Paper for Consideration by WENDWG14

Update on IC-ENC & PRIMAR RENC Co-operation activities

Submitted by:	IC-ENC & PRIMAR
Executive Summary:	For information. An overview of the progress of IC-ENC & PRIMAR RENC Co-operation activities
Related Documents:	WENDWG ENC Data Flow diagram (January 2024)
Related Projects:	N/A

Introduction/Background

IC-ENC & PRIMAR have an ongoing approach to co-operate on topics of mutual interest. Annex A of this paper describes the progress on these activities. It is the latest meeting record from the various joint meetings (latest one from October 2023)

Analyses/Discussion

Annex A illustrates the breadth of IC-ENC & PRIMAR Co-operation activities and the progress being made in a variety of area

Conclusion

IC-ENC & PRIMAR RENC Co-operation activities continue under the support of their respective groups of Members and governing boards.

Justifications and impacts

N/A

Action required of WENDWG14:

The WENDWG14 is invited to:

a.   Note this report.

Annex A

IC-ENC PRIMAR RENC to RENC Meeting

Date: 11th October 2023

Location: MS Teams & IC-ENC Meeting Room

Present: Stig Osaland, Svein Roar Aas, Hans Christoffer Lauritzen, Daria Mulyarenko (Teams), James Harper, Jake Sharland, Su Marks, Aaran Champion, Helen Upham, Alex Boobyer (Notes)

1. **Welcome**

JH welcomes PRIMAR and runs through the agenda before introducing new members of the team.

PRIMAR introduce themselves to the team and give an overview of their history and roles.

2. **Review of previous RENC-RENC meeting/progress**

Established that a better way to track actions/RENC-RENC progress is needed (the current report has evolved into something less than optimal).

JH ran through 20230119 report, ensuring actions were covered.

S-100 Part 15 – SM mentioned that a timeline regarding the certificate work from PRIMAR would be useful. PRIMAR has been supporting IHO with the software needed for IHO to act as Scheme Administrator. As with S-63, PRIMAR have now implemented S-100 Part 15, with software developed, installed and training given to IHO in Monaco in September 2023. Digital Signatures are still being discussed. PRIMAR understand they need to support all variations, from producers signing the data and then RENCs signing, SRA also referred to the possibility of signing data on behalf of producers. Keeping in mind the end user needs to accurately track the value chain back to the data producer. It was recognised that data producers may be different organisations for S-10x and national coordination will be required.

SM asked for more information on PRIMAR signing on behalf of a producer.

PRIMAR noted that details are to be clarified as they are still in the learning period. Robert may be able to provide further details. It was agreed that there would be benefits from RENC to RENC collaboration. SRA confirmed that the certificate should be available from IHO now.

ACTION RENC01/1 – To establish RENC collaboration regarding Digital Signatures to provide a consistent approach.

Web Map Services – PRIMAR haven't implemented support for the IC-ENC WMS model as they are not sure it is economically viable. For now, the decisions is to leave it to the distributors to merge data from both PRIMAR and IC-ENC for WMS purposes. PRIMAR distributes WMS from their own member

nations and some licensing partners. The demand isn't high enough to justify the investment of implementing support for the IC-ENC WMS licensing model in the PRIMAR distribution system.

IC-ENC frequency of release – SM gave an overview of the intermediate release cycle for S-57 Updates, stating New Editions are the next phase. Currently averaging 30 updates a day. VARs are not taking data on a daily basis at the moment. It is not currently mandatory in the VAR Agreement. SRA confirmed that from a VAR perspective the frequency of data needed to be customer-driven.

SRA noted PRIMAR have tested the intermediate release and it works fine. Also mentioned that to keep value, more dynamic data needs to be pushed through as quickly as possible. PRIMAR do not have the infrastructure for streaming data currently.

SM added the cadence of data needs to be established with the end user. Discussed with delegates at the S-101 project team meeting, S-104 is causing some issues at the moment, which is being explored through an EU project Interreg.

PRIMAR agreed, saying a lot of issues are with the readiness of the standards, with no solutions yet.

3. SC24 outcomes

JH gave an overview of the SC24 report and the meetings general structure.

Decision SC24/02 – fixed fee to stay at $0.50. PRIMAR stated they let members decide their price before adding a % based margin which is the same for all Member data. PRIMAR are looking to reduce the margin.

Multiple S-1XX organisations from a single nation/Member co-ordination – PRIMAR haven't received data from outside HOs yet. Member nation needs to coordinate or verify the produced data.

IC-ENC Safety Case – SM gave an overview of the Safety Case work and explained that it aligns with the UKHO Safety Management Plan. PRIMAR has risk analysis, operated by Norway Hydrographic Service.

Activity funding generation – Approximately 7 – 8 IC-ENC Members opted in at the moment. PRIMAR have this topic on the agenda for their PAC, with expectation there will be a couple of strong supporters for a similar concept. John Nyberg will be the IHO rep for the PAC.

Increased Research & Development permissions for VARs re ENCs -
PRIMAR are not taking advantage at the stage as they have adequate data available through their own members for development.

JS asked if there is value in sharing any developments with PRIMAR as a RENC, giving sight of what is going on in the wider market and attempting to achieve alignment on distribution policy with future MDPs.

4. PAYS/SENC Type Approval - Technical Spec

JS provided an overview of the current discrepancies being discovered and some proposed changes to the Joint-RENC PAYS Technical Specifications.

Established that steps are needed to ensure we drive the correct behaviour, asking if there is something we can do in our tech specifications to establish an accurate start date.

SRA asked if the discrepancies could be due to the starting interval.
JS agreed, adding because they get 72 hours, they are reporting with the incorrect start date. This is not an issue with VARs, it is down to the distributor. As RENCs we need to ensure we are promoting the right behaviours through holding the distribution chain accountable.

IC-ENC propose that a joint RENC register for PAYS solution providers needs to be established, to ensure a collaborated effort with the oversight of solutions on the market.

HCL agreed this is a good idea, mentioning it would be beneficial to include an additional column to include main starting distributor.

ACTION RENC01/2 – JS propose changes to joint RENC spec and discuss further if there are any amendments required. Agree any changes and publish new version.

SENC in S-100 era will be discussed at the next PRIMAR PAC meeting in November 2023.

A**CTION RENC01/3 – PRIMAR to update IC-ENC with their Members views/ position on S100 SENC following PAC meeting.**

5. IC-ENC's ECD Service

An update was requested by JS on PRIMAR's sub-ECDIS service, that was mentioned during the last RENC meeting.

HCL stated although PRIMAR have a service developed and agreements in place, their equivalent sub-ECDIS service is not operational. – Latest: PRIMAR aim to launch this service from 1st half 2024.

Not much drive to get this going at the moment as their largest Members have their own methods of distributing in this market. S-100 developments have a higher priority.

ACTION RENC01/4 – RENC to RENC exchange contracts (non ECDIS service) and see where differences lie.

PRIMAR asked about conditions for updates on the ECD Service.

JS informed that weekly updates are obligated at this stage, however we are hearing increasing interest in a daily release. HCL expressed update timeframes could be a competition advantage or disadvantage for DPs. How could we ensure they are downloading updates as we do not want to put in obligations we are not able to track.

JS said the agreements built are around ENC service. IC-ENC Members asked for a similar service to ENC, for the sub-ECDIS market. Service we have is very stringent because the Members asked for it to be designed that way.

6. ENC Conversions

Overview given by SM, covering the different elements of the IC-ENC Conversion Readiness Service to support Members transition from S-57 to S-101 and Dual Fuel production.

PRIMAR have a Conversion Task Force in place, which uses dKart and CARIS for conversion, SevenCs Analyzer for validation, and a tool to view coverage for both S-57 and S-101. SO confirmed that the report for this will be presented to PAC in November and this would be shared with IC-ENC. PRIMAR asked how the production workflow is established for each Member.

SM said there are many different options available, which is why Industry are invited to TC to share their production/conversion tool progress and answer Member questions on data migration/conversion/optimum workflow.

ACTION RENC01/5 – RENC to RENC collaboration to begin discussions around how to approach Dual Fuel to ensure a consistent RENC approach. PRIMAR to share report from Conversion Task Force with IC-ENC. PAC will have to approve that the report can be shared.

7. S-111 datasets

SM referenced the S-111 service capability developed in IC-ENC, to ingest batches of S-111 datasets, and process through the DMD. SM asked PRIMAR, as a VAR, when they want to start receiving the S-111 data via IC-ENC SM highlighted the current infrastructure changes, and recommended commencing in November 2023.

PRIMAR noted that they have many questions around S-111 and S-104, with data versioning, and dataset naming, the Timestamp being one of the main ones.

SM mentioned an IC-ENC paper submitted to the S-100WG7 meeting in 2022 on dataset naming conventions, as this is so broad in S-100 Edition 5.0.0.

PRIMAR also have S-111 capability and shared how they have looked into NOAA encoding of the data and there are differences between NOAA and CHS data for S-111, stating ingesting the data is easy; it's the distribution services where the problems arise. Which is causing a lot of issues for OEMs, and it is why a lot are currently sat on the fence. We should prepare for a period of learning and it would be good if more OEMs came onboard to enable this, as there are a lot of questions around S-104 and S-111 from distributors and end users. Perhaps we need to be more strict in what is ingested, to avoid problems.

SM said this needs to be harmonised across the RENCs. Starting work around product profiling, which narrows the scope of the Product Specifications to inform best practise. This is an evolving idea. Discussion followed on CATALOG.XML files, as the standard is not clear enough for implementation which is resulting in inconsistent results.

ACTION RENC01/6 – PRIMAR to give views on IC-ENC draft S-101 and S-102 CATALOG.XML templates/S-10x product profiles. Other stakeholders and PDT users to input also. RENC to RENC collaboration required to harmonise S-104 and S-111.

All agreed that S-100 needs to be baselined and the S-10x Product Specifications need to align and be harmonised. It was agreed that the RENCs have a combined input into the IHO working groups, noting the voice of approximately 70 members.

PRIMAR asked for a timeframe for making S-111 official.

SM stated that IC-ENC is currently developing the trial service, initially through PDT, for US and other Members, US already have this data freely available.

SRA said if IC-ENC start providing S-111 data, they will definitely take it, however problems are expected.

8.   Look ahead to C7

JH talked through the IHO Council 7 Meeting agenda.

S-100 Roadmap Decade Paper.
PRIMARs forward leaning HOs are Sweden, Norway, France for native production of S-101 ENCs in 2025.

JH asked which of the S-1XX will be PRIMAR priorities. PRIMAR – S-101, 102, 111 ,104, 124, 128 will be priority. S-131 is also in the plan.

SC24/26 action **–** SM referenced the SHOM paper to IHO Council 7, that proposes an updated diagram (Synoptic Diagram, Annex 2 of the IHO Roadmap for the S-100 Implementation Decade) which removes the reference to RENCs converting the data. IC-ENC supports this updated diagram and SM asked if PRIMAR also support this, adding that a joint RENC approach would be beneficial at IHO C7.
SM ran through the potential options for future production of S-101 ENC in conjunction with S-57 maintenance/production. All agree the proposed diagram is better than the existing. SM suggested that we support, highlighting issues and potential time delays with a third party to produce on their behalf. To be discussed at Council 7. From the RENC point of view, it is best not to have us associated with converting the data.

PRIMAR will probably not be converting on behalf of their Members. Decision to be made by PAC.

S-122 – PRIMAR do not currently have on their process list.

9.   Look ahead to S-100WG

SM referenced Mikus' papers to S-100WG8 around support files which are currently being reviewed to establish whether there will be a joint RENC approach.

Potential for a joint RENC paper for S-104 and S-111 naming conventions to be discussed.

Agreed by all that there is more clout and harmonisation in joint proposals to IHO S-100WG, which is only a good thing for the end user.

ACTION RENC01/7 – RENC collaboration to agree S-100WG8 papers.

10. Look ahead to Feb 2024 WENDWG meeting, last WENDWG actions

Email from WENDWG Chair sent a couple of weeks ago, asking for agenda items.

ENDS – Electronic Navigation Data Service – supply and throughput of S-100 products.

PRIMAR stated it is business as usual. No real change to RENC reporting to WENDWG needed.

PRIMAR distribute Pearl River Delta/Hong Kong and MSA China data. PRIMAR receive the current Peal River Delta data from Hong Kong, the rest of coverage over China originates from the Shanghai Chart Centre (MSA). Noted China could be involved in the next WENDWG meeting.

ACTION RENC01/8 – Give joint RENC / RENC slides in WENDWG meeting

ACTION RENC01/9 – Draft S-57 & S-100 dataflow diagram, adding HOs as they mature as producers. Potential to introduce data from RENC surveys. Establish how best to share the diagrams at a later date

JH shared that Argentina will be offering a S-102 service. PRIMAR as a VAR would be able to sell the data. PRIMAR said this depends on the business model, as it could be problematic. IC-ENC to review PRIMAR approach. Marketing in PRIMAR need to propose weighted price for S-1xx data, perhaps bundling the products together to make it more cost effective?

ACTION RENC01/10 - WENDWG action for collaborative e-learning platform. RENCs to respond with an update at the next meeting.

WENDWG13/26 - ENCWG-8 – was this action reviewed at the meeting?

11. Russia ENCs

Redacted.

12. Indonesia membership of IC-ENC – data flow etc

Onboarding of ENCs has begun. A couple of teething issues IC-ENC need to address. Goal that it is all is in place well before 1st January 2024 at which point VARS will report sales to IC-ENC.

AC shared that working out discrepancies is key. 523 ENCs currently in AVCs. 16 in PRIMAR that aren't in AVCS. Usage band 3, 4 & 5. Dan Miners (UKHO GTL) to provide confirmation regarding status of the 16 cells.

ACTION RENC01/12 – AC to give screenshot of 16 cells to PRIMAR. IC-ENC to keep PRIMAR informed about progress of release plan for ID ENCs in their service.

PRIMAR noted it is best to get cells from ID. IC-ENC should already have the Cell Keys. AC confirmed that IC-ENC will use the keys provided by PRIMAR for the ID data release.

AC confirmed that the Validation Team will assess the known overlaps in line with IC-ENC policy ahead of the data release.

S-101 project team spreadsheet – ID have two cells that still have the SevenC's ECDIS display issue. AC will work with ID to produce New Editions to be supplied to IC-ENC ahead of the data release.

13. S-128 harmonisation

After NIPWIG meeting, PRIMAR provided IC-ENC with some S-128 test datasets for review. IC-ENC are currently iterating their S-128 datasets and are also comparing PRIMARs datasets to identify any areas of difference where harmonisation may be required. It was agreed that RENC collaboration was needed to generate consistent S-128 datasets.

ACTION RENC01/13 – Collaborate on S-128 together. IC-ENC will provide feedback when the comparison is completed. Share with NIPWG once completed.

14. Future Distribution policy with S-100

JS expressed that he feels there is still value in working together as RENCs, and involving VARs in the future development of distribution policy. There is an opportunity to set the future policy and learn from the current shortfalls in distribution policy. This will be front and centre of the IC-ENC workplan for 2024.

HCL explained that PRIMAR do not have much communication with VAR or DPs at this stage. They took the decision to stick to the same ENC licensing model.

In adopting the same model, the services are already there, ready to be used, instead of developing new methods, which would mean further outlay / support needed. PRIMAR state they must compare value against cost. They said the model they have fits S-100 products very well, however the price could be too high for the end user if they must pay multiple times.

JS added that IC-ENC will not change the policy for the sake of it. There is however a need to look at whether we can use component pricing, to assist members with the pricing of S1xx products. Need to provide a plan and a solution for their data imminently.

HCL added that an entry price guide to make it simple would be beneficial and agreed to work with IC-ENC when it comes to future developments.

RENC-VAR Discussions

Redacted.

Note: FOR REASONS OF ECONOMY, THE DELEGATES ARE KINDLY REQUESTED TO BRING THEIR OWN COPIES OF THE DOCUMENTS TO THE MEETING