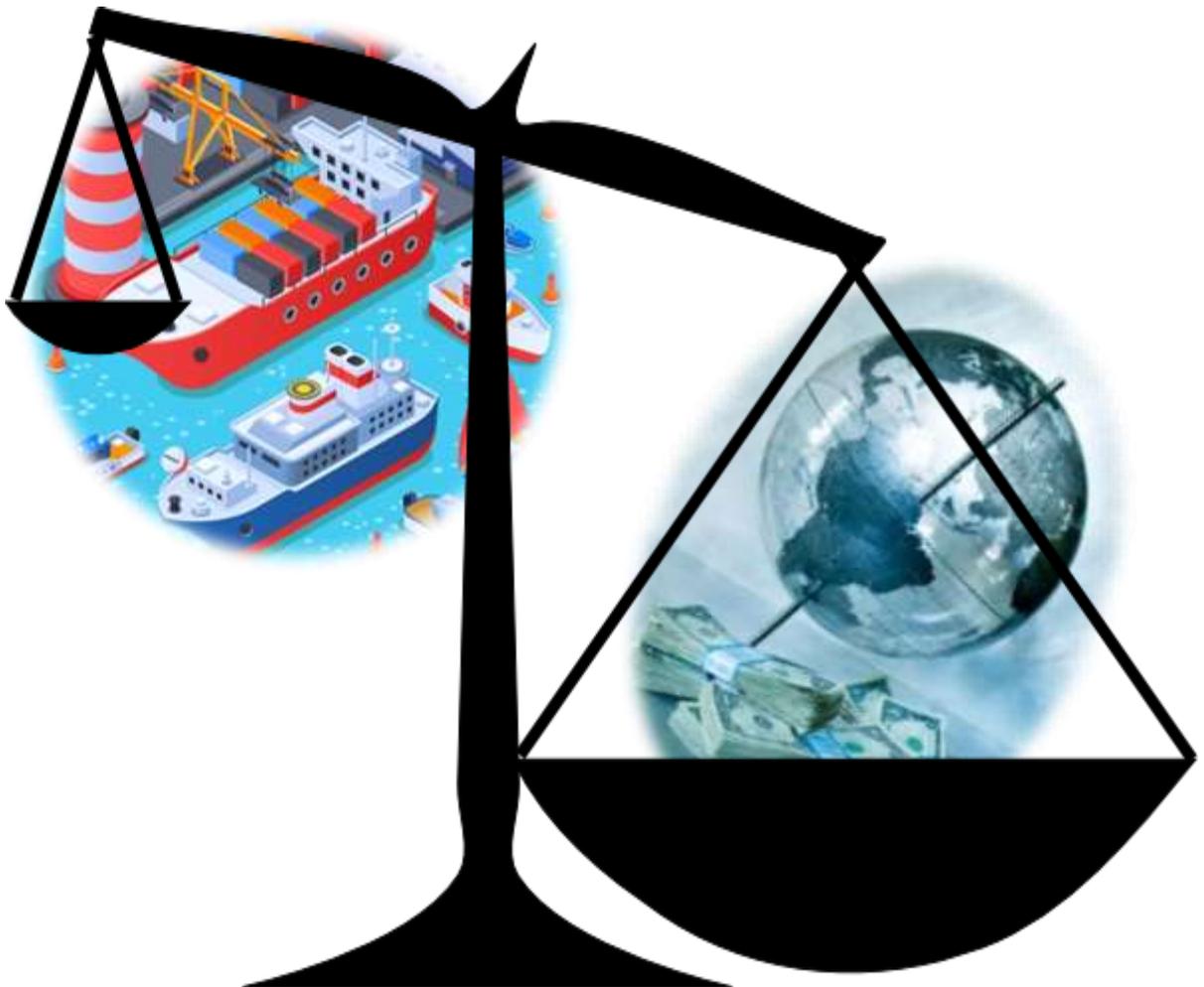


Maritime Economics

Grade 10-Term 3&4

Learner Guide



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Learning Outcome 3: International Trade

1. What is international trade ?



-  The Rooibos plant is endemic to South Africa, and yet Rooibos tea is sold in shops in more than 30 countries around the World. On average, about 14,000 tons of Rooibos are produced in South Africa per annum, and about 6,000 tons of Rooibos is used abroad. How does the South African produced Rooibos tea get to these countries?
-  Samsung is a dominant brand for mobile phones in the South African market. Samsung's market share in South Africa was over 43% in May 2018. Yet by 2020, the only countries which had been producing Samsung mobile phones were South Korea, Vietnam, India, Indonesia and Brazil. How is it possible that Samsung mobile phones are sold in shops in South Africa?
-  South Africa consumed 11 billion litres of petrol in 2007, with most of the crude oil to meet the demand having come from Saudi Arabia, Nigeria, Angola, Qatar, and United Arab Emirates. How has South Africa arranged to get the crude oil and refined fuels from these countries?
-  Countries such as China, India, Mozambique, Korea, Netherlands, Slovenia, Japan, and Switzerland use iron ore from South Africa. In fact, the total value of iron ore from South Africa in 2019 was USD5.7 billion. How does each of the iron ore receiving countries arrange for getting South Africa's iron ore?
-  South Africa received USD8.84 billion from abroad and spent USD3.35 billion for international travel services in 2018.

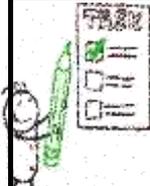


Meaning of INTERNATIONAL TRADE

International trade is the buying and selling of goods and services between countries.



Figure 1: International trade



Task 1:

1.1. South Africa exports about 6,000 metric tons of Rooibos in a year. Convert 6,000 metric tons to the amount in kilograms.

1.2. Choose the most correct answer. If Japan imports 2,000 metric tons of Rooibos, this would be the equivalent mass of:

(a) 2,000 VW polo cars; (b) 2,000 unladen speed boats; or (c) 40,000 bags of cement
(Hint: 1 VW polo ~1650 kg; 1 unladen speed boat ~450 kg; 1 bag of cement ~ 50 kg)

1.3. Consider the below market share data for smart phone penetration in South Africa.

South Africa Smartphone Shipment Market Share (%)	2017	2018
SAMSUNG	33%	32%
MOBICEL	6%	16%
HUAWEI	9%	15%
HISENSE	8%	10%
APPLE	5%	5%
OTHERS	39%	22%
TOTAL	100%	100%

1.3.1. Which of the brands of smartphones had the most significant market share in 2018?

1.3.2. Which brand had the most significant penetration jump between 2017 and 2018? What is the percentage jump for this brand?

1.3.3. Which brand had the least significant change in market share between 2017 and 2018?

1.3.4. Which country developed Mobicel?

1.3.5. Which country manufactures Mobicel smartphones?

1.3.6. Give examples of service trade between South Africa and the manufacturing country for Mobicel.

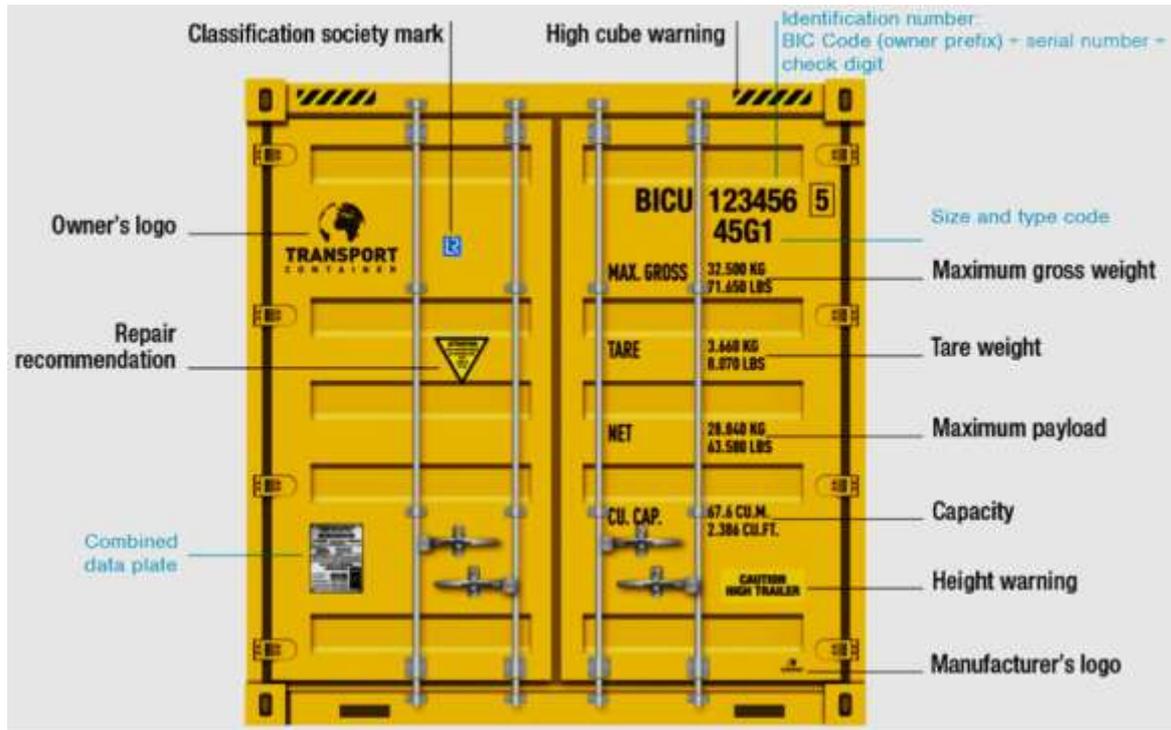
1.3.7. South Africa has five ships on her register, would the Mobicel mobile phones be transported in bulk by any of these ships?



Markings on containers



- Markings a container provide essential information.
- Located on the front, sides and top of a container is the BIC Code (owner prefix) + check digit. These are useful for finding more information on the container, such as its owner's address and contact details, by entering it into the official BIC Code database.
- The below image (from *bic-code.org*) shows the standard markings on a container.



Task 5:

(Fun Trivia)

- How many containerships are active today on liner trades?
 - almost 5000
 - almost 4000
 - almost 6000
- A Galaxy tab weighs about 0.3 kg. How many Galaxy tabs could you load on a Triple E vessel with a capacity of 18,000 TEUs?
 - 4,450,000,000
 - 1,440,000,000
 - 2,350,000,000
- How many advantages are there in containerisation?
 - at least 10
 - at least 30
 - at least 5
- one FEU container is equivalent to
 - 1/2 TEU
 - 40 TEU
 - 2 TEU



7. Maritime Environment Challenges



- 🌐 Understanding environment factors such as waves, tidal currents, and wind are important for safe and economic ship navigation.
- 🌐 Clean technologies and responsible mining of marine resources are necessary to protect the environment. Disruptions to a marine ecosystem and climate can in turn put safe and economic shipping at risk.

7.7.1 Tides and their formation

(including material from <http://maritimesa.org/grade-10/tides-and-their-formation/>)

- 🌐 Tides are caused by the gravitational pull of the moon and sun on our planet.
- 🌐 Tides are the vertical rise and fall of water level.
- 🌐 The ocean is the most affected by tides.
- 🌐 Even though the Moon only has about 1/100th the mass of Earth, since it's so close to us, it has enough gravity to move things around.
- 🌐 The water on the side of the Moon always wants to bulge out toward the Moon. This bulge is called a high tide.
- 🌐 High tide is experienced at two places in the ocean simultaneously. This is because the rotation of the earth causes the **centrifugal force**, which causes the water level to rise on the opposite side of the earth at the same time.
- 🌐 The rotation of the earth also means that the high tide moves around the earth from east to west. High tide (when the water level is higher) occurs every 12 hours 25 minutes, and low tide (when the water level is lower) follows 6 hours 13 minutes after each high tide.
- 🌐 Changes in the level of the ocean are most noticeable along the coast. High tide will reach a particular level on a beach, while the water level at the time of low tide will be further down the beach (see Figure 7).
- 🌐 *The tide is coming in* or the *flood tide* is the rising tide.
- 🌐 *Tide is going out* or the *ebbing tide* is when the tide subsides.
- 🌐 The tides occur in regular cycles.
- 🌐 Tidal range is the difference in water level between high tide and low tide.



Figure 6: High and low tide at the Bay of Fundy, Canada.

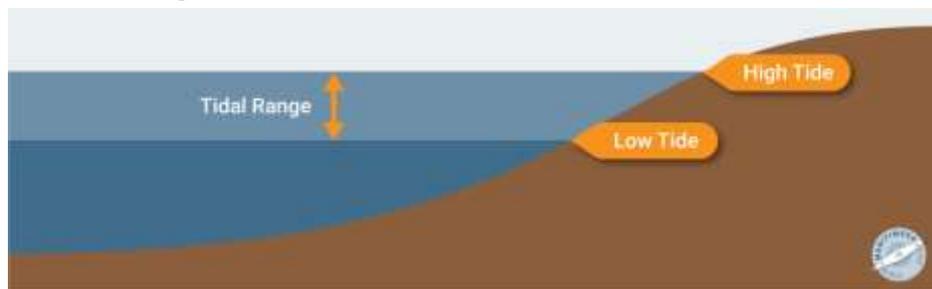


Figure 7: High tide and low tide water levels on a beach and the tidal range

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