



Abstract zum INFRADAY 2009

## ***Conjoint Analysis to Assess Quality Regulation in the Gas Distribution Industry***

### **Abstract**

Incentive Regulation should encourage network operators to manage their networks as cost-effectively as possible. However these regulations also pose a risk to the quality of product at the expense of greater efficiency. To counteract this effect, the incentive-oriented regulatory system can be complemented with a quality-oriented regulatory system. Germany has imposed such incentive regulation with a quality element in the *Anreizregulierungsverordnung (ARegV)*. According to § 19 paragraph 1, increases and decreases in the revenue cap can be made if network operators are able to achieve key targets on network reliability or network performance (this is also known as the quality item, or the Q-element). Customer surveys on quality can provide important insight into the effectiveness of such quality regulation.

The instrument of conjoint analysis, a classical technique to identify consumer preferences in multiattribute decision making, has already been used in Great Britain and the Netherlands electricity market to measure the effectiveness of the incentive regulation. More specifically, conjoint analysis is an indirect survey method for empirical research and provides scientific analysis of purchasing decision processes. Conjoint analysis is especially compatible with certain product concepts and design alternatives. With the help of conjoint analysis, we can demonstrate which influences ("push and pull factors") are relevant to the gas supply and in which way variations of the gas supply influence consumer behavior.

First, this paper describes how Conjoint Analysis can be used as an assessment tool to measure customer readiness to accept charges for changes in network reliability. Secondly, this paper explores how conjoint analysis can help determine and identify the influences of the supply quality in the gas market.