



Subway Track Furniture Components – award of contract

Date of meeting 8 February 2019

Date of report 16 January 2019

Report by Senior Director (Subway)

1. Object of Report

To recommend that the Committee approve the award of contract for the supply of track furniture components to Pandrol UK Ltd.

2. Background

2.1 Basis of requirements

A vital part of Subway operation is the infrastructure that the trains operate on, specifically the track system. In addition to the rails and trackbed, the track system includes the track furniture (i.e. baseplates and associated components) that secures the rail to the trackbed, thereby facilitating safe and smooth train passage.

In order to ensure that track furniture remains fit for purpose, it is inspected regularly to establish its condition. Where condition is found to be outside required standards, replacement of affected components is undertaken in order to ensure continued fitness for purpose of the track system.

2.2 Track furniture components

As part of Subway upgrade in the late 1970s, track furniture components were designed by Pandrol UK Ltd based on the physical and operational parameters encountered in the Subway. Over the years Pandrol has worked with SPT to improve baseplate design and address arising maintenance issues. The design is thus considered proprietary and is not planned to be changed as part of the current modernisation programme.

The current baseplate design includes the follow components:

- Cast Iron Baseplate
- Spring Steel Clips (2No. per plate)
- Nylon Insulators (2No. per plate)
- Nylon Bushes (2No. per plate)
- Linear Low-Density Polyethylene (LLDPE) Liner
- Rail Pad [non-proprietary, supplied by others]

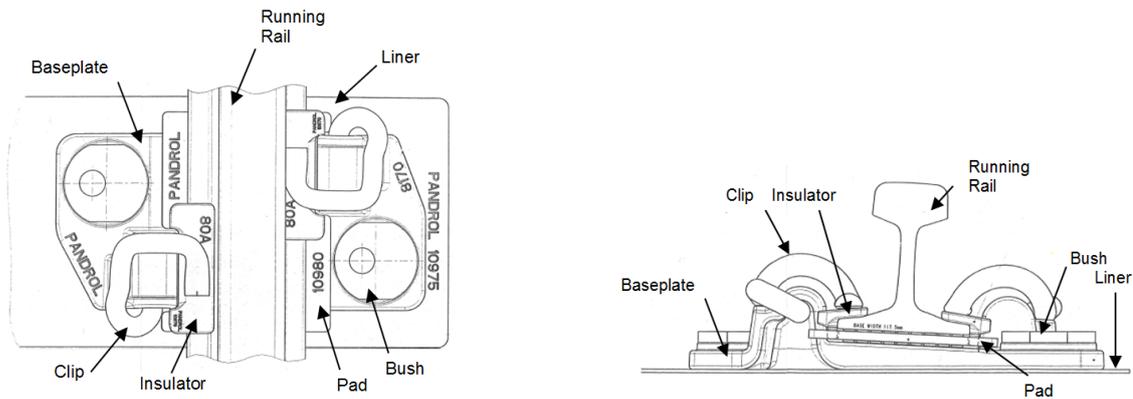


Figure 1 Track Furniture Schematics (Plan and Elevation)

2.3 History of supply

Historically, supply of track furniture components was secured via discrete orders to a single supplier (Pandrol UK Ltd) based on annual routine maintenance requirements. In 2015 a 3-year contract was agreed with Pandrol UK Ltd for provision of track furniture components, with an option to extend for a further 2 years. Towards the end of the 3-year contract, it became apparent that a new longer term contract would deliver better value than extending the existing contract for a further two years and the proposal below sets out the proposed arrangements.

3. Outline of Proposal

3.1 Objectives

The overall objectives are:

- To secure supply of safety critical track furniture of proprietary design; and
- To ensure best value and cost surety for SPT for track furniture components.

3.2 Scope of supply

Components to be supplied under the proposed contract are as listed in Section 2.2, i.e. baseplates, clips, nylon insulators, nylon bushes and LLDPE liners (standard and for 3rd rail).

Component replacement is undertaken only when required, based on assessment of condition. Nevertheless, future requirements can be forecast based on historical usage of each component. Annual demand forecasts are summarised in Table 1 below. It should be noted that individual components have different expected frequencies of replacement/design life.

Table 1 Component Demand Forecast

Component		Annual Demand Forecast (2019-2023)
Baseplate		3,000
Spring Steel Clips		18,000
Nylon Insulators		24,000
Nylon Bushes		6,000
LLDPE Liner	Standard	3,000
	3 rd Rail	2,000

The scope of supply includes fabrication, testing and delivery of all components listed.

3.3 Supply strategy

Owing to the proprietary nature of design, historically Pandrol fabricated bespoke components only upon receipt of an order from SPT. This introduced a lengthy lead time (primarily associated with shipping from non-UK locations) and the small order quantities resulted in higher costs per component (owing to the requirement for Pandrol to undertake dedicated manufacturing runs and for small batches to be shipped separately).

In order to mitigate the risks associated with long lead times and in order to obtain best value for money, it is SPT's preference to use annual demand forecasts to form the basis of relatively few, larger orders with Pandrol. Given the long term, continual need for the track furniture components, and the long shelf-life of the components, the risk associated with component supply exceeding short term demand is considered minimal. Conversely, risks associated with supply shortfalls (including delaying maintenance) are considered to be significant.

3.4 Supply negotiation and costings

Based on the supply strategy outlined above, SPT has engaged with Pandrol and negotiated a supply and pricing agreement. Key aspects of the agreement include:

- Contract term of 8 years (with an option to break after the initial 4 years);
- Cost of each component fixed throughout the initial 4 years of the contract, with commodity price indexation agreed for years 5 to 8;
- Ability to review full year demand forecast at the beginning of each year;
- Within the annual forecast, components to be fabricated and shipped in the most economic batch sizes (with all parts Delivered Duty Paid); and
- For long lead items, Pandrol to hold contingency stock in the UK and release on demand.

It is noted that, owing to the unique market for components (i.e. SPT only), fabrication and holding of contingency stock is acceptable to Pandrol only with prior commitment to stock use.

On the basis of the above, expected cost over the initial 4 years (based on demand forecasts) is £563,120.

4. Conclusion

Establishing a long term contract with Pandrol UK Ltd in line with the negotiated agreement outlined above will secure supply of these safety critical components, achieve an overall saving on track furniture components, and combating the risk of price increases in future years.

5. Committee action

It is recommended that the Committee approve the award of a contract with Pandrol UK Ltd for provision of track furniture components for eight years. The price is fixed at a cost of

£563,120 for the first four years (with break clause after year 4) with the further 4 years' subject to commodity price indexation increase.

6. Consequences

Policy consequences	<i>None identified.</i>
Legal consequences	<i>None identified.</i>
Financial consequences	<i>The forecast costs of track furniture components are included within the Subway budget.</i>
Personnel consequences	<i>None identified.</i>
Equalities consequences	<i>None identified.</i>
Risk consequences	<i>As set out in section 3.3 this contract mitigates risks relating to safety critical track component supply times and cost increases.</i>

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