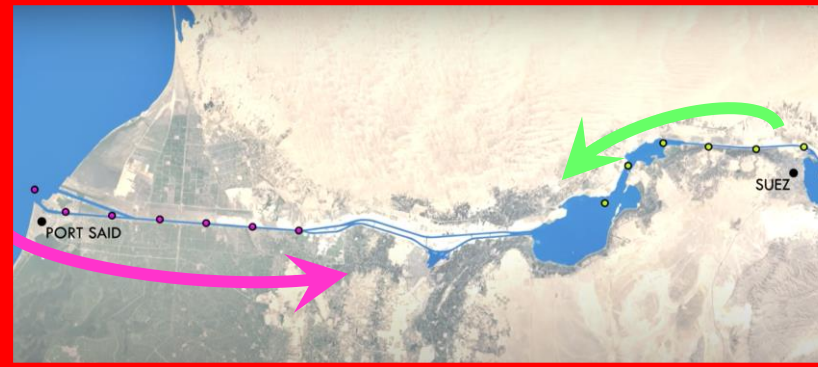


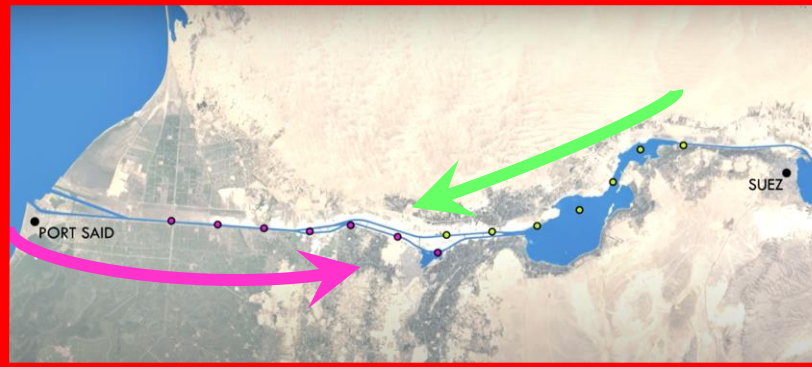


The Suez Canal runs north and south connecting the Red Sea and the Mediterranean Sea. Ships used in global trade use this canal as a shortcut; it saves them a trip around the continent of Africa. On its north and south end the canal is only one shipping lane wide, so shipping traffic must be scheduled carefully to avoid jams. Recently the cargo ship Ever Given ran aground in one of these segments of the Suez Canal effectively freezing international trade for over six days.

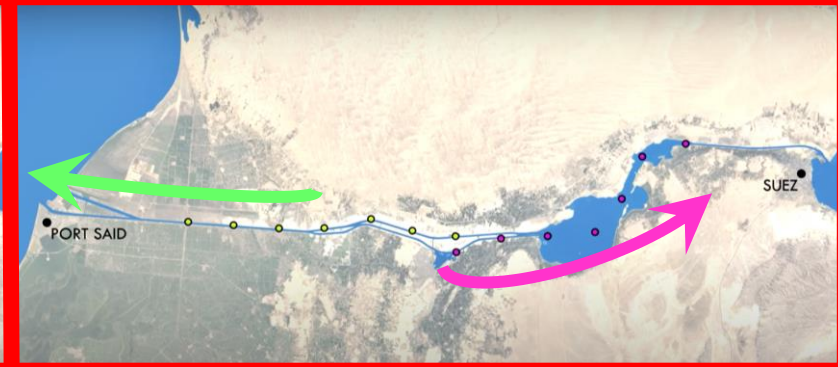




Ships leave, travelling in convoys, from both the North and South ports. The canal is only one lane wide at either end.



In the middle, where there are two branches, the southbound convoy takes the west branch, and the northbound the east branch.



The convoys are scheduled to be fully on the east or west branches before the oncoming convoy needs the single-lane segment of the canal.

A

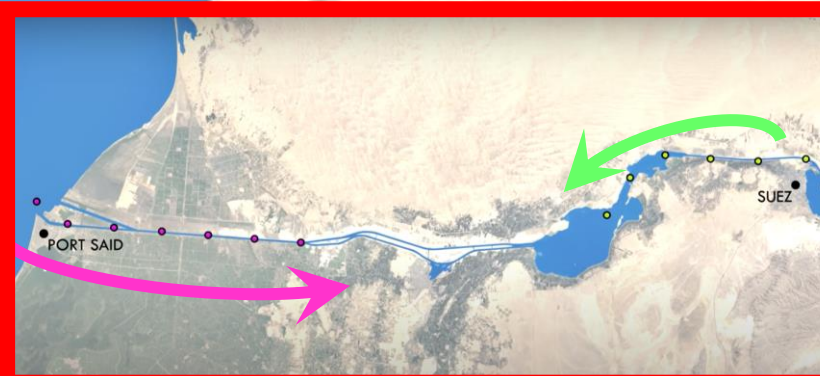
B

C

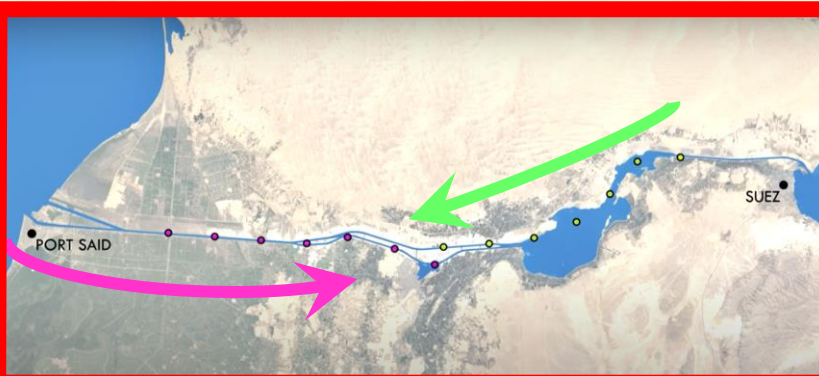
D

If you worked for the Suez Canal Port Authority scheduling convoys crossing the canal, what information would you need in order to manage the traffic most efficiently?





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If you worked for the Suez Canal Port Authority scheduling convoys crossing the canal, what information would you need in order to manage the traffic most efficiently? *The distances from A to B, B to C and from C to D/the speed of the convoy/the length of the convoy*