Response to consultation on PRM NTSN requirements for tactile wayfinding

1. Background

1.1. RSSB carried out a public consultation on the suitability of requirements to provide tactile wayfinding for visually impaired people at stations mandated by clause 4.2.1.2.3 (2) of the Persons with Reduced Mobility (PRM) National Technical Specification Notice (NTSN) issued on 1 January 2021. This consultation took place during October 2021.

1.2. The purpose of this was to gather views and evidence in response to concerns that tactile surfaces for wayfinding may be unsuitable and detrimental in some cases.

1.3. Clause 4.2.1.2.3(2) of the PRM NTSN states: *'Information on the obstacle-free route shall be given to visually impaired people by tactile and contrasting walking surface indicators as a minimum.'* This covers routes between platforms and station facilities listed in PRM NTSN clause 4.2.1.2, such the ticket office or toilets.

1.4. The consultation questions were:

- *What are your views on wayfinding at stations for visually impaired users?*
- *Do you have feedback from visually impaired users to support this, or other evidence for any issues?*
- *Do you consider the current requirement in 4.2.1.2.3(2) of the PRM NTSN to be satisfactory for visually impaired users and do you have any suggestions for improvements?*

1.5. This document sets out the main points raised in response to this and proposals for whether and how these might be reflected in the PRM NTSN requirements.

2. Responses received

2.1. There was a good level of engagement on this from a wide variety of groups and individuals and we are grateful to all respondents for sharing well-informed views.

2.2. We received 32 responses containing c.20,000 words. This consisted of responses from a range of affected users and groups and most responses contained some level of input from affected users, shown in Table 1.

Response from	Affected users or user groups	Direct discussion with affected users	Anecdotal feedback	No input from affected users
No. of responses	8	12	9	3

Table 1: **Number of responses by type**

2.3. The detail and nuance in almost all responses mean it is difficult to capture and reflect the full range of views and points made in this summary, but they have all been fully considered as part of developing the proposed next steps.

3. The key points and issues raised

Overview

3.1. There appears to be a very wide range of views regarding the approach to wayfinding at stations for visually impaired users. In particular, there are polarised views regarding the usefulness and suitability of wayfinding tactiles.

3.2. Views on wayfinding tactiles range from a need to provide them in all circumstances to requests never to provide them as a potential hazard to users. The most common view was somewhere in between; that wayfinding tactiles have the potential to be useful if they are well designed and consistently used, although this is currently rarely the case, but that they are not suitable in all circumstances and there should be a degree of flexibility around whether they are provided for all routes in all stations.

3.3. The mixed nature of responses extends to specific examples of whether tactile wayfinding was suitable and effective, with Clapham Junction explicitly referenced as both a positive and negative example in different responses, showing the challenge of developing acceptable solutions.

3.4. There was also a notable split in responses between the mostly negative or neutral views from Network Rail (who made up a sizeable portion of individual respondents) compared to the mostly positive or neutral views from other respondents, particularly from affected users.

3.5. Regarding the specific PRM NTSN requirement, the majority of responses indicated this is unsuitable, but some responses from affected groups insisted that tactile surfaces must continue to form part of any solution for wayfinding at stations for visually impaired people.

3.6. Among responses that considered a mandatory requirement for tactile wayfinding to be unsuitable, there were various suggestions, but no consensus as to what the right approach to providing wayfinding for visually impaired people is.

Key points of agreement in responses

3.7. Regardless of whether wayfinding tactiles were viewed positively or negatively, the points that are consistent between responses are:

- Implementation of tactile wayfinding is currently inconsistent.
- Poor design and inconsistent application of tactile wayfinding causes confusion.
- There is not enough specific guidance to ensure consistent application.
- People are inadequately trained to use tactile wayfinding.

3.8. This shows that some of the consistently perceived problems with tactiles are with the way they are implemented rather than issues inherent with tactiles. The inherent issues with tactiles raised by responses are:

- Tactile surfaces are not helpful where there are routes without further information about where the route leads, particularly when a route contains intersections.
- Tactile surfaces are uncomfortable for some people, including wheelchair users, walking cane users and people with wheeled luggage.

3.9. Although affected users and groups did not have a single view about the suitability of tactile wayfinding, points that are consistent across responses from affected user are:

- Technology can be helpful, but should not be a replacement for dependable, physical wayfinding solution that is available to all.
- Suitable solutions need consideration from the perspective of visually impaired people, so they should be included in development of designs and guidance.

Key points of disagreement in responses

3.10. Although very few respondents were in favour of keeping the current NTSN requirement, there was a fairly even split between those broadly in favour of tactile wayfinding and those against. This means many respondents who were in favour of changing the requirements in the NTSN consider wayfinding tactiles to be helpful or even necessary.

3.11. There was a fairly even mix of views about whether tactile wayfinding requirements should be removed, be made more flexible or even be more specific and extensive.

3.12. For those with broadly positive or neutral views on tactiles as an appropriate solution to wayfinding (which included some affected users and groups), this was typically caveated with the view that these should not apply to all routes within a station as they are more effective when sparingly used, and that users should be consulted.

3.13. Other points which were made in some responses but contradicted by other responses are that tactile wayfinding is costly and unnecessary in all cases or conversely that tactile wayfinding can be useful if it is well designed.

3.14. A key area that was raised in some responses is that the confusion caused by tactile surfaces has safety implications. This is an area we were particularly keen to understand, but no evidence has been provided to support these views and these views were not raised by affected users/groups. This aligns with previous RSSB research[1] where similar concerns were raised by some stakeholders falls but none were able to substantiate this perceived risk and the accident analysis did not identify any incidents involving a guidance path (noting these were not widely implemented at the time).

Suggestions for improvements in responses

3.15. There is no clearly supported proposal for a harmonised solution. The single most common suggestion in responses was for more specific guidance around the requirement to support a consistent solution.

3.16. Other common suggestions included use of another solution such as audio, braille or new technology. However, these tended to come from respondents which did not have input from affected users. Responses from affected groups highlighted the need to ensure tactiles remain part of any solution.

[1] The use of tactile surfaces at rail stations (T158, 2005) https://www.sparkrail.org/Lists/Records/DispForm.aspx?ID=9438

3.17. Another common suggestion was to allow sufficient flexibility for an appropriate situation specific solution to be developed. However, this is contradictory to other responses which highlighted the need for consistency for this to be effective.

Resulting challenges for wayfinding requirements

3.18. Based on the responses, key challenges are:

- The fundamental contradiction of needing consistency in implementation but allowing the flexibility to deliver the best solution for the specific situation. These were both strong themes across responses. Responses also note that differences between station layouts and other characteristics means a harmonised solution in a way that consistently works for users is very challenging. This includes where routes change to facilitate crowding or queueing, and paved tactiles are inflexible to this.
- The solution needs to consider the needs of all users. For example, tactile surfaces assist some users, but have negative impacts on others such as wheelchair or walking cane users. Also, a technological solution alone without a physical solution does not work for all visually impaired people.
- Limiting the use of tactiles can make these more effective and limit some problems with confusion but limiting its usage without providing an alternative will limit access routes for visually impaired people.
- If people are not trained to use tactile wayfinding this will not be effective, but if tactile surfaces are not provided people will continue not to be trained so this becomes a vicious cycle.
- If the requirements are regularly changed, this will result in more inconsistency across the rail network, which perpetuates the problems.
- There is a need to separate out the problems which are inherent in tactile paving and the problems caused by poor design which result in the negative views. The existence of examples where this has been poorly designed this does not necessarily mean that tactile wayfinding is inappropriate. This is something which can be solved with improved guidance. But if a problem is that decision points (or a single path without a clear destination) are always confusing, that suggests a different approach is needed.
- Developing a truly consistent and suitable solution needs clearer guidance.
- For tactile wayfinding to be truly clear and effective, there is a need for a holistic approach that is consistent applied beyond the rail system, to other environments.

4. Outcome

Conclusions

4.1. This consultation has highlighted the polarised views around the issue of tactile wayfinding, but provides evidence that:

- The current requirements for tactile wayfinding in the PRM NTSN result in unsatisfactory wayfinding solutions.
- Tactile surfaces are an important part of wayfinding for some visually impaired users.

- There is currently no clear harmonised alternative that would be consistently supported.

4.2. The main issue appears to be the confusion for users which is caused by the way solutions are implemented, where this is designed to satisfy the requirement in the NTSN rather than with due consideration of the user and the station environment.

4.3. Specifying a harmonised requirement which results in suitable solutions is not straightforward due to all the challenges highlighted in responses. But there is a need for the PRM NTSN to include some minimum requirements for wayfinding for visually impaired users. There are clear drawbacks to specifying other solutions as minimum requirements which have been identified in responses. For example, solutions that rely on devices are not suitable for all visually impaired people, spoken instructions are not suitable in noisy/busy stations or for people with hearing impairments, not all stations are able to guarantee staff assistance at all times, and there are limitations in the usage of braille. For this reason, while many respondents request more flexibility to allow the right solution, some affected users have made it clear they consider tactiles to be an essential part of wayfinding.

Proposed corresponding PRM TSI changes

4.4. Since this consultation, we have become aware of proposed additions to the PRM Technical Specification for Interoperability (TSI) on which the UK NTSN requirements were based. These are still drafts which have not been endorsed by the European Commission, but expand on clause 4.2.1.2.3 (2) in the PRM TSI with the following:

- *(2a) If more than one facility of a certain type of public area are provided, the route to at least one of them shall be indicated by tactile and contrasting walking surface indicators.*
- *(2b) Tactile walking surface indicators can be omitted when the route is indicated unambiguously by built or natural elements, such as edges and surfaces that can be followed tactually and visually.*

4.5. This would result in flexibility for projects to determine whether tactile surfaces were needed in additional to using other features of the station for wayfinding. If changes are made to the PRM TSI in 2022, these will be considered for inclusion in the PRM NTSN.

Next Steps

4.6. This consultation highlights a need for further research and investigation to develop a solution. There is a clear call for further guidance and standards around this to be developed and for this to be consistent with approaches in other sectors.

4.7. DfT will shortly be seeking to understand industry and users' requirements further through consultation to inform an updated code of practice for accessible railway stations design standards. This will be the foundation for a system-wide approach and provide a clearer view about what industry needs, which may result in more prescriptive guidance to support this requirement, or clearer proposals for a harmonised alternative.

4.8. Before that can be developed and introduced, the immediate need is to ensure there is a suitable minimum mandatory requirement in the PRM NTSN for accessibility for visually impaired people.

4.9. The responses to this consultation show that although unsatisfactory solutions are being designed and implemented, there is no evidence that there are safety implications or issues that are inherent in the use of tactiles such that the requirement must be completely removed. Instead, the responses do provide evidence that some visually impaired people rely on and support tactile surfaces for wayfinding. The responses also show that there is currently no acceptable, harmonised alternative with which to replace the requirement.

4.10. Without removing or replacing the requirement, another option would be to allow more flexibility around the requirement, giving opportunity for more situation specific solutions to be implemented. As highlighted in responses there is already provision for an innovative solution utilising technology in place of using tactiles in clause 4.2.1.2.3 (3) of the PRM NTSN. Adding further flexibility would be contrary to one of the key messages from the consultation around the need for consistency for any solution to be effective.

4.11. On this basis, there should not be an immediate change to the PRM NTSN requirements for tactile wayfinding. Instead the focus needs to be on addressing the challenges with implementation of this through developing a suitable system-wide solution and developing guidance to support that to ensure consistent implementation. The implications of the coming changes to the PRM TSI in this area will be assessed as part of our commitment to monitor equivalent TSI changes and we will continue to consider opportunities for alternative requirements as possible wayfinding solutions are developed.