We are replacing Heathrow’s landing systems – known as the Instrument Landing Systems (ILS). There are four landing systems at Heathrow – one at either end of each runway.

These systems have come to the end of their life and need replacing. The two landing systems for the westerly runways (known as 27L and 27R) were replaced last summer. This year we plan to replace the landing aids for the two easterly runways (09L and 09R).

Although we’re planning to minimise the impact on our operations and local communities as much as possible, depending on the wind conditions, there may be periods when aircraft land out of the usual alternation pattern.

**What is an ILS?**
Aircraft follow a radio beam known as the Instrument Landing System (ILS) when landing into Heathrow. There is one beam aligned with the centreline of each runway end to ensure planes approach in a straight line. It is a critical system that ensures the safe and efficient arrival of landing aircraft.

**Why is it being replaced?**
The existing ILS is approaching its end of life – the last time they were replaced was approximately 15 years ago.

**What does the work involve?**
To minimise the time where there is no ILS in operation for a particular runway end, the new ILS will be built behind the existing ILS. Then we will turn off the old ILS system, turn on and ‘commission’ the new ILS so that it is safe to use.

**How many systems are being replaced?**
In total 4 systems are being replaced – one for each runway end. The westerly runways were completed last year.

- Westerly operations – northern runway (27R) [COMPLETED in August 2015]
- Westerly operations – southern runway (27L) [COMPLETED in September 2015]
- Easterly operations – southern runway (09R) [To be completed in April 2016]
- Easterly operations – northern runway (09L) [2016 – exact month TBC]

**Wind direction**
The direction planes fly at Heathrow depends on the direction of the wind. Planes must take off and land into the wind for safety reasons.

‘Westerly operations’ – this is when aircraft arrive from the east (over London) and take off towards the west (over Berkshire/Surrey). Westerly operations occur for around 70% of the year.

‘Easterly operations’ – this is when aircraft arrive from the west (over Berkshire) and depart towards London. Easterly operations occur for around 30% of the year.

**Which system is being replaced next and when?**
The work to replace the ILS for the southern runway (09R) during easterly operations is due to begin on Saturday (23 April 2016) and the work should take five days to complete.
What does this mean for local communities?
There should be no impact to normal operations for the first four days of the works (Saturday 23 April to Tuesday 26 April). However, on the last day (Wednesday 27th April), and in the event of westerly operations, aircraft will have to use the northern runway (27R) as the main arrivals runway all day (rather than alternating at 3pm as normal). Departing aircraft will use the southern runway (27L). This means that some residents will experience more overflight than usual on Wednesday 27 April.

Could the work take longer than planned?
Every effort will be made to ensure that we can complete this in the timescale given. However, poor weather or unforeseen circumstances could impact on this.

What happens if the wind changes to an easterly wind during the works?
There will be no changes to normal operations if we are on easterly operations since we land on the northern runway (09L) and depart from the southern runway (09R) all day.

What areas under the final approach will be affected on the 27 April (if westerly operations)?
Communities located under the final approach into the northern runway on westerly operations (27R). The map below illustrates this.

What areas will be affected by departures on the 27 April (if westerly operations)?
Communities located closest to the end of the southern runway (27L) as illustrated below.