

FLEXIBLE DEPOT SYSTEMS TO SUPPORT MULTIPLE FLEET MAINTENANCE

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MECHANICAL SYSTEMS

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FLEXIBLE DEPOT SYSTEMS ASSUMPTIONS

- Limited variety of rolling stock designs
- Uniform traction voltage supply, e.g.. 25 kV AC
- Centrally located and accessible from opposite sides
- Shared maintenance facilities and equipment
- Onsite material stock holding
- Standardised components from OEM
- Optimised shunting movements between the yard and workshop repair lines
- Provision for future expansion – staging yard and workshop facilities

SIMPLE ROLLING STOCK DEPOT LAYOUT AND EQUIPMENT

Hot bearing Detector
Wheel Defects Monitor

Wayside Condition
Monitoring System

Automatic Vehicle
Inspection

Wash Plant

Sanding Bay

Underfloor Wheel Lathe

Pre-inspection

Road Rail Shunting Vehicle/Electric Shunting Vehicle
Shunting Locomotives
Wheelset Drop Tables

Workshop Line and Maintenance Equipment

Mobile and Fixed Lifting jacks
Overhead cranes
Jibs, Hoisting Cranes
Bogie turntables

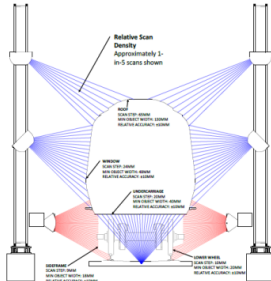
Post Inspection

Component Repair

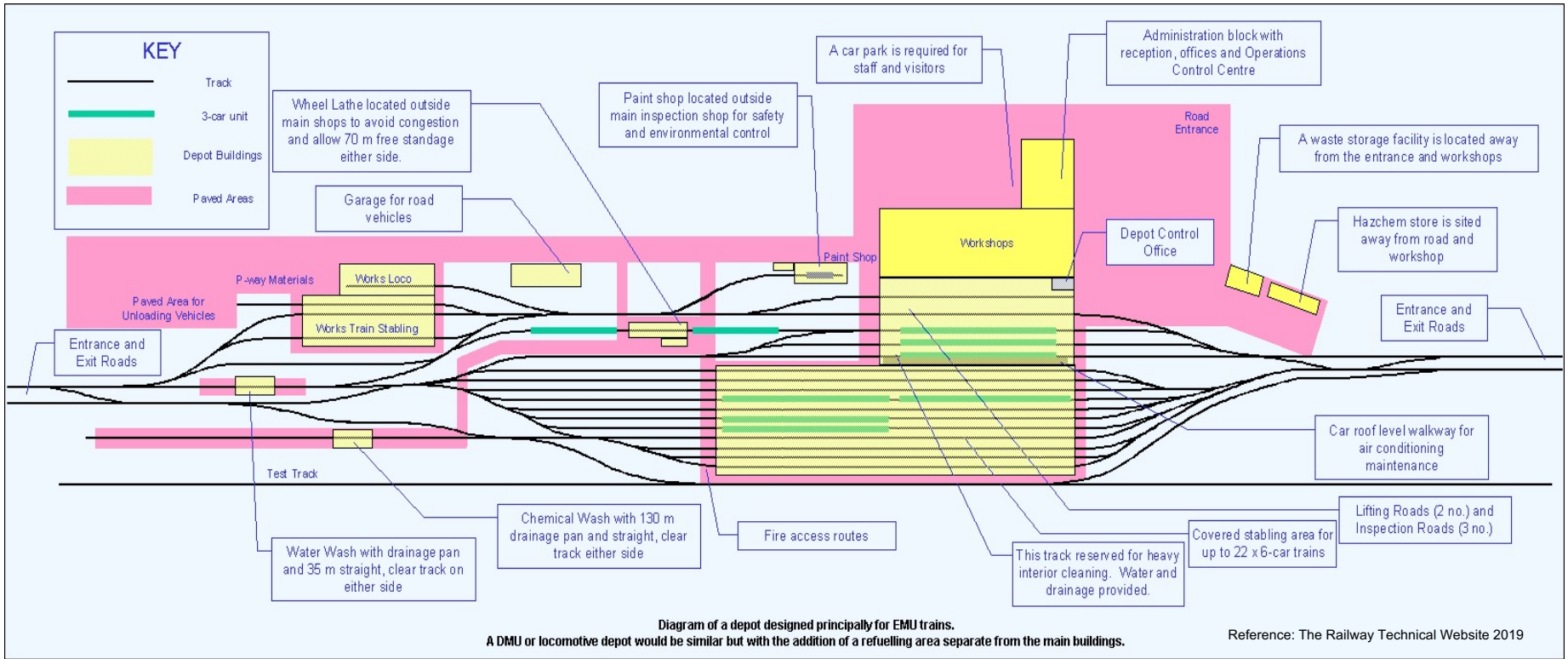
Offices

Stores

360° VIS Scan resolution and accuracy



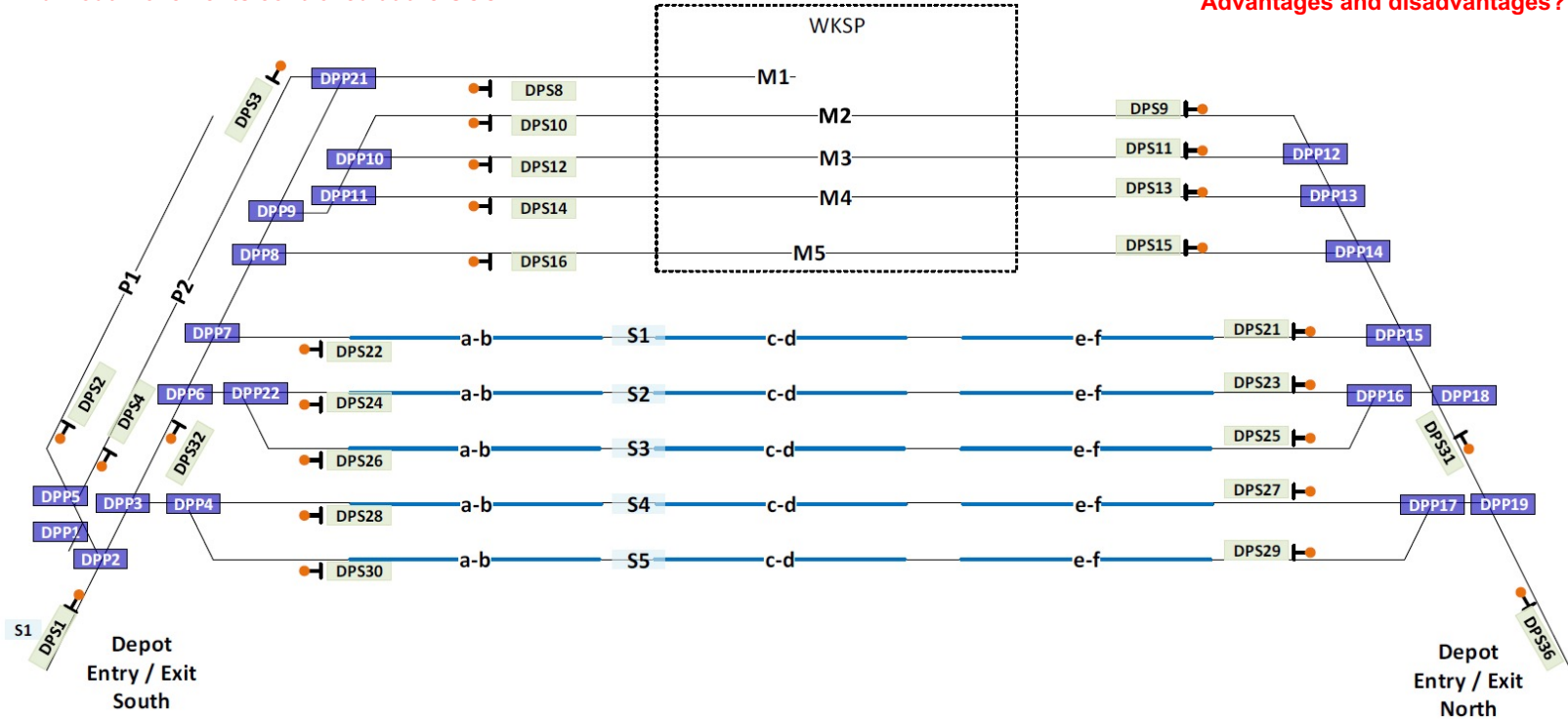
TYPICAL MAINTENANCE DEPOT FACILITY



STAGING YARD SHUNTING MOVEMENTS

Turnout movements controlled at the OCC

Signalling in the staging yard or not
Advantages and disadvantages?



Reference: docD ES

THE FUTURE

- Shared facilities and resources
- Outsourced critical components repair and overhauls to OEM supported entities
- Agility to meet customer demand (ever-changing)
- Achieving high levels of availability and punctuality (underpinned by high reliability and quality – mean time between service affecting failures, mean time between failure, mean time to repair (high levels of punctuality)
- Optimal balance between maintenance cost and service provision

Thank You

