An American National Standard

Standard Guide for
Database Structure of Electronic Data Interchange Between Ship Owner and Shipyard for Contract Administration[1]

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1. Scope

1.1 This standard provides the database structure of electronic data interchange (EDI) information between ship owner and a shipyard for contract administration. Ship owners (hereinafter referred to as owners) and shipyards may each have unique software programs to manage their respective portions of a ship repair period. There is information that must be exchanged between the parties during the contract period. This standard has been developed to establish common field lengths, names, and types such that the exchanged information can be used directly by the respective software programs without scanning, typing, or redundant keying of information.

2. Terminology

2.1 *Definitions of Terms Specific to This Standard:*

2.1.1 *BLOB*—short for binary large object, a collection of binary data stored as a single entity in a database management systems (DBMS). BLOBs are used primarily to hold multimedia objects such as images, videos, and sound, though they can also be used to store programs or even fragments of code. Not all DBMSs support BLOBs.

2.1.2 *CHAR(XX)*—character data, alphanumeric where XX represents the maximum number of characters permitted and SQL fills the remaining spaces with blanks if fewer than the maximum are entered.

2.1.3 *Condition Found Report (CFR)*—a report generated by the shipyard to inform the owner of conditions found, deficiencies with the specification, or any other pertinent information regarding a particular work item.

2.1.4 *Condition Found Report Response*—the owner's response back to the shipyard's Condition Found Report. It may be a simple acknowledgement of receipt or a lengthy response and reference to a Request for Proposal.

2.1.5 *DATE*—stores the year, month, and day values of a date. The length of a DATE is ten positions, as in 01/31/2000 (for 31 Jan 2000).

2.1.6 *INTEGER*—a number that has no fractional part and its precision (maximum number of digits) depends on the specific SQL implementation.

2.1.7 *owner*—in this case, the recognized authority for contracting ship repair work.

2.1.8 *Request for Proposal*—an owner-generated document asking the shipyard to add, modify, or delete work to the existing package. It may or may not be related to a shipyard initiated CFR.

2.1.9 *shipyard*—in this case, the principal party to a contract with a ship owner.

2.1.10 *SQL compliant*—an industry standard data sublanguage, specifically designed to create, manipulate, and control relational databases. SQL-92 is the latest version of the standard.

2.1.11 *tests and trial agenda*—the agenda provided by the shipyard, which details the planning schedule for all testing events to be conducted during a dock or sea trial.

3. Significance and Use

3.1 *Intended Use*—Compliance with this practice will allow the sharing of electronic data between contracting parties that is normally done by hard copy. This can only be used when both parties use a database-derived software package to manage their contracts. Specifically, it will:

3.1.1 Eliminate the duplication of manual entry of data into each party's contract administration software package and

3.1.2 Allow for wide access of the data to all authorized parties.

4. Database Structure

4.1 A shipyard contract management database, or an owner contract management database, may contain hundreds of tables and fields and thousands of records. Much of the data is business-sensitive and must remain under the control of the party. However, there is data that is shared and common to both parties in a ship repair contract.

4.2 *Condition Found Report*—A Condition Found Report, generated by the shipyard and forwarded to the owner, will be structured as follows:

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Name	Required Field	Type	Size	Data Element Owner
Condition Found Report ID	Y	CHAR	10	shipyard
Contract number	Y	CHAR	16	owner
Work item number	Y	CHAR	7	owner
Equipment ID number	N	Integer	12	owner
Ship name	N	CHAR	30	owner
Date Condition Found Report Generated	Y	DATE MM/DD/YYYY	10	shipyard
Shipyard POC	Y	CHAR	30	shipyard
Condition	Y	memo	BLOB	shipyard
Recommendation	N	Memo	BLOB	shipyard

4.3 *Condition Found Report Response*—A Condition Found Report Response, generated by the owner and forwarded to the shipyard, will be structured as follows:

Name	Required Field	Type	Size	Data Element Owner
Condition Found Report ID	Y	CHAR	10	shipyard
Contract number	Y	CHAR	16	shipyard
Ship name	N	CHAR	30	owner
Response date	Y	DATE MM/DD/YYYY	10	owner
Owner POC	Y	CHAR	30	owner
Response	N	memo	BLOB	owner

4.4 *Request for Proposal*—A Request for Proposal, generated by the owner and forwarded to the shipyard, will be structured as follows:

Name	Required Field	Type	Size	Data Element Owner
RFP ID	Y	INTEGER	4	owner
Condition Found Report ID	Y	CHAR	10	shipyard
Owner contract number	Y	CHAR	16	owner
Shipyard contract number	Y	CHAR	16	shipyard
Ship name	N	CHAR	30	owner
RFP date	Y	DATE (MM/DD/YYYY)	10	owner
Owner POC	Y	CHAR	30	owner
Statement of work	Y	memo	BLOB	owner

4.5 *Proposal*—A Proposal, in response to an RFP and generated by the shipyard and forwarded to the owner, will be structured as follows:

Name	Required Field	Type	Size	Data Element Owner
Proposal ID	Y	CHAR	10	shipyard
Owner contract number	Y	CHAR	16	owner
Shipyard contract number	Y	CHAR	16	shipyard
Ship name	N	CHAR	30	owner
RFP ID	N	INTEGER	4	owner
Proposal date	Y	DATE (MM/DD/YYYY)	8	shipyard
Shipyard POC	Y	CHAR	30	shipyard
SOW comments	N	memo	BLOB	shipyard
Shipyard proposal	N	Currency ($#,###,###.##)	$M	shipyard

4.6 *Test and Trial Agenda*—A TTA, generated by the shipyard and forwarded to the owner, will be structured as follows:

Name	Required Field	Type	Size	Data Element Owner
TTA ID		Number (Long)	4	
Owner contract number	Y	CHAR	16	owner
Shipyard contract number	Y	CHAR	16	shipyard
Ship name	N	CHAR	30	owner
Agenda date	Y	DATE (MM/DD/YYYY)	8	shipyard
Shipyard POC	Y	CHAR	30	shipyard
Event table[A]	Y	memo	BLOB	shipyard

[A] The event table will include the test name, equipment name, start time, and required attendees (witnesses).

5. Keywords

5.1 contract administration; database; electronic; owner; shipyard