Although there is a wealth of information on equipment performance monitoring, there was no document in the UK which set out in a single volume, information on what tests should be conducted, how frequently, by whom and finally what action to take when the results indicate a deterioration in performance. Report 77 from the Institute of Physics and Engineering in Medicine attempts to do this. It covers all types of X-ray equipment, applies to all departments regardless of size, includes all types of tests and applies to all the professionals involved.

Two levels of expertise are introduced corresponding to in-house and externally provided services. For many tests, a range of frequencies is given reflecting the fact that test intervals must depend on factors such as the clinical work load and the type of equipment.

Tests are assigned a priority one or two denoting good and best practice respectively. The report extends the concept of remedial and suspension levels, first introduced within the UK Breast Screening Programme, to all x-ray equipment. Both levels are action levels. The remedial level represents a level of performance which requires corrective action to be initiated. The suspension level represents a deterioration in performance by a factor of 2 or 3 compared to the remedial level.

This presentation will descibe the development and philosophy of this report and how it relates to European Directives and to the legal requirements in the UK.