The DIAMOND RF System, D.M. DYKES, CLRC Daresbury Laboratory, Warrington, WA4 4AD, UK - The RF System for the proposed 3 GeV UK Light Source, DIAMOND, needs to provide an accelerating voltage of 5.1 MV and sufficient RF power to make up synchrotron radiation losses of up to 2.5 MeV per turn for a beam current of 300 mA. The technical design and feasibility, as well as the economics of various accelerating structures, are discussed. Amplifier and feeder options are assessed, and possible system layouts are shown.