

Bond type The ionization energy required to produce M^{5+} is so immense that it never occurs. A coordination number of 4 is obtained by donating this lone pair to another atom or ion, for example in the ammonium ion. Outer electronic structure of group V elements BiO Bi^{3+} H_2O HCl The three unpaired electrons form bonds with three other atoms, and the resultant molecule is tetrahedral with one position occupied by a lone pair. Fluorine is the only element which gives a large enough electronegativity difference to permit ionic bonds, and SbF_3 and BiF_3 exist as ionic solids. 3