ABSTRACT WORKING PAPER 6.1

DETAILED POLICY IMPACT MODEL

November 2013

This report provides a detailed description of the economic model that has been developed for estimating the likely impacts of certain policy prescriptions arising from research results of earlier work packages. The specific model construct chosen is the GMR (Geographic Macro and Regional) modelling approach that has been applied earlier for Cohesion policy and EU Framework Program impact analyses at the levels of European regions, the European Union and Hungary. The GMR framework is developed and extended in order to test as many policy suggestions generated in earlier work packages of SEARCH as possible. The particular country chosen for impact analysis is Turkey. This choice is motivated by practical reasons: availability and reliability of data for modelling. The GMR-Turkey model reflects the challenges of incorporating regional, geographic and macroeconomic dimensions in development policy impact modelling by structuring the system around the mutual interactions of three sub-models such as the Total Factor Productivity (TFP), Spatial Computable General Equilibrium (SCGE) and macroeconomic (MACRO) model blocks. Following this approach the macroeconomic model of GMR-Turkey calculates policy impacts at the national level while the 26 NUTS 2-level regional models provide results at the regional level. The model system provides policy simulation results for the 2015-2025 time period. Instruments implemented in GMR-Turkey reflecting SEARCH policy suggestions are categorized into (i) general macroeconomic (space-neutral) policy instruments and (ii) regional/local (place-based) interventions. The objective of this report is to introduce GMR-Turkey. Its applications in actual policy analyses will be reported in working papers and in other deliverables.