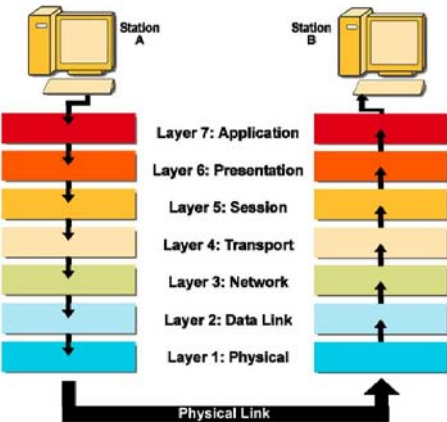# My Placement Year with Virgin Media

My Role
Core and Metro Network Planning

For my placement year, I worked in the Core and Metro Network Capacity team which is in the Network and Business Planning Department of Engineering.

My team was responsible for reporting on, as well as forecasting the traffic and capacity of both consumers and businesses at the aggregation layer of the network (Layer 3).

Figure 1 : OSI layers of a Telecommunications Network

Figure 2: How Virgin Media network is set up

Virgin Media

Telecommunications Company

Founded : 2006

Within the first year Virgin Media became the first company who offered home phone, TV, broadband and mobile packages.

2013: Virgin Media was bought and now owned by Liberty Global.

The organisation currently employs approx. 15,000 members of staff

Figure 3: 2018 Virgin Media Interns

Key Responsibilities

1. Update the METNET Capacity reports and enable network realisation process.

2. Ensure that appropriate worked solutions are in place to support growth in the network.

3. Reduce the number of incorrectly allocated 1Gbps customer ports on METNET.

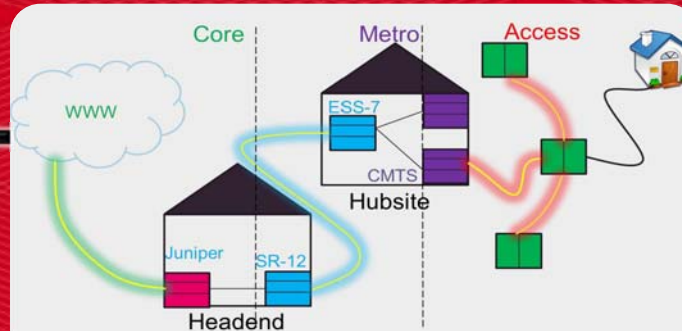4. Carry out impact analysis activities for large customer orders.

Reflection on my year

I've had many opportunities within the whole year at Virgin Media, examples of some of these being:

- **Install and Service Training** – This training covered how to install TV and phone lines as well as skills needed for a technicians role within Virgin Media.

- **Lightning Site Visit** – Lightning is one of Virgin Media's new initiatives increasing Virgin Media's connectivity across the whole of the UK. This taught me more about Virgin Media as a company, a different sector of the business and the business initiatives that plan for the future.

- **STEM** – I have had many opportunities to promote STEM by participating in events and activities run by Virgin Media. This has built my confidence whilst also representing Virgin Media as a company.

Throughout my year with Virgin Media I have also developed many skills. I have seen the development in the following areas:

- *Time Management*
- *Stakeholder Management*
- *Planning*
- *Multitasking*
- *Taking initiative*
- *Communication Skills*
- *Team Work*
- *Presentation Skills*

Figure 5: Install and Service Training

Diagrams

One of my responsibilities was keeping the METNET diagrams monitoring the networks rings up to date.
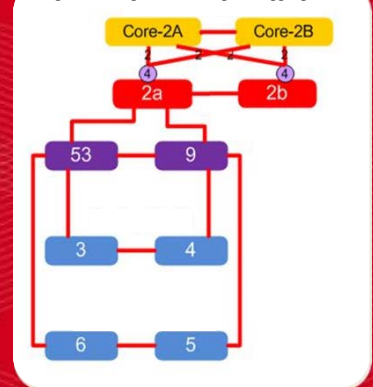
I later added a new tab to the diagram sheets, including a new setup to monitor the newer projects my team were delivering, such as a process called pre-aggregation.

By adding the a new tab, my team has been able to accurately monitor and keep track of the METNET network and our nodes throughout the whole of the UK in a visually simple manner.

The features I have implemented are being used day to day by my team as a template for the future growth in the METNET network.

Figure 6: Diagram showing Pre-aggregation

Reports

As part of my role, I was in charge of a number of reports, this taught me a lot about the network overall and improving certain processes to help make them either easier or simpler;

- **METNET Capacity Report** – This was a monthly run report, looking at the METNET network. My role was to ensure this was delivered on time as well as to analyse the data given and ensure if there was any problems then solutions were put in place. This report benefits the whole department as it highlights how my team's network is running and what is planned for the future.
This has taught me how to manage my time effectively, which lead me to making a further development to the process which reduced the delivery time of this report.

- **>300Mb Report** – This is a monthly report, highlighting incorrectly allocated 1Gbps ports so that I can allocate these customers onto the correct ports.
I found that this process was out of date and I took the initiative to update these myself. Now the team has an up to date set of instructions and the process has also been improved due initiating conversations with different teams I've been engaging with and getting them on board.

- **10G and 1G Impact Analysis -** This is dealing with a customer requests for ports.
I dealt with the received customer requests and assessed whether they were viable with the current network's situation. This process taught me how to be customer facing and adapt my communications styles for the appropriate audience. I also learnt the importance of attention to detail because if this was done incorrectly this could lead to incorrectly allocated customers and further problems within the network..

Figure 4: Virgin Media Lightning Visit

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