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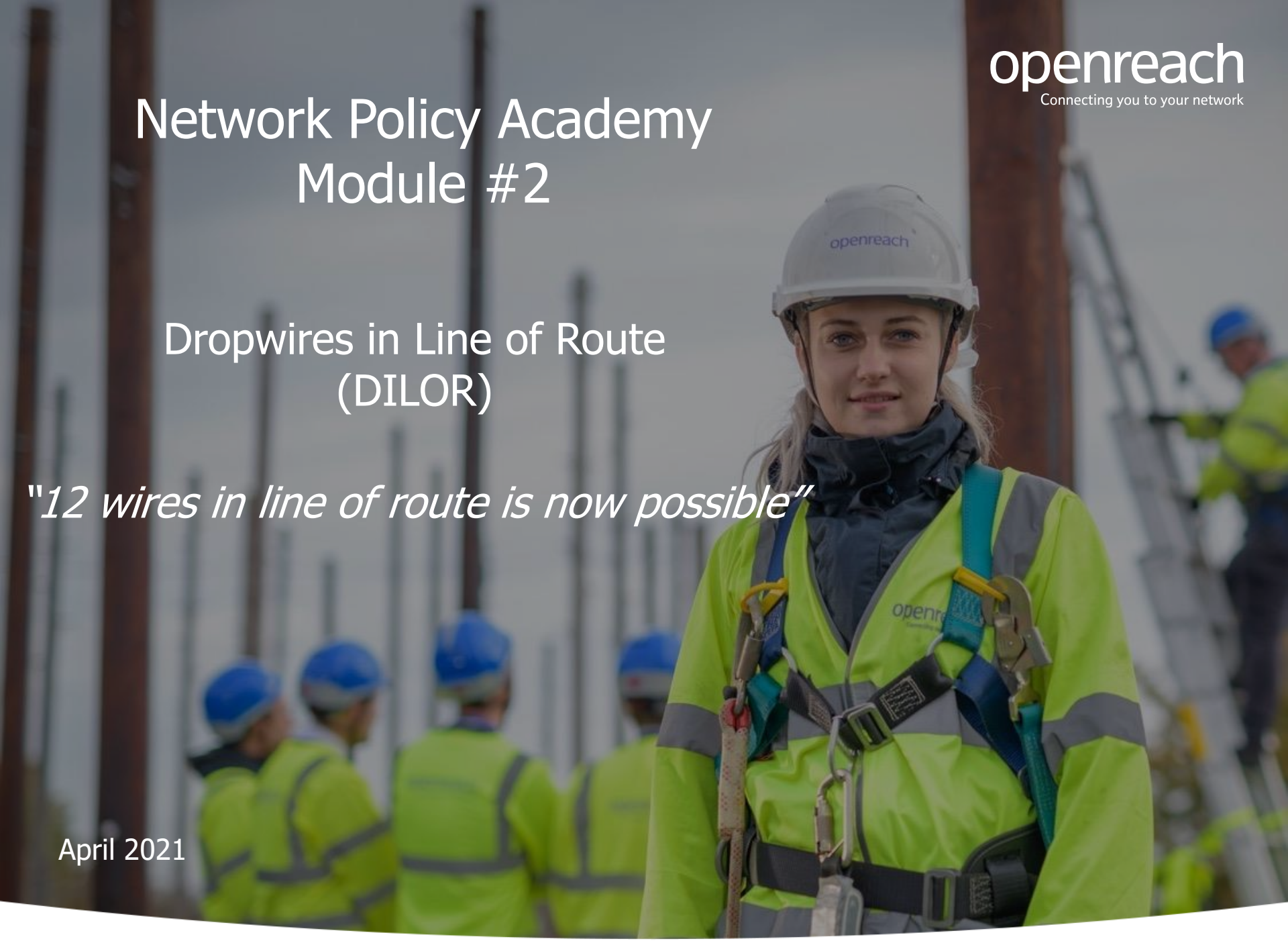
Network Policy Academy Module #2

Dropwires in Line of Route (DILOR)

"12 wires in line of route is now possible"



April 2021

Welcome to Module 2

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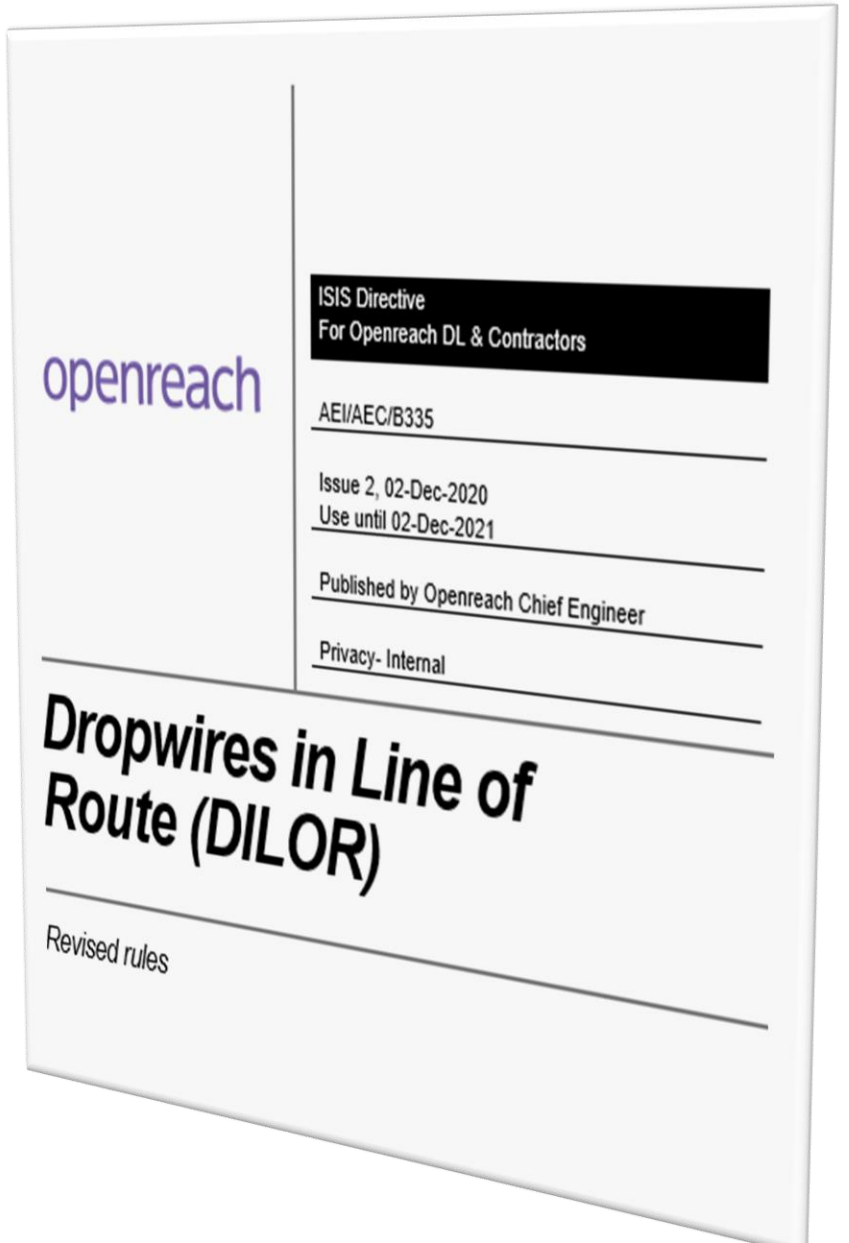
This module looks at the revised rules for Dropwires in Line of Route (DILOR).

The guidance in this module is taken from the ISIS document.

AEI/AEC/B335
Dropwires in Line of Route (DILOR)
Issue 2



A bit of background…

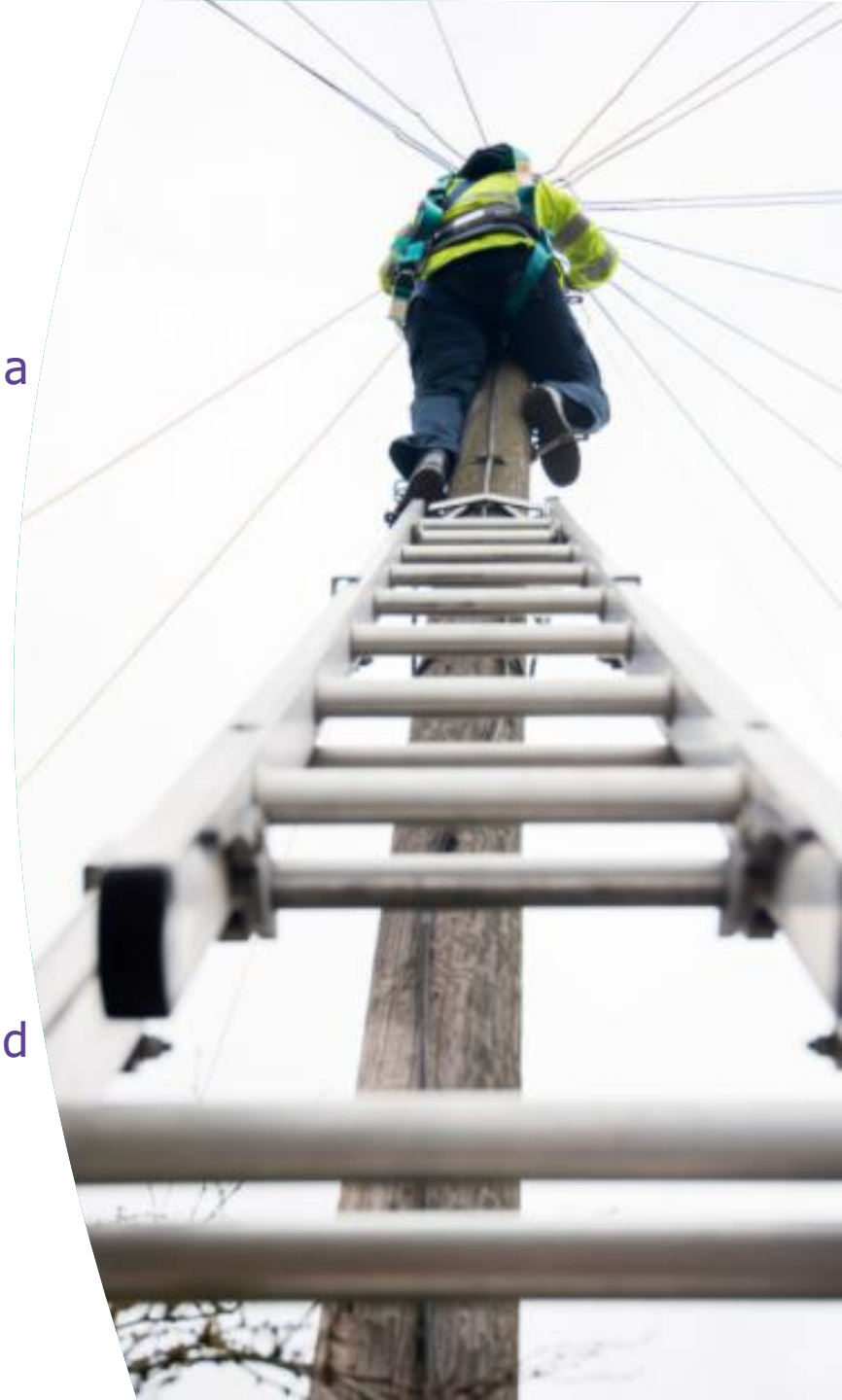
Where Dropwires are run together in line of route, they begin to act together and can apply a more significant, combined load onto Poles.

This can threaten the stability of a Pole.

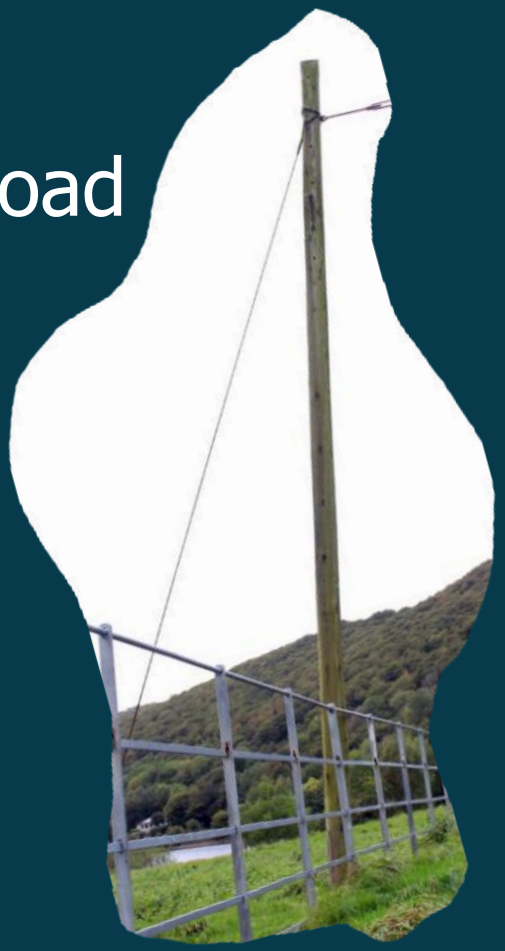
Because of this, we limit the number of wires running in line using the DILOR rules.

The new rules allow for more wires to be run in line of route **providing that Stays or a countering wire load is present.**

This provides additional operational flexibility and reduced need for pole staying or upgrades.



Stayed Poles
or poles with an opposing wire load



Stayed Poles

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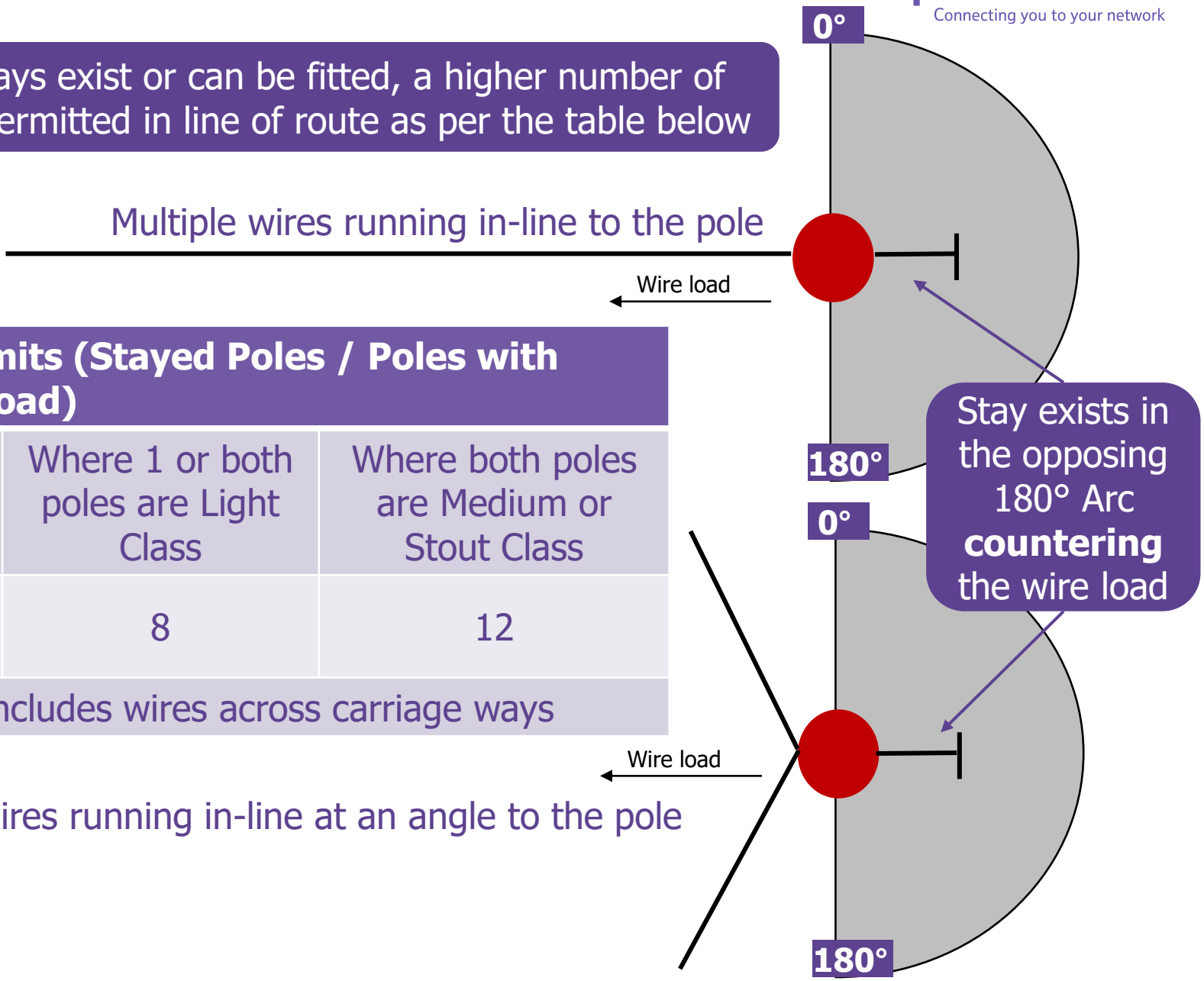
Where Stays exist or can be fitted, a higher number of wires are permitted in line of route as per the table below

Multiple wires running in-line to the pole



Loading limits (Stayed Poles / Poles with opposing load)		
	Where 1 or both poles are Light Class	Where both poles are Medium or Stout Class
Maximum Wires	8	12
This includes wires across carriage ways		

Multiple wires running in-line at an angle to the pole

Poles with an opposing wires to counter loading

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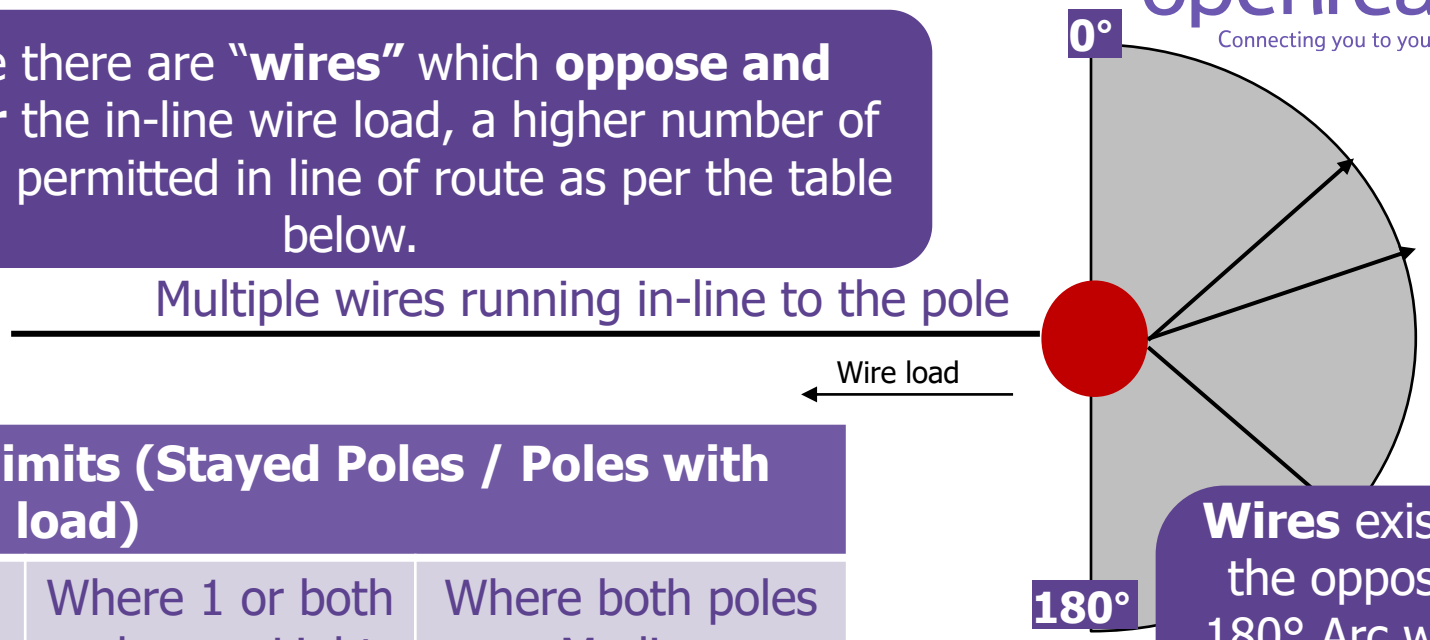
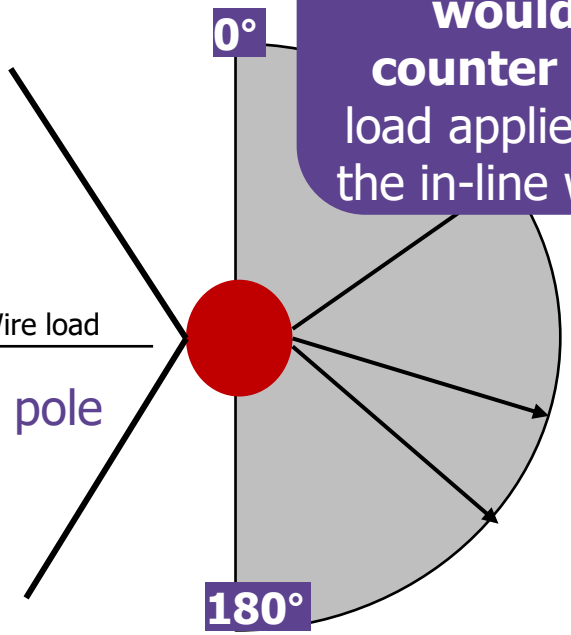
Where there are "**wires**" which **oppose and counter** the in-line wire load, a higher number of wires are permitted in line of route as per the table below.

Multiple wires running in-line to the pole



Wires exists in the opposing 180° Arc which **would counter** the load applied by the in-line wires

Loading limits (Stayed Poles / Poles with opposing load)		
	Where 1 or both poles are Light Class	Where both poles are Medium or Stout Class
Maximum Wires	8	12
This includes wires across carriage ways		



Multiple wires running in-line at an angle to the pole

Unstayed Poles
or poles without an opposing wire load

Multiple wires in-line to pole

Un-Stayed Poles

Poles with no opposing wire load

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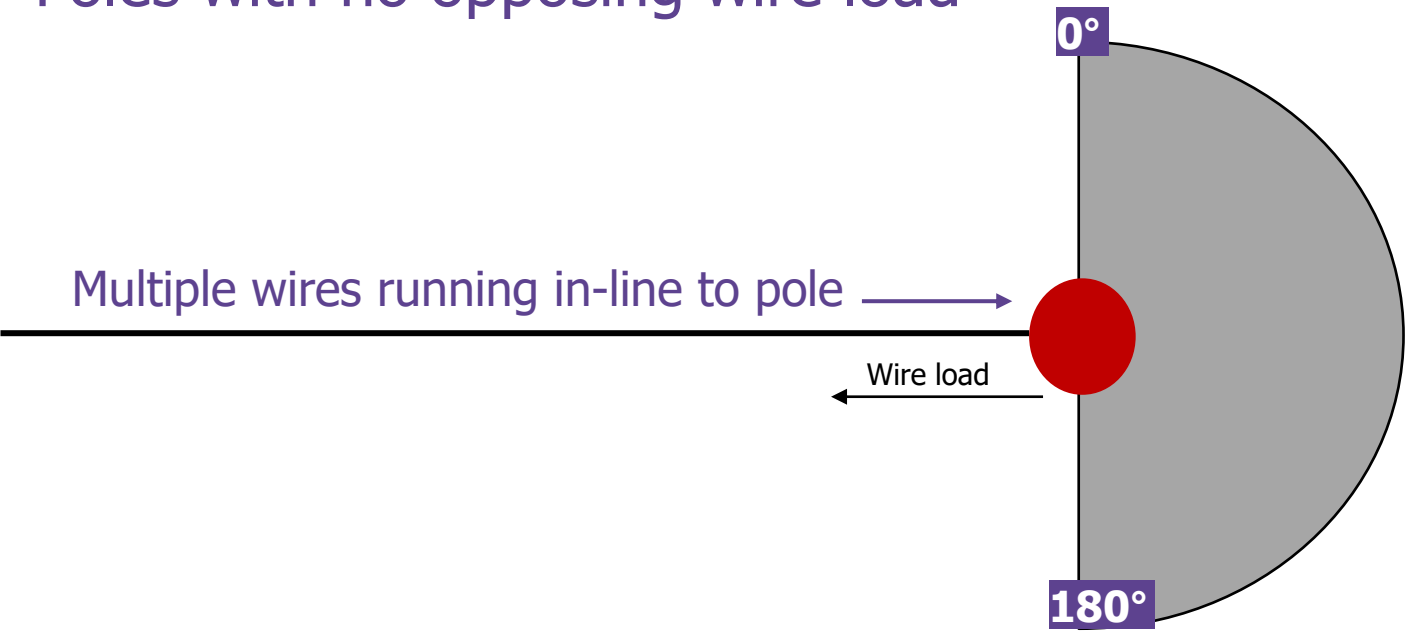

No stay or wires in the opposing 180° arc to counter the load. Follow the table below

	Wires crossing carriageway			Wires not crossing carriageway		
	One or both poles are Light class	Both Poles are Medium class	Both Poles are Stout Class	One or both poles are Light class	Both Poles are Medium class	Both Poles are Stout Class
Maximum permitted wires	3	4	5	4	5	6

Multiple wires in-line at angle to pole

Un-Stayed Poles

Poles with no opposing wire load

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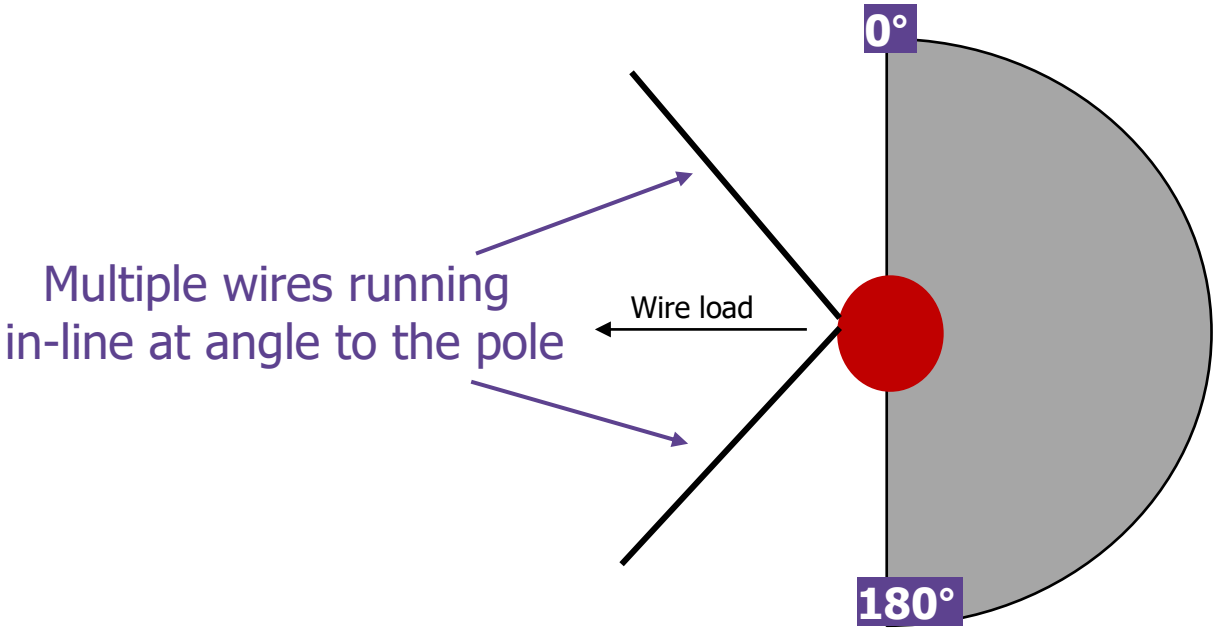

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	Wires crossing carriageway			Wires not crossing carriageway		
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Maximum permitted wires	3	4	5	4	5	6

Intermediate / In-line Poles.
Trigger Angle to Light class poles

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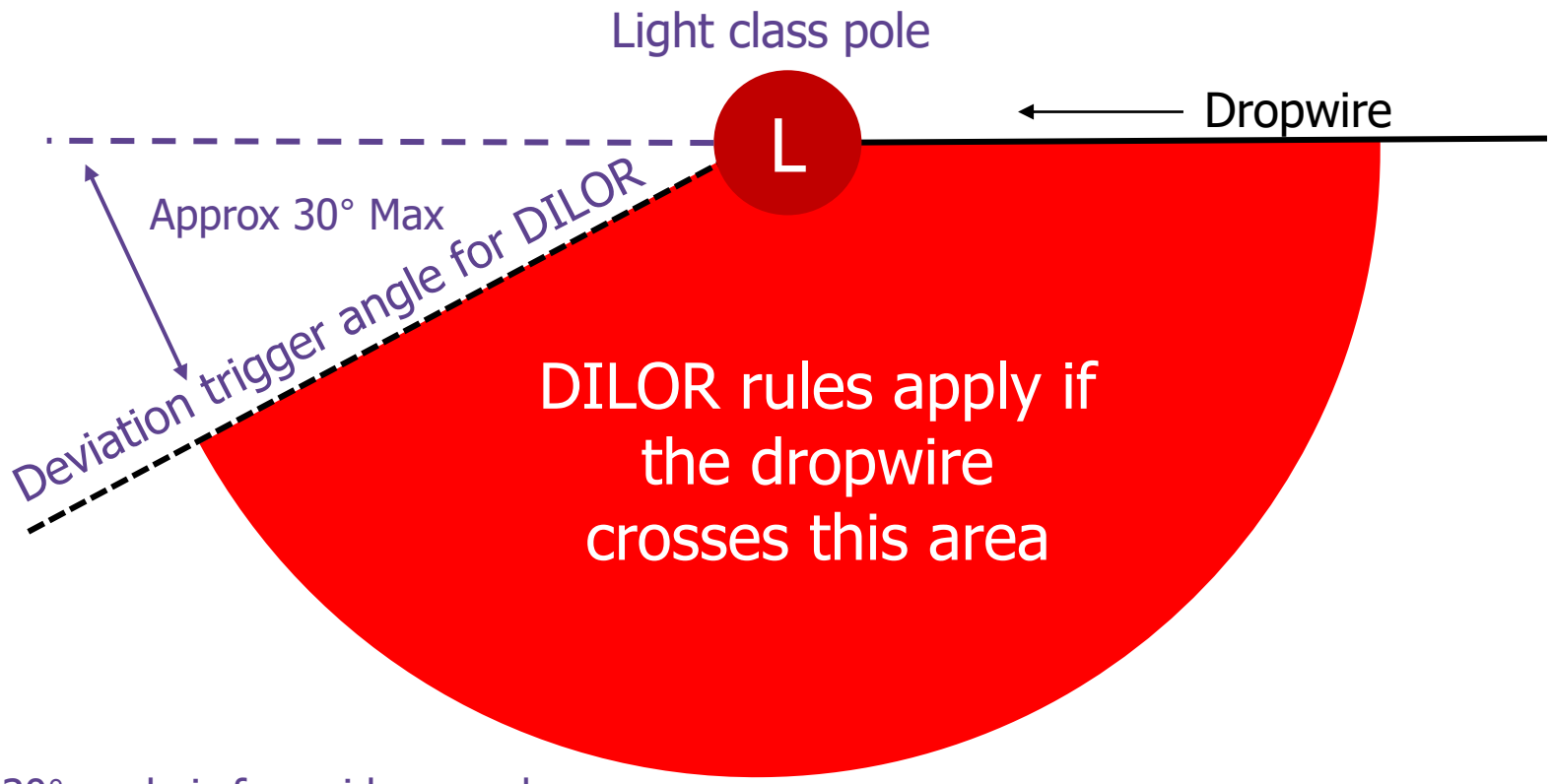
In general, in-line poles need not be considered for DILOR except where there is a deviation in the route.

DILOR should then be considered



The 30° angle is for guidance only.

Intermediate / In-line Poles.
Trigger Angle to Medium class poles

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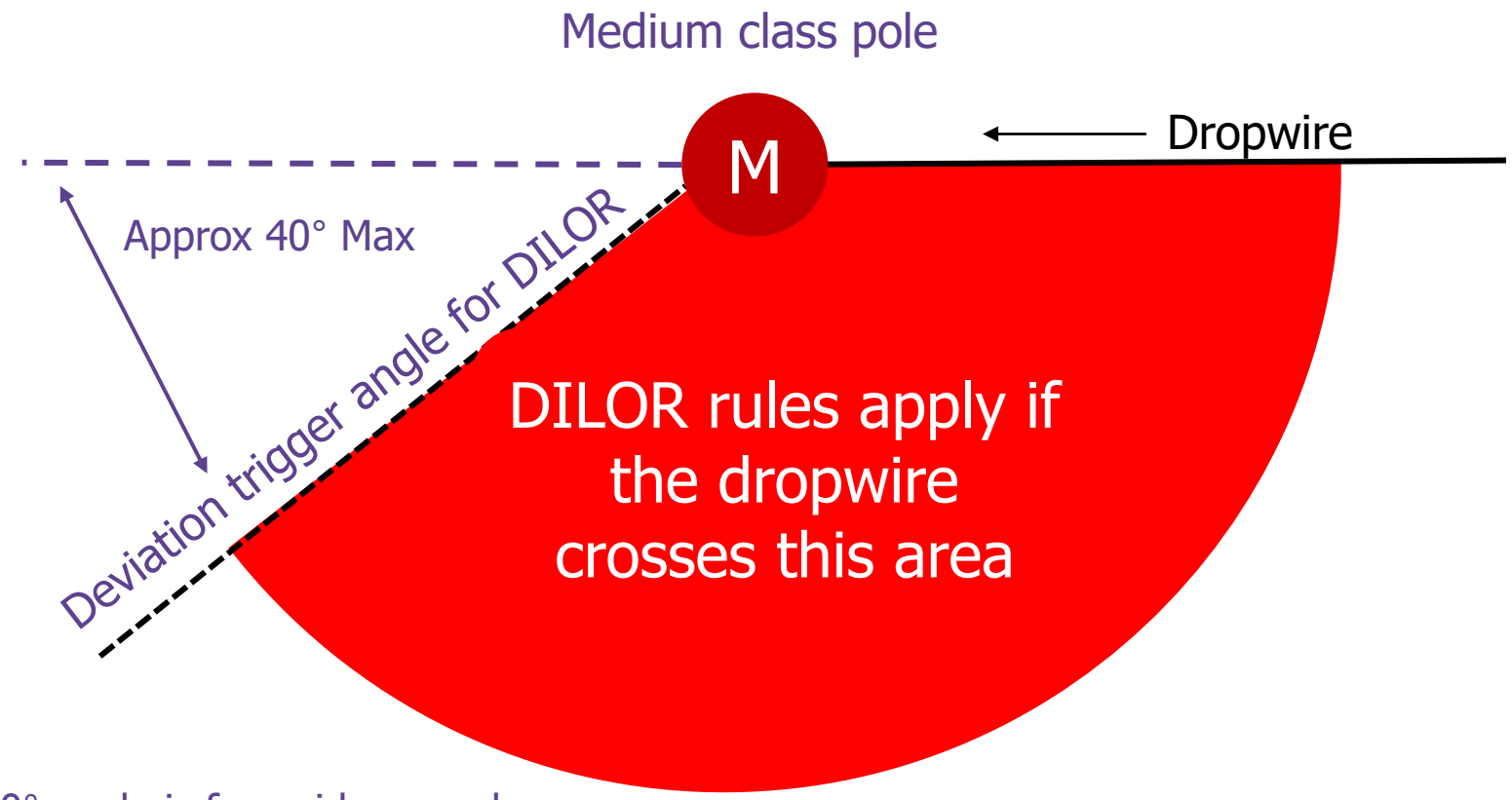
In general, In-line Pole poles need not be considered for DILOR except where there is a deviation in the route.

DILOR should then be considered



The 40° angle is for guidance only.

Survey considerations

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The safe load capacity of a single pole stayed or not stayed is limited and consideration should be made to the following before adding additional load to a pole for example:

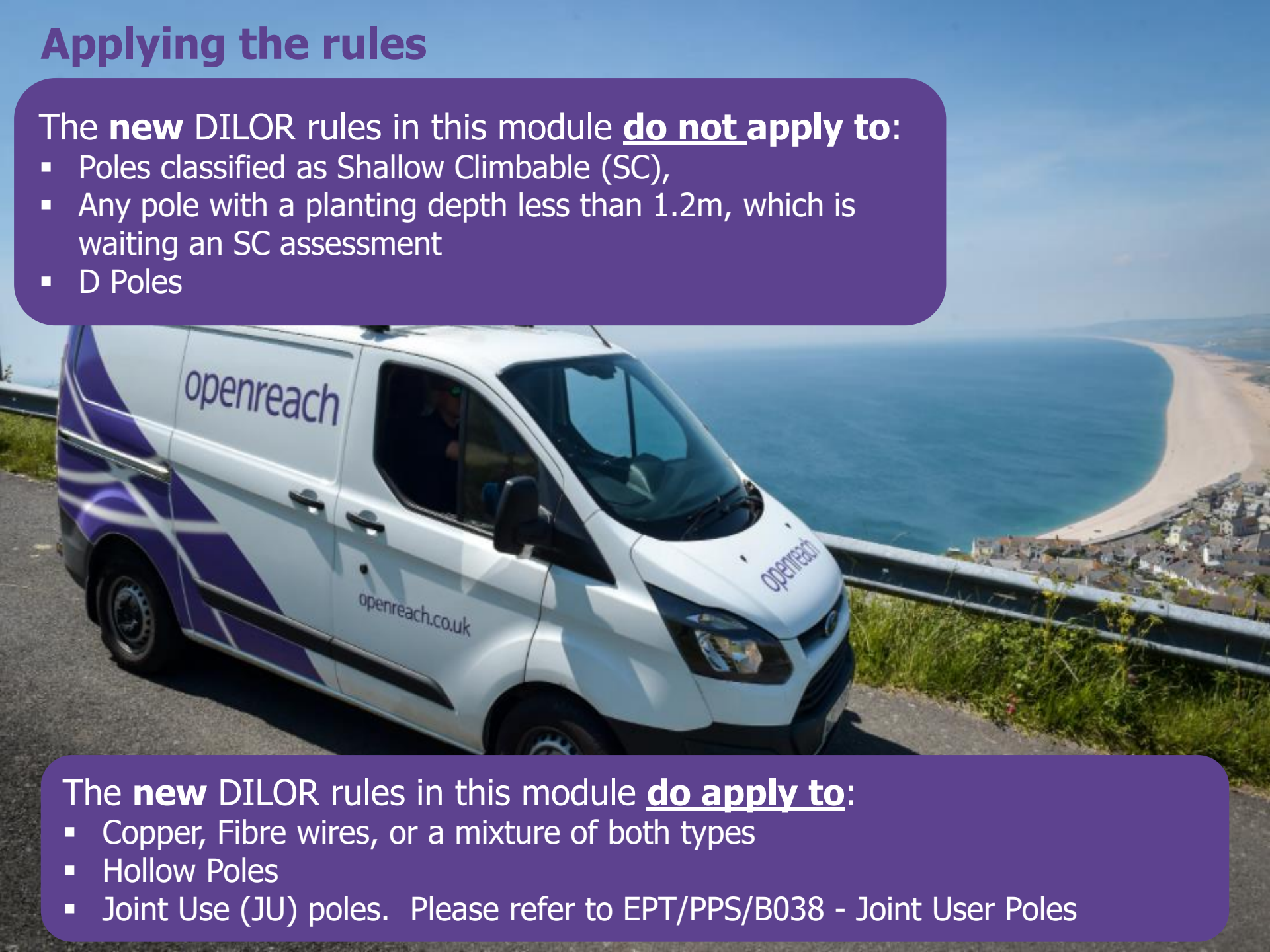
- The strength and angle of any counteracting wire(s)/stay
- Exposed locations
- Tree lined routes

Remember not all scenarios will be suitable for the maximum DILOR loading!

Applying the rules

The **new** DILOR rules in this module **do not apply to**:

- Poles classified as Shallow Climbable (SC),
- Any pole with a planting depth less than 1.2m, which is waiting an SC assessment
- D Poles



The **new** DILOR rules in this module **do apply to**:

- Copper, Fibre wires, or a mixture of both types
- Hollow Poles
- Joint Use (JU) poles. Please refer to EPT/PPS/B038 - Joint User Poles

Options to reduce DILOR issues

There may be scenarios where you may be able to reduce the amount of dropwires in line along a route.
Possible options are:

1) Remove any redundant Copper Wires (particularly one's you may make redundant by installing a Fibre / Copper Hybrid Drop)
2) Rationalise any existing Copper wires that are feeding or beyond the DP using DW15.
3) Install an Aerial Cable to replace Dropwires
4) Fit Stays to counter the load applied by Dropwires

Where an aerial cable can be erected this should be the preferred solution.

DILOR with existing Aerial Cables

Where additional Dropwires are to be added alongside an **un-stayed aerial route**, the loading will be **beyond permitted limits**.

A **Route Stability** evaluation should be carried out to ascertain the provisions required to strengthen the route in order to accommodate the new loading.

Please refer to:
EPT/ANS/A014 - Specification for Overhead Route Stability

Further Guidance

Overhead Guidance From the **Policy & Build App**

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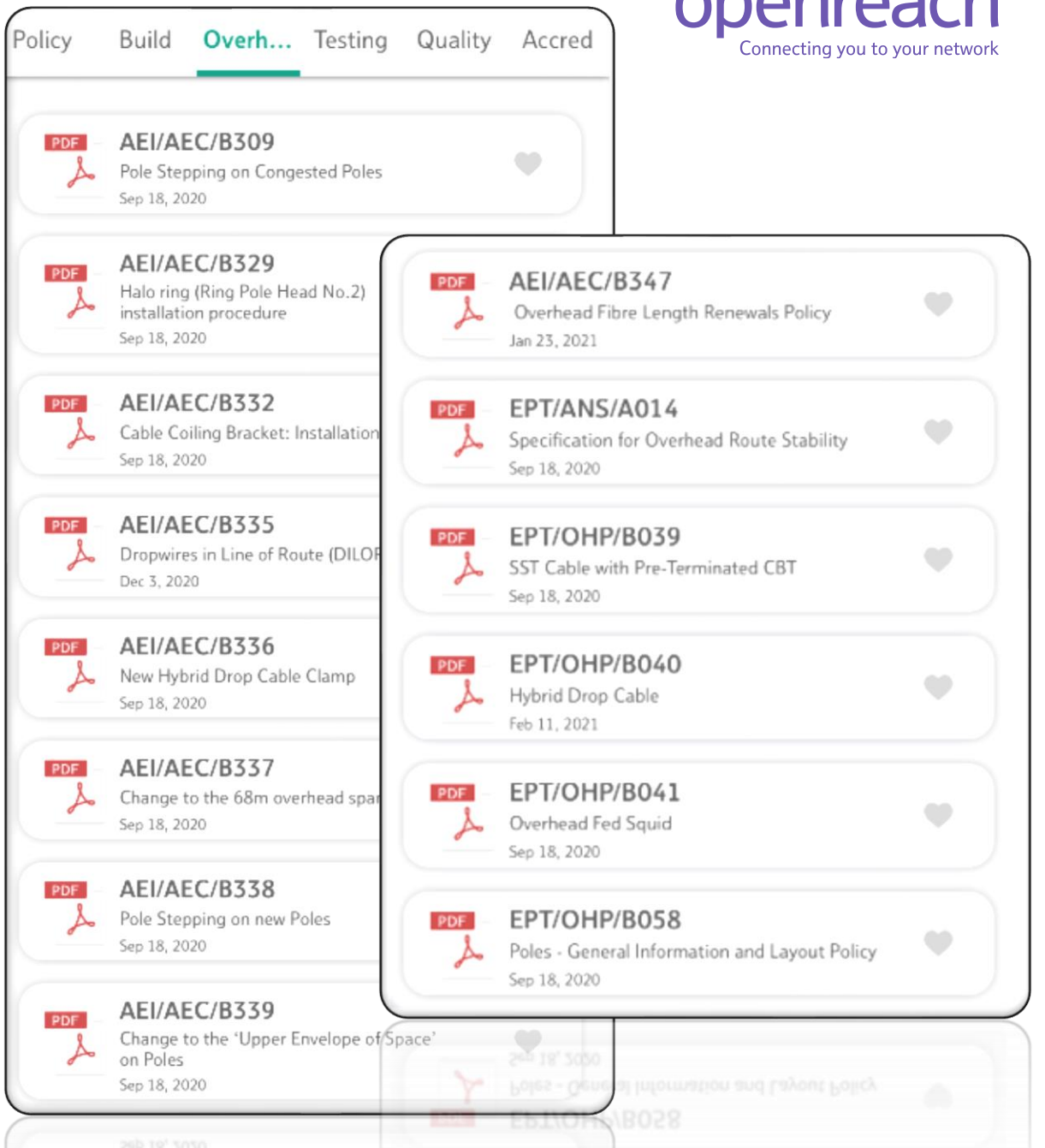

The Quiz

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Now it's time to test your knowledge
Click on the button below
or go to
Policy Academy Module 2 - Quiz

Or click on the button below

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