

**ISES-report of progress, February 1997 -  
ESTABLISHING DIALOGUE WITH THE POWER CONSUMER**

**A executive summary of the subproject's progress**

- During 1996, an increased focus on the household's utility behaviour and their imagination about future services and control aspects has been elaborated.
- It has been an increased co-operation both within ISES and with the local utility company.
- A paper was presented and achieved good responses at the DA/DSM conference in Vienna.
- *The purpose* is now to examine how the electricity supplier can begin to create a value developing spiral between themselves and their household customers, by using the electricity net as a communication system and delivery channel for new services.
- *The objectives* are to examine:
  1. The consumers' **attitudes** and **behaviour** in relation to their utility company.
  2. What **needs** and **desires** they have about utility information and services.
  3. What **priorities** they are doing.
  4. What **future attitudes and behaviour** the supplier can expect when they begin to use these both external and internal technical systems to reach optimal **comfort**.
- The results so far indicate great opportunities for a utility company to develop strategically by offering new services and by doing market segmentation through style sensing.

**The working process**

- Because of the general lack of knowledge about household's electricity behaviour and service demand, we required a test group to simulate ideas on.
- We have worked with 39 economic students, both as focus groups and with the first draft of a survey. In spite of their lack of experience about own energy consumption, it has been valuable to test and explore different utility questions on them.
- We co-operated both with the local distributor and other subprojects to create realistic pictures of the future as simulation basis. Specially an integration with subproject eight has given a better understanding for each others work and a bridge between social and technical aspects on what this communication system can and will perform.
- The focus groups (the students divided in five groups after style) indicate strongly that there are differences between consumers about making decisions, how complex they want their world and how much control they want. They also indicated that decision styles can be good segmentation instruments.
- We have created a survey after the focus group results, that the students had to fill in.

**Interesting results from the analysis of the student survey<sup>1</sup>:**

About utility behaviour:

- Almost 80 % think on how to save energy.
- 41 % are trying to actively minimise the energy use.
- Just 20 % control the bill when it arrives, and 54 % will contact the supplier if they find something suspicious on it.
- About 25 % regulate their use of water heater, dish washer, and washing machines in winter time, when the electricity is cheaper in the nights and weekends.

About information services in the future

- The respondents in general have a very high desire for more and better information from their electricity supplier.
- The cost is more interesting than the amount of consumed electricity.

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<sup>1</sup> If more detailed and extend information are of interest, we are pleased to send you a complete report of the results.

- A high rate for household specific advises and prognosis about different behaviours' effect on the consumption.
- About 75 % want information about their consumption just once a month.

#### Important factors for choosing energy supplier

- The price is the most important aspect. (95 %<sup>2</sup>)
- About 2/3 of the respondents want automatic control of the whole heating system.
- Consumption information and saving advises are very important to achieve. (90 %<sup>1</sup>)
- Few services have less than 50 %<sup>1</sup> interested respondents.
- There is a very high interest for all kind of alarm services, like security alarm, malfunction alarm etc. (92-97 %)<sup>1</sup>

#### About the home automation system

We described the differences between a simple and a complex home automation system.

- Over 80 % prefer high or very high complexity. No one prefer very low complexity.
- Their motives for purchasing such system are mostly cost savings and better control aspects.

#### About temperature and comfort

- Almost everyone are so comfortable with their current indoor temperature that:
  - a) even if more heat would be free, they shouldn't increase the average temperature.
  - b) it is important to not let it fall more than one degree below that temperature.
- Just once a week in average, there is a reason for increasing the temperature. It could be when someone is ill at home or when they light a fire.
- Most of the respondents almost never decrease the temperature, reasons could be when the family is away or at night.
- Lower average temperature demands very large rebates, close on 50 % of the total cost for 2 degrees. This has paid attention also from subproject 8 in the context of utility functions.

#### Future plans

- Next step is to improve the survey from our experiences with the students and together with sponsors and the local distributor, and then send it by mail to the 70 households within test site Ronneby.
- The household survey will hopefully result in a great step further to the above mentioned objectives and then be used as basis for deep interviews of the households during the autumn 1997 and also for a first segmentation of utility services.
- The last step, as it is planned now, is to do a ethnographic study of about ten different households. The target is to get a deeper understanding for the changing of utility behaviour after the electricity market has been free for a while and the relationship with their electricity supplier has been deeper in both a technical and a social perspective.
- A doctoral dissertation is planned to be finish in the beginning of 1999.

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<sup>2</sup> The percent value means how many who have rated the question important or very important.

