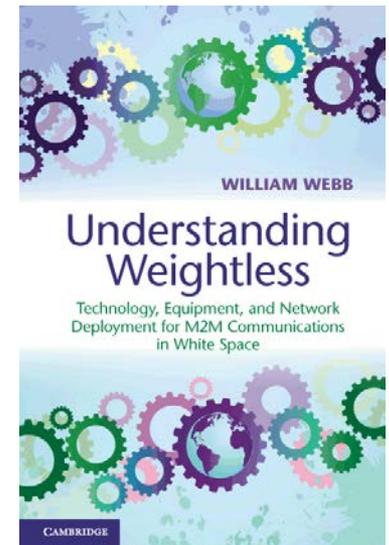# Why DSA is better deployed and modified rather than modelled in detail

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Sharing can be defined but unanticipated factors may dominate

- Most sharing is on the basis of interference caused
- This is difficult to define but approaches like UK SURs have been developed in detail, implemented and would appear suitable
- However, unexpected factors such as TV susceptibility to burst-like noise can cause 10-15dB of error

Measuring or even noticing interference can be difficult

- Measuring DSA interference almost impossible due to time variance, location variance, low power and the difficulty in knowing whether the primary or secondary user is active

- Users may not report low levels of interference
  - May not realise it is interference
  - May not know where to report it to
  - May be difficult to troubleshoot

- Internet tools may provide a good way ahead to report issues and allow "big data" processing

Better to take risks and address issues post roll-out

- Two approaches
  - Exhaustively test any new technology against all existing receivers in the target band, construct detailed sharing scenarios and build conservative models to lead to allowed usage
  - Use generic approaches such as SURs and mechanisms to monitor interference should it occur
- Balance between risk and reward
  - Risk often falls more to DSA
  - Politics and experience play a key role
- Very hard to relax rules – requires consultation etc, much easier to tighten them
- Excessively tight rules may prevent any deployment
- Hence, strong argument for more relaxed rules with vehicles to track interference and address