

## SOS User Manuals

SOS Data and Programs are developed to suit either one of the following three computer configurations; configuration A, configuration B, or configuration C. Configuration A is slower and may accommodate small and medium data volumes. Configuration B is networkable, faster, more reliable, and may accommodate large data volumes. Configuration C contains pieces of hardware and software other than that of configurations A and B. Details of the computer configuration A or configuration B are found in the user manuals. 'SOS Edition A' and 'SOS Edition B' identify the data and programs using configuration A and configuration B, respectively. In case networking and large data volumes are not so desired while the shipping problems at hand are large enough and need fast processing, 'SOS Edition AB' may be used. In case SOS integrates with configuration C, 'SOS Edition AC', 'SOS Edition BC', and 'SOS Edition ABC' may be used. Consult the SOS service provider for the latter three editions.

This folder contains the following materials to guide the ship operator on how to use SOS Data and Programs:

- 1- "SosDataAndSosVoyagerUserManual.pdf" for the user manual of SOS Data and SOS Voyager programs.
- 2- "SosAllocatorUserManual.pdf" for the user manual of SOS Allocator programs.
- 3- "SosAppraiserUserManual.pdf" for the user manual of SOS Appraiser programs.

Manuals are contained in two subfolders: one for 'SOS Edition A' and 'SOS Edition AC' and the other for 'SOS Edition B', 'SOS Edition BC', 'SOS Edition AB', and 'SOS Edition ABC'

Each manual contains case studies for the ship operator to review. The case studies have some built-in dummy ships, which the ship operator cannot change their data without consulting the SOS service provider. However, the ship operator may change the data related to cargo, port, route, charter party, and shipping operation. With the guidance of the user manuals, the ship operator may try SOS data and programs many times as to make sure the fleet performance and profitability are considerably improved. The tried case studies are simple (1-3 ships and 10-15 cargoes) as to permit the ship operator reach a solution while assessing the magnitude of the improvement without too much effort. However, SOS is scalable. It can go up to 60 open ships of same type and 60 compatible cargoes. It is advisable that the ship operator finds his own solution to the case he builds, without using SOS, and then compare it with the SOS solution. The solution finds which cargo goes to which ship following which route. If the two solutions do not match, the ship operator has to try his solution on SOS, where the operator-solution cargoes are made booked to their operator-solution ships. The reason for this is to make sure that the ship operator and SOS give the same financial results. SOS saves the financial results of the solutions broken down into gross profit, days, net freight, port dues, cargo handling cost, canal and strait dues, fuel cost, and fixed cost. This break down enables the ship operator to trace the shipping elements causing the difference, if any, between the financial results of his solution and the one given by SOS in trying his solution. The reconciliated financial result of the ship operator solution may then be compared to the financial results given by SOS solution. The ship operator can then calculate the improvement SOS adds to the fleet performance and profitability the ship operator used to have under his current practices. If current practices prove to favor the transportation of less-profitable cargoes for unjustifiable reasons, it is advisable not to try SOS under such practices.

SOS is data-intensive application. More than 80% of the data is acquired at the beginning of SOS usage. Most of this data relates to ship, port, canal, strait, currency exchange, and distance between ports. For the latter two data items, SOS integrates with internet sites such as Xe and DATALOGY for currency exchange and distance between ports, respectively. Data on canal and strait is extracted from the authority running each utility. Data on port is submitted by the ship agent or extracted from past disbursement accounts. Data on ship is extracted from the ship operator's records.

Finally yet importantly, SOS comes in two products; one is standard and the other is customized. The SOS standard product has an assumed data structure of ship, cargo, port, canal, strait, charter party, and shipping operation, which is described in the SOS user manuals. The customized product has a tailored data structure as to suit special business needs of the ship operator. The user manuals assume the standard product of SOS.