Creation and research of national humidity standard of gases unit is a part of the program of metrology infrastructure development, approved by the Government of Moldova. It is one of the prime steps in ensuring the uniformity of measurements in the country since in the Republic of Moldova was a lack of standard base in this field of measurements. As a result, economic agents were forced to invest more in the measurement provided in other countries, which inevitably led to higher costs for maintaining quality of the domestic production. In this paper, the principle of the realization of humidity unit gases and further transfer to measuring instruments are described. For the qualitative implementation of the foregoing, the main components of the measurement uncertainty are presented.