1031-22-95 **Todor Tsankov*** (todor@caltech.edu), Department of Mathematics, Caltech, MC 253-37, Pasadena, CA 91125. Compactifications of the Natural Numbers and Polishable Subgroups of S_{∞} .

It is well known that every compact metrizable space can be realized as the remainder of a compactification of the natural numbers. This allows one to represent homeomorphism groups of arbitrary compact metrizable spaces as factors of subgroups of S_{∞} , the permutation group of the natural numbers. We use this construction to show that every Polish group is a homomorphic image of a Polishable, almost zero-dimensional (in its Polish topology) subgroup of S_{∞} , which, however, is not always zero-dimensional. (Received August 05, 2007)