

Launching the Dubai Metro



In June 2009 North Star were commissioned to provide operational support to the start-up of the Dubai Metro. The overall objective was to ensure that the service opened on time on the 9th September 2009 to meet the aspirations of the client.

Staged Opening

The Dubai Metro had to open in a reduced configuration from the original plan. This was to ensure that the aspirations of the client were met: a service that could open on-time and be increased in stages. The service opened with a ten minute headway and 10 of 29 stations opened over 80% of the route. In addition, a number of non-vital sub-systems were not operational. This was a result of the construction and installation work not being finished sufficiently early for target opening date.

Operating instructions

North Star used existing UK experience and best practice to write operational procedures that are understandable for multi-cultural staff without railway experience prior to their role in Dubai.

These procedures also had to meet the requirements of the independent safety assessor (ISA). Having gained approval for opening, the procedures were further adjusted to reflect operating practices and aid memoirs were created to assist in real time decision making.

As a result of the reduced configuration an addendum to the Operations Safety Case needed as the main safety case was based upon the full configuration. North Star produced this safety case addendum to suit the reduced configuration after a risk assessment of its operability. The revised operational instructions were then included in the training and briefing to staff.



Tests and trials

North Star also provided management for testing of foreseen operational scenarios. This involved the preparation of the overall strategy, the validation of an exercise plan against the hazards and the practical management of the exercises as the programme rolled out. The lessons learned from these exercises were captured and injected into the project work areas such as competence management or procedures and instructions to deliver overall improvement to operational readiness.



Validation and verification

As a final check of the arrangements for operation, North Star undertook a verification of the Operations and Engineering Directors' start-up activity to ensure that everything was in place following a limited train operations period and made an assessment of the viability for opening. Throughout this period, North Star assisted in liaison with the ultimate client and the ISA and responded to issues logs for the areas in which they were working.

Timetables and rosters

North Star were also engaged to help create the rules of orderly and efficient rosters creating both parameters and initial rosters. In order to bring the service to life North Star created and helped upload the first timetable to the automatic system to help operations commence.

Hands-on

Following commencement of operations North Star provided mentoring support to key operational roles at both strategic and operational levels. This 'hands-on' approach from experienced consultants helped in the bedding down of the operation at control and stations level. Action plans were created and delivered to build on the learning process in an organised and systematic way.

Richard Brown



North Star Managing Director, Richard Brown provided support initially in the preparation of procedures and instructions for submission to the client and the ISA. This commission extended to cover preparing the safety case addendum for the opening of the service in a reduced configuration and providing assurance support working on a number of validation and verification tasks to identify readiness for opening. Post opening Richard was retained to provide support to the control room manager and provide further updates to procedures and instructions in light of operational experience. Whilst in Dubai he also led the North Star team of consultants that provided support on test case management, timetable and rostering implementation support.



Andy Todd



Fellow North Star Director, Andy Todd undertook a detailed review of the revised Trial Operations Plan which was reduced from 64 days to 35 days. That reduction in available test time was compensated by a comprehensive test review process that reduced the number of actual tests required. Working within the client's management procedures and experience he wrote the case presented to the ISA to demonstrate that the integrity of the test programme was not compromised. Andy also undertook a number of other assignments including; revision of the test procedures manual to provide the strategy for the execution of the test programme and the measurement criteria to determine success or failure on a test-by-test basis, validation and verification of work instructions, writing of public address announcements and a comprehensive mapping exercise to ensure all hazards were tested.

Andy Hollaway



During the lead up to the opening of the Dubai Metro Andy reviewed rostering processes, identified areas for improvement in efficiency and produced and updated an action plan. He also provided mentoring to the planning team throughout the review and implementation of the processes. Andy then carried out a similar exercise on timetable planning, and in the days leading up to the opening provided critical coordination of the timetable, rosters and training schedules.

Following successful opening, during the first 10 days of operation Andy carried out the role of Silver Command, based in the Operational Control Centre, guiding the control room team through the challenges of operating the first railway in the Gulf region

Success

North Star's assistance in all the above areas provided vital expertise to a project which had a tight deadline. The Dubai Metro opened on time to universal global acknowledgement.



Alex Wiid



North Star consultant Alex Wiid provided the practical expertise to deliver the test programme and managed the change procedures that documented how and why the programme evolved over the test period leading up to launch. The logistics, including provision of third party support, the Emergency services and track/station access for each test were carefully planned, briefed and measured against defined success criteria. Alex then wrote the final report submitted for sign off and acceptance that was required for the metro to open.

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