Conceptual Design of the Vacuum System for the LSB Storage Ring, M.J. VICENTE, LSB, Barcelona, Spain - A detailed design for a new Synchrotron Light Source located in Barcelona (LSB) must be accomplished at the end of 1997. Here we present the storage ring vacuum system for the LSB. The main goal of the vacuum system is to maintain a beam-on operating pressure of 1 nTorr or less in order to achieve an electron beam lifetime of approximately 24 hours. One of the main difficulties that are foreseen in the project comes from the very compact magnetic lattice (TBA) that will impose limitations in the positioning of the vacuum components. Another severe problem is posed by the high gas load induced by the synchrotron radiation. An overview of the general features, requirements and problems associated with the preliminary design of the vacuum system is described together with some indications on material, conditioning treatments, components and pumps .