Accessible E-Government through Universal Design

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INTRODUCTION

The accessible design of e-government ensures that these offers can also be used by people with disabilities (accessibility). Moreover, experience shows that clarity and comprehensibility of the offers benefit from their careful and deliberate design and structuring while keeping in mind accessibility requirements. Therefore, accessibility is useful for all citizens who want to attend to their administrative issues via the Internet (universal design).

Accessibility as a cross-sectional subject has to be considered holistically: On the one hand, following the “universal design” principle, it becomes clear that all users benefit from an accessible solution, independent of their abilities and independent of their situation, environment or conditions.

On the other hand, especially in e-government, the complete business process has to be considered: An offer accessible in itself may not be usable if an installation routine or plug-in has to be loaded from a non-accessible page or if the work procedure involves a media break.

BACKGROUND: ACCESSIBLE E-GOVERNMENT AND HANDLING OF MEDIA BREAKS

Handicapped citizens as well as handicapped employees of the administration benefit from accessible e-government. When implementing e-government applications, there are three substantial areas of requirements where the principles of accessibility have to be considered.

1. **Access**: It has to be ensured that all citizens are generally able to use the application, at home, the workplace or a public access place. It has to be ensured, for example, that a person with a walking impairment can enter a public access location. For a Web site, it is crucial to make the pages accessible for people with disabilities and compatible with assistive technologies. Besides these criteria, which concern hardware, software and constructional issues, an important question is whether the citizens are sufficiently competent to use the media: Do they know what the application offers? Can they judge if the application is trustworthy concerning privacy and security? This means that media competence trainings should also be designed for persons with disabilities.

2. **Vertical Integration**: This area of requirements deals with processing in the administration. E-government makes it possible to think over and change traditional processes. Probably, people with disabilities could take over new tasks at their workplace, which may mean more independence from work assistance or help by colleagues.

3. **Horizontal Integration**: Up to now, normally you will have to visit several administrative agencies and fill in various forms if your life changes; for example, if you move or a child is born. E-government is a genuine added value for citizens if the services are offered in a bundle. From the point of view of the citizen and especially the handicapped citizen, the successful horizontal integration of services clearly is a facilitation and reduces the effort required now.

TARGET GROUPS

Users with different abilities and skills strongly benefit from the accessible design of Internet offers; respectively, they are excluded from use if their requirements are disregarded.

Blind people depend on screen readers reading the monitor content to them, and a Braille display can give additional help. As the information on navigation and orientation can mostly be understood auditive— that is, linearly—a Web site must be structured very clearly. Therefore, all graphic elements must be accompanied by descriptive texts; it should be possible to use every Web site via keyboard.