Hydro 2015, Cape Town

Maritime Source Data Collection, Management and Integration

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Source data…

Source data to a Hydrographic office today originates from a variety of different entities, organizations, departments and offices.

The source quality, content, purpose and impact on product compilation also plays a significant role.

It is challenging to administer and to ensure that correct sources are used to its best and that the highest possible quality output is achieved.
Source data providers...

RIVER Administrations

HARBOR Administrations
Remote Locations

Central Location

Local Source Databases

Central Source Database

Production Environment

Web User

Source data collection...
Product Maintenance

Nautical products are mainly maintained based on Notice to Mariners information and other prepared/derived publications.

This have been sufficient for keeping paper charts maintained and up-to-date.

This approach was established to provide mariners with corrective information so that they could keep their (paper) products updated.

The same information is also used by the HO themselves for their own product maintenance.
The conventional way...

**NtM Production**
- Source receipt
- Source/NM Processing
- Booklet Compilation
- NtM Booklet release

**Product Maintenance**
- Paper chart maintenance
- ENC Maintenance
- Product updated
Product Maintenance

This process is sufficient, and required, for the mariners to keep their cartographic/nautical product portfolio updated.

For a Hydrographic office, with e.g. introduction of "Print on Demand" services (paper charts and other digital products and services there is a higher demand for more accurate and detailed information at an earlier stage then what the NtM publication can provide.
Maritime Source Data based process

To improve the product maintenance, and at the same time streamline the NtM production, Jeppesen have introduced a Source Data Collection & Management system.

… fully integrated with NtM Booklet production.

The source data, with all affiliated information, are the basic sources not only for the NtM production but also for the product maintenance.
The preferred and integrated way...

- Source receipt
- Booklet Compilation
- NtM Booklet release
- Source/NM Processing
- NtM Production

- Paper chart maintenance
- Product updated
- Product Maintenance
- Tracing/Block production
- ENC Maintenance
- Product updated
Source Message for NtM and product update

The Source to NtM process can be described as follows:

**Registering:**
- Record incoming messages
- Process metadata
- Attach source data files
- Status (Permanent, T or P)
- QC/QA of source message

**Propagating message to:**
- Relevant NtM section(s)
- Dispatch to production line
- QC/QA

**Editing NM item**
- Format the textual notice
- Verify geo info.
- Cancellation instructions
- Product linking
- QC/QA of the NM

**NTM Booklet processing**
- Booklet structure/meta data
- Sectioning
- QC/QA of NtM booklet (Pre print)
- Publication

**Notice to Mariners**
- Format the textual notice
- QC/QA

**ENC Updating**
- SM displayed
- Geo referenced
- Access to originals
- QC/QA

**PC Updating**
- SM Displayed
- Geo referenced
- ENC ER used
- QA/QC
Source to NtM Production flow line

- Source data register
- NtM Publishing
- Dispatching
- Production & Maintenance ENC & Paper chart
- Tracing/Block production
- NtM Editing
Integrated Source & NtM Production system

- Source registering and archiving system
- Sources processed to NM items
- A complete NtM production environment, from source to publication
- Defined templates for NM publications
- Digital tracing/block production integrated
- Automated NtM booklet compilation
The NtM production is completed by following 3 roles:

<table>
<thead>
<tr>
<th>Roles/Profiles</th>
<th>Process</th>
<th>Description</th>
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<tbody>
<tr>
<td>Dispatcher</td>
<td>Source Message processing</td>
<td>Responsible for the Source Message database, metadata collection and full editing rights for the SM. Read rights to Draft and Published NtM database</td>
</tr>
<tr>
<td>Notice Editor</td>
<td>Notice Item compilation</td>
<td>Responsible for the Notice Item processing, editing, QC and finalizing. Read access to Source Messages and published Notice to Mariners booklets. This is utilizing and improving the quality for the editorial work and the QC phase.</td>
</tr>
<tr>
<td>NtM Booklet Publisher</td>
<td>NtM Booklet completion</td>
<td>Responsible for the full NtM booklet, compile the booklet with all item types, setting order and layout. Published the NtM Booklet on QC/QA approval. Read rights to SM’s and the draft NtM database</td>
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</table>
Dispatching
Source revision handling
Source based Product Maintenance
Integrated maintenance and product update processes
NtM Editing

Notice Composer

Notice to Mariners

JADRANSKO MORE - ADRIATIKA
HRVATSKA - CROATIA

Area, Sub Area: Test SM
Insert F1 3s R. in position 44°47'27.42"N - 13°55'00.56"E

Enter text of Notice in international (English) language here
Karta (poulejedni ispravak) - Chart (Last correction): HR3C0016 ; HR4A0003.

Source Message Composer

Blocks and Tracings Preview

1:4000 43°30'22.22" N : 16°26'13.23" E
When a NtM Booklet is to be released, the NtM Publisher collects all processed NM Items, for each NtM booklet section.

The NtM Publisher organize each NM item and section and allow a pre-publish of the NtM booklet for QC and approval purposes (MS Word and PDF format).

Blocks and/or Tracings are collected and included automatically with the pre-publish document.

When accepted, the NtM booklet is released when the booklet is published.

All ”Draft” NM items are flagged as ”Published”
### Integrated Tracings production

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**Chart**

IN52015M

**Previous Correction**

/XX

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**Chart**

IN52015M

**Previous Correction**

/XX
Integrate Block production
Thank you for your attention

For further information or questions, please contact:

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Please visit us at booth #9...