

## Speaking

### Set 1 Student 1

**Preparation – 15 minutes**

**Presentation and questions – 10 minutes (use fact file *Canals*)**

#### Task 1

### Modern Wonders of the World

#### 1. *Monologue: Time 2 - 3 minutes*

Imagine you are at the meeting of your English School Club. The meeting is devoted to Modern Wonders of the World. Your task is to make a presentation about **the Suez Canal** and prove that it can be considered a wonder of the modern world.

**Remember to speak about:**

- (1) Location
- (2) Historical background
- (3) Construction costs
- (4) Capacity
- (5) Transit fees
- (6) Interesting facts
- (7) Economic and strategic value

You can make notes during the preparation time while studying the fact file, but **YOU ARE NOT ALLOWED TO READ** them during the presentation.

#### 2. *Questions/ Answers: Time: 2 - 3 minutes*

Answer 2 **QUESTIONS** from your partner, who wants to get **ADDITIONAL INFORMATION** not mentioned in your presentation.

#### Task 2

1. **Listen** to the presentation of your partner (**Set 2: The Panama Canal**).
2. *Questions/ Answers: Time: 2 - 3 minutes*  
**Ask 2 QUESTIONS** to get **ADDITIONAL INFORMATION** not mentioned in the presentation.

**YOUR ANSWERS WILL BE RECORDED**

# Canals

## Suez



## Panama



<b>Location</b>	Isthmus of Suez – Africa, Middle East	Isthmus of Panama – Americas (North & South Americas)
<b>Seas</b>	The Mediterranean Sea The Red Sea	The Caribbean Sea The Gulf of Panama
<b>Oceans</b>	The Atlantic Ocean The Indian Ocean	The Atlantic Ocean The Pacific Ocean
<b>Shortcut</b>	Shortens water-borne travel between oceans by 6,500 km, by a 1/4 the distance between Rotterdam & Tokyo, compared to the route around Africa	8,000 mile shortcut for cruise & cargo ships instead of the alternative hazardous Cape Horn voyage
<b>Dimensions: Length, Depth, Width</b>	193.3 km long, 24 m deep, 280 – 345 m wide at water level. Cross-Section Area 4,800 – 5,200 sq. m wide at a depth of 11 m	77 km long, 26 m above sea level

<b>Locks</b>	The longest lockless canal The world's third longest canal	3 locks up, 3 locks down per transit. The original locks are 33.53 m wide, 320 m long. A third, wider lane of locks was constructed in 2007 - 2016 to allow greater cargo capacity.
<b>Capacity: Tonnage</b>	Around 201,000 tons	340.8 mln tons of shipping
<b>Ships</b>	18,700 ships passed in 2015. Ships travel in three daily convoys in both directions with speed range of 11- 14 kph. 50 ships pass through its waters every day.	14,702 vessels passed in 2008. 40 ships pass through the canal daily on average. The longest ship to transit the canal was 973 feet. 230 cruise ships passed in 2016.
<b>Trade boundary between</b>	Asia and Africa, international maritime trade	Americas, international maritime trade
<b>Crossing Lakes</b>	Lake Manzala Lake Timsah Bitter Lakes	Gatun Lake (artificial lake – 470 square km)
<b>River</b>	The Nile River	The Chagres River
<b>Main Seaports</b>	Port Said Northern Terminus of the Canal	Port Colon Balboa
<b>City</b>	The City of Suez	Panama City
<b>Transit Fees</b>	The third largest source of the revenue for Egypt's economy Canal receipts reached \$3.4bln in 2005 and are constantly increasing, annually it gets about US\$5bln.	Worth \$1bln to Panama's economy Tolls of the canal are set by the Panama Canal Authority and are based on the ship's capacity. The bill for a single ship could reach \$316,800. Cruise ship Crown Princess paid \$144,344,910 to transit the canal.

<b>Economic &amp; Strategic Value</b>	<p>In 1956, it was at the center of a brief war between Egypt and the combined forces of Britain, France and Israel. The conflict had its origins in Britain’s military occupation of the canal zone, which continued after Egypt gained independence. Egyptians resented the colonial influence, tensions finally boiled over in 1956, when Egyptian President nationalized the Suez Canal. In the Suez Crisis, a combined British, Israeli and French force launched an attack on Egypt in 1956. The Europeans succeeded in advancing close to the canal, but later withdrew from Egypt in disgrace following the threat of nuclear defense from the Soviet Union. British Prime Minister resigned and the Suez Canal was left under Egyptian control.</p>	<p>In the 100 years since its opening, the canal continues to enjoy great success. Even though world shipping—and the size of ships themselves—has changed markedly since the canal was designed, it continues to be a vital link in world trade, carrying more cargo than ever before, with fewer overhead costs.</p>
---------------------------------------	--	--

<b>Origins/ first navigation</b>	<p>“Canal of the Pharaohs” between the Nile and the Red Sea existed in 3rd century BC. In 200 AD the Nile was linked with the Red Sea, after 80 AD it fell into disuse. Napoleon considered building it in 1798. The British Government opposed its construction as it could undermine their dominance of global shipping.</p>	<p>Early proposals to build the canal date back to 1534. Such a route would have given the Spanish military advantage. In 1698 the Kingdom of Scotland wanted to set up a trade route, in 1843 London planned a British endeavor across Mexico’s Isthmus. In 1877 two French engineers surveyed the route for the Panama Canal, the success of the Suez Canal encouraged planning for the Panama canal.</p>
<b>Construction Period</b>	<p>Started in 1859</p>	<p>Started in 1881</p>
<b>Commercial Traffic Opening</b>	<p>1869</p>	<p>1914</p>
<b>Labor involved</b>	<p>1.5 mln people Unknown number of workers died due to disease.</p>	<p>27,600 workers died during construction in the sweltering, disease-ridden jungle of malaria and yellow fever.</p>

<b>Overall Cost</b>	Doubled the original estimate. It cost US\$100 million.	The whole project cost \$8.6 billion.
<b>Interesting Facts</b>	<p>The Statue of Liberty was originally intended for the canal at its Mediterranean entrance under the name “Egypt Bringing Light to Asia”, inspired by the ancient Colossus of Rhodes.</p> <p>A fleet of ships was once stranded in the canal for more than 8 years (1967 – 1975).</p>	<p>The opening of the canal in 1914 caused a severe drop in traffic along the Chilean ports due to shifts in the maritime trade routes.</p> <p>The American Society of Civil Engineers has called the Panama Canal one of the seven wonders of the modern world.</p>
<b>Concession</b>	<p>In 1875 the British Government purchased concession into the Suez Canal, in 1882 GB occupied Egypt, the Suez Canal became the main British military &amp; strategic Base in the Middle East.</p> <p>1888 Convention of Constantinople announced the Suez Canal a neutral zone. This document remains in force today.</p>	<p>In 1902 the US bought the venture from the French for US\$40 mln.</p> <p>The total US investments in the canal construction reached US\$8,600,000,000.</p>
<b>Development &amp; Restructuring</b>	<p>The canal is still hampered by its narrow width and shallow depth, which are insufficient to accommodate two-way traffic from modern tanker ships. In 2014, Egypt’s Suez Canal Authority announced an ambitious plan to deepen the canal and create a new 22-mile lane. Preliminary work has already begun on the project, which Egyptian authorities claim could more than double the canal’s annual revenue by 2023.</p>	<p>US\$5.25 bln project doubled the capacity of the newly expanded canal in 2016.</p>

## Speaking

### Set 2 Student 2

**Preparation – 15 minutes (use fact file *Canals*)**

**Presentation and questions – 10 minutes**

#### Task 1

### Modern Wonders of the World

1. **Listen** to the presentation of your partner (**Set 1: the Suez Canal**).
2. **Questions/ Answers: Time: 2 - 3 minutes**  
**Ask 2 QUESTIONS** to get **ADDITIONAL INFORMATION** not mentioned in the presentation.

#### Task 2

##### **1. Monologue: Time 2 - 3 minutes**

Imagine you are at the meeting of your English School Club. The meeting is devoted to Modern Wonders of the World. Your task is to make a presentation about **the Panama Canal** and prove that it can be considered a wonder of the modern world. **Remember to speak about:**

- (1) Location
- (2) Historical background
- (3) Construction costs
- (4) Capacity
- (5) Transit fees
- (6) Interesting facts
- (7) Economic and strategic value

You can make notes during the preparation time while studying the fact file, but **YOU ARE NOT ALLOWED TO READ** them during the presentation.

##### **2. Questions/ Answers: Time: 2 - 3 minutes**

Answer 2 **QUESTIONS** from your partner, who wants to get **ADDITIONAL INFORMATION** not mentioned in your presentation.

**YOUR ANSWERS WILL BE RECORDED**

# Canals

## Suez



## Panama



<b>Location</b>	Isthmus of Suez – Africa, Middle East	Isthmus of Panama – Americas (North & South Americas)
<b>Seas</b>	The Mediterranean Sea The Red Sea	The Caribbean Sea The Gulf of Panama
<b>Oceans</b>	The Atlantic Ocean The Indian Ocean	The Atlantic Ocean The Pacific Ocean
<b>Shortcut</b>	Shortens water-borne travel between oceans by 6,500 km, by a 1/4 the distance between Rotterdam & Tokyo, compared to the route around Africa	8,000 mile shortcut for cruise & cargo ships instead of the alternative hazardous Cape Horn voyage
<b>Dimensions: Length, Depth, Width</b>	193.3 km long, 24 m deep, 280 – 345 m wide at water level. Cross-Section Area 4,800 – 5,200 sq. m wide at a depth of 11 m	77 km long, 26 m above sea level

<b>Locks</b>	The longest lockless canal The world's third longest canal	3 locks up, 3 locks down per transit. The original locks are 33.53 m wide, 320 m long. A third, wider lane of locks was constructed in 2007 - 2016 to allow greater cargo capacity.
<b>Capacity: Tonnage</b>	Around 201,000 tons	340.8 mln tons of shipping
<b>Ships</b>	18,700 ships passed in 2015. Ships travel in three daily convoys in both directions with speed range of 11- 14 kph. 50 ships pass through its waters every day.	14,702 vessels passed in 2008. 40 ships pass through the canal daily on average. The longest ship to transit the canal was 973 feet. 230 cruise ships passed in 2016.
<b>Trade boundary between</b>	Asia and Africa, international maritime trade	Americas, international maritime trade
<b>Crossing Lakes</b>	Lake Manzala Lake Timsah Bitter Lakes	Gatun Lake (artificial lake – 470 square km)
<b>River</b>	The Nile River	The Chagres River
<b>Main Seaports</b>	Port Said Northern Terminus of the Canal	Port Colon Balboa
<b>City</b>	The City of Suez	Panama City
<b>Transit Fees</b>	The third largest source of the revenue for Egypt's economy Canal receipts reached \$3.4bln in 2005 and are constantly increasing, annually it gets about US\$5bln.	Worth \$1bln to Panama's economy Tolls of the canal are set by the Panama Canal Authority and are based on the ship's capacity. The bill for a single ship could reach \$316,800. Cruise ship Crown Princess paid \$144,344,910 to transit the canal.



<b>Economic &amp; Strategic Value</b>	<p>In 1956, it was at the center of a brief war between Egypt and the combined forces of Britain, France and Israel. The conflict had its origins in Britain’s military occupation of the canal zone, which continued after Egypt gained independence. Egyptians resented the colonial influence, tensions finally boiled over in 1956, when Egyptian President nationalized the Suez Canal. In the Suez Crisis, a combined British, Israeli and French force launched an attack on Egypt in 1956. The Europeans succeeded in advancing close to the canal, but later withdrew from Egypt in disgrace following the threat of nuclear defense from the Soviet Union. British Prime Minister resigned and the Suez Canal was left under Egyptian control.</p>	<p>In the 100 years since its opening, the canal continues to enjoy great success. Even though world shipping—and the size of ships themselves—has changed markedly since the canal was designed, it continues to be a vital link in world trade, carrying more cargo than ever before, with fewer overhead costs.</p>
---------------------------------------	--	--

<b>Origins/ first navigation</b>	<p>“Canal of the Pharaohs” between the Nile and the Red Sea existed in 3rd century BC. In 200 AD the Nile was linked with the Red Sea, after 80 AD it fell into disuse. Napoleon considered building it in 1798. The British Government opposed its construction as it could undermine their dominance of global shipping.</p>	<p>Early proposals to build the canal date back to 1534. Such a route would have given the Spanish military advantage. In 1698 the Kingdom of Scotland wanted to set up a trade route, in 1843 London planned a British endeavor across Mexico’s Isthmus. In 1877 two French engineers surveyed the route for the Panama Canal, the success of the Suez Canal encouraged planning for the Panama canal.</p>
<b>Construction Period</b>	Started in 1859	Started in 1881
<b>Commercial Traffic Opening</b>	1869	1914
<b>Labor involved</b>	1.5 mln people Unknown number of workers died due to disease.	27,600 workers died during construction in the sweltering, disease-ridden jungle of malaria and yellow fever.

<b>Overall Cost</b>	Doubled the original estimate. It cost US\$100 million.	The whole project cost \$8.6 billion.
<b>Interesting Facts</b>	<p>The Statue of Liberty was originally intended for the canal at its Mediterranean entrance under the name “Egypt Bringing Light to Asia”, inspired by the ancient Colossus of Rhodes.</p> <p>A fleet of ships was once stranded in the canal for more than 8 years (1967 – 1975).</p>	<p>The opening of the canal in 1914 caused a severe drop in traffic along the Chilean ports due to shifts in the maritime trade routes.</p> <p>The American Society of Civil Engineers has called the Panama Canal one of the seven wonders of the modern world.</p>
<b>Concession</b>	<p>In 1875 the British Government purchased concession into the Suez Canal, in 1882 GB occupied Egypt, the Suez Canal became the main British military &amp; strategic Base in the Middle East.</p> <p>1888 Convention of Constantinople announced the Suez Canal a neutral zone. This document remains in force today.</p>	<p>In 1902 the US bought the venture from the French for US\$40 mln.</p> <p>The total US investments in the canal construction reached US\$8,600,000,000.</p>
<b>Development &amp; Restructuring</b>	<p>The canal is still hampered by its narrow width and shallow depth, which are insufficient to accommodate two-way traffic from modern tanker ships. In 2014, Egypt’s Suez Canal Authority announced an ambitious plan to deepen the canal and create a new 22-mile lane. Preliminary work has already begun on the project, which Egyptian authorities claim could more than double the canal’s annual revenue by 2023.</p>	<p>US\$5.25 bln project doubled the capacity of the newly expanded canal in 2016.</p>

## Speaking

### Set 3 Student 1

**Preparation – 15 minutes (use fact file *Tunnels*)**

**Presentation and questions – 10 minutes**

#### Task 1

### Modern Wonders of the World

#### 1. *Monologue: Time 2 - 3 minutes*

Imagine you are at the meeting of your English School Club. The meeting is devoted to Modern Wonders of the World. Your task is to make a presentation about **the Channel Tunnel** and prove that it can be considered a wonder of the modern world. **Remember to speak about:**

- (1) Location
- (2) Historical background
- (3) Construction costs
- (4) Capacity
- (5) Transit fees
- (6) Interesting facts
- (7) Economic and strategic value

You can make notes during the preparation time while studying the fact file, but **YOU ARE NOT ALLOWED TO READ** them during the presentation.

#### 2. *Questions/ Answers: Time: 2 - 3 minutes*

Answer 2 **QUESTIONS** from your partner, who wants to get **ADDITIONAL INFORMATION** not mentioned in your presentation.

#### Task 2

1. **Listen** to the presentation of your partner (**Set 4: The Seikan Tunnel**).
2. *Questions/ Answers: Time: 2 - 3 minutes*  
**Ask 2 QUESTIONS** to get **ADDITIONAL INFORMATION** not mentioned in the presentation.

**YOUR ANSWERS WILL BE RECORDED**

# Tunnels

## Channel Tunnel



## Seikan Tunnel



**Location**

Start: Folkestone, Kent, UK  
 End: Coquelles, Pas-de-Calais, Northern France  
 beneath the English Channel at the Strait of Dover

**Seas**

The North Sea (the English Channel: Strait of Dover), the Celtic Sea

**Oceans**

The Arctic Ocean, the Atlantic Ocean

**Location**

Start: Honshu  
 End: Hokkaido, Japan, beneath the Tsugaru Strait, connecting the Island of Honshu with the northern Island of Hokkaido

The Sea of Japan, the Sea of Okhotsk

The Pacific Ocean

<p><b>Dimensions:</b></p> <p><b>Length</b></p> <p><b>Depth under sea</b></p> <p><b>Capacity: Trains</b></p> <p><b>Speed limit</b></p> <p><b>Passenger traffic volumes</b></p> <p><b>Freight traffic volumes</b></p>	<p>50.5 km It has a longer undersea portion than the Seikan Tunnel.</p> <p>75 m deep at its lowest point</p> <p>Shuttle trains convey cars and coaches; other trains carry heavy goods vehicles. High speed Eurostar passenger trains travel daily; the Eurotunnel Shuttle for road vehicles (25 shuttles daily) is the largest in the world.</p> <p>160 kph</p> <p>21 mln in 2014</p> <p>Semi-open wagons carry lorries, with a passenger carriage at the front of the train for the drivers to relax.</p>	<p>53.85 km; 23.3 km portion is under the seabed. It is the world's longest undersea tunnel.</p> <p>240 m below sea level</p> <p>50 passenger, 52 freight trains travel daily. Locomotives carry freight and offer overnight sleeping car services. The track at the Seikan tunnel enables running Shinkansen bullet trains.</p> <p>140 kph</p> <p>6 mln in 2016</p> <p>Annual railway volumes exceed 5 mln tonnes. Passenger and freight trains passing through the Seikan Tunnel are completely separate.</p>
<p><b>Construction reasons</b></p> <p><b>Trade/passenger boundary between</b></p>	<p>Tunnel causes least disruption to shipping in the Channel, least environmental disruption. It is best protected against terrorism.</p> <p>UK, France and EU</p>	<p>Tunnel investigation was started as people traveling by ferries were killed by typhoons. The tunnel is the best way to travel without using air transport.</p> <p>Japanese people, foreign tourists, cargoes</p>

<b>Journey length</b>	35 minutes for lorries on Shuttle. Popular routes for passengers from London to Paris take 2.15 hours, from London to Brussels - 1.51 hours.	New Shinkansen trains started in 2016. This shortens the time to 3.5 hours.
<b>Terminal Cities</b>	Coquelles, near Calais, France and Cheriton, Folkestone, Kent in the UK.	Aomori, major Honshu Island city, and Hakodate, major Hokkaido Island city.
<b>Transit Fees</b>	Return journey is from £25 per passenger, for cars £51-£65 (with 2 or 4 passengers).	One-way fare from Hokkaido to Aomori: 27,240 yen.
<b>Economic &amp; Strategic Value</b>	In 2013 operating profits rose to £54 mln. The South East of England benefits developmentally and socially from faster and cheaper transport to continental Europe, as the Eurotunnel helped to remove the bottleneck.	The economics of the tunnel made a great deal of sense at the beginning. Today conditions have dramatically changed. Seikan proved that engineers' dreams can be realized. However, they are not always worth the cost.

<b>Origins/ first operation</b>	<p><b>1802:</b> A cross-Channel tunnel proposal</p> <p><b>1875:</b> Preliminary trials</p> <p><b>February 1986:</b> Signing the Treaty of Canterbury</p> <p><b>June 1988:</b> First tunnelling in France</p> <p><b>May 1994:</b> Tunnel formally opened by Queen Elizabeth II and President Mitterrand</p> <p><b>Mid-1994:</b> Operation commenced</p> <p><b>November 2011:</b> First commercial freight service run on High Speed 1</p>	<p><b>1912–1925:</b> Idea Connecting the islands Honshu and Hokkaido by a fixed link</p> <p><b>1939-1940:</b> Completing conceptual planning</p> <p><b>1946:</b> Start of serious surveying</p> <p><b>1971:</b> Beginning Construction</p> <p><b>13 March 1988:</b> The tunnel opens - freight and passenger services begin</p> <p><b>26 March 2016:</b> Shinkansen services commence operation</p>
<b>Construction Period</b>	1988 - 1994	1971 - 1988
<b>Labor involved</b>	15,000 people were employed. 10 workers were killed in the first months in accidents.	30,000 people were employed. Due to geological conditions 34 workers were killed.
<b>Overall Cost</b>	£9.5bln to build, about double original estimate	\$7bln

<b>Interesting Facts</b>	<p>Eurotunnel is criticized for fires in the carrying wagons; the Fire Brigade recommended to use closed wagons to prevent fire.</p> <p>£925mIn was lost in its 1st year of operation.</p> <p>In 1994 the American Society of Civil Engineers elected the tunnel as one of the 7 modern Wonders of the World.</p>	<p>The use of a tunnel boring machine was abandoned after 2 km. Blasting with dynamite was used after that. More than 2,800 tons of explosives were used.</p> <p>The project is 'a white elephant'. It may never pay back the cost of its construction. Despite its limited use, the Seikan Tunnel remains one of the greatest engineering feats of the 20th c.</p>
<b>Concession</b>	<p>The British and French governments gave Eurotunnel a 65-year operating concession to repay loans.</p>	<p>It took 17 years to be completely built by Japanese National Railways.</p>
<b>Developments &amp; Restructuring</b>	<p>After restructuring in 2007, Eurotunnel became profitable for the 1st time.</p> <p>Trains travel at 300 kph.</p>	<p>The upgraded tunnel facilitates the passing of bullet trains now.</p> <p>Toshiba's new 25m long electric locomotives replaced the old ones in 2014.</p> <p>Speed is limited to 140kph.</p>

## Speaking

### Set 4 Student 2

**Preparation – 15 minutes (use fact file *Tunnels*)**

**Presentation and questions – 10 minutes**

#### Task 1

### Modern Wonders of the World

1. **Listen** to the presentation of your partner (**Set 3: the Channel Tunnel**).
2. **Questions/ Answers: Time: 2 - 3 minutes**  
**Ask 2 QUESTIONS** to get **ADDITIONAL INFORMATION** not mentioned in the presentation.

#### Task 2

##### **1. Monologue: Time 2 - 3 minutes**

Imagine you are at the meeting of your English School Club. The meeting is devoted to Modern Wonders of the World. Your task is to make a presentation about **The Seikan Tunnel** and prove that it can be considered a wonder of the modern world. **Remember to speak about:**

- (1) Location
- (2) Historical background
- (3) Construction costs
- (4) Capacity
- (5) Transit fees
- (6) Interesting facts
- (7) Economic and strategic value

You can make notes during the preparation time while studying the fact file, but **YOU ARE NOT ALLOWED TO READ** them during the presentation.

##### **2. Questions/ Answers: Time: 2 - 3 minutes**

Answer 2 **QUESTIONS** from your partner, who wants to get **ADDITIONAL INFORMATION** not mentioned in your presentation.

**YOUR ANSWERS WILL BE RECORDED**



# Tunnels

## Channel Tunnel



## Seikan Tunnel



### Location

Start: Folkestone, Kent, UK  
End: Coquelles, Pas-de-Calais, Northern France  
beneath the English Channel at the Strait of Dover

### Seas

The North Sea (the English Channel: Strait of Dover), the Celtic Sea

### Oceans

The Arctic Ocean, the Atlantic Ocean

### Location

Start: Honshu  
End: Hokkaido, Japan, beneath the Tsugaru Strait, connecting the Island of Honshu with the northern Island of Hokkaido

The Sea of Japan, the Sea of Okhotsk

The Pacific Ocean

<p><b>Dimensions:</b></p> <p><b>Length</b></p> <p><b>Depth under sea</b></p> <p><b>Capacity: Trains</b></p> <p><b>Speed limit</b></p> <p><b>Passenger traffic volumes</b></p> <p><b>Freight traffic volumes</b></p>	<p>50.5 km It has a longer undersea portion than the Seikan Tunnel.</p> <p>75 m deep at its lowest point</p> <p>Shuttle trains convey cars and coaches; other trains carry heavy goods vehicles. High speed Eurostar passenger trains travel daily; the Eurotunnel Shuttle for road vehicles (25 shuttles daily) is the largest in the world.</p> <p>160 kph</p> <p>21 mln in 2014</p> <p>Semi-open wagons carry lorries, with a passenger carriage at the front of the train for the drivers to relax.</p>	<p>53.85 km; 23.3 km portion is under the seabed. It is the world's longest undersea tunnel.</p> <p>240 m below sea level</p> <p>50 passenger, 52 freight trains travel daily. Locomotives carry freight and offer overnight sleeping car services. The track at the Seikan tunnel enables running Shinkansen bullet trains.</p> <p>140 kph</p> <p>6 mln in 2016</p> <p>Annual railway volumes exceed 5 mln tonnes. Passenger and freight trains passing through the Seikan Tunnel are completely separate.</p>
<p><b>Construction reasons</b></p> <p><b>Trade/passenger boundary between</b></p>	<p>Tunnel causes least disruption to shipping in the Channel, least environmental disruption. It is best protected against terrorism.</p> <p>UK, France and EU</p>	<p>Tunnel investigation was started as people traveling by ferries were killed by typhoons. The tunnel is the best way to travel without using air transport.</p> <p>Japanese people, foreign tourists, cargoes</p>

<b>Journey length</b>	35 minutes for lorries on Shuttle. Popular routes for passengers from London to Paris take 2.15 hours, from London to Brussels - 1.51 hours.	New Shinkansen trains started in 2016. This shortens the time to 3.5 hours.
<b>Terminal Cities</b>	Coquelles, near Calais, France and Cheriton, Folkestone, Kent in the UK.	Aomori, major Honshu Island city, and Hakodate, major Hokkaido Island city.
<b>Transit Fees</b>	Return journey is from £25 per passenger, for cars £51-£65 (with 2 or 4 passengers).	One-way fare from Hokkaido to Aomori: 27,240 yen.
<b>Economic &amp; Strategic Value</b>	In 2013 operating profits rose to £54 mln. The South East of England benefits developmentally and socially from faster and cheaper transport to continental Europe, as the Eurotunnel helped to remove the bottleneck.	The economics of the tunnel made a great deal of sense at the beginning. Today conditions have dramatically changed. Seikan proved that engineers' dreams can be realized. However, they are not always worth the cost.

<b>Origins/ first operation</b>	<p><b>1802:</b> A cross-Channel tunnel proposal</p> <p><b>1875:</b> Preliminary trials</p> <p><b>February 1986:</b> Signing the Treaty of Canterbury</p> <p><b>June 1988:</b> First tunnelling in France</p> <p><b>May 1994:</b> Tunnel formally opened by Queen Elizabeth II and President Mitterrand</p> <p><b>Mid-1994:</b> Operation commenced</p> <p><b>November 2011:</b> First commercial freight service run on High Speed 1</p>	<p><b>1912–1925:</b> Idea Connecting the islands Honshu and Hokkaido by a fixed link</p> <p><b>1939-1940:</b> Completing conceptual planning</p> <p><b>1946:</b> Start of serious surveying</p> <p><b>1971:</b> Beginning Construction</p> <p><b>13 March 1988:</b> The tunnel opens - freight and passenger services begin</p> <p><b>26 March 2016:</b> Shinkansen services commence operation</p>
<b>Construction Period</b>	1988 - 1994	1971 - 1988
<b>Labor involved</b>	15,000 people were employed. 10 workers were killed in the first months in accidents.	30,000 people were employed. Due to geological conditions 34 workers were killed.
<b>Overall Cost</b>	£9.5bln to build, about double original estimate	\$7bln

<b>Interesting Facts</b>	<p>Eurotunnel is criticized for fires in the carrying wagons; the Fire Brigade recommended to use closed wagons to prevent fire.</p> <p>£925mIn was lost in its 1st year of operation.</p> <p>In 1994 the American Society of Civil Engineers elected the tunnel as one of the 7 modern Wonders of the World.</p>	<p>The use of a tunnel boring machine was abandoned after 2 km. Blasting with dynamite was used after that. More than 2,800 tons of explosives were used.</p> <p>The project is 'a white elephant'. It may never pay back the cost of its construction. Despite its limited use, the Seikan Tunnel remains one of the greatest engineering feats of the 20th c.</p>
<b>Concession</b>	<p>The British and French governments gave Eurotunnel a 65-year operating concession to repay loans.</p>	<p>It took 17 years to be completely built by Japanese National Railways.</p>
<b>Developments &amp; Restructuring</b>	<p>After restructuring in 2007, Eurotunnel became profitable for the 1st time.</p> <p>Trains travel at 300 kph.</p>	<p>The upgraded tunnel facilitates the passing of bullet trains now.</p> <p>Toshiba's new 25m long electric locomotives replaced the old ones in 2014.</p> <p>Speed is limited to 140kph.</p>