

**Domotic home for the telework. The progress of home automation : the new Bus products**

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The method of thinking is today adjusted to the current use of computer so much that nobody is any more surprised to realise that it has become a useful means for the most various services. It is now a component of our culture. So we find among the expertises that an updated person must possess for the necessity of living in armony with the others, that familiarity with the modern electronic tools and their virtual models of functioning is required. We have in definitive become capable to assimilate more technology than in the past. Such new capability is the requisite for archiving a rapid reorganisation of the new methods of work in the process of purchasing, informing and interacting with governing methods.

It is a living phenomenon which is of great interest for our society. One must apply his will and intelligence in this process to avoid any events of detrimental entropy of technology, more and more important in connection with efforts to achieve technical progress. Offering new projects means to foresee the sustainability of the new technology within a system of new rules and new values.

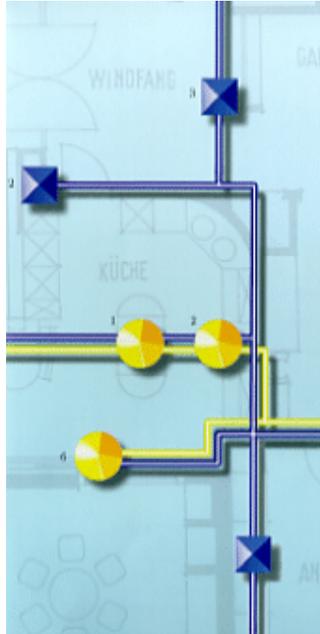
While rejecting the influence of any remote visionary projects, the utilisation and distribution of these new technical devices have now become a matter of fact. The services the time spent, the number of works employed and connected with the functions of the computer, increase continuously. The computer with its network has also become an electronic household appliance of general use.

Home automation for whom who utilises this "electronic household appliance" appears familiar and useful, more than at any time before. Home automation is being classified among of the technical devices in the computer world. At the same time the activities of the video terminal can be better organised, more easily employed for adequate, safe and economic services, within the domotic system. Bringing the social phenomenon of the telework in the home automation is a valid strategy for transferring such technology in the home section.

The man who operates by computer can profit of the advantages of the Bus installation and make his work place "movable" inside the home and get himself more comfortable, dynamic and adjustable to the video. Further advantages are offered through the possibility to control any waste of energy and survey the rest the house. Such services also offer facilities to disabled persons and resolve problems of possible isolation within the local environment. The quality of the workplace is improved and the advantages of these technically advanced services have then useful repercussions on the maintenance of the home.

In our doctoral dissertation we try to describe more deeply the technology by pointing out new standards, new products, degree of interfacing and interaction among the interconnected disciplinary sectors.

The technology :



*The "home automation", logic of the bus, evolution of the bus, promotion and sustainability of home automation*

### What is a "home automation installation" ?

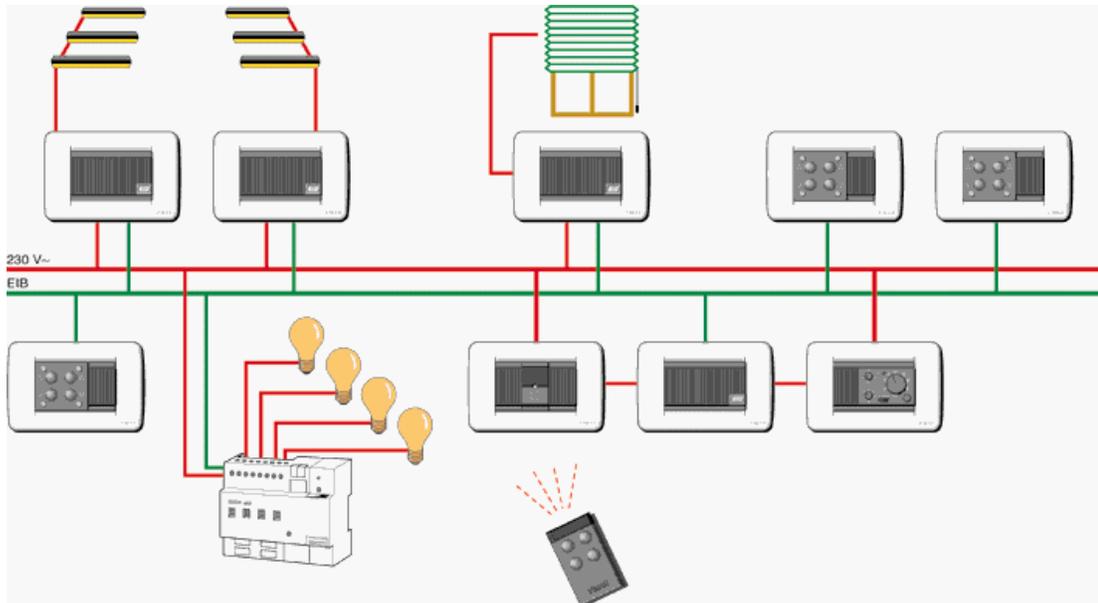
The integration of technical devices and functions in the home with the goal of achieving more safety, comfort and economic efficiency in dealing with energy resources. Such coordinated installation makes possible a dialogue among the various elements within the home and with the outside,

The various coordinated elements are principally : a cable for transmission and a line of modular and flexible components in the different functional areas of the home.

### How does it work ?

Simple switches for groups of apparatus, detectors, sensors, interrupters, PC or an intelligent switchboard.

The products which are today available on the market are the result of a research based upon the experience of the Lan Works. The different associations linked to three European Bus Systems have tried to standardise the various projects in order to reach a mixed integrated system in the home automation field.



### The application of the new technology

#### *Analysis of an Eibus system, examples of bus applications.*

A home must offer protection and safety. It must be pleasant and comfortable. Therefore, the goals of the research in order to apply the new technology are to improve the fulfilment of these requisites through the performances such as temperatures, controlling of entrances, maintenance of domestic appliances and information apparatus , functioning of installations, engines and electronic door-locks. The goodness of product is measured upon the degree of fulfilment of comfort, safety and economic efficiency.

The experience acquired :

*Analysis of single case : EIB-HAUS Limburgerhof Instabus Siemens; an Italian case : "The automatic home"; the telework, safety and VDT.*

The various cases which have been analysed in my thesis show the flexibility of the project and their correlation with the requirements of telework.

The spreading use of these systems depends on three variables : strait answers to the user, technical progress of the product, integrated modules. All this depends on the particular requirements of the user and the particular environment conditions, as well as on the availability of more perfected products and their quality of being integrated and interfaced in the system.

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