The direct measurement of the proton or deuteron Electric Dipole Moment (EDM) has never been performed before. These experiments can be done at electrostatic storage ring. As a starting point the magnetic storage ring COSY at Forschungszentrum Jülich can be used. It will require implementation of the electrostatic or electromagnetic beam-bending elements. For testing the electrodes material, shape, surface treatment and high voltage, a real size large deflector is developed and will be checked in a magnetic field of a large-gap dipole magnet. The experimental setup and the laboratory test results will be presented.