I keep six honest serving-men
(They taught me all I knew);
Their names are What and Why and When
And How and Where and Who.
I send them over land and sea,
I send them east and west;
But after they have worked for me,
I give them all a rest.

I let them rest from nine till five,
For I am busy then,
As well as breakfast, lunch, and tea,
For they are hungry men.
But different folk have different views;
I know a person small-
She keeps ten million serving-men,
Who get no rest at all!

She sends'em abroad on her own affairs,
From the second she opens her eyes-
One million Hows, two million Wheres,
And seven million Whys!

Rudyard Kipling
The Elephant's Child
OPERATIONAL PLANNING AND PERFORMANCE: WHO, WHAT & WHY?

- The Operational Planning process plans 215,000 train paths every week for UK Train Operators. (34k each weekday, 30k on Saturdays and 17k on Sundays).

- It provides a core service to passenger Train Operators by planning their product (trains) and advertising them through web-based timetables (NRES), pocket timetables and in the NRT (National Rail Timetable).

- Network Rail is the steward of the infrastructure and of the national timetable. As steward of the timetable, it is charged with ensuring that the timetable ultimately reflects, on behalf of the rail industry, the best interests of the passenger.

- Prohibited under EU law\(^1\) from being a train operator, thus must work with the likes of SERCO Railtest to operate “our” trains.

- To fulfil this role Network Rail takes specifications from the Train Operators (this is what train planning is about) and by following contracted agreements and national processes (laid down by UK Rail PLC and approved by the Office of Rail Regulation), sets out to achieve the target - a national timetable with equal opportunities for all operators.

- Network Rail’s ability to increase its revenue stream is fundamentally based on the number of train paths that can be delivered from the existing infrastructure i.e. “white space =  

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\(^1\) Enshrined in UK law as the Railways Infrastructure (Access and Management) Regulations 2005
potential revenue. The robustness of these train paths affects the Train Operator’s revenue.

Due to the prohibitive high cost and long lead time involved in constructing new railway infrastructure, it is certain that effective management of the timetable is the key to delivering a more efficient and cost acceptable service to passengers, to freight suppliers and to the Government. PCAT (Performance & Capacity Analysis Team) based in Tournament House, Paddington, will have been engaged to produce model timetables which will ‘test’ the usefulness (or otherwise) of all new infrastructure changes.

- Operational Planning is able to give an added value service to Train Operators in the area of timetable development by working with them to produce options for new and/or improved services.

- To deliver a quality of service on the network requires an appropriate level of maintenance and renewal. Operational Planning plans access for Network Rail Maintenance staff and their contractors to maintain and renew the network to ensure appropriate safety and quality standards of the infrastructure are maintained.

- Operational Planning plans the ultimate balance of access to the network for both customers and suppliers.
FRANCHISED TRAIN OPERATORS

Arriva Trains Wales
Arriva X Country
c2c
Chiltern Trains
East Midlands Trains
First Capital Connect
First Greater Western
First Scotrail
First Trans-Pennine
Island Line
London Midland
London Overground
Merseyrail
National Express East Anglia
National Express East Coast
Northern Rail
South West Trains
Southeastern
Southern
Virgin Trains
OPEN ACCESS PASSENGER OPERATORS

Eurostar
Grand Central
Heathrow Express
Heathrow Connect
Hull Trains
London Underground (Bakerloo & District Lines)
North Yorkshire Moors Railway
West Coast Railway Company
West Highlander
Scarborough Spa Express
Cambrian Coast Express
Wrexham, Shropshire and Marylebone Railway
PRINCIPAL FREIGHT OPERATORS

DB Schenker Rail (UK)
Freightliner Inter-Modal
Freightliner Heavy-Haul
First GBRailfright
Direct Rail Services

OTHER OPERATORS

Balfour Beatty
Fastline
Jarvis
Serco Railtest
Where does Operational Planning sit within Network Rail?

Operations & Customer Services

- 3 x Train Planning Centres
- OPSU
- Train Planning Centre
- PCAT
- NAU
- Route Directors
  - General Managers
- Customer Relations Executives

- Infrastructure & Investment
- Engineering
- National Delivery Service
- Territory Maintenance Directors
Operational Planning Structure within Network Rail

National Operational Planning Teams

OPSU  TrainPlan, TPS, TSDB, NRT; production / support and maintenance of processes and systems
Lead centre for freight customers

NAU  Co-ordination of Access requests and implications of Engineering work.
Custodian of Rules of the Route

SNFC  National Planning of commercial freight planning alterations made within the Day A for Day C timescales
Development of robust pathways over capacity-restricted routes
National Planning of Charter Trains

PCAT  Maximises Network Rail’s business aspirations through the development of robust Performance Plans and development of future timetabling.
Train Planning Centre Team

Train Planning Centre

- Capacity Allocation Manager
- Network Trains Manager
- Informed Traveller Manager
- Schedule Integrity Manager
- OPSU (Leeds)
- Short Notice Freight and Charter Manager (Leeds only)

Train Planning Centre Manager

To lead and direct all aspects of train planning in the Area. Deliver robust and performant Permanent and Amended Timetables which are compliant with Network Rail’s Licence obligations, ensuring that plans are delivered to time and quality standards.

Capacity Allocation Team

Produces the permanent timetable in accordance with industry rules, timescales and procedures. Publishes the information via TSDB /WTT etc.

Network Trains Team

Develops and validates pathways to accommodate Train Operator’s requests for additional and altered services plus other short notice alterations to the permanent timetable (e.g. engineering haulage and yellow plant).
Informed Traveller Team

Develops altered timetables in respect of the Informed Traveller process to accommodate service changes brought about by engineering work plus other alterations requested by TOCs (e.g. commercial requirements at Bank Holidays)

Schedule Integrity Team

Manages the electronic / paper ‘bid’ receipt and input process for both LTP supplemental and spot bids plus STP and ensuring all data is accurately maintained in the Train Planning systems. Editors of the NRT data and WTT.

Short Notice Freight and Charter Team

Develops alterations to the timetable to accommodate Train Operators’ requests for Charter and freight trains. Located only at Leeds.

PCAT

Analyses data from Operations Systems (eg TRUST and TRUST DA) to provide structured feedback on planning and data errors. Identifies and recommends process improvements to minimise future errors.
Sample TOC Train Planning Structure

**Head of Planning & Access**

- **Timetable Production Manager**
- **Amended Access Manager**
- **Timetable Planning Manager**
- **Service Planning Assistant**
- **Timetable Production Assistant**
- **Timetable Planning Manager**
- **Timetable Planning Assistant**
- **Timing Managers**
- **Planning Assistants (STP)**

**TOC Train Planning Teams**

Each Train Operator has a Train Planning function; although these may be set up in different ways, there are many similarities. An example of how a Train Planning function is set up is as follows:

**Head of the Timetable Planning Function**

This area is concerned with developing the long-term strategy and looks at the development of services to satisfy franchise commitments, the introduction of new trains and services, the examination of new Network Rail infrastructure schemes, developing new Track Access Contracts, compliance with existing franchise commitments and track access conditions including ensuring that compensation is received in line with the agreement with Network Rail.
Train Planning Manager’s Team

Focus is on developing the Principal Timetable in December and the Subsidiary Timetable in May. This is based around the Train Operator’s aspirations, its Franchise Commitments and its resource base (rolling stock and train crew) with each timetable specification being compliant with the Rules of the Route and the Rules of the Plan.

For a Train Operator they will start to develop service proposals in the October before the Timetable Priority Date the following February, unless it is a either a major re-write of the timetable or new rolling stock and infrastructure is being provided. In such cases, development work would start much earlier. Once the Train Operator has made its declaration, there is a Timetable Development Period; this is a collaborative approach between Network Rail and the Train Operator. This is followed by a formal Timetable Offer from Network Rail, which enables the Train Planning Manager’s team to develop the rolling stock and train crew diagrams along with associated timetable information.

Amended Access Manager’s Team

The focus here is on amending the permanent timetable plan as a result of Network Rail possessions to maintain and renew the infrastructure (track, signalling, etc). This is managed through the Informed Traveller process where the Train Operator agrees to Network Rail possessions through the Confirmed Period Possession Plan and submits amended train service bids (may also include bus replacement) to Network Rail at T-18 (18 weeks out from the possession taking place). Within the Informed Traveller process, Network Rail provides formal Offers to the Train Operators who then produce amended timetables, rolling stock and train crew diagrams.

Timetable Production Team

This area looks at providing timetable information to both customers and internally to other functions within the business, both for the development of the permanent plan and for the development of amended timetables as a result of Network Rail possessions. Whilst the type of information and publications produced for customers may vary by operator most will focus around producing timetable guides, route cards and station departure posters. Internal information looks at producing timetable circulars and station working books. Timescales within
this area are based around when the formal timetable offers are received and typically start around 20 weeks before commencement of the timetable.
SYNDICATE EXERCISE

Take one of the following topic areas\(^2\) and put together a short presentation to set-out, for the other course delegates, what you think are the main issues:

Q1 – With which external bodies/customers does NR Operational Planning & Performance Teams work with and in what way?

Q2 – Who are the customers of a Train Operator’s train plans?

Q3  (a) Why is pleasing the customer so important?  
(b) What does a customer want from a supplier?

\(^2\) Make sure you know what topic area your syndicate is to report back on