Mitigation method/Results/Conclusion

In this case, common mode filters and capacitors were used as a mitigation measure. For the telephone set, a common mode filter was inserted into the inner port of the telephone: A 1000-pF capacitor was applied to the handset of the telephone set. The capacitance was selected considering the insertion loss and noise reduction. As for the host equipment, a common mode filter and capacitors were applied to the telecom port and the inner ports. The central frequency of the common mode filter was set to 20 MHz in this case. This filter is also effective for a 7 MHz electromagnetic field. One port of the capacitances was connected to the earth terminal of the host equipment. According to the mitigations, the immunity level is more than $130~\mathrm{dB}\mu/\mathrm{m}$; the acoustic noise problem was resolved.

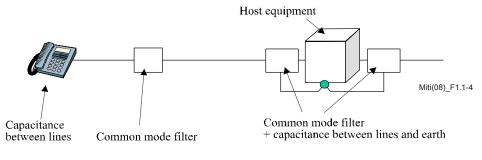


Figure 1.1-4 – Mitigations

References

Rec. ITU-T K.37; Annexes A and B.