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Omega open sets with topological groups

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The topological group is a logical combination of a group and topological space. And also, generalized open sets play a very important role in general topology and it concerns the variously modified forms of irresoluteness separation axioms by utilizing general open sets. In this project, we have introduced the concept of an omega open set with a topological group. Mostly here, we used semi-open sets to define our basic definitions. So, we introduce semi-open sets by using generalized open sets and also relevant examples for those definitions have been discussed. Here we discussed some properties of omega open sets under three categories, they are omega irresoluteness, omega connectedness, and compactness. And also, we include some basic theorems, lemmas, and properties related to those properties. Further, we proved some of those lemmas and theorems. Finally, as topological groups along with continuous group action are used to study continuous symmetries, many results from the theory of topological groups can be applied to functional analysis. So here we investigate some results of omega topological group

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