Role Type	**Association Name**	**Role**	**Features**	**Multiplicity**

Information associations				
Role Type	**Association Name**	**Role**	**Features**	**Multiplicity**
Association	Additional Information (see remark for PILBOP)	Provides	Pilot Boarding Place	0..*

INT 1 Reference:

Remarks:
- No remarks

Distinction:

New complex attributes supporting the proposed amendments

Attribute Name: Contact Address

IHO Definition: Direction or superscription of a letter, package, etc., specifying the name of the place to which it is directed, and optionally a contact person or organisation who should receive it. (Oxford English Dictionary, 2nd Ed., adapted).

Indication: The attribute is able to encode all variations of a contact address

Sub-attributes: **Delivery Point**   see clause X.X
                  City Name   see clause X.X
                  Administrative Division   see clause X.X
                  Country   see clause X.X
                  Postal Code   see clause X.X

Remarks:
- No remarks.

Attribute Name: Frequency pair   IHO Definition: A pair of frequencies for transmitting and receiving radio signals. The shore station transmits and receives on the frequencies indicated.

Indication: The attribute is able to encode all variations of radio receiving and transmitting

Sub-attributes: **Frequency Shore Station Transmits**   see clause X.X
                  Frequency Shore Station Receives   see clause X.X
                  Contact Instructions   see clause X.X

Remarks:
- An "empty" frequency must be represented by an empty or null-valued sub-attribute and not by an absent sub-attribute.
- Footnotes and asterisks of the source assigned to particular frequencies or frequency pairs must be putted into the Contact Instructions.

Attribute Name: Telecommunications   IHO Definition: A means or channel of communication at a distance by electrical or electromagnetic means such as telegraphy, telephony, or broadcasting.

Indication: The attribute encodes the different telecommunication methods.

Sub-attributes: **Telecommunication Idenifier**   see clause X.X
                  Telecommunications Service Carrier   see clause X.X

Contact Instructions	see clause X.X
Telecommunications Service	see clause X.X

Remarks:

- If no telcomService information is given, it means "voice".

- If no telcomCarrier information is given. it means "land line"

Attribute Name: Online resource   <u>IHO Definition:</u> Information about online sources from which a resource or data can be obtained (ISO 19115, adapted)

<u>Indication:</u> The attribute describes the access to online resources according to ISO 19115.

<u>Sub-attributes:</u>	**Linkage**	see clause X.X
	Protocol	see clause X.X
	Application Profile	see clause X.X
	Name of resource	see clause X.X
	Description	see clause X.X
	Online function	see clause X.X
	Protocol request	see clause X.X

<u>Remarks:</u>
   No remarks

New Free Text Type Attributes relevant to the proposed complex attributes

Attribute Name: Delivery point <u>IHO Definition:</u> Details of where post can be delivered such as the apartment, name and/or number of a street, building or PO Box.

<u>Indication:</u>

<u>Format:</u> String

<u>Example</u>:

<u>Remarks:</u>
      This could be repeated if there is more than one address item required in addition to the city name.

Attribute Name: City name <u>IHO Definition:</u> The name of a town or city.

<u>Indication:</u>

<u>Format:</u> String

<u>Example</u>:

<u>Remarks:</u>
      No remarks.

Attribute Name: Administrative division <u>IHO Definition:</u> Administrative division is a generic term for an administrative region within a country at a level below that of the sovereign state.

<u>Indication:</u>

<u>Format:</u> String

<u>Example</u>:

<u>Remarks:</u>
      To be used in the context of contact details.

Attribute Name: Country <u>IHO Definition:</u> The name of a nation. (Adapted from The American Heritage Dictionaries)

<u>Indication:</u>

<u>Format:</u> String

<u>Example</u>:

<u>Remarks:</u>
      No remarks.

Attribute Name: Postal code <u>IHO Definition:</u> Known in various countries as a postcode, or ZIP code, the postal code is a series of letters and/or digits that identifies each postal delivery area.

<u>Indication:</u>

<u>Format:</u> String

<u>Example</u>:

<u>Remarks:</u>
      No remarks.

Attribute Name: Telecommunication Identifier <u>IHO Definition:</u> An identifier, such as words, numbers, letters,

symbols, or any combination of those used to establish a contact to a particular person, organisation or service.

Indication:

Format: String

Example: +49 123 456 789; pilsner@beer.com

Remarks:
No remarks.

Attribute Name: Telecommunication Carrier IHO Definition: The name of a provider or type of carrier for a telecommunication service. This service may include land line based, shore based or satellite based radio connections.

Indication:

Format: String

Example:

Remarks:
No remarks.

Attribute Name: Contact Instructions IHO Definition: Instructions provided on how to contact a particular person, organisation or service, or any additional information needed.

Indication:

Format: String

Example:

Remarks:
The instructions should also provide information of the access time of that particular person, organisation or service.

Attribute Name: Linkage   IHO Definition: Location (address) for on-line access using a URL/URI address or similar addressing scheme. (Adapted from ISO 19115-1:2014.)

Indication:

Format: URL

Example: http://www.fuerstenberg-dhg.de

Remarks:
No remarks.

Attribute Name: Protocol   IHO Definition: Connection protocol to be used. Example: ftp, http get KVP, http POST,etc. (ISO 19115)

Indication:

Format: String

Example: ftp, http get KVP, http POST

Remarks:
No remarks.

Attribute Name: Application Profile   IHO Definition: Name of an application profile that can be used with the online resource (ISO 19115)

Indication:

Format: String

Example:

Remarks:
No remarks.

Attribute Name: Name of resource IHO Definition: Name of the online resource (ISO 19115)

Indication:

Format: String

Example:

Remarks:
No remarks.

Attribute Name: Description IHO Definition: Detailed text description of what the online resource is/does (ISO 19115)

Indication:

Format: String

Example:

Remarks:
No remarks.

Attribute Name: Protocol request IHO Definition: Request used to access the resource. Structure and content depend on the protocol and standard used by the online resource, such as Web Feature Service standard. (ISO 19115, adapted)

Indication:

Format: String

Example:

Remarks:
No remarks.

New Code List Type Attributes relevant to the proposed complex attributes

---

Attribute Name: Telecommunication Service   IHO Definition: methods to communicate between involved parties over a distance

Indication: The attribute describes the access to online resources according to ISO 19115.

Tagged Values:			
Codelist Type	open enumeration	see clause X.X
URI	n/a	see clause X.X
encoding	other [something]	see clause X.X

Remarks:
No remarks

Expected input

1 : voice

2 : facsimile

3 : sms

4 : data

5 : streamed data

6 : telex

7 : telegraph

8 : email

Definitions:

voice:The transfer or exchange of information by using sounds that are being made by mouth and throat when speaking

facsimile: a system of transmitting and reproducing graphic matter (as printing or still pictures) by means of signals sent over telephone lines (http://www.merriam-webster.com 20.05.2014)

sms: Short Message Service, a form of text messaging communication on phones and mobile phones. (http://www.wikipedia.org 20.05.2014)

data: facts or information used usually to calculate, analyze, or plan something (http://www.merriam-webster.com 20.05.2014)

streamed data: Streamed data is data that that is constantly received by and presented to an end-user while being delivered by a provider. (adapted: http://www.wikipedia.org 20.05.2014)

telex: a system of communication in which messages are sent over long distances by using a telephone system and are printed by using a special machine (called a teletypewriter) (http://www.merriam-webster.com 20.05.2014)

telegraph: an apparatus, system, or process for communication at a distance by electric transmission over wire

email: Messages and other data exchanged between individuals using computers in a network. (http://www.merriam-webster.com 20.05.2014)

Attribute Name: online function   <u>IHO Definition:</u> code for function performed by the online resource (ISO 19115)

<u>Indication:</u> The attribute describes the access to online resources according to ISO 19115.

<u>Tagged Values:</u> **Codelist Type**   open enumeration   see clause X.X
                 URI   n/a   see clause X.X
                 encoding   other [something]   see clause X.X

<u>Remarks:</u>
        No remarks

        Expected input

1: download

2: information

3: offline access

4: order

5: search

6: complete metadata

7: browse graphic

8: upload

9: email service

10: browsing

11: file access

Definitions:

download: online instructions for transferring data from one storage device or system to another. (ISO 19115:2014)

information: online information about the resource (ISO 19115:2014)

offline access: online instructions for requesting the resource from the provider (ISO 19115:2014)

order: online order process for obtaining the resource (ISO 19115:2014).

search: online search interface for seeking out information about the resource (ISO 19115:2014).

complete metadata: complete metadata provided (ISO 19115:2014).

browse graphic: browse graphic provided (ISO 19115:2014).

upload: online resource upload capability provided (ISO 19115:2014).

email service: online email service provided (ISO 19115:2014)

browsing: online browsing provided (ISO 19115:2014)

file access: online file access provided (ISO 19115:2014).

New Integer attributes relevant to the proposed complex attributes

Attribute Name: Frequency shore station transmits <u>IHO Definition:</u> The shore station transmitter frequency expressed in kHz to one decimal place.

<u>Unit:</u> kHz

<u>Resolution:</u> 0.1

<u>Format:</u> XXXXXX

<u>Example:</u> 4379.1 kHz becomes 043791; 13162.8 kHz becomes 131628

<u>Remarks:</u>
• No remarks

Attribute Name: Frequency shore station receives <u>IHO Definition:</u> The shore station receiver frequency expressed in kHz to one decimal place.

<u>Unit:</u> kHz

<u>Resolution:</u> 0.1

<u>Format:</u> XXXXXX

<u>Example:</u> 4379.1 kHz becomes 043791; 13162.8 kHz becomes 131628

<u>Remarks:</u>
• No remarks

New Integer attributes relevant to the Information Type

Attribute Name: Maritime Mobile Service Identity (MMSI) Code <u>IHO Definition:</u> The Maritime Mobile Service Identity (MMSI) Code is formed of a series of nine digits which are transmitted over the radio path in order to uniquely identify ship stations, ship earth stations, coast stations, coast earth stations, and group calls. These identities are formed in such a way that the identity or part thereof can be used by telephone and telex subscribers connected to the general telecommunications network principally to call ships automatically. (Adapted from USCG which in turn adapted it from Appendix 43 of the International Telecommunications Union Radio Regulations)

<u>Unit:</u> none

<u>Resolution:</u> 1

<u>Format:</u> XXXXXXXXX

Example: 366777490

Remarks:
- No remarks

New Free Text Type Attributes relevant to the proposed Information Type

Attribute Name: Call name IHO Definition: The designated call name of a station, e.g. radio station, radar station, pilot. This is the name used when calling a radio station by radio i.e. "Singapore Pilots".

Indication:

Format: String

Example:

Remarks:
    This is to be distinct from the attribute call sign.

New Enumerations relevant to the Information Type

Attribute: Category of channel or frequency preference IHO Definition:

1) **preferred calling**

    IHO Definition: the first choice channel or frequency to be used when calling a radio station

2) **alternate calling**

    IHO Definition: a channel or frequency to be used for calling a radio station when the preferred channel or frequency is busy or is suffering from interference

3) **preferred working**

    IHO Definition: the first choice channel or frequency to be used when working with a radio station

4) **alternate working**

    IHO Definition: a channel or frequency to be used for working with a radio station when the preferred working channel or frequency is busy or is suffering from interference

Remarks:
- Additional encoding guidance relevant to the attribute.

Proposed amendment of an Attribute ((((BTW: That attribute type is not mentioned in the submission template))))

Communication channel: IHO Definition: A channel number assigned to a specific radio frequency, frequencies or frequency band. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.114, November 2000).

Expected Input: Enter specific VHF-Channel.

Indication: Each VHF-Channel should be indicated in square brackets by 2 digits and up to 2 characters (A-Z).
            Each Channel should be indicated in square brackets by 4 digits and up to 4 characters (A-Z).

Format: [XXXXXXXX]

Example: **[VHF0007]** for VHF-Channel 7
            [NBDP5555] for Narrow Band Direct Printing Channel 5555

Remarks:
The attribute "communication channel" encodes the various VHF Channels used for all methods of radio

communication.

Paper for Consideration by [TSMAD]

[Difference of the geometric primitives statements for features]

Submitted by:	SNPWG
Executive Summary:	Need for clarification of geometric primitives for features
Related Documents:	S-101 DCEG baseline version April 2014
Related Projects:	S-101

Proposal Type
The table below provides the difference between the statement of the allowed geometric primitives and their respective statement at the scale minimum table:

Item 2.2 (table 2.1)		2.5.12
Dam	curve/surface	point/curve/surface

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	x
New/Amended Feature	
New/Amended Complex Attribute	
New/Amended Simple Attribute	
New/Amended Information Type	
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	
New/Amended Code List	

Justification and Impacts
Benefits:
- Clear document structure
- Harmonised data interpretation

Required Resources:
- Email exchange
- no extra funding

Involved HSSC WG
- TSMAD

Due date:
- ??

Priority:
- ??

Impact on work:
- update S-101 DCEG

Related activities:
- S-101

Action Required of TSMAD
The TSMAD is invited to:
a.   harmonise the geometric primitive statements.

Paper for Consideration by [TSMAD]

[Clarification of MARSYS information]

Submitted by:	SNPWG
Executive Summary:	Need for clarification of MARSYS values
Related Documents:	S-101 DCEG baseline version April 2014
Related Projects:	S-101

Proposal Type

Item 26.108 Marks navigational – System of (MARSYS) defined value 10 as "other system". Assuming the definitions of the different values must be bijective, it would cause problems by the end user to understand what the term "other system" means.
Solutions could be
- to search for all systems which are present and specify them now.
- to make it an open list so that encoders can specify on which system the navigational marks are based if the system is not in the list.

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	
New/Amended Feature	
New/Amended Complex Attribute	
New/Amended Simple Attribute	x
New/Amended Information Type	
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	
New/Amended Code List	x

Justification and Impacts

Benefits:
- Better understanding of the value by the end user
- Improvements of the definitions

Required Resources:
- Email exchange
- no extra funding

Involved HSSC WG
- TSMAD

Due date:
- ??

Priority:
- ??

Impact on work:
- update S-101 DCEG

Related activities:
- S-101
- any other product specification using MARSYS

Action Required of TSMAD

The TSMAD is invited to:
   a.   consider the proposal

Option 1: specify all systems in use

Attribute Name: Marks navigational – system of

IHO Definition: An agreed system of visual aids to navigation generally used to indicate the course of a navigable waterway. (IALA Dictionary 1-1-035 - Lateral system of marking)

---

1) IALA A

IHO Definition: Navigational aids conform to the International Association of Lighthouse Authorities - IALA A system. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.149, November 2000).

2) IALA B

IHO Definition: Navigational aids conform to the International Association of Lighthouse Authorities - IALA B system. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.149, November 2000).

9) No system

IHO Definition: Navigational aids do not conform to any defined system. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.149, November 2000).

11) CEVNI

IHO Definition: Definition required

TBD: someone must identify other enumerates…(e.g. SIGNI-System (Netherland))

Remarks: The sides of the navigable waterway are indicated by aids to navigation of defined shape, colour, or light characteristic in relation to the direction taken by the mariner from seaward or to the direction determined by the competent authority. (IALA Dictionary 1-1-035 - Lateral system of marking)

Option 2: make Marks navigational – System of (MARSYS) an open enumeration codelist.

Attribute Name: Marks navigational – system of

IHO Definition: An agreed system of visual aids to navigation generally used to indicate the course of a navigable waterway. (IALA Dictionary 1-1-035 - Lateral system of marking)

Tagged Values: **Codelist Type**   open enumeration
                URI   n/a
                encoding   other [something]

---

1) IALA A

IHO Definition: Navigational aids conform to the International Association of Lighthouse Authorities - IALA A system. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.149, November 2000).

2) IALA B

IHO Definition: Navigational aids conform to the International Association of Lighthouse Authorities - IALA B system. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.149, November 2000).

9) No system

IHO Definition: Navigational aids do not conform to any defined system. (S-57 Edition 3.1, Appendix A – Chapter 2, Page 2.149, November 2000).

11) CEVNI

IHO Definition: Definition required

Remarks: The sides of the navigable waterway are indicated by aids to navigation of defined shape, colour, or light characteristic in relation to the direction taken by the mariner from seaward or to the direction determined by the competent authority. (IALA Dictionary 1-1-035 - Lateral system of marking).

Values other than the enumerated values shall be encoded as for an open enumeration codelist in S-100 Edition 2.0.0.

Paper for Consideration by [TSMAD]

[Content is missing for 2.5.2]

Submitted by:	SNPWG
Executive Summary:	Need for clarification of 2.5.2
Related Documents:	S-101 DCEG baseline version April 2014
Related Projects:	S-101

Proposal Type

Item 2.5.2 is intended to provide information on Discovery Metadata. The header has no accompanied text underneath.

It is proposed to either provide a text which fits the purpose of this item or to provide a clear statement that this item left intentionally empty.

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	x
New/Amended Feature	
New/Amended Complex Attribute	
New/Amended Simple Attribute	
New/Amended Information Type	
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	
New/Amended Code List	

Justification and Impacts

Benefits:
- Clear document structure

Required Resources:
- Email exchange
- no extra funding

Involved HSSC WG
- TSMAD

Due date:
- ??

Priority:
- ??

Impact on work:
- update S-101 DCEG

Related activities:
- S-101

Action Required of TSMAD

The TSMAD is invited to:

a. Provide an appropriate text at section 2.5.2

Paper for Consideration by [TSMAD]

[reference to a non-existing attribute]

Submitted by:	SNPWG
Executive Summary:	Need for clarification of 30.2.3 number 11 d)
Related Documents:	S-101 DCEG baseline version April 2014
Related Projects:	S-101

Proposal Type

Section 30.2.3 number 11 d) refers to an attribute **source indication** which doesn't exist.
It is proposed to change the wording of this subparagraph.

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	x
New/Amended Feature	
New/Amended Complex Attribute	
New/Amended Simple Attribute	
New/Amended Information Type	
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	
New/Amended Code List	

Justification and Impacts

Benefits:
- Clear document structure

Required Resources:
- Email exchange
- no extra funding

Involved HSSC WG
- TSMAD

Due date:
- ??

Priority:
- ??

Impact on work:
- update S-101 DCEG

Related activities:
- S-101

Action Required of TSMAD

The TSMAD is invited to:

      a.   Provide an appropriate text at section 30.2.3 number 11 d)

Paper for Consideration by [TSMAD]

[Harmonisation between S-101 and SNPWG data model on update information]

Submitted by:	SNPWG
Executive Summary:	The update information model of both WG requires harmonisation
Related Documents:	S-101 DCEG baseline version April 2014
Related Projects:	S-101

Proposal Type

In the S-101 baseline version dated April 2014, the "update information" is indented to be used as a metadata feature which could be associated to all features if considered necessary.
Considering that the mariner is not really interested in seeing the reference to charted information, the purpose of this feature is to provide source information to the issuing HO. In addition, the feature provides a reference to the relevant NtM if updates to the information apply.
The SNPWG has been developed a more comprehensive data model. (1) That model based on the assumption that the mariners assessing the quality of publication's information according to the identity of the source.
(2) That model based on the assumption that the issuing HO may need more information on the source as background information.

The harmonisation of the different data models could be done in two different ways. (1) One way could be the consideration of the adoption of the SNPWG data model by the S-101 DCEG or, (2) the definition of the sub-attribute "Update Reference" should be harmonised between the two different data models.

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	
New/Amended Feature	x
New/Amended Complex Attribute	x
New/Amended Simple Attribute	x
New/Amended Information Type	
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	x
New/Amended Code List	

The SNPWG data model proposed with option (1) containing all components which have not been described by the S-101 DCEG is described in Annex A.
The amendments to the S-101 DCEG according to option (2) are in Annex B.

Justification and Impacts

Benefits:
- Harmonised data model through all product specifications.
- Or, less model variations of the same fact.

Required Resources:
- Email exchange
- no extra funding

Involved HSSC WG
- TSMAD

Due date:
- Next version of the S-101 DCEG

Priority:
- high

Impact on work:
- update S-101 DCEG

Related activities:
- S-101
- any other product specification using Update Information or Source Indication

Action required of TSMAD
The TSMAD is invited to:

      a.   consider the proposal.

Annex A:

Attribute: **Source Indication**, Alpha code: SORIND, Camel case: sourceIndication

Attribute type: Complex

SubAttributes:

Name	AlphaCode	CamelCase	Multiplicity	Sequential
Source Type	SORTYP	sourceType	0..1	n/a
Source	SOURCE	source	0..1	n/a
Reported date	REPDAT	reportedDate	0..1	n/a
Country	CONTRY	country	0..1	n/a
Category of Authority	CATAUT	categoryOfAuthority	0..1	n/a
Object Name	name	name	0..1	n/a

Attribute: **Source Type**, Alpha code: SORTYP, Camel case: sourceType
Attribute type: Simple
Data type: Enumeration

Expected input:
1 international law
2 publication issued by an international organisation
3 national law or regulation
4 publication issued by a national administration
5 local law or regulation
6 publication issued by a local administration
7 mariner report, confirmed
8 mariner report, not confirmed
9 industry publications and reports
10 remotely sensed images
11 photographs
12 products issued by HO services
13 news media
14 traffic data

Definitions:
1 treaty, convention, or international agreement; or European Union law
2 publication including graphics and charts issued by an international organisation
3 legislative or administrative law or regulation passed by a national government or national regulatory agency or authority
4 publication including graphics and charts issued by a national administration
5 legislative and administrative law or regulation passed by a national sub-division, for example a state, province, or local government or sub-national regulatory agency or authority
6 publication including graphics and charts issued by a local administration, such as local government or port authority
7 reported by mariner(s) and confirmed by another source
8 reported by mariner(s) but not confirmed
9 shipping and other industry publication including graphics and charts and web sites
10 information obtained from remote sensing devices
11 information obtained from photographs
12 information obtained from products issued by Hydropgrahic Offices
13 information obtained from news media
14 information obtained from the analysis of traffic data

Attribute: **Source**, Acronym: SOURCE, Camel case: source

Attribute type: Simple
Data type: String

Definition:
The publication, document, or reference work from which information comes or is acquired.

Attribute: **Country**, Acronym: CONTRY, Camel case: country

Attribute type: Simple
Data type: String

Definitions:
The name of a nation. (Adapted from The American Heritage Dictionaries)

Attribute: **Category of authority**, Acronym: CATAUT, Camel case: categoryOfAuthority

Attribute type: Simple
Data type: Enumeration

Expected input:
1 customs
2 border control
3 police
4 port
5 immigration
6 health
7 coast guard
8 agricultural
9 military
10 private company
11 maritime police
12 environmental
13 fishery
14 finance
15 maritime

Definitions:
1 the agency or establishment for collecting duties, tolls (Merriam-Websters online Dictionary 23rd February 2006, amended)
2 the administration to prevent or detect and prosecute violations of rules and regulations at international boundaries (adapted from Merriam-Websters online Dictionary 23rd February 2006)
3 the department of government, or civil force, charged with maintaining public order (Adapted from OED)
4 person or corporation, owners of, or entrusted with or invested with the power of managing a port. May be called a Harbour Board, Port Trust, Port Commission, Harbour Commission, Marine Department (NP 100 8th Edition 14 Oct 2004)
5 the authority controlling people entering a country
6 the authority with responsibility for checking the validity of the health declaration of a vessel and for declaring free pratique
7 the organisation keeping watch on shipping and coastal waters according to governmental law; normally the authority with responsibility for search and rescue
8 the authority with responsibility for preventing infection of the agriculture of a country and for the protection of the agricultural interests of a country
9 a military authority which provides control of access to or approval for transit through designated areas or airspace
10 a private or publicly owned company or commercial enterprise which exercises control of facilities, for example a calibration area

11 a governmental or military force with jurisdiction in territorial waters. Examples could include Gendarmerie Maritime, Carabinierie, and Guardia Civil

12 an authority with responsibility for the protection of the environment

13 an authority with responsibility for the control of fisheries

14 an authority with responsibility for the control and movement of money

15 a national or regional authority charged with administration of maritime affairs

Annex B

IHO Definition: **UPDATE INFORMATION**. The Update Information feature is used to represent a change to the information shown.

S-101 Metadata Feature: Update Information

Primitives: Point, Curve, Surface

Real World	*Paper Chart Symbol*	*ECDIS Symbol*

S-101 Attribute	**S-57 Acronym**	**Allowable Encoding Value**	**Type**	**Multiplicity**
Update description			C	1,*
Language		ISO 639-3	(S) TE	0,1
Text			(S) TE	0,1
Source			S	0,1
Scale Minimum	SCAMIN		IN	0,1

Feature associations

Role Type	**Association Name**	**Role**	**Features**	**Multiplicity**
Association	Updated Information	Updates	All Geo Features	0,*

INT 1 Reference:

X.X.X Sub-clause heading(s) (see S-4 – B-YYY.Y)

3.11.1 Update information
If it is required to encode information about changes made to ENC data it must be done using **Update Information**. This feature must be encoded to cover the extent of changed data incorporated in the SENC via ENC Updates (ER Application Profile), and may also be used to indicate changes introduced in ENC New Editions. It carries information about the changes. **Update Information** may be associated with features which have changed using the association **Updated Information** (see clause X.X).

Remarks:

☐ The mandatory attribute **update description** must be used to provide a brief textual description of the changes to the dataset included in the Update. If a more detailed description of the Update is required, this should be encoded using an associated instance of the information type **Supplementary Information** (see clause X.X), complex attributes **information** or **textual description**.

☐The attribute **Source** may be used to indicate the related paper chart notice to mariner's number.

☐At each new edition of an ENC cell **Update Information** features which are no longer relevant must be deleted.

☐Where information has been deleted from an ENC the **Update Information** feature should cover the extent of the deleted information.

Distinction: Information area; caution area.

For detailed description of the proposed "source" attribute please refer to Annex A.

Paper for Consideration by TSMAD
Spatial Quality

Submitted by:	United States (NOAA)
Executive Summary:	Missing a complete description of the Spatial Quality Information type
Related Documents:	S-101 Comments
Related Projects:	N/A

Type of Change Requested	Mark All that Apply
S-101 DCEG Change	
New/Amended Feature	
New/Amended Complex Attribute	
New/Amended Simple Attribute	
New/Amended Information Type	Yes
New/Amended Association/Aggregation/Composition	
New/Amended Enumerate Value	

Notes: 1) The templates are located in the annex to this proposal form
2) Where the proposal suggests a minor amendment to a feature/information type or attribute (e.g. a change in the definition), the proposal may be explained here without a supporting table as included in the annex.

Justification for any proposed action or recommendations.
 The DCEG houses all the feature/attribute and enumeration information for S-101. In reviewing S-101, it was noted that that there is not a DCEG entry for the spatial quality information type. The only notation about spatial quality is in clause 2.4.7 of the DCEG that provides the UML diagram.

In order to provide a complete DCEG and for registration into the S-100 register it is recommended that the spatial quality information type be added to the DCGE.

The TSMAD is invited to:
   a.   agree to the attached proposal to add the spatial quality information type into S-101

ANNEX A : Proposal Templates [Delete any section which is not relevant to the proposal]

Geo/Information Feature Type Proposals

IHO Definition: **SPATIAL QUALITY:** Definition. (Authority for definition).

S-101 Information Feature: **Spatial Quality**

Primitives: None

Real World	*Paper Chart Symbol*	*ECDIS Symbol*

S-101 Attribute	**S-57 Acronym**	**Allowable Encoding Value**	**Type**	**Multiplicity**
Positional Uncertainty	POSACC		RE	0,1
Vertical Uncertainty	VERACC		RE	0,1
Quality of Position	QUAPOS	1 : surveyed 2 : unsurveyed 3 : inadequately surveyed 4 : approximate 5 : position doubtful 6 : unreliable 7 : reported (not surveyed) 8 : reported (not confirmed) 9 : estimated 10: precisely known 11: calculated	EN	0,1
Category of Temporal Variation		1 : Unassessed 2 : Event 3 : Likely to change 4 : Likely to change but significant shoaling unlikely 5 : Unlikely to change	EN	0,1

Feature associations

Role Type	**Association Name**	**Role**	**Features**	**Multiplicity**
Association	Name of the Association	Role Name	Features that are at the other end of the association	

INT 1 Reference:

X.X.X Spatial Quality

Spatial attribute types must contain a referenced geometry and may be associated with spatial quality attributes. Each spatial attribute instance must be referenced by a feature instance or another spatial attribute instance.
Spatial quality attributes are carried in an information class called **Spatial quality**. Only points, multipoints and curves can be associated with Spatial quality. Currently no use case for associating surfaces with spatial quality attributes is known, therefore this is prohibited. Vertical uncertainty is prohibited for curves as this dimension is not supported by curves.

Remarks:
- No remarks

Distinction: List of features in the Product Specification distinct from the Feature.