openreach

ISIS Practice
For Openreach and our suppliers

AEI/AEC/B339

Issue 1, 02-Apr-2020
Use until 02-Apr-2021

Published by Openreach Overhead Policy Team

Privacy- Internal

Change to the 'Upper Envelope of Space' on Poles

Amendment to the Upper Envelope of Space

About this document ...

Author

The author of this document may be contacted at:

Wesley Grantham
Electrical Protection & Overhead Professional
(BOI)
Post Point BY2Grimsby Pyewipe TEC
Estate Road No. 2
South Humberside Ind Est
Grimsby
LINCS
DN31 2TJ

Telephone: +447736637011
Fax:
Email: wesley.grantham@openreach.co.uk

Content approval

This is the Issue 1 of this document.
The information contained in this document was approved on 02-Apr-2020 by Glen Barford, Overhead Network Policy and Standards Specialist

Version History

Version No.	Date	Author	Comments
Issue 1	02-Apr-2020	Wesley Grantham	Initial issue

Table of Content

1 *Introduction*

This document introduces a change to the 'Upper envelope of Space'. The change is being introduced to enable additional equipment to be added to Poles without the need for Network Adjustments.

See section 4 for details.

2 *Status*

- Engineering / Planning Quality Standard
- Working practice

3 *Scope*

All people involved in the planning, survey and execution of works (in particular, Fibre Build, Asset Assurance, maintenance work and PIA).

4 *Detail*

4.1 Background to change

As the use of PIA increases and fibre roll out continues to grow, it's becoming increasingly clear that on many existing poles, there is simply not enough space at the top to accommodate both old and new equipment within the permitted space envelope.

A previous Engineering Communication, AEI/AEC/B309 introduced the option to move the uppermost Bass Step down and level with the lower Bass step, as a retrospective network adjustment. That option can still be used if sufficient space is not created by this change of policy.

To help reduce the need for Network Adjustment and to reflect increasing demand on limited space, this document now allows old and new equipment to be located at any point that is 800mm above the 'Working Steps' up to the tip of the Pole.

Apparatus (e.g. Copper Blocks, CBTs) can be fitted to the full circumference of the Pole within this space, providing the equipment does not obstruct the Bass steps. See 50mm rule below.

Effectively this means that the 'upper envelope of space' is increased and the Bass step in most cases will not need lowering.

This new policy has been assessed by independent risk consultants, with no issues arising.

4.2 Previous Permitted Envelopes of Space

The upper envelope of permitted space was quite small and this was a key contributor to the problem.

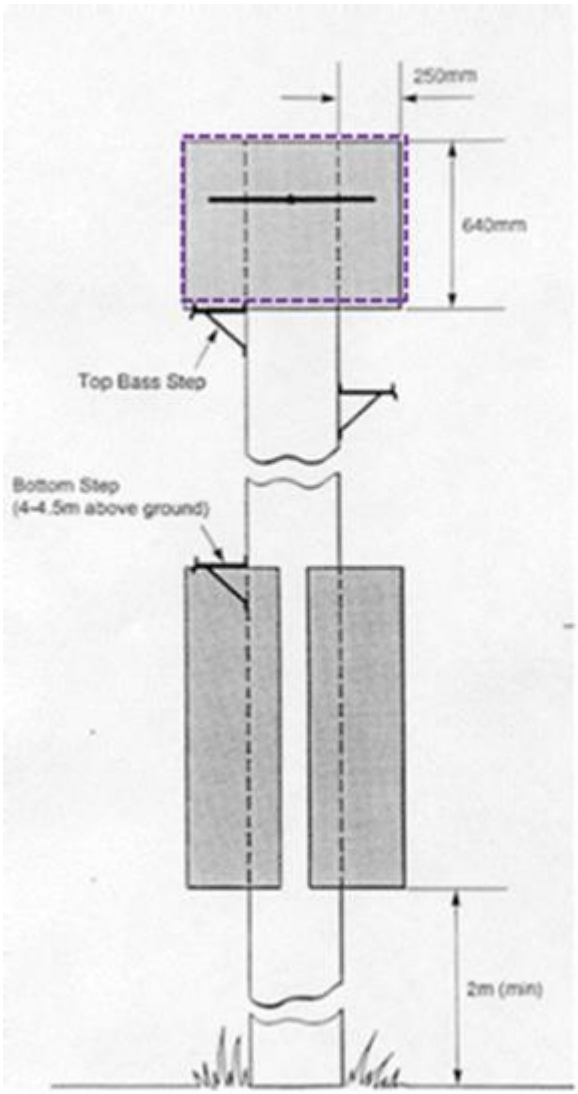

Figure 1 – Previous Permitted Envelopes of Space

4.3 New Permitted 'Upper Envelope of Space'

The new permitted envelope of space extends vertically from a position of 800mm above the working steps to the top of the pole (on most poles this is the position of the lower Bass step).

The full circumference of the pole above the 800mm line can be used to mount equipment providing it doesn't obstruct the Bass steps.

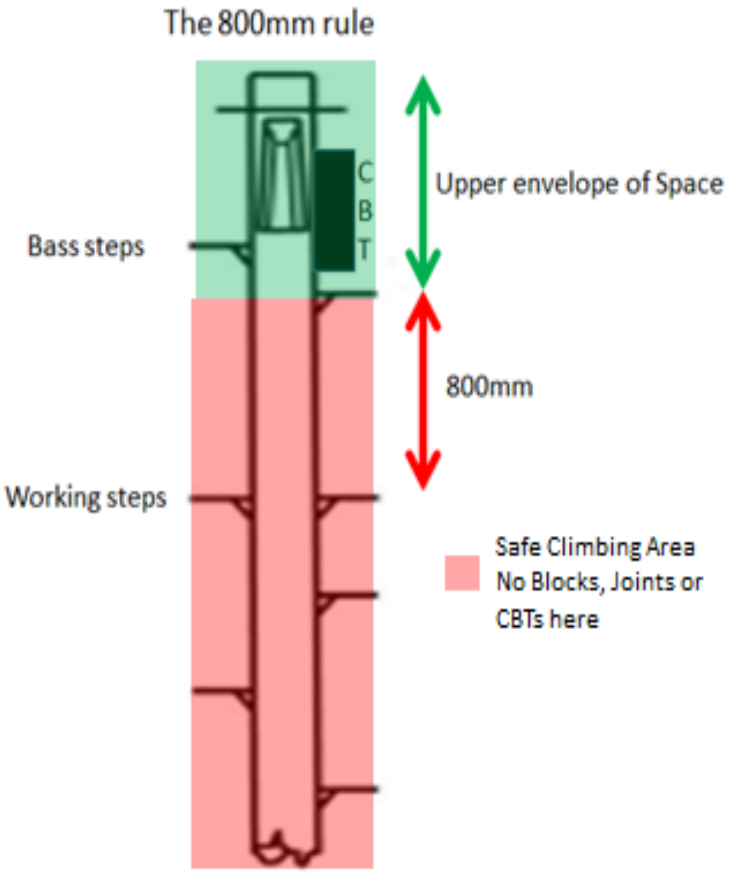

Figure 2- New Upper Envelope of Space

- The 800mm zone must be kept clear. No equipment is allowed in this area due to the requirement to safely position the climber's belt and to avoid potential damage to equipment.
- Pole space can be surveyed or retrospectively audited easily by measuring the 800mm distance from the ground level using height clearance rods.

4.4 Un-obstructed Steps

The Bass steps must have a 50mm spherical space from the step tread to allow for a safe hand-hold. This space must be kept clear and free from obstructions. Please see Figure 3.

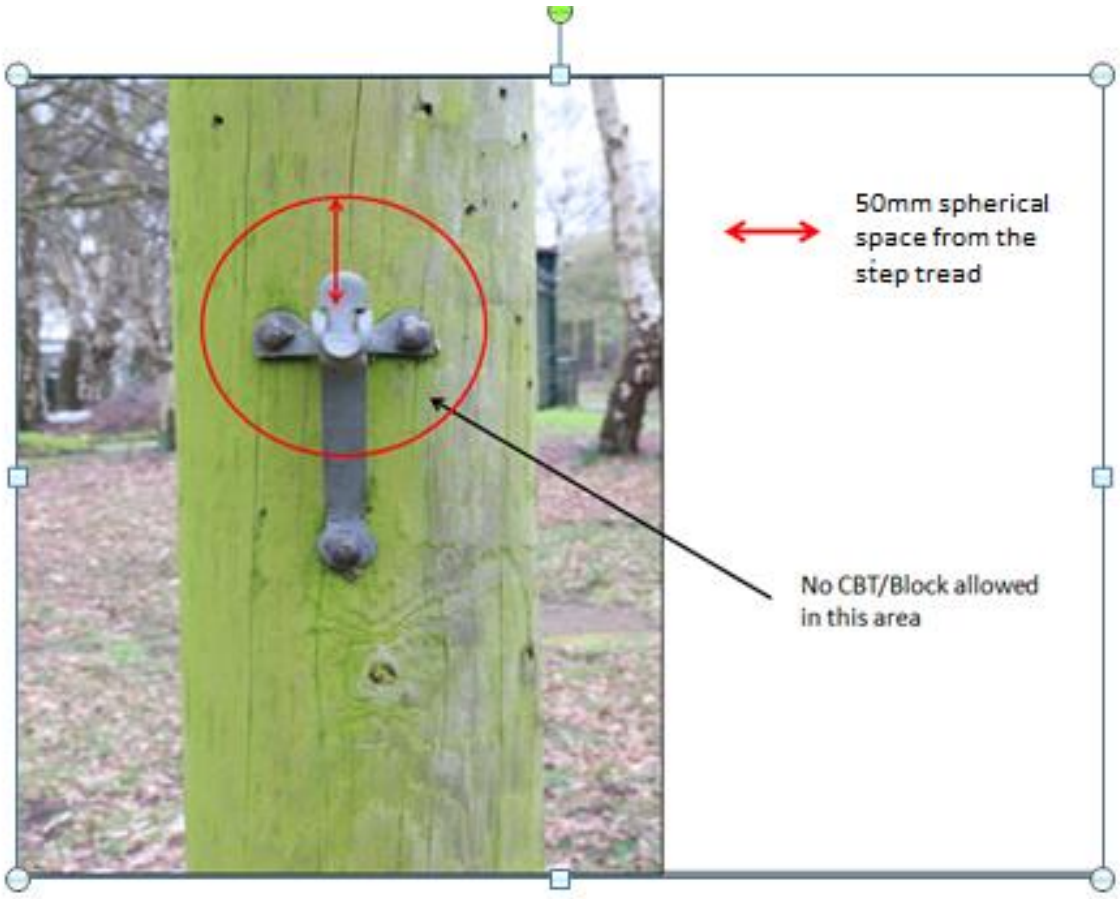

Figure 3 – Area that must be kept clear.

Figure 4 …… **NB 50mm not to scale here**

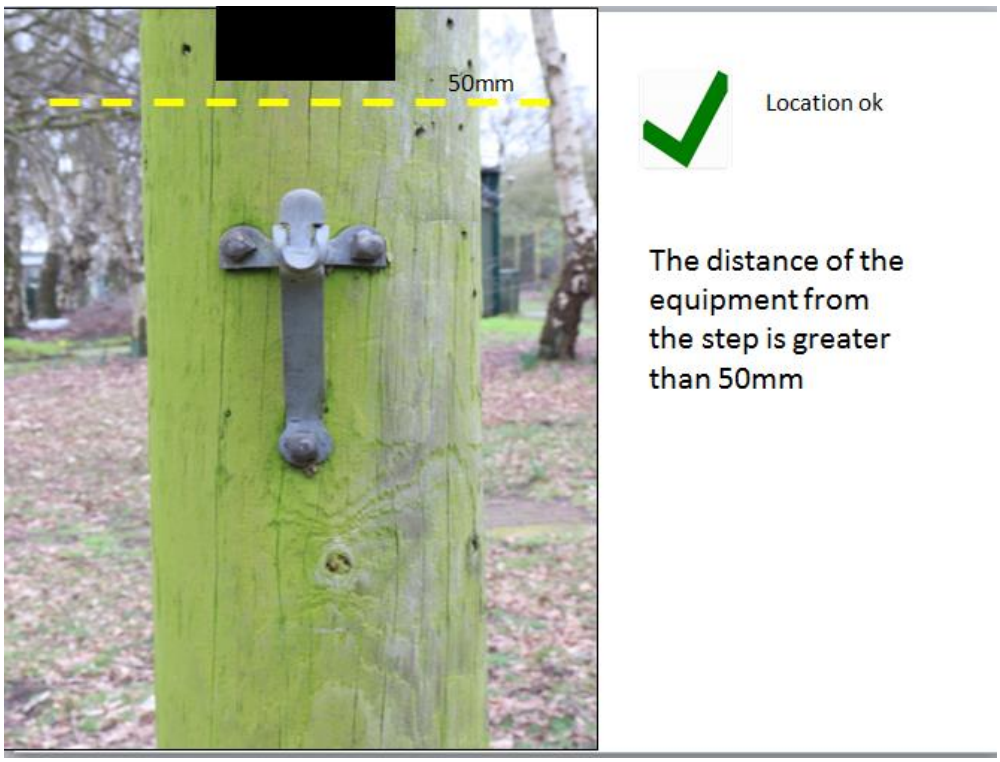

Figure 5

4.5 Impact of the new policy

Below are examples of historical build that did not comply with the previous policy, however following the new policy outlined above, they are now compliant.

This new policy applies to both Openreach and PIA CP equipment.

Figure 6

In most cases the 800mm line will be at the position of the lowermost Bass step.

Where the Bass steps are higher than 800mm, equipment can be attached below them providing the attachment point is a minimum of 800mm above the 'working steps'.

Likewise, where the Bass steps are exceptionally low, the 800mm clear space rule still applies.

Please see the examples below.

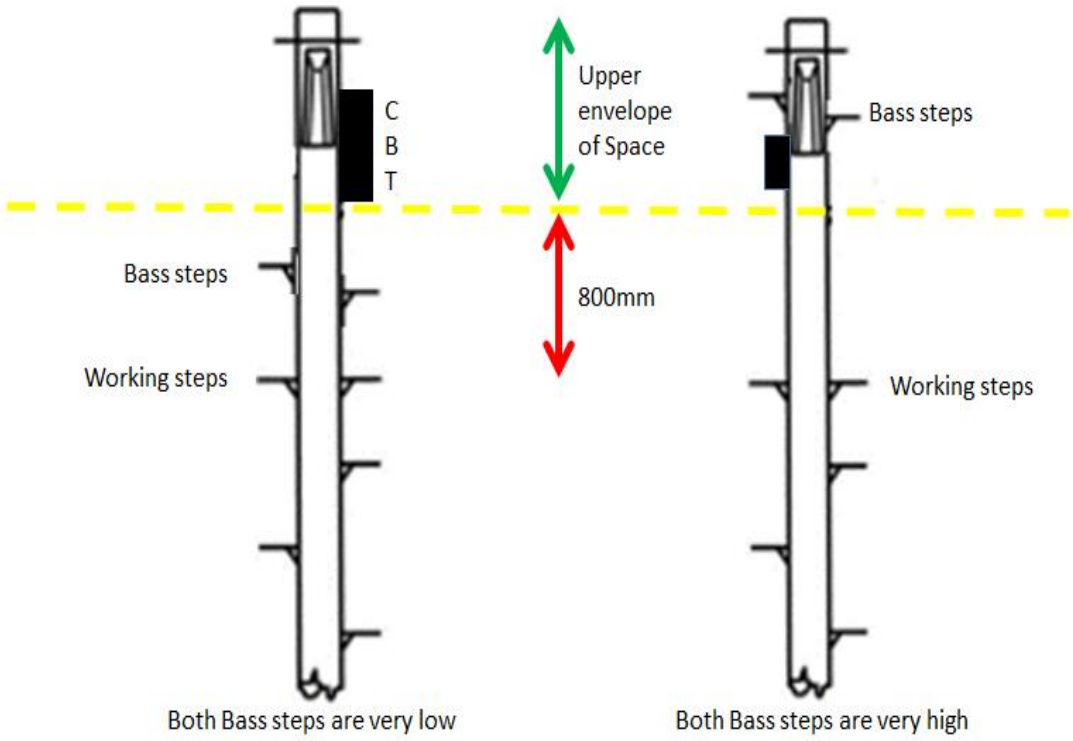

Figure 7

Both of these examples are compliant as neither have equipment located within the 800mm zone.

Whilst other stepping permutations may be encountered, the 800mm principle remains.

Occasionally (typically early 1960s) Poles may only have had one Bass step. The 800mm policy still stands, meaning no equipment can be mounted in that zone.

Please see figure 8 below.

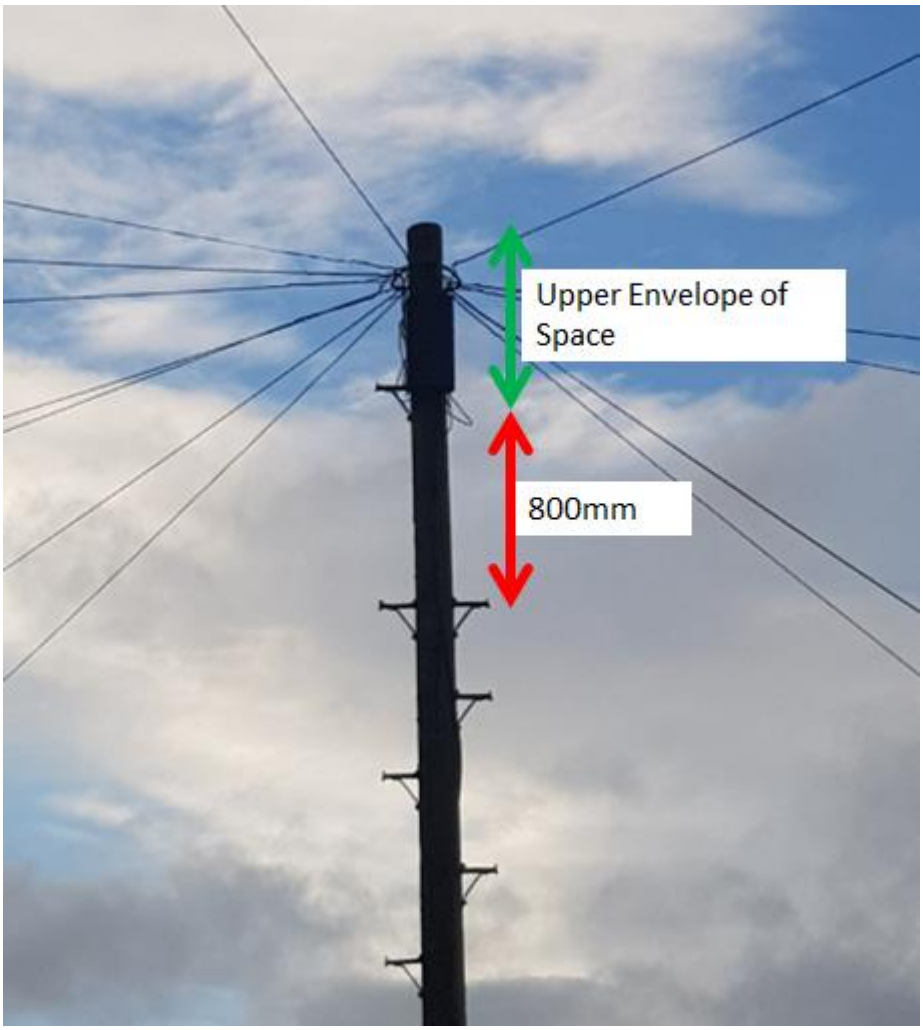

Figure 8 – Pole with one Bass step

4.6 Existing kit not complying with the new rules

Existing equipment (Copper or Fibre, Openreach or CP) installed before publication of this document (April 2020), which does not comply with the new rules can remain in-situ providing that it does not impede a safe hand hold of the Bass step (50mm rule).

In exceptional circumstances where the existing equipment may compromise the 50mm rule and as a result the Pole is deemed unsafe to climb, the problem should be flagged to the owning Operational team for rectification.

All new equipment installed after publication of this Engineering Communication must be provided to the new standard.

5 *Training*

Briefing only. No formal training requirement required.

6 *Quality Standards*

Revised quality standards / guidance required.

7 *Accreditation*

Accreditation has been considered and changes are required.

8 *Quality Checks*

Revised quality standards / guidance required.

9 *Contract impact*

The information in this document is issued to Contractors on the following basis:

- Mandatory

10 *Reference Documentation*

10.1 ISIS

ISIS Documents EPT/OHP/B058 will be updated in due course, to reflect these changes.

10.2 Manufacturer's instructions

N/A

10.3 Quality

Revised Q Standards required

10.4 Accreditation Documents

Changes required

10.5 FPQ

Considered and no changes required

10.6 Supply Chain

N/A

10.7 Communications

AEC and Briefing Sessions

END OF DOCUMENT