

### The View of the VARs

Licensing, Pricing, SENC Distribution and other issues

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## Agenda

01 Role of VARs (Data Service Provider)
02 SENC distribution
03 Licensing
04 Pricing
05 The Dynamics of Innovation
06 Recommendations







## **Role of VARs (Data Service Provider)**

#### Implications of the term VAR = Value Added Reseller

- Product is distributed by a "Reseller"
- "Resellers" are no partners, but "only" distributors
- Adding value is unspecified

Understanding of the "VARs"

- ENCs are no products, only the consolidation of the ENC data sets build a product
- VARs understand themselves as partner of HOs in supply chain
- VARs see themselves rather as "Data Service Provider" (DSP)
- Customers relying on DSP for all their data needs (ENC, real-time weather, tides and currents information...)
- End-user expect complete coverage, not for primary navigation when no ENCs are available
- End-Users expect DSP to ensure data is working on all different platforms



## Why DSP rather then VAR





## The complexity of the Data Supply Chain





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## A "many to many" relationship



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## Add "digital"





### **Add standards:**





# **Fusion of Content and Technology**



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### **SENC** Distribution

- SENC is the internal database in the ECDIS
- ENC is compiled and encrypted in the SENC format
- SENC distribution simplifies the installation and update procedures of chart data in the ECDIS system
- ENC data is never unprotected & in an open format as with S63 encryption of S57 data
- SENC distribution facilitates supply and use of 'multifuel' data in the ECDIS



### **SENC compilation** – Jeppesen Marine Example







### **ENC in SENC distribution** – Jeppesen Marine Example

DNV Type Approved SENC distribution infrastructure



• When installed in the ECDIS system, technology ensures that ENC data is always given proirity



### **On-Line Updating Service** – Jeppesen Marine Example

- On-line, direct access updating service available to subscribers at no cost
- Enables the chart database on board to be updated on line with official ENCs in SENC format via e-mail or Internet





## Licensing

#### **Assumptions:**

- ENCs should be owned and produced by the HOs for their territorial waters only
- Some HOs distribute through RENCs -> Licensing is through RENCS without involvement of owning HOs
- In the RENC concept the DSP partner is the RENC, no longer the HO
- RENCs only are allowed to act in "current conditions"
- End-User do not care about differences in licensing conditions. They expect DSP to solve this and make it transparent

#### **Questions:**

- Who is the owner if "HOs" are producing ENCs for other waters?
- How can advanced innovations on marine safety and efficiency being introduced if the RENC licensing is restrictive but negotiation with RENCS are prohibitive?
- How to handle conflicting licensing terms which prevents DSPs to harmonize services? Examples:
  - Request for promoting Data supplier on end-user media
  - Different, conflicting liability terms



# **Pricing**

#### In ENC and derivation different pricing themes exist:

- % Calculation
- Access fees
- Flat fees
- Minimum fees
- "Recommended Product costs"

#### **General Pricing Conditions:**

- Pricing must be acceptable to the market: never pricing navigational products out of the reach of navigators.
- Fair and equal pricing guarantee fair and equitable licensing arrangements, whereby all licensees are subject to identical conditions

# **Dynamic of Innovation**



#### The Paradigm shift

- The "Analog" paradigm requires a product to issue data.
- The "Digital" paradigm enables the separation of data and product

#### Need for high precision data

- "Analog" data does not support easy comparison and overlap
- "Digital" data requires higher level of harmonization
- High precision on-screen positioning (DGPS) highlights deficiencies in cartographic data

#### Need for additional data

- Increasing density of traffic and increasing risk (e.g. ship size) requires additional data to gather necessary information
- New methods are enabling new data streams to ship masters (sensors, realtime weather, AIS, LRIT...)
- Additional data enables higher precision of situational awareness and prediction

#### Need for data aggregation

- New data streams can easily overload ship masters
- Data aggregation is needed to convert data into information using situational analysis

#### Adapt to speed of technology innovation

- Technological innovation is doubling speed every five years
- Innovative new products will increase safety and efficiency
- Hydrographic data presentation and products using hydrographic data cannot "sit back"

**Dynamic of Innovation** 



- Standards will have to adopted to speed of innovation
  - S-100 a solution for rapid adaption for new objects and features
- New Standards need to be flexible for integration
  - S-100 as an option to integration IALAs (Universial)- Marine Data Model (U-MDM)
- IHO has the opportunity to be the "Gate-Keeper"
- Innovations will not stop
- Stakeholders can either "join the journey" or "miss the train"



### Recommendations

- IHO to focus on developing "Process Standards"
- IHO to partner with various stakeholders as "Gate-Keeper" for new integrated standards.
- Data Service Provider (DSP) to fully accept data ownership by HOs for their territorial waters
- DSP to fully cooperate with HOs
- HOs and DSP to cooperate in defining fair and acceptable pricing models
- HOs as data providers are accepting DSP as partners in the supply chain, allowing real value addition (SENC distribution, new innovative Products...)
- DSP to be ready for quality certification once standard for "Data Supply Chain Certification" is ratified
- HOs to cooperate with DSP to improve safety and efficiency at sea

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## **THANK YOU !**