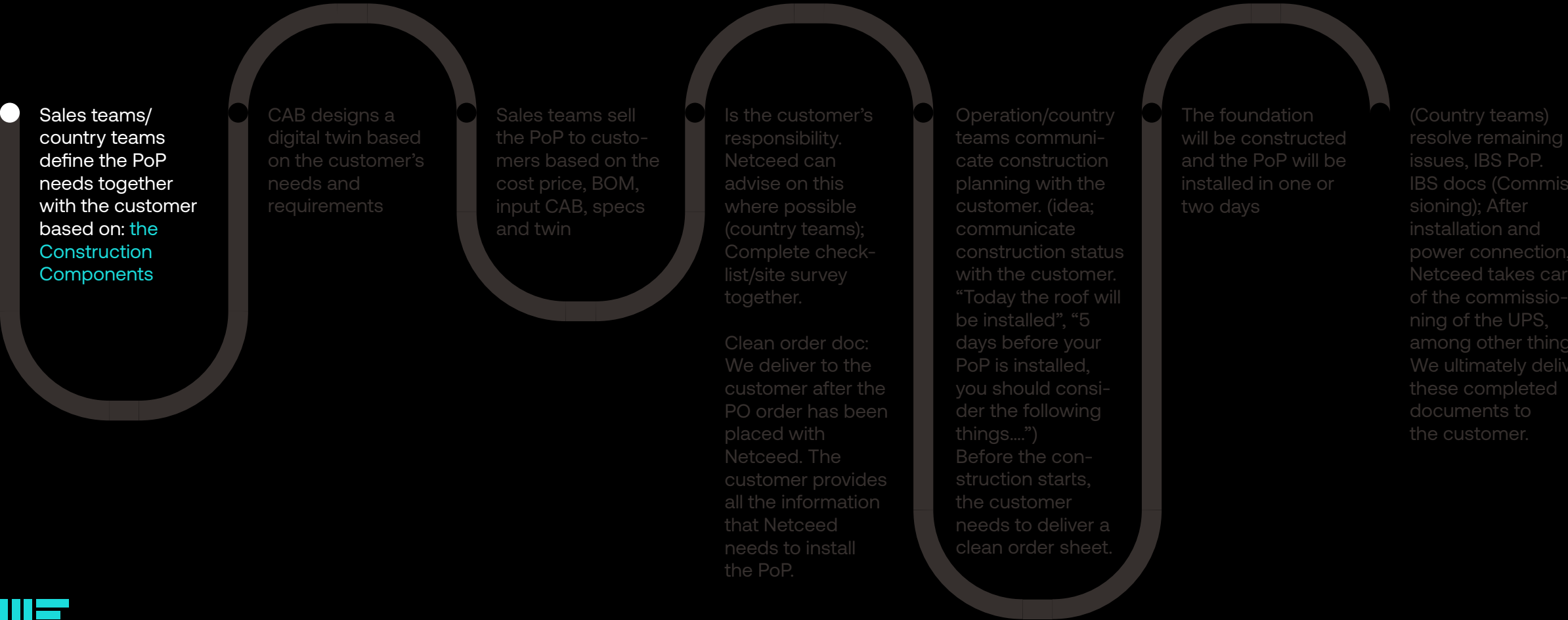
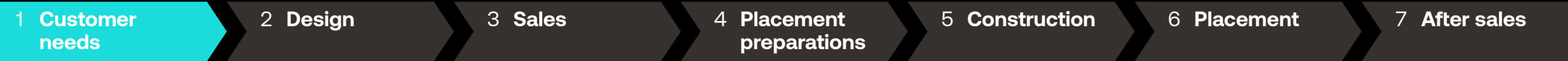
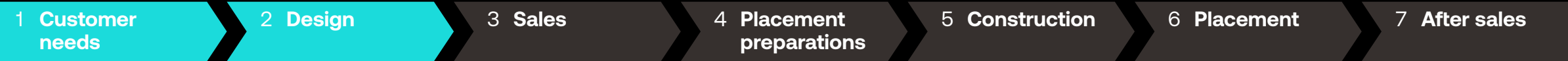


Customer journey PoP

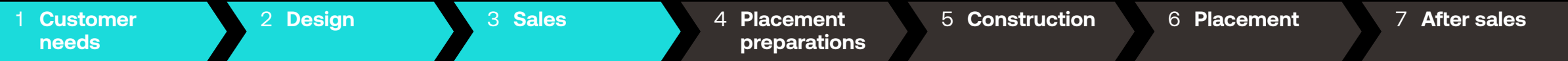
Total roadmap



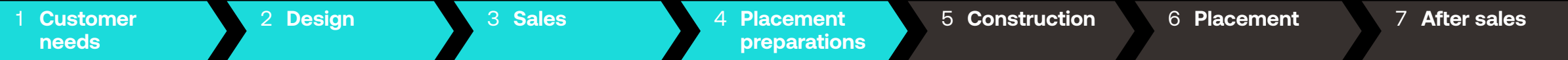
Total roadmap



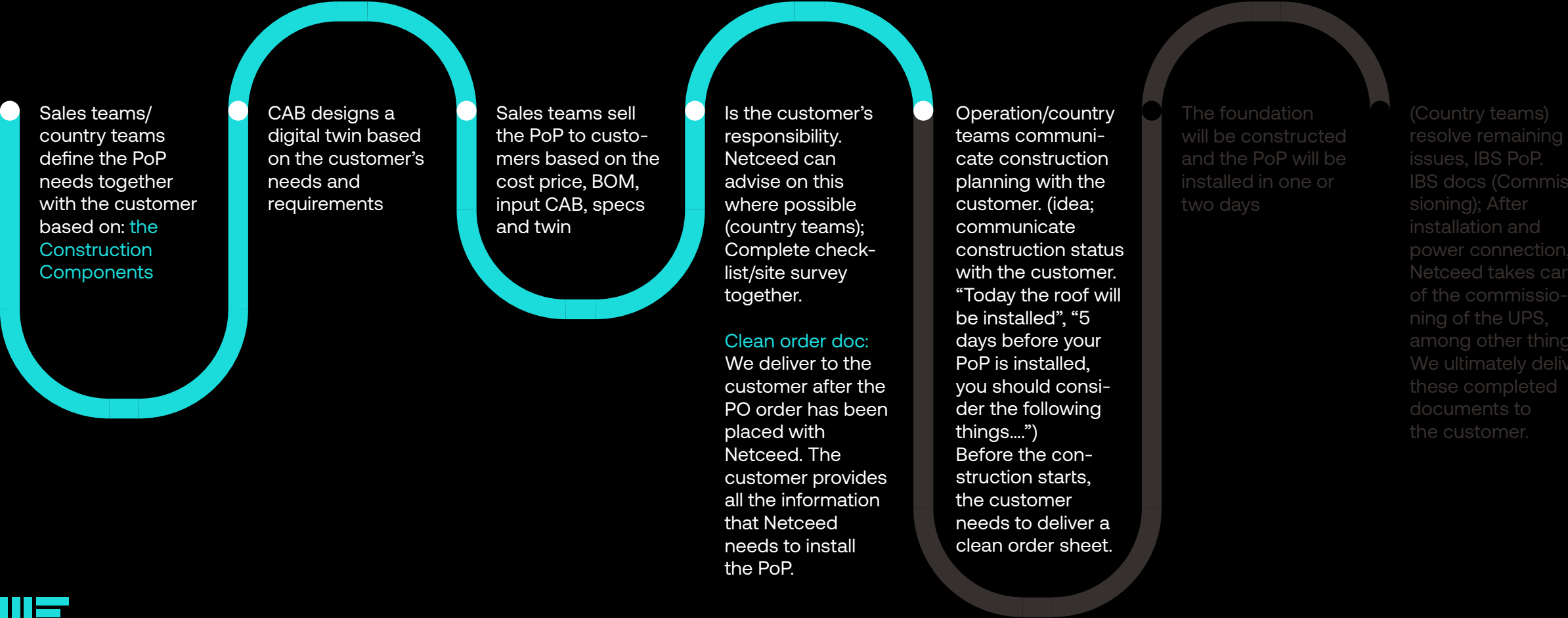
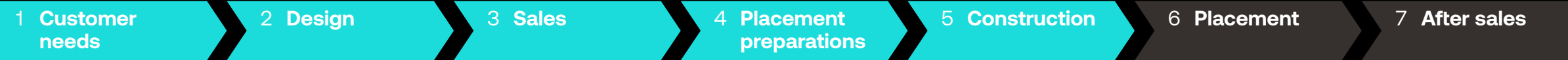
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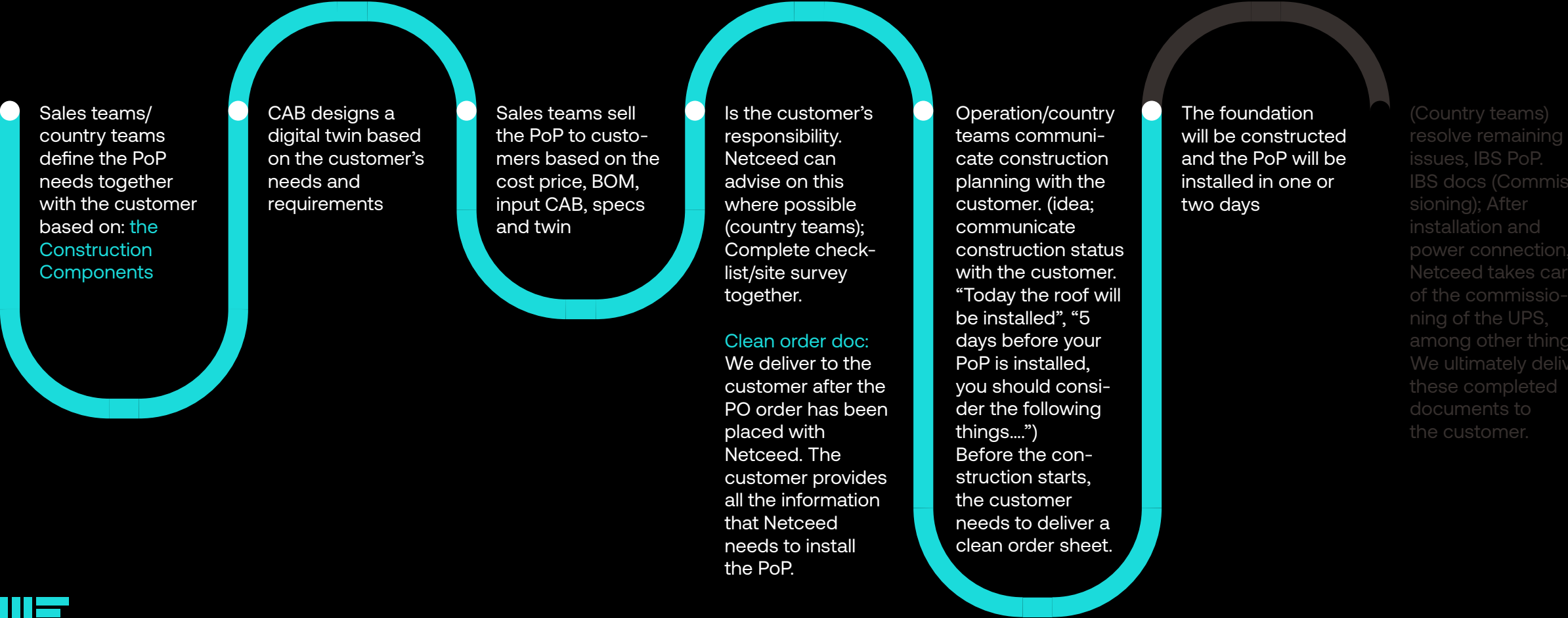
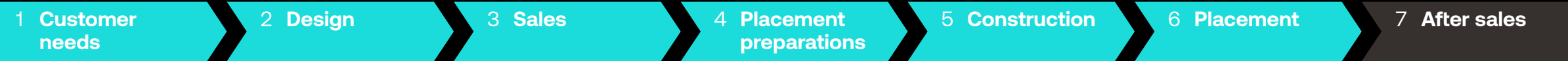
Total roadmap



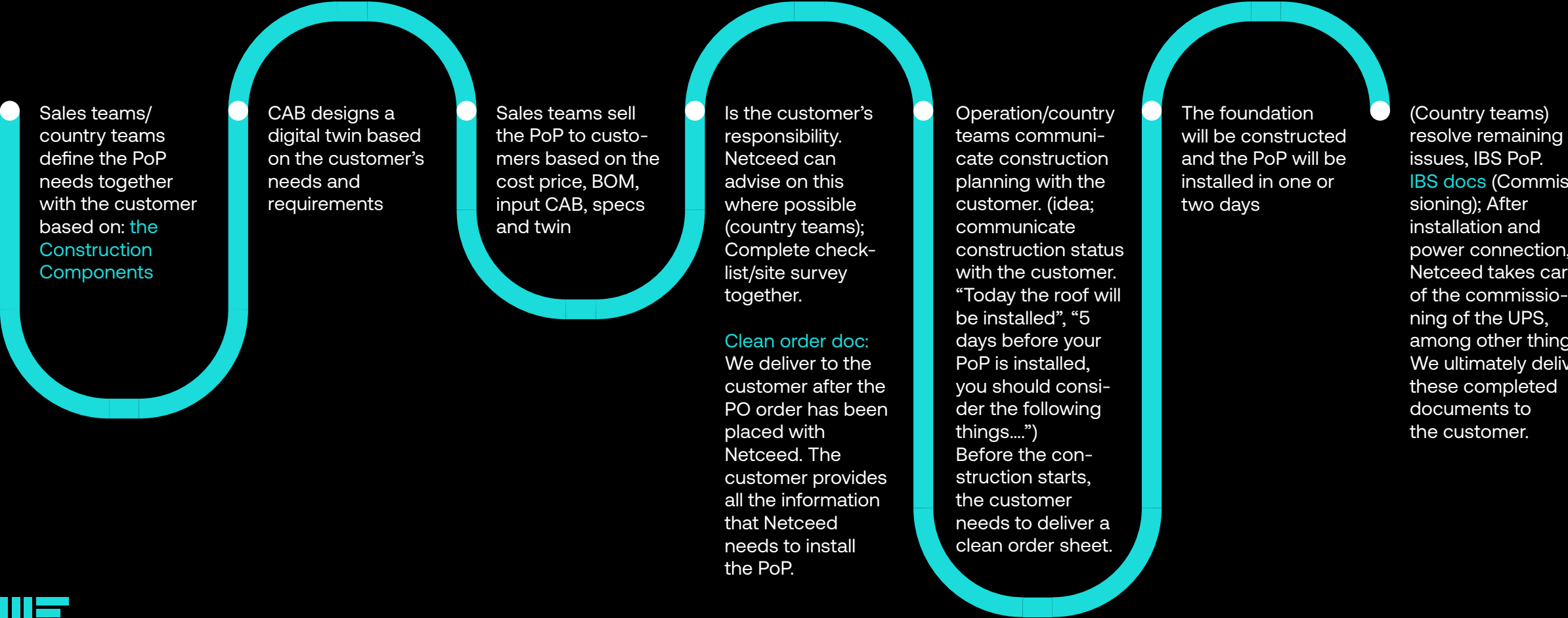
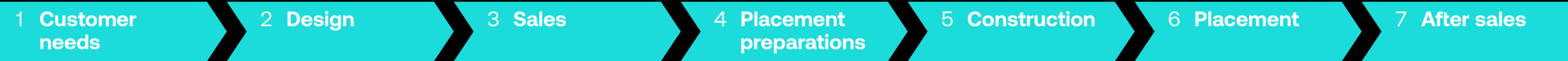
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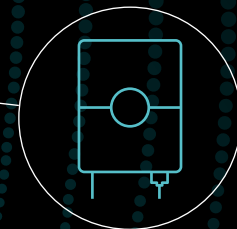
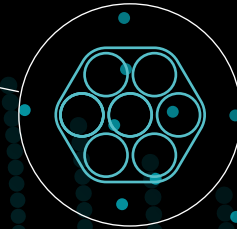
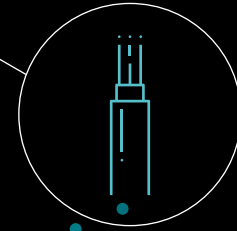


Total roadmap



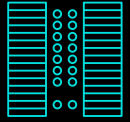
Total roadmap



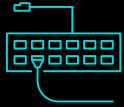


It all starts with the network requirements

A modular approach to meet each demand



ODF-Rack configuration



Fiber configuration



UPS



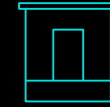
Cooling



Power System



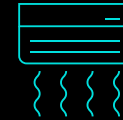
Monitoring, Access & Control



Housing



100% waterproof



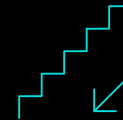
Compact cooling system ($\leq 16\text{kW}$)



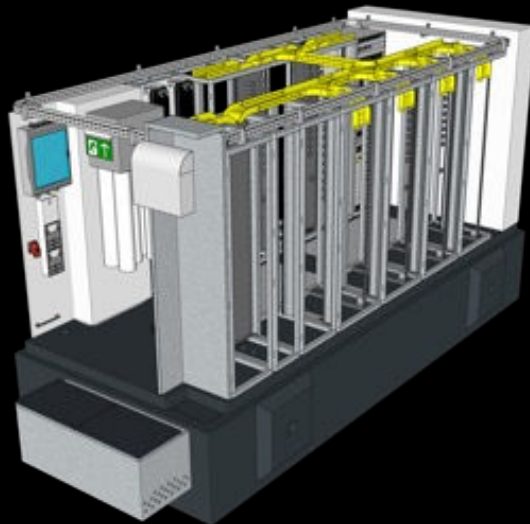
Noise level ($\leq 30\text{ dBa}$)



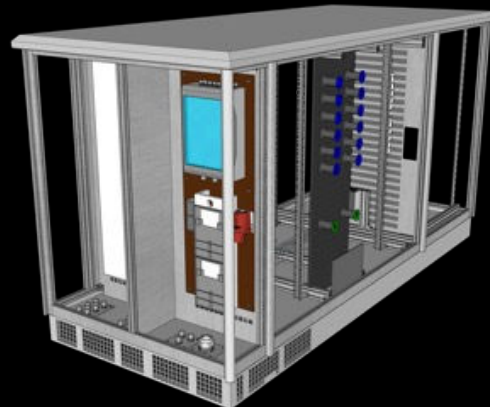
Thermal Insulation system



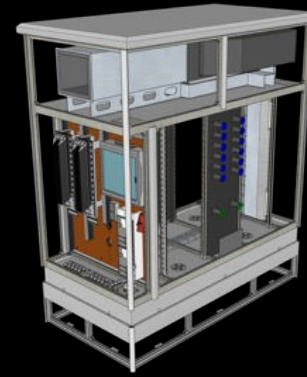
Cable basement and raised floor (PoP only)



PoP

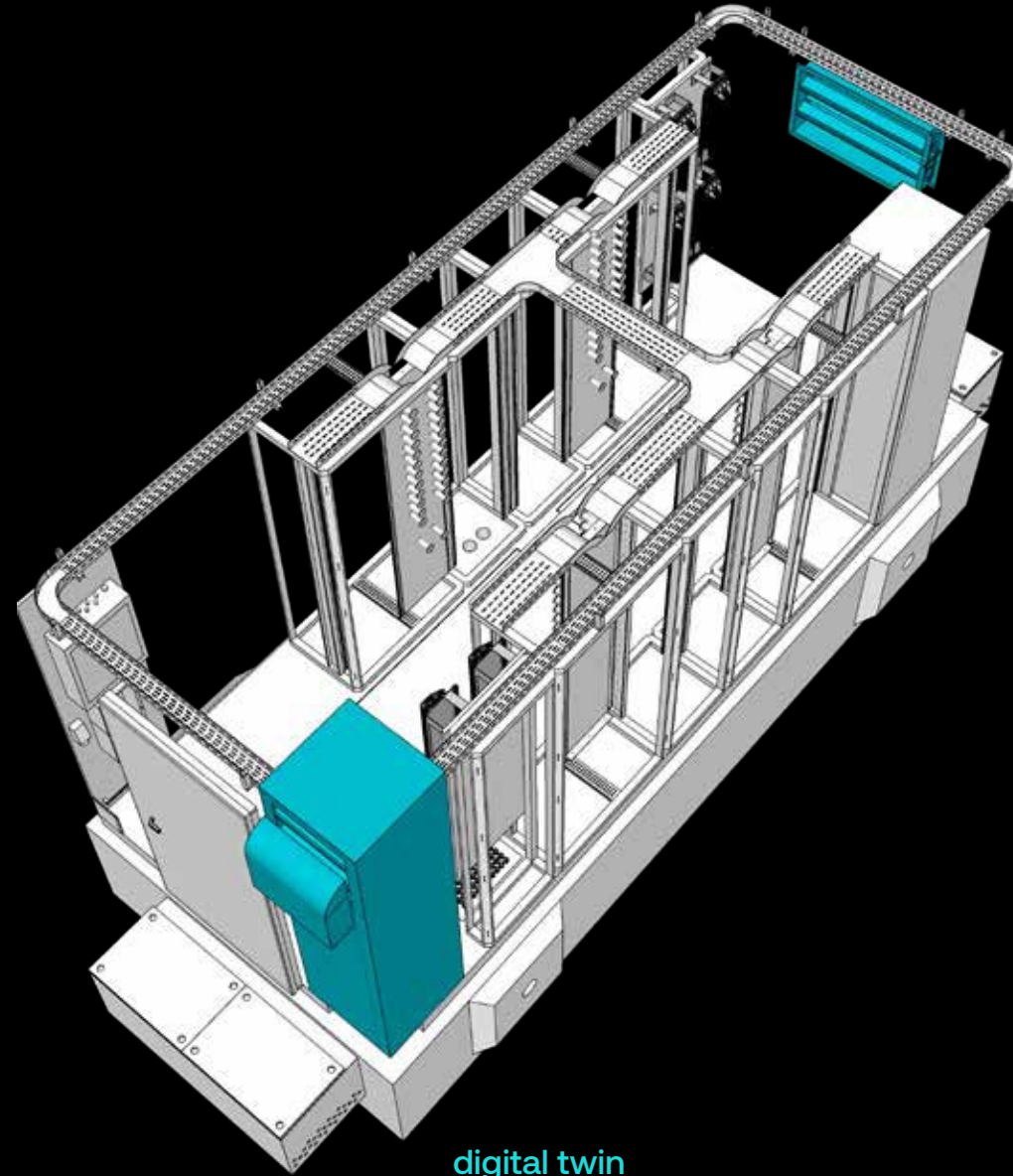


Mini PoP



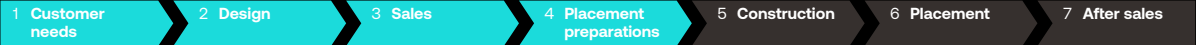
Street cabinet

Based on the requirements, the network topology and the business case, the Change Advisory Board provides a detailed specification document with digital twins of the offered POP solutions. The sales team will then provide a turnkey offer, including transport & placement and optional services.



digital twin

Points to consider when researching a Point of Presence (PoP) location



Transport Route from Border City/Town to POP Location

Is the route accessible for a flatbed or crane truck? Take into account:

- Viaducts,
- Narrow roads,
- Tight turns,
- Obstacles such as (lamp)posts, trees, etc.

Are there weight/axle load restrictions on the transportation route? If yes, what are they? Contact information for the road authority

Traffic Measures: are traffic measures (blockades and detours) necessary?

PoP Location Placement

Is the location free from cables and pipelines?

Does the location have a clean soil certificate?

Is the location free from paving (asphalt, tiles, bricks)?

Does excess soil need to be removed?

Is the permit available, and are authorities such as the municipality informed and in agreement?

Is there evidence that the location is free from unexploded ordnance?

Ground Level

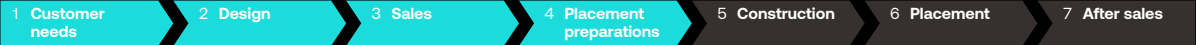
Should shrubs or other greenery be removed? (consider the reach of the crane)

What is the required ground level height?

Which point should be used as a reference for the future ground level?

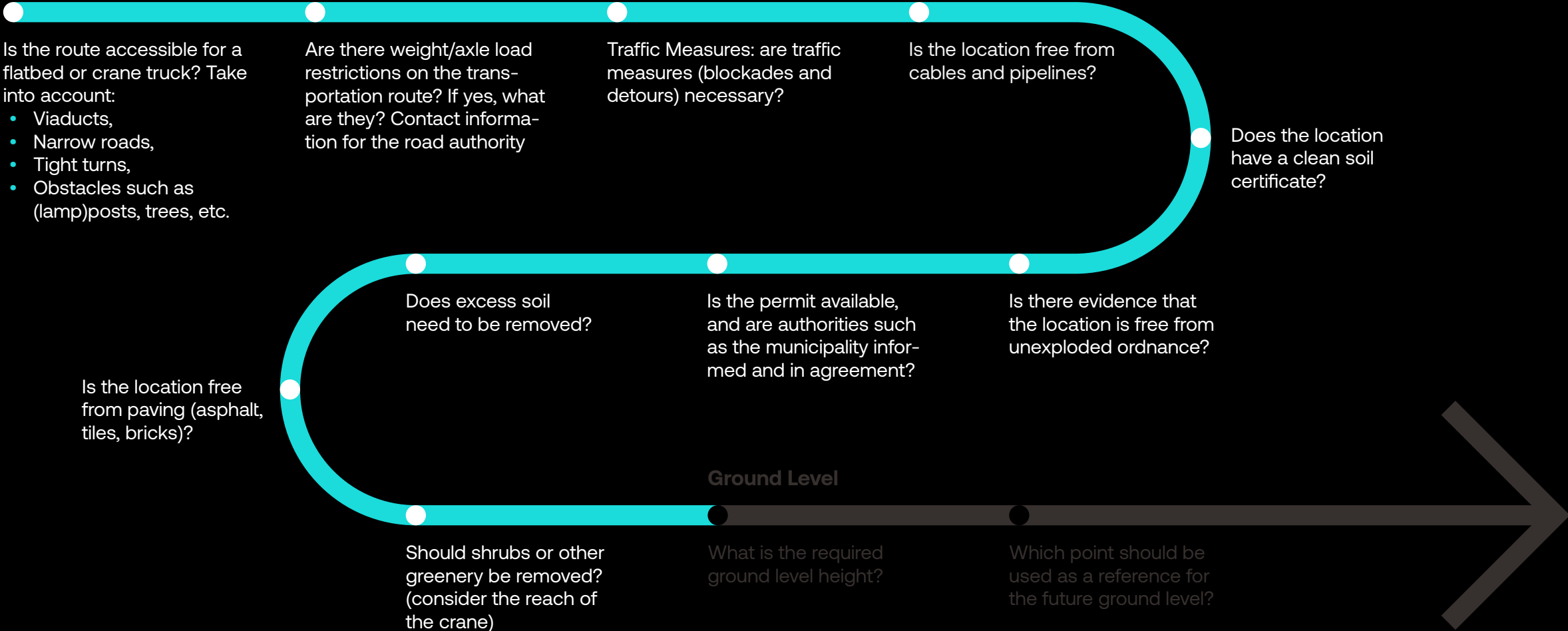


Points to consider when researching a Point of Presence (PoP) location

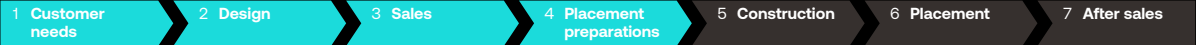


Transport Route from Border City/Town to POP Location

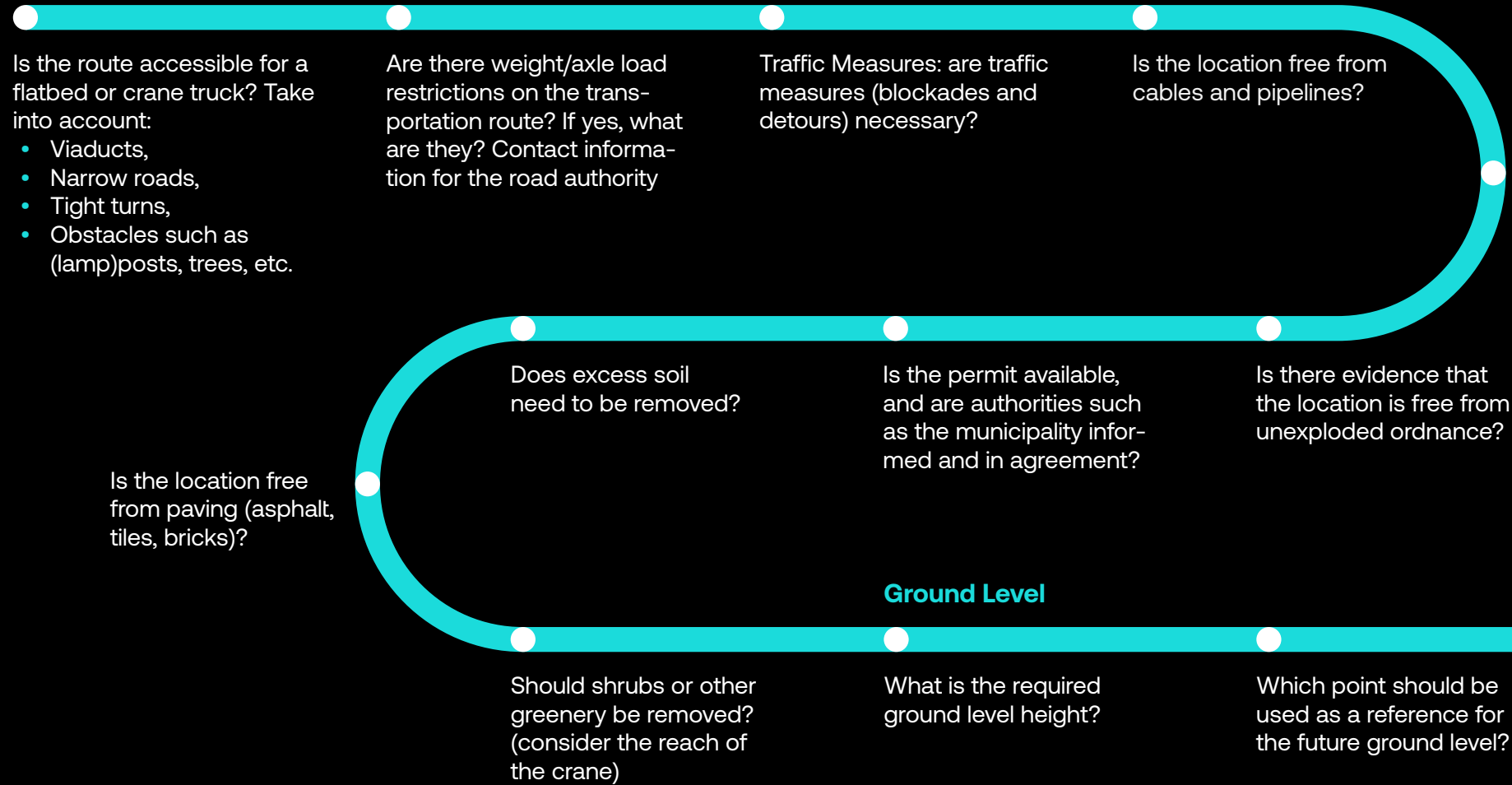
PoP Location Placement



Points to consider when researching a Point of Presence (PoP) location



Transport Route from Border City/Town to POP Location



wk -2

-1

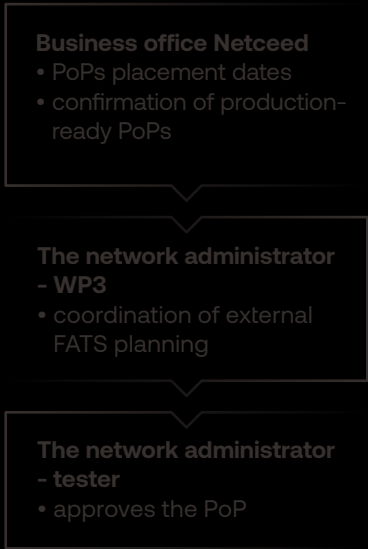
0

1. Internal FAT

The Intere Factory Acceptance Test is in principle carried out by Netceed 2 weeks before actual placement. Netceed inspects the PoP itself and has the remaining points identified immediately addressed.

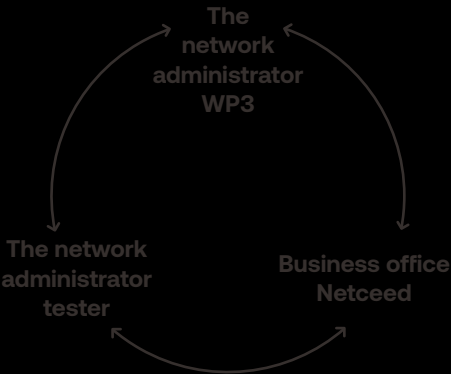
2. External FAT

Netceed will pass on the data to the WP3 party, the network administrator, 1 week before the actual placement. the network administrator informs Netceed when they will carry out the external FAT. During the External FAT, an Netceed employee accompanies the network administrator inspector.



3. Solve FAT points

During the External FAT, an Netceed employee accompanies the network administrator tester. The network administrator communicates the remaining points identified directly with Netceed on site. Where possible, the remaining points identified are immediately resolved by Netceed. The network administrator assessor assigns all remaining points to the network administrator WP3 and to Netceed. Netceed in turn communicates all resolved remaining points to the assessor at the network administrator WP3. After this, the network administrator WP3 creates the report.



4. Reporting FAT points

WP3 party, the network administrator, sends a FAT report to the contractor, Network owner/client (PM) and Netceed. This report contains all outstanding remaining issues (RFI blocking issues and non-RFI blocking issues).

The identified residual points that came to light during the external FAT, which were resolved by Netceed before preparing the report and communicated to the network administrator, are not mentioned in the report.

Development points that go through the RFC process and have not yet been agreed with the design board (Network owner/client) are not included in the reporting.

The outstanding remaining points are placed by Netceed in the Odoo ticket system. A maximum of two tickets are created per PoP:

- For non-RFI blocking issues points (see also point 15)
- for RFI blocking issues points (see also point 16)

wk -2

-1

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Business office Netceed

- PoPs placement dates
- confirmation of production-ready PoPs

The network administrator - WP3

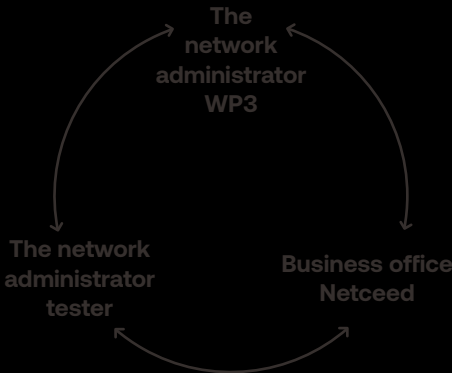
- coordination of external FATS planning

The network administrator - tester

- approves the PoP

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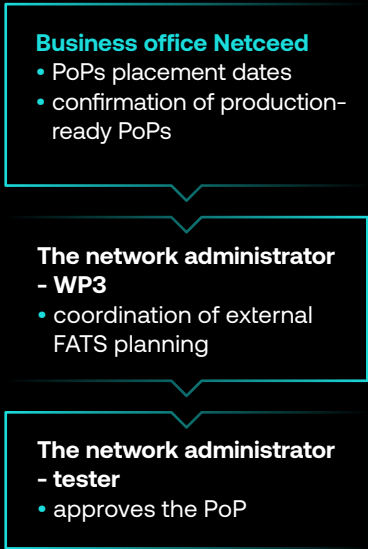
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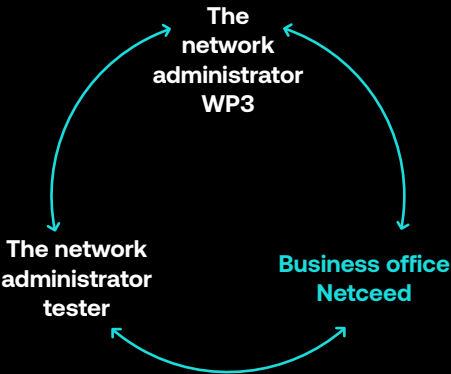
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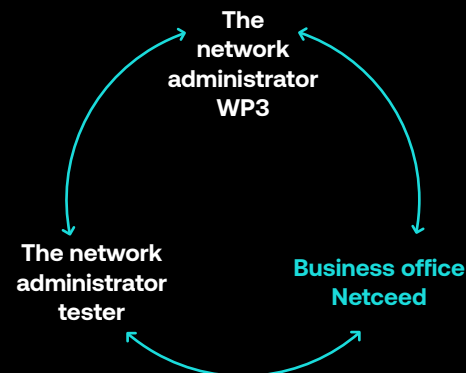
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wk 0



5. Placement

The installation is provided by Netceed. WP3 party the network administrator is present during the installation for the Site Acceptance Test (SAT). This tests whether:

- The door direction is facing correctly,
- The PoP has been set to the correct height,
- The PoP is level,
- Whether there was any damage to the outside during transport/installation.

The ring tubes are pulled out of the PoP by Netceed. After this, both ring entries are sealed by Netceed. Photos of this seal will be shared by Netceed with the contractor within one week.

After installation, the PoP is the property of the contractor.

1



6. Grounding

The earth pin is ideally driven in the same week as the week of installation. This cab be coordinated by Netceed, the WPT3 party or the customer/contractor.

2



7. Power connection

The power request can be taken care of by Netceed, the contractor or network customer. The power connection is important for the remainder of the process; inspection of the electrical installation/commissioning of the UPS -> RFI moment. In order for all follow-up actions to proceed as planned, the power connection must be provided at least 5 weeks before RFI.

If necessary, a generator will be installed. The earth pin must always be in place and a second inspection of the electrical installation will have to be carried out in the future.

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8. The inspection of the electrical installation

The inspection of the electrical installation is scheduled after the power connection has been provided.



wk 0



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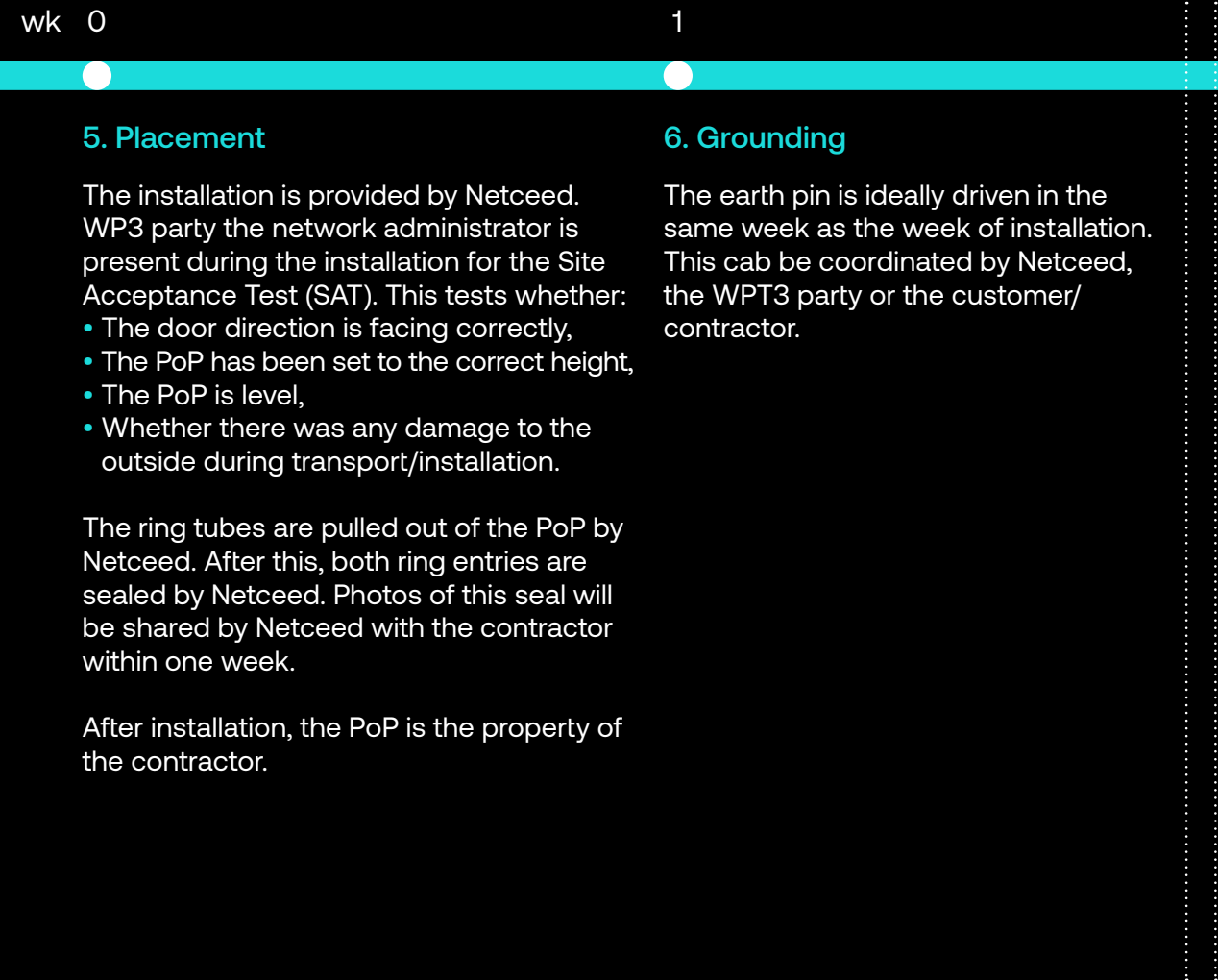
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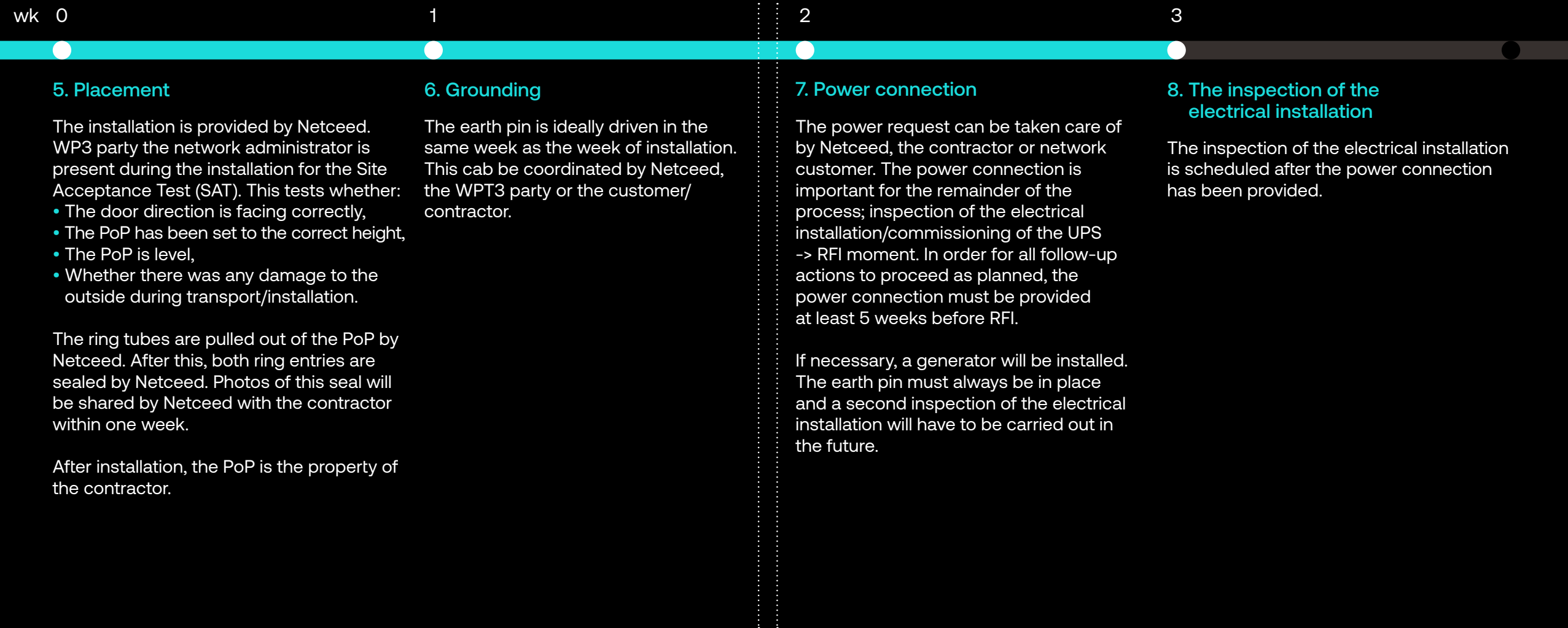
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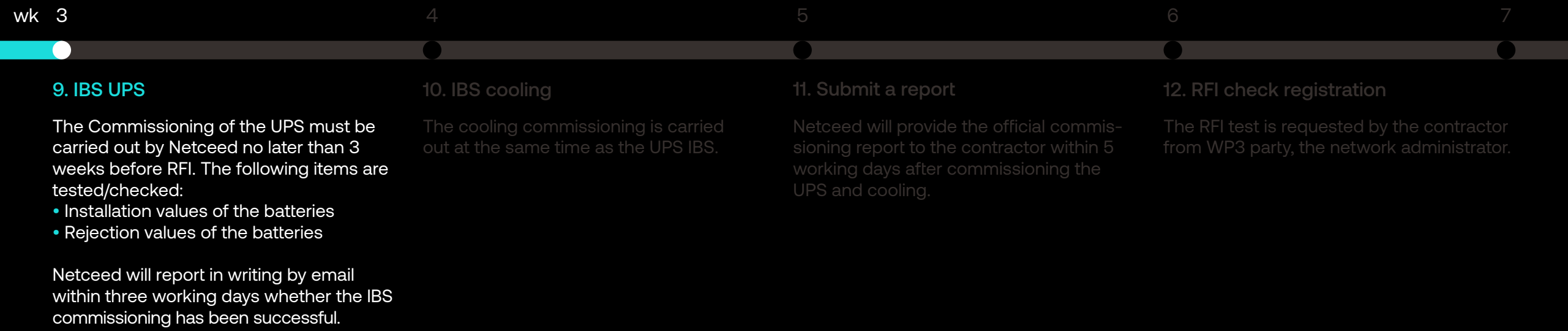
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wk 3

4

5

6

7

9. IBS UPS

The Commissioning of the UPS must be carried out by Netceed no later than 3 weeks before RFI. The following items are tested/checked:

- Installation values of the batteries
- Rejection values of the batteries

Netceed will report in writing by email within three working days whether the IBS commissioning has been successful.

10. IBS cooling

The cooling commissioning is carried out at the same time as the UPS IBS.

11. Submit a report

Netceed will provide the official commissioning report to the contractor within 5 working days after commissioning the UPS and cooling.

12. RFI check registration

The RFI test is requested by the contractor from WP3 party, the network administrator.

wk 3

4

5

6

7

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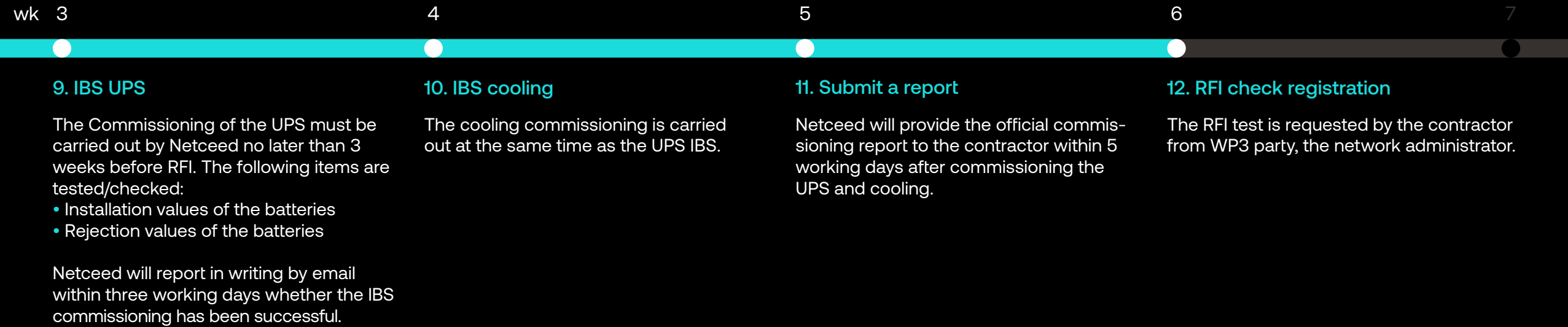
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13. RFI inspection

The RFI test is provided by WP3 party, the network administrator. The PoP must meet the following requirements;

- Double-sided measured backbone (OTDR),
- Electricity must be connected according to NEN1010 (demands electrical installation),
- PoP must comply with PVE,
- The cooling and UPS must be commissioned,
- PoP must be clean,
- PoP must be easily accessible.

14. RFI

If the inspection is successful, the PoP RFI will be issued. Network owner/client and Netceed are hereby informed by WP3 party.



wk 7

8

9

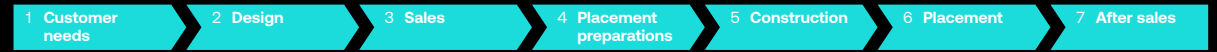
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15. Remaining points RFI related

- Electrical Installation; distribution box, UPS and PDUs
- Installation drawings, diagrams
- Cooling
- Door and lock
- Leakages

16. Remaining points not RFI related

- Cosmetic items:
 - Scratches/irregularities on the floor
 - Applying spray cork brick slips
 - Damage to the facade
- Door closer
- Labeling in the POP; distribution (resopal plates)



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**Thank you
for watching**

Any questions?