AAL-2009-2-090
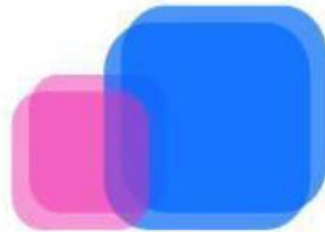
SeniorChannel

An Interactive Digital Television Channel for Promoting Entertainment and Social Interaction amongst Elderly People

D4.2 Programme Elements Specifications

Deliverable 4.2 Programme Elements Specifications			
Start Date	03/2011 (M13)	Termination Date	06/2011 (M16)
Release Date	06/2011 (M16)		
Responsible	Audemat		
Compiled by	Jim Playfoot, White Loop Limited		
Partners	Indra Software Labs, University of Padova, Brainstorm, Audemat, Linköpingskommun, M31 Spa		
Report Version	Final		
Circulation	Project Partners and CMU AAL		

Table of Contents:

1. About this deliverable

This deliverable further develops the work presented in D4.1. In D4.1, we set out a series of potential content streams and functional elements that could be usefully and effectively integrated into the Senior Channel platform. This work was developed on the basis of end user engagement sessions exploring the relationship seniors have with technology and working with them to define and initial set of potential content and functional concepts for integration into the senior channel solution..

Having created a set of content and functional ideas, these were tested with primary and secondary end users and discussed amongst consortium partners. The purpose of this work was twofold: first, we wanted to identify the most compelling concepts for inclusion in the pilot stage of the Senior Channel project. And second, we wanted to explore the feasibility of developing and implementing these concepts during the lifecycle of the project.

As a result of this process of refinement, we have developed a series of content specifications that will help guide the project development over the coming months. The specifications presented here represent an implementation plan that will be followed by the consortium with all partners fully engaged and agreed on this plan.

Before presenting the individual content and functional specifications in Section 3, we briefly present an overview of the ideas generated in D4.2 and explain the rationale behind their inclusion or exclusion from the final project plan.

2. Concepts presented in D4.1

2.1.   Overview

The concepts developed and presented in D4.1 were as a result of workshops and consultation with primary and secondary end users as well as internal discussions amongst the consortium partners. Although some focus was given to feasibility, the approach here was to generate a set of concepts that would be of interest to primary end users and to then explore the feasibility and attractiveness of the concepts subsequently.

Below is a list of the concepts developed and presented in D4.1 with brief analysis of the feasibility and attractiveness alongside the decision as to whether these will form part of the pilot application development and testing.

In section 2.3, we summarise the elements that we will be developing during the pilot application process before going on, in section 3, to describe the details requirements for each of these individual programme elements.

2.2.1 The Senior Channel Weekly News Programme

What is it?

The Senior Channel technology has, at its heart, a low-cost easy to use IPTV studio. This can be used for the production of TV content to be broadcast across the Senior Channel platform. One of the most prominent areas of interests for seniors is news and current affairs. The Senior Channel Weekly News Programme would be a function that allows groups of seniors, with help, to create a short 'magazine' programme about their town, their region, what's going on in the world and their reflections on it. It would be produced and broadcast on a weekly or bi-weekly basis and provide a cornerstone piece of programming for Senior Channel.

How would it work?

Using the IPTV studio, the programme would be constructed out of a series of standard templates including simple pieces to camera, interviews and simple graphics and images. The programme would be made up of a series of short 'stories' put together by the seniors working on the programme. A script would be generated and, where required, original footage would be shot to support the pieces delivered to camera. The facility to add in pieces from a video library would also enhance the flexibility and options available. Once the programme was recorded, it could be shown at regular intervals across Senior Channel or could be accessed on demand.

What are the benefits?

The function of creating original TV content is central to the Senior Channel proposition. As the majority of seniors are both interested in news and current affairs and keen to generate content in this area, the creation of a function to support a regular 'news' programme would give seniors both the motivation to engage with the world around them, the chance to take editorial decisions and the opportunity to collaborate on a 'flagship' piece of programming. The programme would also be of great interest to all those who access the Senior Channel network, and would be an excellent way for communities across Europe to share their experiences.

Is it attractive to end users?

This concept was highly appealing to end users, although the proposition was much stronger when connected to the local environment. Users were interested in the idea of creating their own localised programming. Some questions over whether there would be enough content for a weekly programme and this idea may be amalgamated with the 'short documentaries' idea. One concept to emerge was the idea of collating news outputs from other sources (newspapers; magazines; TV; radio) and presenting a kind of news review show on a weekly basis with the content focussing on the stories that matter to seniors. This was of significant interest.

Is it feasible/desirable within the project lifecycle?

This idea will use the low-cost TV studio suite and will be pre-recorded for broadcast at specific times or on demand. It will also involve the integration of images, video and text from third party news sources, all of which can be handled within the studio suite. There are no technical reasons why this should not form part of the project pilot.

2.2.2   Personal Histories

What is it?

All seniors have stories to tell, and many are very interesting and entertaining when they do so. The idea of Personal Histories is to provide seniors with a means of recording stories about themselves and their lives and share these stories with others. This may relate to past events of historical significance (like the war) or may simply be a chance to recall important personal moments (like the birth of a child).

How would it work?

The Senior Channel studio will be set up with a standard background and each story will be told within a specific timeframe (10 minutes). The stories will be simple pieces to camera augmented, where possible, with relevant images and photos. Once recorded, the stories can go into a library of stories alongside others and can be classified, where relevant, by subject. They can then be accessed on demand or can be scheduled to be played at different times of the day.

What are the benefits?

The recording and broadcasting of personal stories will do two things. First, it will allow seniors to leave a legacy that can be seen by family, friends and others. Second, it will allow seniors to forge new friendships through revealing themselves by telling their own stories in their own words. Stories will often reveal a particular experience (which others may have shared in) or will reveal a specific interest or passion (which, again, may find favour with others). Simply giving seniors the stage to 'tell their story' will be a powerful motivating force for engagement in the Senior Channel proposition.

Is it attractive to end users?

In general, this idea appealed to end users. There were some editorial concerns around whether there would be enough stories of good enough quality to keep the viewer interested. Also some concerns that personal histories may involve politics or religion which could be complex. However, there was enthusiasm for the idea of personal histories related to health with individuals sharing their experiences of particular conditions (e.g. my experience of having a hip replacement etc.) There was also enthusiasm about finding stories from people's lives that reflected a moment of personal importance from which their lives changed. Provided the stories themselves are compelling enough, this would be a good programme element to develop.

Is it feasible/desirable within the project lifecycle?
This idea will use the low-cost TV studio suite to record the story either direct to camera or as an interview between two people. There may also be some images integrated into the programme. It will be pre-recorded for broadcast at specific times or on demand. There are no technical reasons why this should not form part of the project pilot.

2.2.3 The Short Documentary

What is it?
Alongside news and current affairs, seniors are highly engaged in the world around them and in the issues that matter to them. They are also passionate about a variety of subjects. Providing them with the ability to put together a short documentary on a subject or issue that they care about or are passionate about would be a powerful mechanism to create engagement and would also provide the opportunity for collaboration around a shared theme.

How would it work?
We will create a standard set of formats within the Senior Channel TV studio into which various types of content can be inputted. This will include third party content – images, audio and video – and original audio and video shot or recorded by the seniors themselves. Alongside this we will create an opportunity for recording a voice over and/or for recording pieces direct to camera. Every documentary created would go into an indexed library that could be accessed by viewers on demand.

What are the benefits?
Enabling seniors to explore their interests and passions and the issues that matter to them will very much play to the desire seniors have to engage with the world around them. Moreover, this would be a collaborative experience with the documentary being developed by teams who share the same interests or passions.

Is it attractive to end users?
This idea was highly appealing to end users with particular interest in creating documentaries about local issues or aspects of local life. Specifically, it was felt that a short documentary about the centre in which the seniors congregate would be a good project to start with, giving experience to the participants and value to the centre in creating content that can be used to promote the work of the centre and the experience of going there. Further to this, there was also clear enthusiasm for programming that explored the lives of individual seniors within the centre, particularly in their own homes. One approach to this that might prove popular would be to have a series of short films showing seniors cooking at home and talking about themselves, their food and their lives. Food and cooking were clearly drivers for engagement amongst women in the way that sport is (typically) for men. As we need to ensure that women are directly appealed to, a programme of this nature would work well.

Is it feasible/desirable within the project lifecycle?
The centre documentary idea would require some location filming (which would take place within the centre itself) but would be easily achieved using the standard Senior Channel toolset. For the Cooking at Home idea, the technical considerations would be similar. There are no technical reasons why this should not form part of the project pilot.

2.2.4   Digital Library Builder

What is it?

The Senior Channel technology offers the opportunity to create, store and access digital content of all types. One of the ways this opportunity could be exploited is in the development of a 'digital library' function that would allow end users, in teams, to build a library of content based on a particular subject. The idea can be thought of as a version of the 'playlist' function in iTunes where individuals are asked to put together a collection of music tracks that represent them or that are representative of a particular theme.

How would it work?

The Senior Channel technology would facilitate the creation and storage of an extensive collection of content – audio, video, images etc – that would then be classified according to their particular area of interest (e.g. sport or cookery or art). Users of the technology could then select specific items of content from this collection to put into their themed digital library. They could then name the library and add an introductory piece of video that would explain what viewers could find in the library. All content within the library could then be explored on demand.

What are the benefits?

By providing seniors with the opportunity to build their own digital library, based on a theme and in collaboration with others, we will be creating small temporary communities of interest around that theme and will encourage socialisation during the design and development of each library. Beyond that, every library will be accessible via on demand by other users of the Senior Channel system and interactions within the technology and in the real world can ensue based on the shared interests on display.

Is it attractive to end users?

This idea failed to stimulate particular interest amongst the primary end users with the sense that this may be too difficult to navigate. Although this functionality mirrors that of most existing on-demand TV services, many users are not currently using these services and so the concept is alien.

Is it feasible/desirable within the project lifecycle?

The idea would require significant back-end development in terms of creating the menu structures and interface. It would also require the creation and/or sourcing of a large amount of content in order that the library would have real value. Bearing in mind the lack of end user enthusiasm for this idea, this will not form a part of the pilot project although could be a useful feature in future versions of the technology.

2.2.5   Digital Diary

What is it?

Our research indicates that there is significant interest amongst this target group towards creating their own content. Alongside this, there is a strong propensity amongst this group to tell their own stories and to communicate to others how they feel about the world around them. The idea of a digital diary is now very common amongst many internet users (in the form of blogs and associated technologies). The Senior Channel technology provides the opportunity for end users to create their own digital diary in the form of audio/video footage.

How would it work?

The Senior Channel platform will facilitate the creation of a series of backdrops against which individuals can record their own testimony. This will probably be time limited (to 5 minutes for example) and may be augmented by other media from the Senior Channel content library (images or video). Each recording will be stored and then accessed on demand. Alternatively, individual testimony can be scheduled for playing at certain points in the day. Those watching will then be able to comment on the testimony they see.

What are the benefits?

Our research suggests that seniors are particularly keen to leave a legacy and that one of the best ways of doing this is for them to record their thoughts, their recollections and their stories in a form that will be able to be accessed by friends and family. The idea of a digital diary will therefore appeal as a mechanism to leave this legacy and to enable seniors to communicate their thoughts, feelings and experiences to a wider public.

Is it attractive to end users?

Although the notion of leaving a legacy is clearly evident (and bearing in mind an often-observed propensity for telling stories amongst the target user group), there were concerns amongst end users about whether these contributions would really be of interest to a wider audience. Furthermore, whilst many end users were keen to talk face to face and in company, some suggested they would be less likely to share their stories whilst being filmed. This idea would also require a long term commitment from end users. The 'personal histories' idea works better with this target end user group.

Is it feasible/desirable within the project lifecycle?

This would use the low-cost TV studio suite and be pre-recorded for broadcast at specific times or on demand. There are no technical reasons why this should not form part of the project pilot. However, lack of end-user enthusiasm for the idea suggests it should not form a part of the pilot application development although it could be further developed for future iterations of the technology.

2.2.6   The Senior Channel Debate

What is it?

Our research demonstrates the deep and ongoing interest that seniors have in news, current affairs and the issues of the day. This extends not only to issues in their immediate environment but also to international issues and global themes. The willingness to engage in debate is also clear, with many seniors holding strong opinions and enjoying the experience of discussing these issues with their friends. There is also evident interest in news and discussion programming on TV. Senior Channel will provide the context for a regular hosted discussion that will enable seniors to play an active role in the debate, give their views and engage in dialogue with others.

How would it work?

We will create, using the Senior Channel virtual studio, a programme format that enables a live studio debate to take place that will involve seniors in their own homes via video conferencing. The debate will be held on a regular basis – probably weekly – and will focus on a particular theme of the day. A host will lead the debate and will engage with seniors interested in taking part both via video conferencing and within the virtual studio environment. The programme would either be broadcast live or be recorded and then scheduled to play or made available on demand. The only issue with the idea – and this must be taken into account when designing the areas for

discussion – is that debate can cause conflict, particularly if the debate focuses on politics or religion. The subjects for debate need to be carefully chosen so as to not lead to any such conflict.

What are the benefits?

As stated above, news and current affairs are extremely important to this age group, both because of historical interests and because this is a way of these users staying in touch with the world around them. Most end users keep themselves well informed of events and the Senior Channel debate is a way that their passion for news and the knowledge they have about the world around them can be effectively utilised. The opportunity to play an active role in the debate will be even more compelling.

Is it attractive to end users?

The enthusiasm end users have for debate is clear. Typically, this group have strong opinions and are not afraid to share them with others. They are also interested in current debate and current affairs shows on TV so they would see the opportunity to create their own version as highly appealing. There would be some issues around navigating difficult subjects like politics and religion. Also, it seemed from our research that men were more engaged with the idea than woman and we would need to address this. However, the enthusiasm the group had for the idea of a debate show where they could set the agenda was evident.

Is it feasible/desirable within the project lifecycle?

To produce the debate show and involve individuals from home would be technically challenging but certainly achievable within the lifecycle of the project. The programme would use the low-cost TV studio suite for the live debate and would enable end users to contribute via audio or video feeds from home. Bearing in mind the end-user enthusiasm for the idea and the value of exploring this as a way of engaging end users in their own homes, we believe this should form a part of the pilot application development.

2.2.7 Interaction with Content

What is it?

The Senior Channel technology will provide a range of content (as described in this document) within the overall content framework developed. One of the unique benefits of an IPTV solution is that the technology can provide the facility to interact with the content in a way that is not possible through standard digital or analogue television. This facility can enable viewers to rank, rate or comment on particular elements of content which, in turn, can then be viewed by other users of the technology. This kind of facility is very common within web 2.0 technologies like social networks and video sharing platforms.

How would it work?

Essentially, every content element – a piece of video, an image, some text, a piece of audio – can be ranked, rated or commented on by users of the technology using a standard set of icons accessed via the TV remote control. Ranking and rating will then allow different pieces of content to be flagged up as 'most popular' or 'most viewed' thereby helping other viewers access high quality or well-received content. The commenting facility will allow users to leave short comments – again using their TV remotes – about the item viewed, providing opinion, augmenting the content of the item or suggesting further items that could be viewed in relation to that item. All data related to each content item will be stored in the Senior Channel database.

What are the benefits?

By enabling end users to interact with the content broadcast on the Senior Channel platform, we increase the degree of engagement with that content. Over time, the user feedback on specific content items will build and generate a much greater sense of the Senior Channel 'community' where content is not only created by seniors for seniors but, once it's been made available, seniors can continue to interact with it.

Is it attractive to end users?

The challenge with bringing end users on board with this idea is that they do not entirely understand the concept. Uptake of participatory technologies (including social networks) is relatively low (although rising) amongst this group. Therefore the idea of ranking, rating or commenting on a piece of content is not particularly embraced. However, it is felt that the job of Senior Channel is, in part, to introduce new technologies to this group and trends suggest that user feedback mechanisms will become more important in future.

Is it feasible/desirable within the project lifecycle?

The user feedback data would be supplied via the remote handset during or after on-demand programming has been screened. It is feasible to add this functionality to the interface and then to display rankings and comments associated with particular programme elements. Therefore, we believe this should be included as part of the pilot application development.

2.2.8   Collaborative Digital Learning

What is it?

Our research indicates strongly that this particular user group are very interested in furthering their knowledge, in exploring new skills and experiences and in training and education. However, there is seemingly very little in the way of technology within this context as many seniors see education and courses as a way of meeting people (rather than simply valuing it for the education itself) so the idea of distance learning using the internet does not appeal as this would turn the activity into something they would end up doing on their own. Furthermore, there is an inherent belief in the value of the teacher so the idea of self-led learning is also something that doesn't appeal. Utilising the Senior Channel platform, we can make engaging in courses and ongoing learning a more interactive and collaborative experience.

How would it work?

The key to this will be to have the course delivered by a real teacher and broadcast live over the Senior Channel network. Participants can then engage through the TV at home and can interact with others who are taking the same course. The facility to interact with the content – as outlined in 3.7 – could also be effectively utilised here. Video conferencing could be used as a mechanism to get instant feedback from participants to what is being taught. It is envisaged that courses would be run over a number of weeks with the broadcast happening at a set time each week. Any broadcasts could also be accessed, anytime, via the on demand facility.

What are the benefits?

By delivering the course via TV into their own homes, seniors will have far greater access to a range courses than they would have if they had to be there in person. By having courses led by a recognised teacher, this will maintain interest and belief in the value of the course. Furthermore, by creating opportunities for seniors to interact during and after the broadcast, the act of learning remains a social one, even if it is happening via the television.

Is it attractive to end users?

The idea of continued learning and education is very strong amongst this age group. However, despite the vast array of digital learning currently available online, none of the participants had actively engaged in this kind of eLearning. They tended to see learning as a process that should happen face to face and also as something that was, in itself, social. Therefore the level of enthusiasm for engagement with learning through the TV was very low.

Is it feasible/desirable within the project lifecycle?

There are no technical reasons why this should not form part of the project pilot. However, lack of end-user enthusiasm for the idea suggests it should not form a part of the pilot application development. Clearly, as engagement with digital learning technologies becomes more prevalent, learning collaboratively through the TV will become more appealing and could form part of future iterations of the technology.

2.2.9   Live Multi-Player Gaming

What is it?

Playing games is a regular and much loved activity within the elderly centres surveyed. In fact, the primary activity within these centres is board games, card games, pool and other such pursuits. The interest in playing games stems, in part, from the social aspect of playing and also from the perceived health benefits, particularly in relation to games that require thinking (like Scrabble or quizzes). Although our research suggests that uptake of gaming online is low amongst this user group, the Senior Channel technology provides us with an opportunity to create a new environment within which games and quizzes can be played. The vital ingredient here is that the game experience is something that players share with each other. Therefore, any of the games designed will need to be played live and with multiple players.

How would it work?

Essentially, the number of games that could be played using the Senior Channel technology is vast. We will initially look to develop some simple games that will be controlled using the remote handsets and will manage the interaction with these games centrally. A gaming 'zone' will be created where, at any point, players can go and see whether there are other players online who are looking to play. Games will then start at specified times and players can play one on one or within a group. Over time, the gaming zone will grow into one of the most active areas of the Senior Channel platform, with games developed by third party providers being integrated into the platform.

What are the benefits?

The main benefits of a Senior Channel gaming zone are twofold. First, this will enable seniors to engage in an activity that they love (gaming) at any time and from the comfort of their own home. And crucially they will be able to do this with others who also enjoy playing games. In this way they will continue to get the social benefits of game playing that they so value. Second, Senior Channel lends itself very well to quizzes and 'brain training' activities which, we know, are hugely popular with this age group who are very motivated by a desire to keep themselves mentally and physically fit.

Is it attractive to end users?

The general concept of playing games through the TV was initially met with some confusion. Typically, those who played games played them face to face with others as part of their daily social activities. There was not much enthusiasm for the idea of simple digital games along the

lines of what you might currently find on various websites. However, the concept of a participatory game show, with questions and answers that those at home could play along with was met with more enthusiasm. General knowledge games were seen to be both fun and supportive of mental health and agility and were popular as programmes amongst this group. A game show run by the seniors themselves and that they could participate in from home would be seen as highly engaging by the target users.

Is it feasible/desirable within the project lifecycle?

This would use the low-cost TV studio suite for the live recording and STB/remote handset technology to capture the answers and inputs of end users at home. Although a technical challenge, end-user enthusiasm for the idea suggests it should form a part of the pilot application development.

2.2.10 Video Conferencing

What is it?

Our research suggests that using technology to communicate is something that has taken hold amongst an older age group, particularly as it often means that the method of communication is cheaper (or in some cases free) than the alternative. Many end users were familiar with e-mail, and a good number has used instant messaging or video conferencing. By building in a simple video conferencing facility into Senior Channel, we can encourage more end users to utilise this technology as a means of connecting with friends, peers and family.

How would it work?

The Senior Channel platform will have integrated into it a simple interface that will allow for video conferencing using a webcam and a pre-existing communication software (probably Skype). This will enable video calls, audio calls and instant messaging to all friends and family who are signed to the service.

What are the benefits?

Once seniors understand the power of technology as a means of communication, they are very clear about the benefits this can bring. First, using video conferencing across Senior Channel will be free. Therefore this will reduce costs associated with talking over the phone. Second, the technology is significantly more engaging and immersive than simply using the telephone as you can see who you are talking to. Finally, our evidence suggests that connecting with younger people (particularly younger members of the family) is often more successful for this age group if they use new technologies.

Is it attractive to end users?

Many of the end users were current adopters of Skype technology, driven by the low cost of the technology and the video streaming that enabled them to keep in touch with members of family and friends who had moved away. The concept of embedding this technology into the Senior Channel solution did not seem justified to end users as they were already using Skype and could not understand why they would use their TV instead.

Is it feasible/desirable within the project lifecycle?

Integration of a Skype-like system into the Senior Channel technology would be costly and complicated. Furthermore, we would be duplicating a well-liked technology that is already being widely used. However, future iterations of the Senior Channel solution should explore the possibility of integrating Skype or a similar third party video conferencing tool into the product suite.

2.2.11 On-Demand Content Library with Recommendation Engine

What is it?

Although the primary focus for Senior Channel is to engage seniors in the creation and broadcast of content for themselves and for others, the Senior Channel technology also lends itself to other purposes. Our research indicates that this age group share a wide range of passions and interests (many of which are reflected in the content streams discussed in the next section). One of the ways we can engage seniors in active life and in sociable activities is to create content that matches their interests. By partnering with content providers, we can create a content library – mainly made up of video and audio content – built around specific themes. So that if an end user wants to watch content on food, they can go to the on-demand library and look for the available content to watch. Further to this, a recommendation engine will enable them (and others who share their passions and interests) to rate and recommend specific content based on their reaction to it.

How would it work?

The Senior Channel platform will create a repository of content based around a set of key interest areas. These will be defined during the project and could be added to at a later date. These key interest areas are likely to reflect the content streams discussed in the next section of this document. We will then source content to populate this repository, and include the main content object (most likely a piece of video or audio), a summary of the content, information about who produced the content and details of length and so on. This can then be watched, on demand, by users of the Senior Channel system. They can then rate the content and provide a review for others to access within the repository.

What are the benefits?

By offering content in this way – organised into interest areas and easily accessible – we will be encouraging engagement with the Senior Channel technology. Furthermore, we will be providing greater motivation to end users to utilise on-demand content (which, currently, they generally don't do either online or using digital TV services). The recommendation function will create a further driver for engagement and provide the opportunity for users to share comments and communicate with people who have similar interests to them.

Is it attractive to end users?

The idea of a content library broadly appealed to end users although some struggled with the concept. This is similar to what is currently available on existing digital TV platforms and could be effectively integrated into the Senior Channel solution over time. It seemed that end users would ultimately become engaged with watching TV on demand and, in this way, would find a subject-driven content library a useful element of the technology.

Is it feasible/desirable within the project lifecycle?

Although relatively easy to integrate, the challenge with this idea would be to have enough content to justify the development. As the initial content available on Senior Channel would not extend to multiple programmes within various subject areas, there does not seem to be a string argument to implement this at this time. However, over time, as content partnerships are made, this type of technology will need to be integrated into the Senior Channel solution.

2.3 Conclusions

Having explored all the possible concepts developed in our first stage of research and analysed the appeal to end users alongside the feasibility of developing the element during the project lifecycle, we propose the following elements are developed. These are placed in order of technical difficulty and the specific details for each element are provided in section 3:

1   **Personal Stories**: short films shot to camera where individual seniors are invited to share their stories

2   **Our Centre**: a documentary demonstrating what goes on at the centre and the part it plays in the lives of the seniors who visit

3   **The News Review**: a weekly discussion programme where seniors explore the parts of the news that are relevant to them and their peers

4   **Cooking At Home**: a series of short films inviting individual seniors to share recipes and stories from their kitchen

5   **The Senior Channel Quiz:** a general knowledge quiz game played live with players in the studio playing against players at home

6   **The Senior Channel Debate**: a live debate involving studio participants and connecting with individuals contributing from home

In addition to these core programme elements, we will also integrate a basic level of content interaction (as defined in 2.2.7) which will be available to end users who are accessing any on-demand TV content.

3   Specifications for Individual Programme Elements

What follows is a revised list of programme elements, based on the original list presented in D4.1, that reflects both the elements that were of most interest to primary end users and the elements that are, from a technical feasibility perspective, achievable within the project lifecycle.

In each case, the element has been defined both in terms of the content to be generated and the functionality to be included. The technical specifications and challenges have been developed in tandem with the technical partners in the consortium and are designed to be a guide to the development process.

It should be noted that during the course of the development of each of these elements, the specifics of each element may change depending on the various technical barriers that arise. However, it is intended that each element will be developed in full and ready to test with end users in accordance with the existing project schedule.

3.1 Personal Stories

This programme will be put together with the following steps:

-   The process will begin with the selecting people from the centre that have interesting personal histories and experiences that will be attractive and useful for the audience. An editorial committee will select the best stories to be recorded.
-   As soon as the stories have been selected, one editor will be assigned to each story to write the narrative (in partnership with the speaker) and to plan how the story will be told during the programme.
-   A group of operators will gather images (photos) from the people telling their story and relevant videos and images from Internet selecting the graphical material that will support the narrative.
-   The images and videos will be introduced using the virtual studio application and prepared for use during the recording.
-   The programmes will begin with an introduction from the presenter and the story will follow the script written and the operators will introduce the images and videos prepared at the correct time.
-   The full story will be recorded and then edited
-   The final broadcast will be uploaded to the play server of SeniorChannel system to be available on demand for the audience.

The following table outlines key aspects of delivering this programme element:

Element 1	Personal Stories
Content Type	Single piece to camera or one-to-one interview
Content Subject Areas	Personal recollections of the individual about past events; notable stories from history as seen through the eyes of the individual; stories about health matters and experiences; notable moments in time that changed

	your life
Estimated Length	15-20 minutes
Frequency	Regular recordings (5-10); screened daily
Risks & Barriers	Finding good stories; getting the timing of the stories right for scheduling purposes
Requirements	Sourcing of stories with supporting content; interviewer with relevant questions; single camera set-up; supporting content from interviewee including pictures and video where relevant
Possible Partners	Local historians; local museums; historical societies; local news organisations; local medical experts
Resource/expertise requirements	Editorial team; interviewees; interviewer; camera/studio operator; editor
Broadcast Type	Pre-recorded; scheduled programme; on demand
Graphical Requirements	Graphics generated in virtual studio engine to create backdrops to stories and integrate other content; no specific graphical interface requirements via STB
Level/Type of Interaction	Ranking and rating programme following transmission
Captioning and On-screen Graphics	Simple studio backdrop with images and video integrated at relevant points in the narrative; titles; credits

3.2 Our Centre (Documentary)

This programme will be put together with the following steps:

- the process will begin with the development of a narrative for the centre, with a group of staff and seniors agreeing on which are the most interesting aspects of the centre to be captured in the film
- Once the main narrative has been agreed, an editor will be assigned to write the narrative and to plan how the story will be told during the programme.
- A producer/director will also be assigned who will be responsible for choosing who will participate in the programme (including interviewees and presenters)
- The programme will be shot over a series of days, with individual elements of the narrative captured as and when they happen. This will include general filming of activities at the centre as well as interviews with seniors and staff
- The process will also involve the recording of a voice over to keep the narrative moving
- Once all elements of the filming have been completed and the audio has also been recorded, the footage and audio will be edited by an assigned editor and pre-screened in front of the editorial team and participants
- The final broadcast will be uploaded to the play server of SeniorChannel system to be available on demand for the audience.

The following table outlines key aspects of delivering this programme element:

Element 2	Our Centre (Documentary)
Content Type	Factual pre-recorded film with single presenter and multiple interviews/pieces to camera
Content Subject Areas	What goes on at the centre; who is it for; what do individuals involved in the centre feel about it; what plans does the centre have for the future; how can individuals get involved in the centre
Estimated Length	30 minutes
Frequency	One-off programme regularly repeated
Risks & Barriers	Quality of editorial approach; securing full participation in the production by centre staff; ensuring the film projects a positive image of the centre
Requirements	Strong script that covers all key aspects of life at the centre; participation of both seniors and staff to be interviewed; some context and history in terms of what the role of the centre is and how it was initially created
Possible Partners	Staff and visitors to the centre; local funding authorities
Resource/expertise required	Script writer; presenter; camera operator; editor
Broadcast Type	Pre-recorded; scheduled programme; on demand
Graphical Interface Requirements	No requirements for specific graphical interface via STB
Level/Type of Interaction	Ranking and rating programme following transmission
Captioning and On-screen Graphics	Titles; credits; narrative captions where appropriate

3.3 The News Review

This programme will be put together with the following steps:

- The process will begin with the selection of individuals to take part in the weekly show: this will include members of the 'panel' who will be asked to comment and discuss news stories from that week and also a presenter who will keep the programme moving
- An editorial committee will then be appointed. Their job – working in tandem with the participants – will be to identify interesting and relevant stories from the news week and to generate some ideas around how these stories might be discussed.
- As soon as the relevant news stories have been selected, the editorial team will work with the presenter and the participants to prepare them for the broadcast, ensuring that all participants understand each story and have something interesting to say

- A group of operators will gather relevant supporting images (photos) and relevant videos and images from the Internet selecting the graphical material that will support the narrative.
- The images and videos will be introduced using the virtual studio application and prepared for use during the recording.
- The virtual studio environment for the discussion will be prepared and the participants will take their positions within the virtual studio.
- The programmes will begin with an introduction from the presenter and then each participant will be asked to explore the stories they have found that week. Operators will introduce the images and videos prepared at the correct time relevant to the story being discussed.
- The programme will be recorded and then, if required, edited
- The final broadcast will be uploaded to the play server of SeniorChannel system to be available on demand for the audience.

The following table outlines key aspects of delivering this programme element:

Element 3	The News Review
Content Type	Magazine-style hosted panel show; 3-4 participants discussing the week's news; pieces to camera; not live
Content Subject Areas	Mainly local, regional and national news and current affairs of relevance to seniors
Estimated Length	30 minutes
Frequency	Weekly recordings; regularly repeated
Risks & Barriers	Challenging to find good stories; avoid repeating local TV news; ensuring participants are engaging and interesting when talking and discussing the news; avoid difficult subjects like politics/religion
Requirements	Sourcing of appropriate stories and content for discussion; well prepared participants who are able to talk clearly about the stories they have found; visual content to support the stories being discussed
Possible Partners	Local news agencies; freelance journalists; local/regional government
Resource/expertise required	Editorial team to identify and source content for discussion; presenter; discussion panel participants; camera operator; studio operator; editor
Broadcast Type	Pre-recorded; scheduled programme; on demand
Graphical Interface Requirements	Graphics generated in virtual studio engine to create an appropriate backdrop for the discussion and integrate other supporting content (images/video) where relevant; no specific graphical interface requirements via STB
Level/Type of Interaction	Ranking and rating programme following transmission
Captioning and On-screen Graphics	Titles; credits; narrative captions where appropriate

3.4 Cooking at home

This programme will be put together with the following steps:

- The process will begin with the selection of individuals who have both recipes and stories that they want to share.
- An editorial committee will then be appointed. Their job will be to identify interesting and capable participants who will provide a strong narrative and good cooking for the programme.
- As soon as the relevant participants have been selected, the editorial team will work with the participants to prepare them for the broadcast, ensuring that all participants understand what they are going to be doing during recording, understand how they need to address the camera etc. and have something interesting to say
- The programmes will begin with an introduction from a presenter and then the participant will begin to cook, explaining the recipe as they go and also discussing their lives along the way. The presenter will need to ask question about the food as they go, as well as asking about the life of the participant.
- Each programme will be recorded and then edited for time
- The final broadcast will be uploaded to the play server of SeniorChannel system to be available on demand for the audience.

The following table outlines key aspects of delivering this programme element:

Element 4	Cooking At Home
Content Type	Factual pre-recorded film with single presenter and single interview subject; fixed camera on location in the interviewee's home
Content Subject Areas	Cook your best recipe; talk about yourself; talk about the food you like cooking; talk about other aspects of your life
Estimated Length	30 minutes
Frequency	Regular recordings (5-10); screened daily
Risks & Barriers	Challenging to the right participants who can be compelling on screen; need to find a way of ensuring the recipes fit within a set timeframe (30 minutes)
Requirements	Sourcing of individuals willing to participate and who have recipes people are interested in; preparing the participants for the filming process including subjects for discussion and cooking techniques; planning how the cooking will be filmed to ensure the recipes are clearly demonstrated
Possible Partners	Local food experts; local restaurants; food historians
Resource/expertise required	Editorial team; interviewees; interviewer; camera/studio operator; editor
Broadcast Type	Pre-recorded; scheduled programme; on demand

Graphical Interface Requirements	No specific graphical interface requirements
Level/Type of Interaction	Ranking and rating programme following transmission
Captioning and On-screen Graphics	Titles; credits; narrative captions where appropriate

3.5 The Senior Channel Quiz

This programme will be put together with the following steps:

- The process will begin with the design of the quiz and the questions. This may borrow from an existing quiz or offline game (live Trivial Pursuits). It's important that there are a series of questions with multiple answers (4).
- We will then select a group of individuals to take part in the quiz: this will include individuals who will take part in the virtual studio and those who will play at home using their remote controls. We will also need to select a presenter (who will provide voice over for the show and ask all the questions)
- We then need to design the quiz environment using the virtual studio technology; we also need to design the way in which the graphics will render on screen in terms of offering the question and then 4 possible answers.
- The show will be broadcast live so we need to ensure that there are a requisite number of players at home who will play along with the participants in the studio
- Prior to broadcast, all the questions and answers need to be agreed and a voiceover recorded to introduce the show, present questions and answers and say goodbye at the end.
- The graphics need to be prepared at this time that mirror the order of the questions being asked so that individuals can play along at home
- At the time of broadcast, all participants in the virtual studio need to be fully prepared and studio and camera operators trained and in place
- The programmes will begin with a pre-recorded introduction from the presenter and then the questions will begin. Each participant will need to have a mechanism to answer the questions in the studio and then the visuals on screen will record their scores and show a leader board as the programme develops
- The programme will be broadcast live but also recorded for uploading to the play server of SeniorChannel system and made available on demand for the audience.

The following table outlines key aspects of delivering this programme element

Element 5	The Senior Channel Quiz
Content Type	General knowledge quiz that allows users to play and participate with others from home whilst individual players play within the studio environment
Content Subject Areas	Typically, the quiz would be general knowledge with specific rounds focussed on individual subjects (like food/travel/history/geography etc)

Estimated Length	30 minutes per quiz
Frequency	The quiz could be played live once a week; recordings of previous quizzes could also be available on-demand (although could not be played by home users on demand)
Risks & Barriers	Lack of requisite number of users to create the collaborative live experience; visual experience is not engaging enough in comparison with other quiz shows they are used to; technical complexity of delivering live interactive TV
Requirements	Source/create the questions and answers; create question graphics; identify a presenter (which could be just audio); find relevant players who are able to play the game
Possible Partners	Possibly an extension of existing quiz shows that are already broadcast so partnership could be with the production companies who produce quiz shows
Resource/expertise required	Game design/question creation; studio operator; camera operator; management of home user interface; live editor
Broadcast Type	Live broadcast; recording of live broadcast available on-demand
Graphical Interface Requirements	Graphics generated in virtual studio engine to create game studio; graphics generated by the STB for individuals to play along at home
Level/Type of Interaction	Live interaction for home users whereby a question can be answered by selecting one of four possible answers using the colour keys on the remote handset
Captioning and On-screen Graphics	Titles; credits; questions/answers appearing on screen in real time; user selection appearing on screen; correct answer appearing on screen; running total of in-studio and home users scores; graphics of final scores and winning score

3.6 The Senior Channel Debate

This programme will be put together with the following steps:

- The process will begin with the selection of individuals to take part in the weekly show: this will include members of the 'panel' who will be asked to comment and discuss the issue that has been chosen for debate and also a presenter who will keep the programme moving
- An editorial committee will then be appointed. Their job – working in tandem with the participants – will be to prepare the content for discussion and ensure that the participants have something interesting and relevant to say during the discussion.
- A group of operators will gather relevant supporting images (photos) and relevant videos and images from the Internet selecting the graphical material that will support the narrative.
- The images and videos will be introduced using the virtual studio application and prepared for use during the recording.

- The virtual studio environment for the debate will be prepared and the participants will take their positions within the virtual studio.
- The programme will enable individuals to participate from their homes using different vias[i] therefore the technology needs to be installed and tested in a selection of home (10) and all home participants prepared in terms of the technical side as well as what will be expected of them
- The programme will begin with an introduction from the presenter and then the discussion topic will be introduced. As a live programme, studio and camera operators need to be trained and in place and an director needs to be appointed to switch between participants in the virtual studio and contributions from home participants.
- Operators will introduce the images and videos prepared at the correct time relevant to the issue being discussed.
- The programme will be broadcast live and then uploaded to the play server of SeniorChannel system to be available on demand for the audience.

The following table outlines key aspects of delivering this programme element:

Element 6	The Senior Channel Debate
Content Type	Live hosted debate with in-studio guests and interaction with home users via webcams
Content Subject Areas	News and current affairs; sport; issues affecting seniors; local/regional issues
Estimated Length	30 minutes
Frequency	Weekly live broadcast; repeated regularly; available on-demand
Risks & Barriers	Lack of engagement in live participation; complexities over use of webcams; securing engaging guests for the debates; an effective presenter who can guide the debate
Requirements	Weekly theme supported by relevant content; a host for each debate; a set of participants (seniors; politicians; experts etc.) to stimulate and generate the debate
Possible Partners	Local news agencies; freelance journalists
Resource/expertise required	Significant editorial expertise to design each show; ; studio operator; camera operator; management of home user interface; live editor
Broadcast Type	Live broadcast with interaction from home viewers; recording of live broadcast available in broadcast schedule and on-demand
Graphical Interface Requirements	Graphics generated in virtual studio engine to create debate studio and integrate any supporting content (graphics/images/text)
Level/Type of Interaction	Live interaction for home users whereby a question can be asked using different vias[ii] or a home user can respond themselves to a point being made by a debate participant in live
Captioning and On-screen Graphics	Titles; credits; images/video/text relevant to the debate topic; integration of web-cam feeds into live broadcast

[i] The first via proposed for making this communication is text messages. It seems to be the best solution, as home user identity is always covered, and the users feel more relaxed, based on the different studies and user requeriments extracted on WP2. Being the simple way to communicate users with Virtual Studio, it can include a biggest number of users interactions simultaneously without disturbing the correct running of the programme.

The second via proposed to doing this communication, is through voice. Using this choice, the users feel more included in the programme emission, although they become more reluctant to participate in the debate. In this kind of communication, the participation of users has to be limited to avoid a high number of interrupts during the emission that may collapse the programme.

Finally the third optional type of communication is based on video. Using this method, the users feel totally included in program, as if they were on the studio, but a big number of the users become nervous and excited in this kind of interaction. In this case, the number of simultaneous interactions in programme has to be highly limited to avoid undesirable results in the emission.

The first type of communication is preferred, but could be possible to add another optional type as detailed above to give more choices to the users.

[ii] The first via proposed for making this communication is text messages. It seems to be the best solution, as home user identity is always covered, and the users feel more relaxed, based on the different studies and user requeriments extracted on WP2. Being the simple way to communicate users with Virtual Studio, it can include a biggest number of users interactions simultaneously without disturbing the correct running of the programme.

The second via proposed to doing this communication, is through voice. Using this choice, the users feel more included in the programme emission, although they become more reluctant to participate in the debate. In this kind of communication, the participation of users has to be limited to avoid a high number of interrupts during the emission that may collapse the programme.

Finally the third optional type of communication is based on video. Using this method, the users feel totally included in program, as if they were on the studio, but a big number of the users become nervous and excited in this kind of interaction. In this case, the number of simultaneous interactions in programme has to be highly limited to avoid undesirable results in the emission.

The first type of communication is preferred, but could be possible to add another optional type as detailed above to give more choices to the users.