



Rail Safety & Standards Board



TrainSafe Workshop

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Management of Adhesion within the Railway

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Definition relates to railhead adhesion - μ

- Low $\mu \Rightarrow$ extended braking distances
- Needs to be $>$ about 0.15 to give little/no problems
- Can be as low as 0.01 – wet leaves
- High $\mu \Rightarrow$ high creep forces (RCF initiation)
- Can be as high as 0.7 – US measurements



Management of Low μ

- High pressure water spray
- Sandite
- Trainborne sanders
- Optimised WSP
- Vegetation management
- “Defensive” driving

For High μ - lubrication



Problem – how to manage $0.15 < \mu < 0.4$ all year?

RSSB Research

- ERTMS & Adhesion
- Laserthor

And deferred:

- PaMLA – Predicting & measuring low adhesion
- TAMOS – Total adhesion management & optimisation strategy



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