Phenomenological approach to a relaxor theory is developed and some experimental results in the support of this theory are received. The position of a broad peak and a dispersion and temperature dependences of dielectric response of relaxor ferroelectrics are described theoretically in the framework of the Landau-Ginzburg-Devonshire theory of phase transitions. It is known that a relaxor behavior is connected with disorder in the position of atoms. We show that an additional condition for the relaxor behavior to appear is the coincidence of the phase transition temperature with the temperature region of thermofilling of local centers by charges. The probability distribution of relaxation time is found analytically, and it express as function of the density of states in the impurity band. The broad maximum in the temperature behavior of the dielectric response is determined by dynamics of charge carrier localization on the local centers. Dispersion of dielectric response is determined by vibration properties of the local states. The delay time of phase transition at field in the low-temperature phase after cooling at zero field is described. Passage of the transition to the phase with long-range ferroelectric order after application of electric field is determined by local center ionization and consequent re-orientation of the polarization in microclusters. The optical properties, luminescence and photoconductivity are investigated for find out the properties of the local centers in PbMg$_{1/3}$Nb$_{2/3}$O$_3$. On the basis of this data the density of states in an impurity band and the dynamics of charge carrier localization are obtained. The participation of this state in arising of the diffuse phase transition is discussed.