The Belgian ports of Zeebrugge and Ostend posed a serious threat to the Allied forces during the First World War. Their location, near the mouth of the Thames and the English Channel, would make these ports the best-situated operating bases for the German U-boat and torpedo boat fleet. Moreover, Bruges was connected to both Zeebrugge and Ostend via a canal. This way a good hiding place for the vessels of Marinekorps Flandern could be developed out of range of the British guns. During the war, German ships operating from these Belgian ports were responsible for one third of the tons of shipping lost by the Allies. At the same time, connections across the Channel were essential to the Allies, not just as a supply line to bring in fresh troops but also for communication and the provisioning of the British Isles. In response to the German naval threat, the British Dover Patrol tried to block the ports of Zeebrugge and Ostend in the night of 22 to 23 April as well as the night of 9 to 10 May 1918.

Prelude

Zeebrugge and Ostend initially not targeted

The activities of Marinekorps Flandern conducted from the Belgian ports had the potential of being strategically decisive. Yet it took the British until late 1917 to realise the seriousness of the threat and decide to blockade the ports of Zeebrugge and Ostend from the sea. To explain this hesitancy it is necessary to take the overall development of the Great War into consideration.

When WWI broke out in 1914, the optimistic idea was prevalent that the war would be short. Both sides were convinced of a swift and glorious victory. The goal of the German Schlieffen Plan to eliminate the French land forces by sweeping through Belgium and Luxembourg, and to take the Channel ports in France to facilitate an attack on Britain was not achieved. The German advance was halted by flooding part of the Yser plain, among other factors. The Germans had only succeeded in taking Zeebrugge and Ostend. At first, the British did not wish to destroy these ports as they assumed they would soon be recaptured.
Zebrugge and Ostend could then be useful for supplying the Allied troops. The Germans also considered these ports to be only a temporary stopover. Zebrugge and Ostend had fallen into German hands relatively intact, but no defences were present and the ports were not equipped for mooring, repairing and maintaining a war fleet.

**Flemish ports become crucial**

The initial optimism wore off as manoeuvre warfare gave way to trench warfare in late 1914. Many British ships shelled the Belgian coast to prevent the Germans from using the harbours of Ostend, Zebrugge and Bruges. The Germans understood that the conquest of the Channel harbours in France would not come soon. The well-equipped port of Antwerp, captured by the Germans, could not be used since using the Scheldt river would violate Dutch neutrality, which the Germans wanted to avoid. For this reason, and for fear of an Allied landing, *Marinekorps Flandern* started to expand the coastal and port defences in and around Zebrugge and Ostend. From 1915 onwards, several batteries were built to repel the British shellings. It became increasingly difficult to shell the ports from the sea. The German U-boats and torpedo boats could now be deployed more often and more efficiently from Zebrugge and Ostend. The British, to whom Channel shipping was crucially important, were in favour of attacking the left flank of the front, close to the coast, to be able to shell the Belgian ports from land. The French, on the other hand, wanted to focus on the inland front. The more experienced French got their way, the British plan was not implemented for the time being.

### The threat of the Flanders Flotilla

Up to 1916 the Imperial German Navy had mostly invested in the High Seas Fleet (*Hochseeflotte*) and the naval forces in the Baltic, while *Marinekorps Flandern* was subordinated. This attitude gradually changed after the Battle of Jutland (31 May – 1 June 1916). Although the Germans had gained a tactical victory at this battle, the British blockade of the High Seas Fleet was maintained. Germany now realised that this blockade would probably never be broken and decided to invest part of the resources earmarked for the main fleet in the Belgian coast. They temporarily added two torpedo boat flotillas to the *Marinekorps Flandern* fleet. This enabled the corps to take the offensive. This increased and more aggressive activity from the Belgian ports gave rise to concern among the British general staff. This concern grew when Germany announced it would engage in unrestricted submarine warfare in early 1917. The German U-boats wreaked havoc and spread panic in the North Sea and the English Channel. In 1917 alone, half of the total tonnage of Allied ships was sunk. It was not just U-boats that sunk more and more ships. In late 1916 and early 1917 the Germans organised several torpedo boat raids in the Channel. The *Flanders Flotilla* was now capable of disrupting the vital communication and supply line between Britain and the Continent. This ever greater threat made the British realise that a final solution had to be found for the ports of Zebrugge and Ostend.

A new attempt was made to break out of the trench deadlock at the Battle of Passchendaele or Third Battle of Ypres (31 July – 6 November 1917). The British high command aimed at breaking through the front near Passchendaele in order to eventually retake the Belgian ports. This offensive failed, however. The front line had only advanced a few kilometres at the expense of hundreds of thousands of casualties. The plan to capture the Belgian ports from land was consequently abandoned. It was equally impossible to destroy the German submarine bases from the air due to the U-boat bunkers the Germans had constructed in Bruges. By the end of 1917, British Vice-Admiral Roger Keyes therefore laid plans to close off the ports of Zebrugge and Ostend from the sea.

### The plan

The British planned to block the ports of Ostend and Zebrugge by sinking obsolete warships filled with concrete across the harbour channel. This way, the German submarines and torpedo boats would be temporarily or permanently trapped in the Belgian ports. It took a great deal of time to draw up the plans for the raids. Especially the old mole at Zebrugge was a source of great concern to the British. The Germans had fortified this two kilometre long arched jetty enclosing the harbour with a series of batteries that protected the entire port. To make sure the blockships would enter the harbour channel smoothly, it was crucial to divert the batteries on the mole. This required British troops to land on the mole. Three ships were converted to transport these troops: the obsolete cruiser HMS *Vindictive* and the ferries HMS *Iris* and HMS *Daffodil*. While the troops were landing, an old submarine had to blow itself up under the viaduct connecting the mole to the shore. This would prevent German reinforcements from coming to the rescue of their fellow combatants on the mole. The three blockships HMS *Thetis*, HMS *Intrepid* and HMS *Iphigenia* would in the meantime enter the harbour channel more or less undisturbedly and be scuttled at the entrance. Of course, the Germans would see these ships coming from a great distance. For this reason the British planned to use small fast boats to create a smoke screen.

At first sight, the situation in Ostend was much simpler. Several batteries and machine gun nests protected this harbour as well, but there was no arched mole. It therefore seemed unnecessary for troops to land. It seemed sufficient to scuttle the blockships HMS *Sirius* and HMS *Brilliant* across the harbour channel. A few crucial factors for the success of the attack plan were the weather, the tide and the timing. Calm weather was required for the optimal deployment of the small boats and for the success of the landing on the mole in Zebrugge. A landward wind had to keep the smoke screen in front of the ships. High tide was required for the troops to scale the high mole and for the heavily laden blockships to enter the harbour channel smoothly. Finally, all these conditions had to be fulfilled around midnight to optimally use
the cover of darkness. The changeable weather resulted in two cancelled attempts. The fleet put out to sea for a third time in the evening of 22 April 1918.

The Zeebrugge Raid: 22 April 1918

The two fleet segments sailed together for a few miles and then their paths parted. Both fleets were planned to arrive at Zeebrugge and Ostend simultaneously so that the Germans would not have time to warn each other, since the plans for the raid had already fallen into German hands during a previous attempt. When the Germans heard the ship engines in Zeebrugge, they initially thought an airborne attack was coming. After a while they realised that what they thought was fog was actually a smoke screen, and they sent up a few flares. They subsequently spotted the British funnels and immediately sounded the alarm throughout the coastline. Flares and searchlights illuminated the entire mole. The ship engines were now clearly audible, but the approaching fog veiled the vessels. British monitors now began to shell the German positions.

Just before midnight a sudden gust of wind blew away the smoke screen. The contours of HMS Vindictive were now clearly visible. The German batteries were in combat readiness and opened fire. By the time HMS Vindictive had reached its position alongside the mole, most of the gangplanks specially
mounted for the landing had been destroyed. Half of the soldiers who had waited on deck for the landing had already been killed or wounded. Yet the ship continued her course. HMS Iris and HMS Daffodil were also approaching the mole. At about a quarter past midnight the first troops landed on the mole, while the British submarine blew herself up and destroyed the viaduct almost simultaneously. The landing force destroyed a few machine gun nests and artillery pieces. At about half past midnight the blockships passed the mole. HMS Thetis, which led the way, immediately came under heavy fire. When entering the harbour, the ship got entangled in the nets the Germans had installed and ran aground. The crew scuttled the ship prematurely. HMS Intrepid and HMS Iphigenia succeeded in reaching the harbour entrance without being noticed. Their crews tried to position the ships across the harbour channel as best they could before detonating the charges. The raid appeared to be successful and the British pulled out.

Ostend, an attack in two episodes

HMS Sirius and Brilliant encountered more difficulties when they approached Ostend. The smoke screen was unexpectedly blown away, so that the two ships were an easy target. British monitors shelled the German batteries but were unable to eliminate them. Heavy rain obstructed their view and the Germans had moved the navigation buoy that marked the harbour entrance. As a result, the two ships did not find the entrance way and were eventually scuttled outside the port, towards Bredene. The First Ostend Raid was a complete failure.

A second attempt was made on 9 May. This time HMS Vindictive, hastily repaired after the Zeebrugge Raid, and HMS Sappho had to block the harbour channel. HMS Sappho never reached Ostend due to a mechanical breakdown. HMS Vindictive did make the journey, but once again finding the harbour entrance was not easy. After steaming back and forth near the harbour, the ship eventually made it to the entrance. HMS Vindictive entered the harbour under heavy German fire. The damage sustained during the first raid was exacerbated and one of the propellers broke down. Because of the broken propeller, Vindictive had difficulty maneuvering. It soon appeared to be impossible to position the crippled vessel across the harbour channel. The commander then scuttled the ship on site. The harbour channel was only partly blocked. This made the second attempt not an unqualified success either.

Mission accomplished?

The two raids together claimed the lives of over 200 British soldiers. The Germans only sustained a few casualties. In light of the losses suffered on the Yser front, this number was acceptable to the British. But had the operation been successful? How was this raid perceived by both parties? What effect did this operation have on the further course of the war? To find an answer to the question whether the British had achieved their goal, it is sufficient to check whether the harbour mouths of Zeebrugge and Ostend had indeed been closed off. In Ostend this was not the case. HMS Vindictive had been unable to position itself across the harbour channel due to a broken propeller. In Zeebrugge, HMS Intrepid and Iphigenia were better positioned, yet a new channel was created behind the blockships after only a few days. U-boats and destroyers could therefore leave the ports again soon after the raid. However, the raids were a moral victory for the British. They had not achieved the anticipated goal, but the raids were promoted as a British victory. The British propaganda machine depicted the entire operation as an unqualified success. For weeks it was claimed that the Belgian ports had indeed been closed off, although numerous photographs proved the contrary. The participants were honoured for their bravery. No less than eleven Victoria Crosses, the highest military decoration in the United Kingdom, were awarded for the exploits of the British troops during the raids. Moreover, this operation had proved that the British could breach the German coastal defences. The raids certainly boosted Allied morale after the disillusionment of the Battle of Passchendaele. The Germans, on the other hand, minimised the results of the raids. The official report by Grand Admiral Alfred von Tirpitz states that little damage had been done to the port infrastructure and that there hardly had been any casualties. German propaganda represented the British failure as proof of their superior defence of the ports. It was pointed out that vessels could already leave the ports after a few days. In reality, German self-confidence took a terrible knock. The aim of the raids had not been achieved, but the British had succeeded in breaking
through the German coastal defences several times and had temporarily set foot on land. As a result, the Germans constructed additional fortifications afterwards, particularly at the ports.

**The threat eliminated**

After the raids, the number of Allied ships sunk by the Marine Corps dropped significantly. If this was not due to the raids, what was the reason for this decrease? The answer to this question is complex. Several British bombings caused the floodgates to function only sporadically until the end of June. But this only caused a temporary delay. However, the depletion of raw materials in Germany after nearly four years of war resulted in the production of new ships falling behind. In 1918 the Allies also applied a few tested as well as new techniques on a structural basis to counter the submarine danger.

The Allies had reverted to using escorted convoys in 1917. Convoying had proved its usefulness many centuries before. The idea is simple: merchant ships travelling together under the protection of a naval escort. It is surprising, then, that the Allies initially did not use this technique during the First World War. The arguments against convoys were diverse. If a convoy ran into an enemy battleship, it did not have the ghost of a chance unless it was protected by a battleship as well. Having every convoy escorted by a battleship was much too expensive, however. Sailing in convoy also meant that the group could only go as fast as the slowest ship. Moreover, ships had to wait in port until a new convoy put out to sea. The Allies believed this would lead to loss of time and efficiency. Finally, the British thought unloading an entire convoy would exceed the capacity of many ports.

These arguments were refuted one by one, however. The British blockade of German battleships prevented them from moving freely to attack convoys. The loss of efficiency and time turned out to be greater when a ship was sunk. And timely notice prior to the arrival of a convoy ensured that the port in question could prepare for unloading the ships. Convoys were gradually introduced and with success. Several new techniques also showed great promise. In late 1917 the British developed ASDIC, the world’s first active sonar technology. This apparatus emits acoustic pulses which reflect off submerged objects and these echoes are then received by the apparatus. The apparatus determines the depth (distance) of an object by measuring the time between emitting and receiving a pulse. The First World War also saw the development of the depth charge, designed for detonation at a preset depth. Sonar and the depth charge would both turn out to be very powerful anti-submarine weapons.

Vice-Admiral Roger Keyes did not just plan and lead the Zeebrugge and Ostend raids, he also took numerous other measures to hinder German shipping in the English Channel. For instance, he had additional anti-submarine nets with mines installed and introduced search-and-destroy patrols. U-boats were then faced with the risk of being sunk by the patrols or getting entangled in mine nets. All these measures and circumstances made it increasingly difficult for the German submarines and torpedo boats in the Channel to disrupt Allied supply lines.
A boost to Allied morale

The Zeebrugge and Ostend raids certainly boosted the morale of the Entente Powers. The bravery of the men who took part and the subsequent reports in the press renewed the faith of the soldiers in trenches in victory. This boost came just at the right moment after the failure of the battle of Passchendaele and especially after the frustrations and concern caused by the German spring offensive. At the same time, the actual effect of the raids was at first greatly overestimated by the Allies, intentionally or unintentionally. The sunken ships only caused moderate interference. After a few days, the German warships were able to put out to sea again. The decreasing number of torpedoed Allied ships was mostly due to the depletion of raw materials, the introduction of convoys, the application of new techniques and Roger Keyes' anti-submarine measures. In any case, the example of the Zeebrugge and Ostend raids was followed in the Second World War. On 28 March 1942 the British conducted a successful raid on Saint-Nazaire. This destroyed the dry dock of the principal port on the Atlantic coast and the only dry dock large enough to repair battleships. From then on, German warships had to return to Germany for repairs.

Current memorials to the Zeebrugge and Ostend raids

Nowadays, several memorials, both in Britain and in Belgium, remind us of the operations that took place in April and May 1918. In Zeebrugge, on the corner of Zeedijk and Baron de Maerelaan, a monument to Saint George’s Day can still be seen today. The look of the monument has remained unchanged since 1984. A plan of Zeebrugge harbour at the time of the raid is flanked by commemorative plates for the blockships and the submarine. On Admiraal Keyesplein, also in Zeebrugge, a memorial has been erected with fragments of the mole with which HMS Vindictive collided during the landing of troops.

And the bow of HMS Vindictive as well as the masts of HMS Thetis and Intrepid were located at Graaf de Smet de Naeyerlaan in Ostend for many years; now, after a recent restoration, they are displayed near the eastern pier of the port of Ostend.

Sources