



PRIMAR[®]

Progress POSACC/SOUACC encoding

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DQWG Action 18/11



5.2	Report of S-101PT	<p>DQWGnote the report of S-101PT, and expressed its gratitude to <u>Mr. Thomas Richardson</u>.</p> <p>[Action 18/11]RENCs to consider providing stats on the progress of the encoding of POSACC/ SOUACC to the DQWG Chair prior to HSSC16 (Action HSSC14/59 refers) for an assessment of S-57 readiness.</p>	HSSC16
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5.5A	Data Quality in existing S-57 ENC's	HSSC14/59 (former HSSC13/49, HSSC12/49)	<p>HSSC encouraged Member States to start populating appropriate POSACC / SOUACC values in existing S-57 ENC's for relevant spatial objects in preparation of conversion to S-101 (<u>iaaw</u> UOC 2.2).</p>	Permanent	
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Analysis basis

Increase in encoding based on the following object attribution:

Acronym: POSACC		Code: 401
Accuracy of data	M_ACCY	300
Quality of data	M_QUAL	308

Acronym: SOUACC		Code: 144
Berth	BERTHS	10
Deep water route centerline	DWRTCL	40
Deep water route - part	DWRTPT	41
Depth area	DEPARE	42
Dredged area	DRGARE	46
Dry dock	DRYDOC	47
Fairway	FAIRWY	51
Gate	GATCON	61
Marine farm/culture	MARCUL	82
Obstruction	OBSTRN	86
Recommended route centerline	RCRTCL	108
Recommended track	RECTRC	109
Sounding	SOUNDG	129
Swept area	SWPARE	134
Two-way route part	TWRTPT	152
Underwater/awash rock	UWTROC	153
Wrecks	WRECKS	159
Accuracy of data	M_ACCY	300
Quality of data	M_QUAL	308

Queries

Queries conducted:

```
SELECT cell_id, cell_edtn, cell_updn, cell_reissue, obcl, attf  
FROM public.s57_feature where (obcl='M_QUAL' or  
obcl='M_ACCY') and attf->>'POSACC' is not null
```

```
SELECT cell_id, cell_edtn, cell_updn, cell_reissue, obcl, attf  
FROM public.s57_feature where (obcl='M_QUAL' or  
obcl='OBSTRN' or obcl='SOUNDG' or obcl='UWTROC' or  
obcl='WRECKS') and attf->>'SOUACC' is not null
```

Result

Queries conducted 3 times since DQWG18:

- 2023-03-27
- 2023-09-28
- 2024-03-12

Totality				%
	2023/03	2023/09	2024/03	
POSACC	7616	7996	8413	10.5
SOUACC	16062	25496	34676	115.9

POSACC				%
M_ACCY	2287	2287	2287	0
M_QUAL	5329	5709	6126	15

SOUACC				%
M_QUAL	4546	4840	5011	10.2
OBSTRN	374	547	657	75.7
SOUNDG	9163	17197	23902	160.9
UWTROC	1111	1693	3717	234.6
WRECKS	868	1219	1389	60





Analysis – Increased number of encodings

% increase over 1 year period – increased number of encodings

- One explanation for increase in M_QUAL could be re-scheming resulting in more ENC's.
- Increase in OBSTRN, SOUNDG, UWTROC, WRECKS can potentially be explained as HOs follow up on HSSC14/59 action.

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Analysis – Increased encoding totality based

% increase over 1 year period – total number of instances in db.

- Number of encodings in PRIMAR db.
- % of objects encoded with POSACC/SOUACC March 2023 and 2024.
- Increase in encodings for the period March 2023 to March 2024 taking total number of instances in db into account.

Total % all objects full db				
	Nr in db	23/03 %	24/03 %	% incr.
M_ACCY	9210	24.83	24.83	0.00
M_QUAL	378907	1.41	1.62	0.21
Total % all objects full db				
	Nr in db	23/03 %	24/03 %	% incr.
M_QUAL	378907	1.20	1.32	0.12
OBSTRN	455168	0.08	0.14	0.06
SOUNDG	2157959	0.42	1.11	0.68
UWTROC	1619622	0.07	0.23	0.16
WRECKS	105099	0.83	1.32	0.50



Analysis – Increased encoding totality based

% increase over 1 year period – total number of instances in db.

- Very low increase (%) when taking total number of instances in db into account.
- May not be deemed important to encode POSACC/SOUACC on all instances (?).
 - (E.g., POSACC/SOUACC encoding on objects < 30-meter depth may not be of interest).

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Thank you for your attention
Questions?