

Megabridges - Task 2 answers

	Öresund Bridge	Rio-Antirrio Bridge
Country	<i>Denmark - Sweden</i>	<i>Greece</i>
Challenges of the bridge	<i>had to make way for aircraft and ships - so they had to build part bridge / part tunnel</i>	<i>water was too deep, sea bed too soft, and an earthquake fault line runs through the middle</i>
Numbers & figures	<i>1090 metres, 160 cables, 60 metres above the sea support towers 204 m high The bridge had to be 60 metres above water with the centre span of at least 450 metres</i>	<i>1.3 mile long takes 5 min to cross the Gulf instead of 45 min by ferry. 7,000 foot roadway</i>
What types of bridges were considered and why were they rejected	<i>An arch bridge but it was considered dangerous for big ships A suspension bridge because it enables the longest span but it was considered not good for trains.</i>	<i>A beam bridge because the longest bridges in the world are beam bridges but it didn't suit the gulf as it would have blocked the ship traffic An arch bridge, which would've been four times bigger than other arch bridges ever built before, was considered too risky. Suspension – suitable but very expensive</i>
Type of bridge chosen and why	<i>A cable stayed bridge because it's better for trains and cheaper - doesn't need tons of steel like a suspension bridge</i>	<i>Cable stayed design because there were no other options left.</i>
Interesting features	<i>Two level bridge with both cars and trains.</i>	<i>Four towers - something never done before</i>