# Call 3:

# ICT-based Solutions for Advancement of Older Persons' Independence and Participation in the "Self-Serve Society"

# Example Mobility

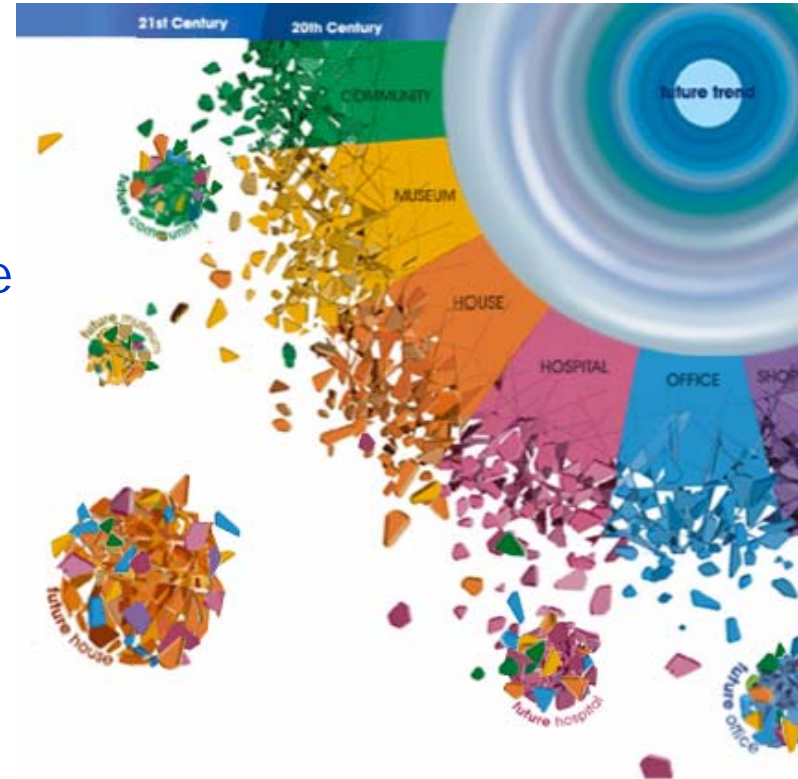Dr. Hartmut Strese, NCP Germany

Vienna, May 27, 2010

# Basis

A **"self-serve society"** is rapidly developing in Europe. This represents both benefits and challenges to citizens as well as providers, public and private. Goods and services can now be accessed and transactions completed by way of digital solutions. Opportunities for individual choice and personalization of products, services and the transaction itself to the demands and desires of consumers and citizens is becoming more common, sometimes even mandated (e.g. through legislation on accessibility). The trend is evident both in commercial, cultural and public services. This represents a positive development for suppliers as well as clients, with lower costs and greater flexibility. For some, however, the ICT-based self-serve society presents problems, in particular for older people with impairments or little or no familiarity with technology. Solutions which increase independence and efficiency for experienced technology users, threatens others with exclusion and loss of independence. These **societal** concerns form the context for Call 3.

# "Self-serve society"

- Individualism rules
- Citizens are independent and active subjects
- Responsibility to actively take initiative when needed
- Services are being digitalized, media takes new forms
- Spaces and places (home, workplace, commercial spaces, public spaces, ...) become blended
- Pervasiveness of technology

# Aims

This call will fund proposals for innovative ICT-solutions that enable older people to:

- Preserve and enhance independence and dignity in all aspects of daily life
- Take active part in the self-serve society
- Stimulate and support the capacities required for such participation (e.g. mobility, physical, and cognitive)

Relevant **application areas** in Call 3 are

- **Home environment** and related activities of daily living – at home, on holiday, in visits ("mobile enabled solutions")
- **Transportation and travel** activities

# Requirements for citizens

- Participation requires an active approach and independence
- Access to information
  - Skills
  - Motivation
  - Trust
  - Appropriate technical solutions

- Older persons are in risk of being excluded
  - Access to information, learning new skills
  - Lack of suitable technical solutions
  - Restricted living environment due to lack of personal mobility or safety and security concerns

# Challenges

**In any application area, innovation of ICT-based solutions must take into account the following challenges:**

- Improvement of older people"s access to, acceptance, trust, and use of services provided through ICT-based solutions.

- Improvement of user interfaces and the usability of devices and solutions for older people, based on design for all-principles as far as possible.

- Enabling customization to individual needs and wishes of elderly people of the total service chain involving different providers, channels, methods, and market segments.

- Integration of new ICT-based solutions to be provided by existing (or new) service providers, channels or market segments, and adapted for seniors.

# Call 3 - Mobility

- Rationale

    - Enhance mobility for elderly persons, i.e. freedom of moving, handling things as well as training the body, or shortly **removing the barriers to the world**.

- Potential benefits

    - Maintaining personal mobility and orientation involves many different things, including opportunities for social contact, exercise, fitness, hobbies, outdoor activities or travelling.

# Call 3 - Mobility

- Mobility is a challenge for a significant proportion of the older population

  – Normal aging commonly leads to changes in perceptual, cognitive und psychomotor performance: vision declines, physical fitness and flexibility diminish, the ability to focus attention decreases, and the time necessary to react to unexpected circumstances increases.

  – In addition to extrinsic barriers of mobility, such as inappropriate transportation infrastructure, aids and physical environments, older adults also cope with intrinsic barriers, such as fear of falling and mobility impairments. A typical problem is that especially older people are often forced on using uncommon devices as ticket machines.
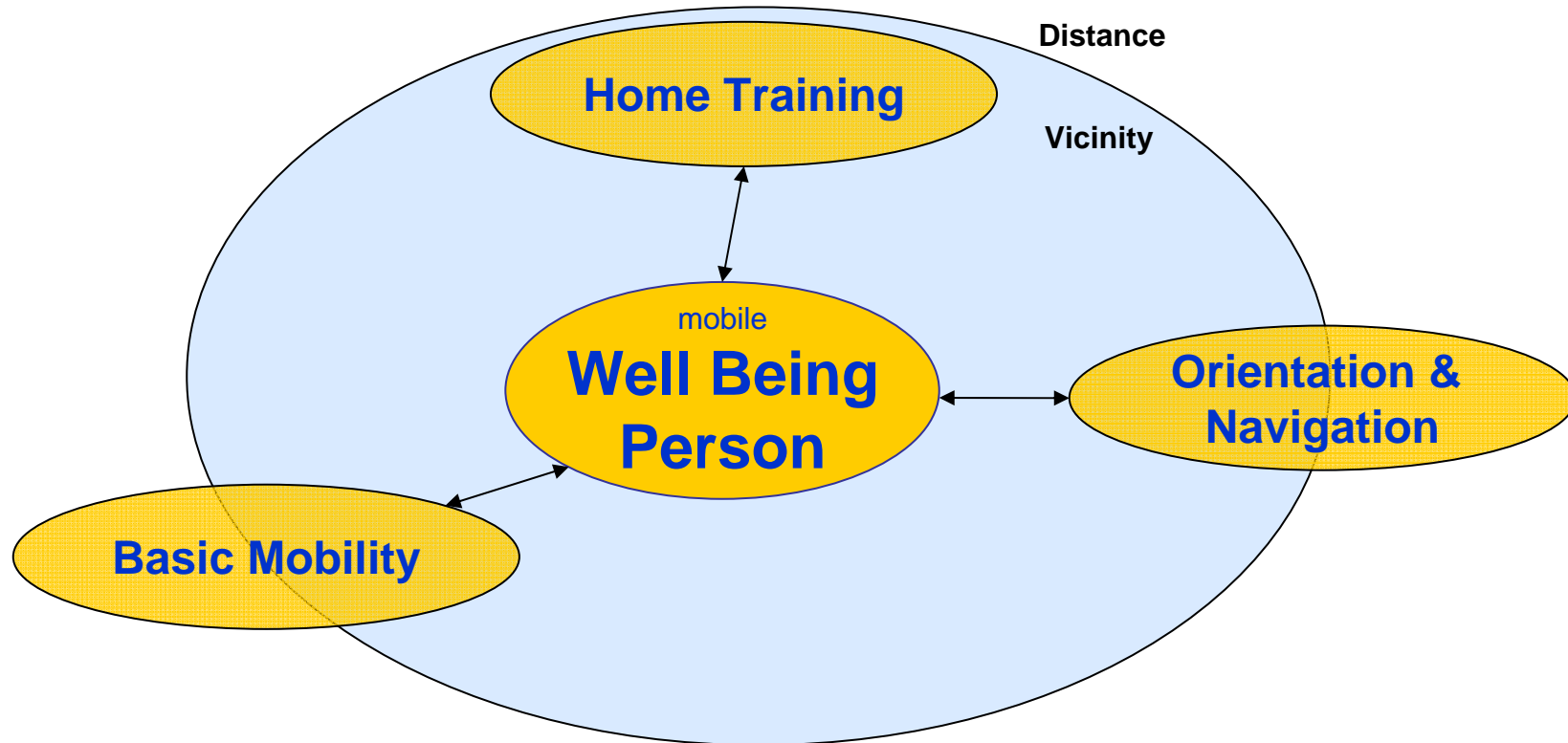
Therefore three aspects of mobility are to be considered:

- **Orientation and Navigation** - empower the mobility in the social context, i.e. the ability to get from place A to place B (move or travel from home to wherever you want to go, local or long-distance: to friends, your garden or summer home, a hotel,...),

- **Basic Mobility** - supportive designs in home and care settings (may require an adapted environment or assistive technologies), mobility aids are integral part in helping the aging population allowing them to age in place,

- **Home Training** - prevent losses of and exercise the physical mobility. Physical exercise is any bodily activity that can contribute positively to enhancing or maintaining physical fitness, mobility and overall health (i.e. tailored excercises at home as well as in gyms)

The mobility context of the user