

Working group « interoceanic seacanals »

1. Typology of canals for large seagoing vessels

Some are linking oceans, other are connecting an ocean with an adjacent sea, and other an ocean or a sea with a lake system. Only the first category will be covered in the planned conference, and the other will just be mentioned in the general introduction

a) *three major interoceanic canals*

- the Suez canal (whose latest deepening and widening scheme is nearing its end)
- the Panama canal, where a dramatic expansion scheme is under way (2015 ?)
- the planned Kra canal through the Kra Isthmus in Thailand

b) *other sea canals*

- the Kiel canal <http://www.kiel-canal.org/english.htm>
- the Corinth canal http://en.wikipedia.org/wiki/Corinth_Canal
- the Canso Strait canal <http://www.ccg-gcc.gc.ca/e0003804>

c) *maritime access canal to a lake system*

- the Great Lakes- Saint Lawrence Seaway System <http://www.greatlakes-seaway.com/en/>
- the Södertälje canal (to the Swedish Lake Malaren) <http://www.sverigesochnorgeskanaler.com/waterways/sv/the-sodertalje-canal>
- the Trolhätte canal (to the Swedish Vanern Lake) <http://www.sverigesochnorgeskanaler.com/waterways/sv/the-sodertalje-canal>
- the Saimaa canal (to the Finnish Saimaa lake system)
http://portal.fma.fi/sivu/www/fma_fi_en/services/fairways_canals/the_saimaa_canal

2 Basic facts about the Suez canal

See their general website, <http://www.suezcanal.gov.eg/> and specially the following sublinks

- a) History : <http://www.suezcanal.gov.eg/sc.aspx?show=8>
- b) Evolution of technical characteristics (currently 24 m / 66' deep, for 240,000 dwt tankers fully laden ; the Suezmax norm does not mean anything, then , as these are VLCC's <http://www.suezcanal.gov.eg/sc.aspx?show=12>
- c) Traffic statistics : 2009 was significantly down (560 Mt) from the historical record of 723 Mt in 2008 <http://www.suezcanal.gov.eg/TRstat.aspx?reportId=7> Oil traffic is nowadays rather secondary (117 Mt in 2008, of which only 57 Mt for crude oil, most of which flows nowadays through the SUMED pipeline, whose capacity is 120 Mt/year) and containers are the leading traffic category (343 Mt in 2008)
- d) Toll revenues are very important for Egypt ! (4.3 billion USD in 2009, down from 5.4 billion USD in 2008) <http://www.suezcanal.gov.eg/TRstat.aspx?reportId=4>
- e) Future plans are limited, <http://www.suezcanal.gov.eg/sc.aspx?show=6> even if it would be feasible to dredge deeper ; there is little need however, as all containerships and 99 per cent of the bulk fleet can go through after the last deepening ; however only 66 per cent of the tanker fleet (in cumulated tonnage) can use the canal fully laden (all can go through when in ballast, however)

3 Basic facts about the Panama canal

See their general website, <http://www.pancanal.com/eng/index.html> and specially the links :

- f) History : <http://www.pancanal.com/eng/history/index.html>
- g) Technical characteristics (frozen since 1914 because of the size of the locks, at the Panamax norm of about 75,000 dwt for bulkers, 4,5000 TEUs for containerships and 90,000 gt for cruise ships) <http://www.pancanal.com/eng/general/asi-es-el-canal.html>
- h) Traffic : <http://www.pancanal.com/eng/op/transit-stats/index.html>. No calendar years here, but fiscal years ending on September 30th ; 2009/2010 has just been published and traffic was up to Last year was up from 201 to 208 Mt, lightly less than the 213 Mt traffic record

registered in 2007/2008 (all tonnages here are in metric tons, after conversion from long tons). Oil traffic is marginal (there is also a cross-isthmus pipeline, but it has been closed for years) and containers are also leading nowadays, with 56 Mt in 2009/2010. Demand is much higher, however, and a lot more container ships could use the canal if it was not congested and undersized by current standards (more than one third of the current container fleet is overpanamax-sized, with vessels up to 14,000 TEUs)

- i) Toll revenues are very important for Panama as well, but less than in the case of Egypt !as the average level for the tolls is lower, despite recent increases (1.5 billion USD in 2009/2010, up from 1.4 billio USD in 2008/2009)
<http://www.pancanal.com/eng/op/transit-stats/table01.pdf>
- j) There is a dramatic expansion scheme, with a series of six new megalocks (more of less the size of the largest locks in Antwerp, with deepening and widening of the current navigation channels for so-called new panamax-sized containerships of about 12,000 TEUs and small capsizes bulkers (160,000 dwt or so) <http://www.pancanal.com/eng/expansion/informes-de-avance/avance.html> See also http://en.wikipedia.org/wiki/Panama_Canal_expansion_project The new locks are being built where the US Navy had planned, just before WW2, new locks for its planned (but cancelled) Montana-class superbattleships.
<http://www.globalsecurity.org/military/facility/panama-canal-third-locks.htm>

4. The planned canal (and/or pipeline) through the Kra Isthmus

Section under construction !