

# **STB++**

## **Multi Play Set Top Box System For Target Group Specific Content Delivery**



**Fraunhofer**

**Portugal**

Assistive Information and  
Communication Solutions

# Soft-Goals

## Mobilizing Creativity

- Sharing Information through the Internet is not only for Techies
- Making use of the Resources (Wisdom, Know-How, History of Places...)

## Social Interaction

- Sharing Information with persons having similar interests
- Sharing Information between generations
- Generating content can be done together (group work)
- Consuming interesting content can be done together (group experience)

## Familiarization & Eco-System

- TV set as UI can do much more than watching broadcast TV
- Using mobile phones for content generation can be easy
- Positive Trojan horse effects for the more 'uncomfortable' day
- Can be easily combine with more health care oriented functionalities (e.g. STB will be incorporated in eCAALYX home system as well)

# To whom?

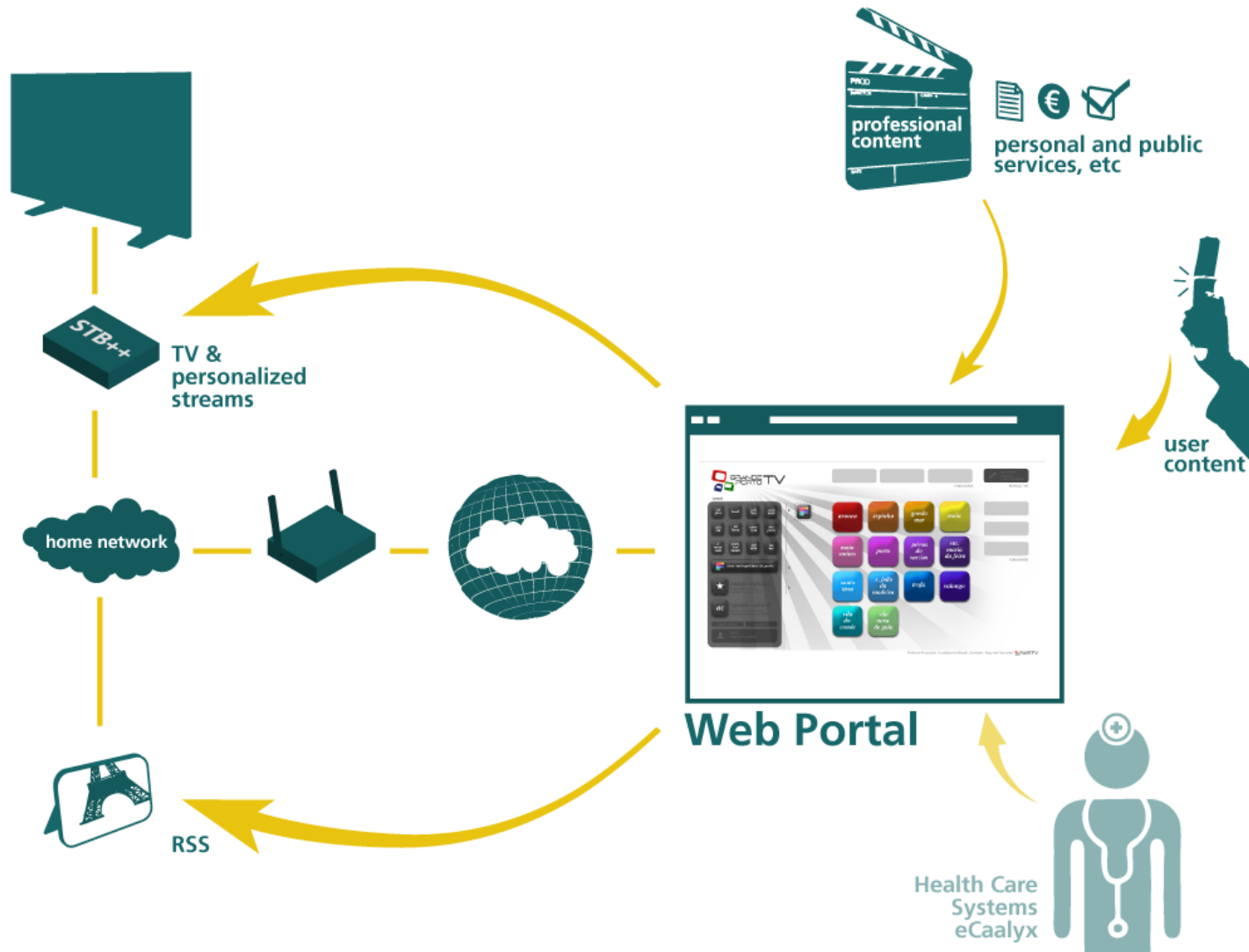
Target groups are people with little access to the information society

- Elders
- Less technology literate

Other target groups may be additionally considered, but not our main focus

- Physically impaired
- Physically disabled

# How?



# Set-Up

## Enhanced Set Top Box (STB++)

- Enables the delivery of a multitude of contents and services
- Through friendly User Interface (UI) designed especially for specific population groups.

## User Interface

- TV set as display
- Input
  - ◆ common remote control
  - ◆ wireless touch interface

## User Generated Content

- Social interaction through sharing information with people that have similar interests
- Automated insertion of Meta-data (who, when, where)
- Generation of online content made easy as taking a photo with a camera

## Aligned Backend & Portal

- Used to receive user generated content
- Content Classification based on Meta-Data and/or easy human interaction
- Personalized content streams (channels) to the STB++

# Task Overview

## STB Hardware and Software enhancement

- Support for wireless home networking
- DLNA and UPnP support (eventually)
- Design and implementation of software to offer desired services over the STB
- Additional functionalities, like intelligent content filtering and display

## User Interfaces

- Identification of relevant characteristics for target user groups
- Design and implementation of UI for TV + remote
- Design and implementation of UI for TV + wireless touch control
- Design and implementation of UI for User Generated Content App for Android Phone

## Android Content Share Application

- No development from scratch needed, we have already a prototype

## Backend

- No development from scratch needed, we have already a prototype

## Support Action

- Evaluation of the acceptance of the developed services and interfaces by target groups
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# Technologies and Partners

## **We are especially interested in working with**

- Android OS
- Zigbee, Z-wave interoperability
- UpnP, DLNA
- User interfaces, Human-machine interfaces

## **We are looking for partners**

- Telecommunications providers
- Device manufacturers
- Visualisation technologies
- Content management and classification
- With experience in working with our target groups

**We are very open to discuss our ideas  
and/or  
to participate in other AAL projects!**

[www.fraunhofer.pt](http://www.fraunhofer.pt)

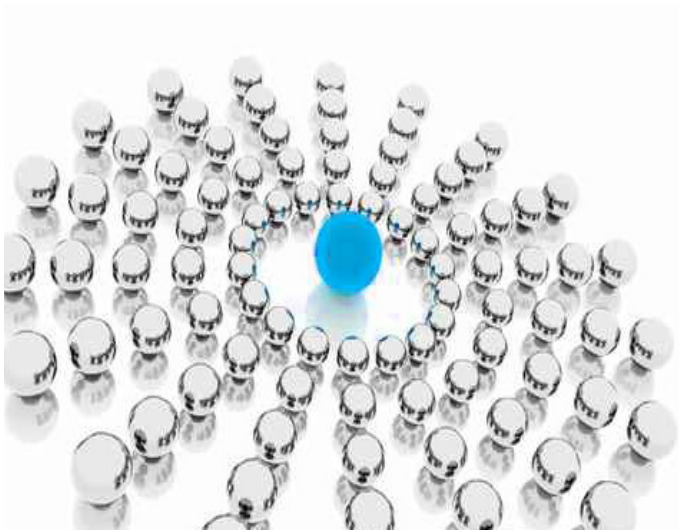
# AICOS - Vision

## Extending the Reach of the Information and Knowledge Society:

Bridging the Digital Divide through Barrier-Free IKS Access with Innovative ICT

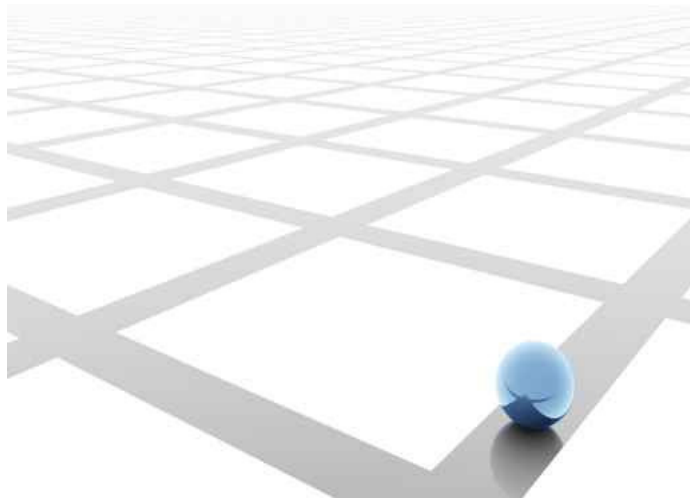
In more practical terms:

We would like to provide applicable solutions with commercial value for assistive information and communication environments aimed at groups that currently suffer from no or limited access to ICT.



# AICOS - Activities

## Extending the reach of IKS by lowering technical and financial barriers:



- Development of assistive systems for the primary demands of the addressed target groups
- Provision of content adaptation services and development of new content formats
- Development of (public) end-systems, intuitive user-interfaces & front-end applications
- Development of access solutions for low cost broadband access (alternative technical solutions and business models)
- Development of front-end aligned back-end systems
- Transfer and commercialization of results
- Set-Up and/or backing of field-tests