Conditioning the Cooler Synchrotron COSY for Internal Experiments, R. TÖLLE, U. BECHSTEDT, J. DIETRICH, A. LEHRACH, H.L.A. LEUNISSEN, R. MAIER, S. MARTIN, D. PRASUHN, A. SCHNASE, H. SCHNEIDER, H. STOCKHORST, Forschungs Zentrum Jülich GmbH, Germany - COSY Jülich is a cooler synchrotron and storage ring delivering protons in a momentum range from 270 to 3300 MeV/c. Internal as well as external experiments are possible. At present three internal experiments are installed: COSY 11, COSY-13, and EDDA. To circumvent crossing transition energy while ramping up the machine the COSY-lattice offers the flexibility to shift transition energy upwards so that the beam never crosses that point. This is of great importance for the EDDA-experiment which takes data during the acceleration phase. Beam stability measurements during the whole ramp cycle will be discussed. The experiments COSY-11 and COSY-13 require nearly zero dispersion at the target places. Therefore, after debunching the beam at flat-top energy the optics is modified to ensure the specific needs of the experiment. If desired, rebunching of the beam with reduced transition energy is then possible at small loss rates. Examples will be presented.