

Introduction

This document is one of a series to explain technological developments in Wi-Fi 6 and 7 in 'lay terms' so that everyone can get a better understanding of how they work and the benefits they can deliver.

This document focuses on **Basic Service Set Colouring (BSS Colouring)**.

BSS Colouring

A Basic Service Set (BSS) comprises a Wi-Fi Access Point and one or more user devices.

If you have a scenario whereby two Access Points are located closely together and operating on the same channel, you have overlapping basic service sets (OBSS). This is also known as co-channel interference (CCI).

The outcome of CCI is that performance is affected because too many devices are contending for airtime on the affected channel.

The purpose of BSS Colouring is to uniquely identify each BSS so that devices in one BSS can safely ignore radio activity in the other BSS.

Whilst the term 'colouring' is used to differentiate two different BSSs, in practice, the differentiation is achieved by using numerical identifiers in the management frames.

Benefits

- Less interference
- Increased capacity
- Better spectral efficiency

Who is Saytelco?

Saytelco is an independent consultancy that specialises in Wi-Fi. We help our clients to devise Wi-Fi strategies, build business cases, procure products/services and project manage implementations.

We can also survey sites and advise on equipment and security configurations. To arrange a no obligation discussion on how we can help you to address your Wi-Fi challenges, please email Mark Sayers via msayers@saytelco.com or call 07970 573428.