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Report on S&T priorities from the second meeting of the Austrian citizen panel

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Notice and acknowledgement:

This report records the second Austrian CIVISTI-Citizen Consultation II (CC2). The results have not been modified or commented by the organizers.

We thank all colleagues and experts who supported the organisation of the CC2 in Austria. Our thanks are addressed especially to the citizens for their involvement in this new process.

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1. CIVISTI-CC2

It is the core idea of the CIVISTI project that socially relevant and proactive research agendas could gain from the consultation of citizens. In the first stage of the CIVISTI project, citizen consultations were organized in seven partner countries in spring 2009, which resulted in 69 citizens' visions for the future. At the second stage, an expert-stakeholder workshop was organized in Sofia, Bulgaria, June 15-16, to discuss these visions and determine how to best turn these visions into actionable research priorities. The workshop resulted in 30 recommendations.

At CC2 meetings in October 2010 citizen panels were consulted again to validate and prioritise the 30 recommendations from the expert-stakeholder workshop. The result is a set of S&T issues and recommendations, which the citizens found most important for their future. These results will provide an input to the preparation of the EU FP8¹.

The Austrian CC2 was held on October 15th, 2010 from 9.30 to 17.00 in the main meeting room (Festsaal) of the Austrian Life Ministry (BMLFUW) in Vienna.

All of the 24 citizens, who participated at the CC1 in June 2009, were again invited in August 2010 again to join the CC2. At the End of September an information brochure was sent to 22 citizens who had promised to participate.

The information material for the workshop contained:

- Programme for CC2
- List of participants
- Summary of the expert-stakeholder workshop in Sofia
- Information chapter 1 with:
 - short versions of all 30 recommendations from the expert workshop
 - the 3 recommendations (full versions) which the Austrian CIVISTI panel was going to validate in the meeting
 - the 4 visions from Austria, which inspired these 3 recommendations.
- Information chapter 2 with:
 - all 30 recommendations (full versions)
 - 32 visions (short versions), which inspired all the 30 recommendations.
- A glossary of the definitions of the technical terms.

As mentioned above, all 24 participants at the CC1 (12 women and 12 men) were invited to the CC2. Two participants had to cancel early. Four participants were absent due to illness on the day of the event. Two participants were abroad, four citizens withdrew because of other commitments and one participant did not show up.

The event was finally held with a group of four women and five men of different ages and different educational and employment backgrounds.

The project team, Walter Peissl and Mahshid Sotoudeh, were supported by Kerstin Arbter as the facilitator and Sabine Stemberger and Ulrich Fiedeler for the organisation.

¹ The Framework programmes (FP) are the European Union's most important funding programme/instrument to support research and technological development, with the aim of increasing growth, competitiveness, and employment in Europe. All research-related actions of the EU are incorporated in the FPs. There are different topics and fields in an FP and both research groups or individual researchers can apply for funding from the budget of an FP. FP7 is designed for the period of 2007 to 2013, while FP8 will cover the following period.

1.1 Programme for the second citizen consultation meeting

9:30 – 9:45	Arrival
9:45 – 10:05	Welcome and introductions Walter Peissl (ITA) Erich Ober (Austrian Life Ministry) Ruperta Lichtenecker (Comittee for Research, Innovation and Technology at the Austrian Parliament) Kerstin Arbter (Facilitator)
10.20 – 11.00	Introductions <ul style="list-style-type: none">• Presentation of the expert-stakeholder workshop: Andrea Höglinger (FFG).• Presentation of the CC2 programme• Questions
11.00 – 12.30	Validation- Group work <ul style="list-style-type: none">• Presentation of the 3 recommendations R1, R2 and R3 and the corresponding national visions• Validation of these recommendations by panel members.
12.30 – 13.00	Presentation of validations
13.00 – 14.00	Lunch
14.00 – 16.30	Prioritisation of the 27 recommendations
16:30 – 16:55	Presentation and celebration of the results Evaluation questionnaire
16:55-17:00	Further process and Thanks on participants Mahshid Sotoudeh (ITA)



Figure 1: guest lectures

The introduction part served on the one hand to inform the citizens about the project activities in the 18 months between the two citizens' forums, and was on the other hand an opportunity for two short guest lectures to show the relationship between national and EU environment, technology and innovation policy.



Figure 2: Presentation of the E&S workshop

The event was continued by a short introduction of the citizens and their experiences between CC1 and CC2. The validation started with the presentation of the three recommendations, which were formulated in the E&S Workshop in Sofia and are related to four Austrian visions. The validation was performed in parallel in two working groups. The review criteria and the results of the evaluation are presented in the next chapter. After comparing the results of the two groups, citizens defined a number of criteria for “good recommendations” that are presented in the section 2.3.

In the afternoon the remaining 27 recommendations were ranked after a brief presentation of the recommendations. For each person, seven points could be used to select seven desirable recommendations. The results of the prioritisation and an overview of the analysis of the citizens' results are presented in the next chapter.

The external evaluator Alexander Kesselring (Centre for Social Innovation) accompanied the Austrian CC2 and conducted a survey at the end of the event using a standardized questionnaire for all partner countries.

Citizens:

Christine Feichtinger

Helmut Jahn

Margrit Karasek

Alfred Parzer

Josef Prenner

Magda Schupfer

Werner Seifert

Anita Strohmaier

Kai Trausenegger

1.2 Outlook

After the CC2 meetings, the results from all the national panels will be put together and prepared for the policy workshop in Brussels in January 2011, which is the last stage before the end of the CIVISTI project. In this workshop the recommendations, which the citizens found most important for their future, will be presented. These results will contribute to the processes of defining FP8.

The workshop will be held in Brussels and is specifically aimed at policy makers in science and technology development in Europe, including the European Parliament (STOA² and ITRE³).

This report records the second Austrian CIVISTI-Citizen Consultation II (CC2) and presents original texts of the citizens' visions and experts' recommendations. The results have not been modified or commented by the organisers.

² STOA stands for Science and Technology Options Assessment and is the Name of the Technology Assessment Unit of the European parliament.

³ ITRE stands for Industry, Technology, Research and Energy and is a committee of the European Parliament.

2 Validation of three recommendations R1, R2 and R3

In Austria, the following recommendations at the event were validated after being formulated in the E&S-Workshop in Sofia in relation to the Austrian visions.

1. Humanistic research to explore what dignity during the dying process means to contemporary Europeans.

Participatory research (anthropological) of an aging population in modern societies for developing spaces, where citizens can discuss and develop a community around their concerns about dignity during the dying process.

Corresponding vision: 7. Being allowed to die in dignity, a companionship of dying in a network of family and relatives. The recommendation is also related to: vision 11: The death passport.

2. Tools for disabled people.

Investigating the state of the art in the development of tools for disabled people and older adults. Based on the introduction of a balanced multidisciplinary approach to the issue by involving experts from technological and social sciences.

Corresponding vision: 9. Disabled people as fully valuable members of the society.

3. European TV – unity in diversity. A permanent lab for experimentation on building and expressing identity (IdenTVLab).

Establishing TV that contributes to the creation of different forms of European identity and to the cooperation of diverse cultures.

Corresponding vision: 10. TV for the creation of a European identity.

2.1 Validation criteria

Faithfulness: was about the degree to which the recommendation reflects the idea in the vision? Do citizens recognise the vision in this recommendation? Have experts understood the meaning and intention of the vision.

Effectiveness: was asking if the recommendation helps to make the vision come true. Could this recommendation be one possible way to support the realisation of the vision?

Desirability: To what extent did citizens think the recommendation was desirable or undesirable?

The above questions were evaluated on a scale of 5 to 1. The scoring was supplemented by a verbal justification for the choice.

Faithfulness:
How strongly does the recommendation reflect the vision?

- **Mark on the "dartboard" how strongly you think the recommendation reflects the vision? – do you recognize your ideas from the vision? Have the experts been loyal to the vision?**

5. Bull's Eye – Reflects the vision completely!
4. Reflects the vision strongly
3. The recommendation does reflect the vision partly but also partly not
2. Reflects the vision weakly
1. Does not reflect the vision at all

- **Give reasons for your choice** – What in particular indicates to you the degree to which you see the recommendation reflects the vision?

1) ...
2) ...
3) ...

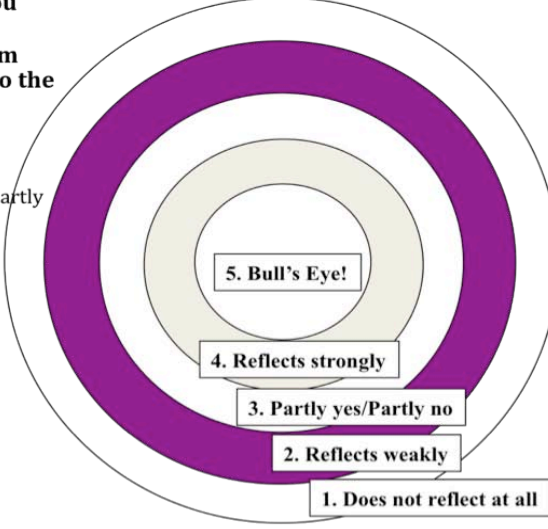


Figure 3: Template for the evaluation of faithfulness

Effectiveness:
Degree to which the recommendation will help to make the vision come true

- **Mark on the scale to the left of 1 (most) to 5 (least) to which degree you believe the recommendation will contribute to the realisation of the vision?**

5. ☐ Will be the most important instrument in making the vision come true
4. ☐ Will be one of important instruments in making the vision come true
3. ☐ May or may not be important for making the vision come true
2. ☐ Will not contribute to make the vision come true
1. ☐ Will prevent to make the vision come true

- **Give reasons for your choice** – What in particular makes you think the recommendation will contribute to this degree in making the vision come true?

1) ...
2) ...
3) ...

Figure 4: Template for the evaluation of effectiveness






Desirability of the recommendation	
<p>• On a scale from 1(most) to 5 (least) how desirable do you think the recommendation is?</p> <p>5.  Highly desirable</p> <p>4.  Partly desirable</p> <p>3.  Neutral</p> <p>2.  Partly undesirable</p> <p>1.  Undesirable</p>	<p>Give reasons for your choice - Both pro and cons for the desirability of the recommendation?</p>

Figure 5: Template to evaluate the desirability of the recommendation

2.2 Validation

The validation of the recommendations was carried out in two parallel groups. The citizens first made their individual evaluations of each recommendation based on the three criteria and noted their respective reasons and comments for their choice on the templates. After about 20 minutes the table facilitators asked for the scores and reasons for the choices of the first recommendation and documented keywords on the pin board papers. Meanwhile, a brief exchange of views in the group was possible. Each recommendation was treated within about 25 minutes assessment time.

2.2.1 An overview of the validation results

Validation of the R1



Figure 6: Group 1 started with the R1 and continued the validation task with the R3 and R2

R1: Humanistic research to explore what dignity during the dying process means to contemporary Europeans.

Participatory research (anthropological) of an aging population in modern societies for developing spaces, where citizens can discuss and develop a community around their concerns about dignity during the dying process.

Corresponding visions:

Vision 7. Being allowed to die in dignity, a companionship of dying in a network of family and relatives

A chip implant enables monitoring the process of dying by a socio-psychological hospice. This vision points at the importance of the process of dying in an aging society. It includes a supervisor, acting as a companion for the dying persons and their families and friends.

Vision 11. Death passport

Respect for autonomous decision about one's own death should be possible through a voluntary personal death passport for passive euthanasia⁴. It should include the individual conditions and should easily be renewed with a minimum of bureaucracy and free of charge.

⁴ Euthanasia is a deliberate intervention undertaken with the express intention of ending of life, to relieve intractable suffering (Wikipedia).

The results of the validation of the both groups are presented below.

Faithfulness

The rating of this recommendation varied between participants. One citizen did not respond to this question.

	Bull's eye	Reflects strongly	Partly yes, partly no	Reflects weakly	Does not reflect at all
Number of votes	3	0	2	2	1

Bull's eye!

One comment:

- In the case of coma patients, the decision should be left to relatives. Dying people who are still conscious should decide themselves whether their pain should be reduced and no other treatment provided.

Partly yes, partly no:

Comments:

- Strong impact on the personal sphere, data abuse is inevitable.
- A liberal regime in the EU would solve the problem. But what is really happening? Relatives to be excluded.

Reflects weakly:

One reason:

- Visions aimed at technical and administrative implementation; recommendation emphasizes legal aspects; research as recommended is unnecessary because it should merely be discussed and decided in parliament.

Comment:

- Harmonization of opinions in Europe on "life" is more important than "dying".

Does not reflect at all:

Reason:

- The visions address solutions. The recommendation, however, only describes a programme for the discussion of solutions. The formation of a "dying community" was not desired.

Effectiveness

Six participants chose 3 points for the effectiveness of the recommendation. Two participants felt it was more effective and awarded 4 and 5 points. One citizen did not respond to this question.

	Most important instrument	One of the important instruments	May or may not be important	Does not contribute to make the vision come true	Contra-productive
Number of votes	1	1	6	0	0

One of the important instruments:

Reason:

- Euthanasia may be provided if desired, individual life care, supervision of relatives.

May or may not be important:

Some reasons:

- The process of implementation is accompanied by fierce ideological debates, you must carry out a broad opinion-forming process, religious (Catholic) resistance will lead to a hesitant reform (hopefully), and so the vision/recommendation will only be one amongst several influencing factors.
- The regulation (as recommended) at EU level would solve some problems of the vision. Other aspects are left completely ignored and therefore the recommendations have no effect.
- I basically regard research as positive.

Desirability

Four participants rated this recommendation as being very desirable, while other participants mentioned different, and some rather critical opinions.

	Highly desirable	Partly desirable	Neutral	Partly undesirable	Undesirable
Number of votes	4	1	3	1	0

Highly desirable:

Some reasons:

- Dying in dignity with family members and trained persons in a peaceful atmosphere.
- If there is a legal standardization, at least the legal and medical shortening of life should finally be regulated strictly at European level.

Neutral:

Reasons:

- Research into the conditions of the aging population is important but top priority is not the euthanasia. However, a Europe-wide regulation is desirable.
- Because key aspects of the vision were not included.
- It is a secondary issue for me.

Validation of the R2



Figure 7: Group 2 started with the R2 and continued the validation task with the R1 and R3

R2: Tools for disabled people.

Investigating the state of the art in the development of tools for disabled people and older adults. Based on the introduction of a balanced multidisciplinary approach to the issue by involving experts from technological and social sciences.

Corresponding vision:

Vision 9. Disabled people as fully valuable members of the society

Integration of disabled people should be achieved through affordable tools and involvement of disabled people in daily life as well as more research on the treatment and prevention of disablement even before birth.

Faithfulness:

None of participants selected faithfulness as a Bull's Eye (5 points). Three participants awarded 4 points and four participants awarded 3 points for partial faithfulness of the recommendation. Two participants awarded 2 points for a weak degree of faithfulness.

	Bull's eye	Reflects strongly	Partly yes, partly no	Reflects weakly	Does not reflect at all
Number of votes	0	3	4	2	0

Reflects strongly:

One reason:

- The vision focused on the implementation; the recommendation more on exploration; investigation and survey of available tools is a modest goal; the interdisciplinary approach is in my opinion very effective and fruitful.

Partly yes, partly no:

Some reasons:

- The recommendation offers no solution but only a possible discussion of a solution.
- Only technical aids; how will this help disabled people to be integrated in the labour market?
- Recommendation relates mainly to older people with disability. This is against the original vision of prenatal and postnatal cases; it is important, therefore, to help the disabled (children) more using technology. The vision has nothing to do with the theme of an "aging society".

Comment:

- Depends only on financial and political will.

Reflects weakly:

Reasons:

- Medical facilities are not addressed in the recommendation, and neither are the ways to make daily life easier, such as barrier-free and stepless trams and trains.
- The recommendation is unfortunately boring; its formulation is meaningless.

Effectiveness:

The recommendation was regarded as being neither very effective nor as having no effectiveness. In each case three participants awarded the recommendation scores of 4, 3 and 2.

	Most important instrument	One of the important instruments	May or may not be important	Does not contribute to make the vision come true	Contra-productive
Number of votes	0	3	3	3	0

One of the important instruments:

Some reasons:

- Informing society about disability issues is urgently required.
- Basic research on social and technical resources will certainly achieve useful results; to implement the vision, the recommendation remains general, partly because the vision has been already realized.
- Switching to disabled-friendly and barrier-free public transport (also for older adults and children); diagnosis of disease before the birth or possibility to choose is important. What if the disabled or elderly person cannot decide him/herself?

May or may not be important:

Some reasons:

- Discussion allows further steps.
- Still there exists insensibility.

Does not contribute to make the vision come true:

Some reasons:

- Too much (or only) technical assistance are mentioned.
- Due to the incorrect handling of the highly important issue of the vision, the experts prevent the chances of realization. For our children, more resources and an open-minded public opinion could be provided through the vision.

Desirability:

Three participants expressed the highly desirability of the recommendation. Three further participants awarded 4 points for partly desirable. Two participants regarded it as neutral and one participant felt the choice was partly undesirable.

	Highly desirable	Partly desirable	Neutral	Partly undesirable	Undesirable
Number of votes	3	3	2	1	0

Highly desirable:

Some reasons:

- Information should lead to social interaction between people.
- Any help for disabled or older people is desirable. Psychological and social support (if desired) is extremely helpful. People who cannot help themselves should be supported.

Partly desirable:

Some reasons:

- Desirable, but it should extend above all to technological progress to help disabled people.
- In my personal experience, disabled people are an enrichment of life. Therefore, they deserve support and greater integration. As obstacles in daily life exclude disabled people, I think research in the area is urgently required.

Neutral:

One reason:

- It is possible to support more disabled adults and older people. Nevertheless, rapid postnatal help for children and their support would be important.

Partly undesirable:

Reason:

- Medical aid is completely excluded, as well as barrier-free opportunities in daily life. (2 points)

R3: European TV

Establishing TV that contributes to the creation of different forms of European identity and to the cooperation of diverse cultures.

Corresponding vision:

Vision 10.TV for the creation of a European identity

An independent and advertisement free TV channel will broadcast from all EU countries. There will be rules and facilitators, acting as an incorruptible objective virtual institution to ensure neutral information without manipulation. All broadcasts should be available in all EU languages.

Faithfulness

One participant regarded the recommendation as completely faithful to the vision (Bull's Eye). Four other participants awarded four points mainly because of the difference between the target groups of the vision and the recommendation. Three participants awarded three points for partial faithfulness and one participant awarded two points for a weak faithfulness.

	Bull's eye	Reflects strongly	Partly yes, partly no	Reflects weakly	Does not reflect at all
Number of votes	1	4	3	1	0

Bull's eye!

Reason:

- Interactive and collaborative, nature of vision has been well taken over into the recommendation. European identity as a peace project.

Reflects strongly:

Some reasons:

- European thought can be disseminated regionally, especially for children and young people; it is important to know the diversity of cultures from the beginning.
- I agree, but the recommendation is too limited through a young target group.
- Excellent recommendation, but adults are neglected.

Partly yes, partly no:

One reason:

- The vision was partly utopian (cooking forums).

Some comments:

- Lack of programmes with subtitles, the need to show more positive moments.
- European identity is often a question of linguistic affiliation; what is good or bad in Europe for one country is also reflected in the other countries. European peculiarities.

Reflects weakly:

Reason:

- For me, the vision evokes a pan-European "Arte" channel, but not another multilingual children's channel. I reject TV as an electronic babysitter with an educational mission. European adults will, however, need to have a European cultural premium channel available.

Effectiveness

The evaluation of the effectiveness of this recommendation for making the vision come true varies considerable between participants. Two participants rated the effectiveness of the recommendation with 5 points, three participants awarded it 4 points, two participants indicated partial effectiveness with 3 points and in two cases the recommendation was not regarded as being efficient.

	Most important instrument	One of the important instruments	May or may not be important	Does not contribute to make the vision come true	Contra-productive
Number of votes	2	3	2	2	0

Most important instrument:

Reasons:

- The construction of a common TV is an important step towards achieving the vision of a common identity.
- With the appropriate implementation of an attractive TV format success is assured.

One of the important instruments:

Some reasons:

- Access to the large mass of people.
- Getting to know different cultures that have similarities with one's own culture.

May or may not be important:

Reasons:

- Combination of the media (Internet is meant).
- Too little is done for the realization.

Does not contribute to make the vision come true:

One reason:

- It will certainly not be achieved in the near future, EU countries are too different.

Comment:

- Since I do not support this target (reference to children's channel), I hope (and think) that it will fail.

Desirability

The differences of opinions are in this case clear, because five participants described the recommendation as very desirable, while two other participants considered it undesirable. In one case, the vision is regarded to be partly desirable and in one as a neutral matter.

	Highly desirable	Partly desirable	Neutral	Partly undesirable	Undesirable
Number of votes	5	1	1	2	0

Highly desirable:

Some reasons:

- It supports on the one hand people in other cultures that cannot travel so much; great effect helping to create European identity and cooperation between different countries in joint projects providing more understanding for each other.
- More openness and tolerance towards other cultures and traditions.
- Right-wing populists in Europe are advancing; this is an integrative platform especially for the social groups that sit a lot in front of the TV, essential to ensure peace in the EU.
- Emergence of a European identity.

Partly desirable:

Reason:

- Uniform TV is desirable, however it should not occur to educational television across Europe, but the educational mission must be a side effect of an entertainment programme (European news, not just local).

Neutral:

Reason:

- Many different languages would be necessary, and there would be so few viewers; through the media diversity this TV program would have to be really unique to attract an audience and be successful.

Partly undesirable:

Reasons:

- The European identity could indeed be promoted; but regional identity would become partly lost.
- Rather not desired (reference to children's channel).

2.3 Comparison of results of the working groups

After the group work, the table facilitators presented the results. The citizens had the possibility to compare the arguments and opinions in the two groups and observe the common features and differences among groups. Thereafter, general criteria for "good recommendations" were collected to support the ranking of the recommendations in the afternoon.

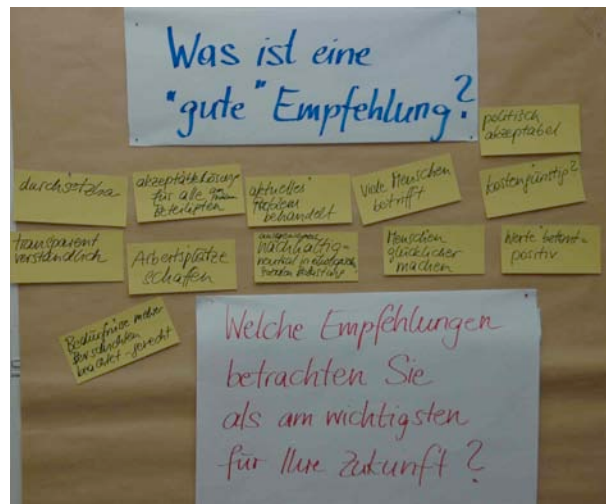


Figure 8: criteria for a "good recommendation"

A "good recommendation" should:

- consider the requirements of several groups - be fair
- be clear and understandable
- be enforceable and practicable
- generate jobs
- provide acceptable solutions for all parties involved
- be balanced, sustainable, neutral in environmental, social impacts
- address current problems
- make people fortunate and happy
- address many people
- stress on positive values
- be cost effective
- be politically acceptable.

3 Prioritisation of recommendation 4 to 30

After a presentation of recommendations R4 to R30, the citizens had the opportunity to read the recommendations in an exhibition on pin boards. After this, each participant received 7 points to select the most important and desired recommendation. Everybody placed their dots on seven recommendations at the same time according to their own opinion. The results are presented in table 1 and table 2. Table 1 shows the list of the top 7 recommendations in the Austrian CC2. Table 2 shows all 27 recommendations that were ranked in Austria.



Figure 9: presentation of the 27 recommendations

Table 1: The list of the top 7 recommendations in Austrian CC2

Recommendation		Votes
R15	Agreements with farmers organizations on avoiding antibiotics and hormones	5
R17	Social innovations for aging societies are needed	5
R21	Policies towards immigrants and refugees appreciation	5
R6	A 'Platform of the future of work' at a local, regional and global level should be considered within upcoming calls of the SSH program	4
R9	Optimization of urban space: towards dense European eco-cities	4
R12	Increase direct democracy through e-voting	4
R24	Go and re-appropriate countryside!	4

Short description of the top 7 recommendations:

R15. Agreements with farmers' organizations on avoiding antibiotics and hormones.

Implement research on ethical, legal and philosophical status of animals in FP8. Develop agreements on avoiding antibiotics and hormones to be implemented at the local or regional level but that are harmonized at the European level.

R17. Social innovations for aging societies are needed.

Research should be done to investigate the effect that a transition period between full-employment and full-retirement would have on the labour market. The aim of this would be to re-evaluate the rigid retirement age/pension system that currently characterizes pension policy.

R21. Policies towards immigrants and refugees appreciation.

Policies towards immigrants and refugees should become less threat-focused. A new immigrant positive approach to educative, cultural, immigration and media policies is needed for changing the mental framework of citizens as well as bureaucracy towards the appreciation of immigrants.

R6: A 'Platform of the future of work' at a local, regional and global level should be considered within upcoming calls of the SSH⁵ program.

Establish a platform within the upcoming calls in the SSH program about work at local, regional and global level. Including research about redefining work, 'flexicurity'⁶, work-life balance, basic income, new jobs, and social responsibility. This platform should involve citizen participation.

R9: Optimization of urban space: towards dense European eco-cities.

Initiate pilot projects creating eco-cities in Europe with sustainable waste management, transportation, urban space use and energy usage. It should be based on citizens participation.

R12: Increase direct democracy through e-voting.

Citizens should be involved more often and easily in parliamentary elections as well as in special decisions affecting the development of the society through e-voting.

R24: Go and re-appropriate countryside!

Foresight studies⁷ should be conducted to develop new visions of the future for establishing attractive, contemporary life in the countryside. Foresight studies should include mobility, cultural and political life, employment and balance between production and recreation in the countryside.

⁵ SSH stands for 'social sciences and humanities' and it constitutes a thematic part of FP7*. SSH aims at supporting common European research in the field of social sciences and humanities. These research activities are funded by the European Union and some key fields of research are defined in advance, to promote common European solutions for the common challenges. It makes the European research infrastructure less expensive and more efficient, since resources are harmonized and researchers gain common knowledge about the research culture of other Member States.

⁶ Flexicurity is "...a degree of job, employment, income, and combination security that facilitates the labour market careers and biographies of workers with a relatively weak position and allows for enduring and high quality labour market participation and social inclusion, while at the same time providing a degree of numerical (both external and internal), functional, and wage flexibility that allows for labour markets' (and individual companies') timely and adequate adjustment to changing conditions in order to maintain and enhance competitiveness and productivity" (Wilthagen and Tros, 2004). Employment in Europe, 2006, European Commission.

⁷ A foresight analysis is a method to try to describe what might happen in the future by lowering the level of uncertainty. Past and present trends have to be foresight-analysed and not only the big trends, but the seeds of change, the weak signals as well.



Figure 10: Voting of the top 7 recommendations



Figure 11: Voting of the top 7 recommendations

The 27 recommendations can be divided into six groups with 5, 4, 3, 2, 1 or 0 points:

Table 2: Results of the ranking of recommendations (R4 to R30) in Austria (9 participants, total: 63 points)

Recommendation		Votes	Groups
Top 7 recommendations			
R15	Agreements with farmers organizations on avoiding antibiotics and hormones	5	I
R17	Social innovations for aging societies are needed	5	I
R21	Policies towards immigrants and refugees appreciation	5	I
R6	A 'Platform of the future of work' at a local, regional and global level should be considered within upcoming calls of the SSH program	4	II
R9	Optimization of urban space: towards dense European eco-cities	4	II
R12	Increase direct democracy through e-voting	4	II
R24	Go and re-appropriate countryside!	4	II
The ranking of the other 20 recommendations			
R5	Foresight and research to explore sustainable options of decentralized energy production systems and the resolution of energy related conflicts	3	III
R18	Promote technical and social innovations that can enhance people's access to and use of public transportation	3	III
R25	European integrated policies on sharing work	3	III
R30	Stimulate research on human-machine interfaces	3	III
R7	Stimulate research to expand/augment the human sensory capabilities	2	IV
R10	From CAP to European Agricultural policy: back to a gardening tradition	2	IV
R16	Innovative participatory structures	2	IV
R20	Select or develop plants and techniques for areas with extreme climate conditions	2	IV
R22	Foster the use of biorefineries ⁸	2	IV
R28	Worldwide collaboration on space technology	2	IV
R29	Project to explore global governance	2	IV
R4	Plug and play communication: development of standards for smart gadgets.	1	V
R8	Enhance the ethical reflection on science based organic and "bionic" production.	1	V
R13	Recognition policy	1	V
R19	Develop avatars that are able to act as a remote physical representation of myself	1	V
R26	Develop effective urban infrastructures supporting a multigenerational lifestyle	1	V
R27	Encourage alumni work in corporate governance	1	V
R11	Research to overcome the tension between the use of highly complex materials in products and their recyclability	0	VI
R14	Develop Sofia into an eco-model for European capitals	0	VI
R23	Project for Finnish best practices to be disseminated and used in other countries	0	VI

⁸ The technology behind a biorefinery is similar to that of an oil/petroleum refinery, but it produces fuel, chemicals, or heat from biomass, e.g. wood or sugar cane. It decreases the volume of waste and makes agriculture and industry sustainable. It also contributes to the replacement of fossil fuel and energy, which are limited/finite. <http://en.wikipedia.org/wiki/Biorefinery>)

A short description of all recommendations is in the appendix.

3.1 Plenary discussion of the results of the ranking

After the presentation of the results of the ranking and top 7 list, the citizens determined that very different recommendations were selected.

Topics such as e-voting (R12) and distribution of work in the future (R6) that have a social character, received five dots, while "utopian variants," such as "Avatar" (R19) only got one dot.

The participants indicated that some recommendations regarded as very important, such as e-voting, can be implemented soon. It is rather a political decision to promote these technologies and also to protect them from abuse. There were also the concerns that e-voting could generate a permanent e-voting campaign. The subject of the voting must be taught before the e-voting starts ("To cast a vote, one must have an idea.")

In some cases, the cost of the action is the crucial factor e.g. in the Agreements with farmers organizations on avoiding antibiotics and hormones (R 15). From the point of view of citizens, the costs of agricultural production without hormones and antibiotics could be a barrier to the implementation of the recommendation. There was also the view that a voluntary agreement is less efficient than a ban on the production of these substances.

The choice of the integration issue (R21) reflected the view of the participants in the discussions in the context of the election held recently in Vienna and the political debate on this issue.

The pension problem (which is addressed in R17) is also a typical hot topic in Austria.

On the question of an assessment of the selected recommendations in other partner countries, no precise answer could be given. One argument was that the internal political debates were decisive for the choice of the recommendations in other countries. In the opinion of the participants the recommendations based on the Austrian visions had a chance to be selected in other partner countries, as they address specific European issues such as the aging society, a disabled-friendly life and European identity.

4 Appendix

4.1 Brief summary of the 30 recommendations

The project consortium provided this section for an overview of the 30 recommendations.

R1. Humanistic research to explore what dignity during the dying process means to contemporary Europeans.

Participatory research (anthropological) of an aging population in modern societies for developing spaces, where citizens can discuss and develop a community around their concerns about dignity during the dying process.

R2. Tools for disabled people.

Investigating the state of the art in the development of tools for disabled people and older adults. Based on the introduction of a balanced multidisciplinary approach to the issue by involving experts from technological and social sciences.

R3. European TV – unity in diversity. A permanent lab for experimentation on building and expressing identity (IdenTVLab).

Establishing TV that contributes to the creation of different forms of European identity and to the cooperation of diverse cultures.

R4. Plug and play communication: development of standards for smart gadgets.

To support the vision of a smart society and reduce the risk of wasting resources standardisation of smart gadgets are needed. Standardisation shall ensure a minimum standard of security and privacy and that smart gadgets can communicate with each other regardless brand or type.

R5. Foresight and research to explore sustainable options of decentralized energy production systems and the resolution of energy related conflicts.

Implement foresight studies* and research in the governance challenges related to different scales and levels of energy production and distribution in order to develop new options for decentralised, sustainable energy production and to avoid future conflicts.

R6. A ‘Platform of the future of work’ at a local, regional and global level should be considered within upcoming calls of the SSH program*.

Establish a platform within the upcoming calls in the SSH program* about work at local, regional and global level. Including research about redefining work, ‘flexicurity’*, work-life balance, basic income, new jobs, and social responsibility. This platform should involve citizen participation.

R7. Stimulate research to expand/augment the human sensory capabilities.

Promote cutting-edge research on bionics and machine-human interface to expanding human sensory capabilities. Main focus on the technological prospective but also focus on the knowledge generated by the recent studies with interdisciplinary research in psychology, ethics and philosophy.

R8. Enhance the ethical reflection on science based organic and “bionic” production.

The ethical aspects of development of radically new genetic and technological treatments should be systematically approached by ethical research councils and advisory bodies at a European level. Ethical interdisciplinary research programmes should be designed.

R9. Optimization of urban space: towards dense European eco-cities.

Initiate pilot projects creating eco-cities in Europe with sustainable waste management, transportation, urban space use and energy usage. It should be based on citizens participation.

R10. From CAP to European Agricultural policy: back to a gardening tradition.

Establish Foresight studies and comparative analyses on the agricultural potentials of the different regions in Europe with the purpose of developing policies for re-establishing a gardening tradition in Europe that would deliver high quality agricultural products.

R11. Research to overcome the tension between the use of highly complex materials in products and their recyclability.

Establish research in new materials that deliver technical performance while at the same time are easily recyclable, and research in new processes that allow for the recycling or reuse of high performance materials.

R12. Increase direct democracy through e-voting.

Citizens should be involved more often and easily in parliamentary elections as well as in special decisions affecting the development of the society through e-voting for

R13. Recognition policy.

The development of a new research area that is called the 'Politics of Recognition' and that focuses on promoting the inherent uniqueness of an area, country, region, values, traditions etc. The research should include participatory process/action research⁹.

R14. Develop Sofia into an eco-model for European capitals.

Establishment of an interdisciplinary "Eco City" European programme with significant funding for supporting the transition of European cities to eco-models and the exchange of good practices.

R15. Agreements with farmers organizations on avoiding antibiotics and hormones.

Implement research on ethical, legal and philosophical status of animals in FP8. Develop agreements on avoiding antibiotics and hormones to be implemented at the local or regional level but that are harmonized at the European level.

R16. Innovative participatory structures.

Implement innovative experiments with citizens participation. Large scale explorative action research based on trying new methodologies and including new communication technologies for citizens political communication debates.

R17. Social innovations for aging societies are needed.

Research should be done to investigate the effect that a transition period between full-employment and full-retirement would have on the labour market. The aim of this would be to re-evaluate the rigid retirement age/pension system that currently characterizes pension policy.

⁹ "Action research... aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. Thus, there is a dual commitment in action research to study a system and concurrently to collaborate with members of the system to change it in what is together regarded as a desirable direction. Accomplishing this twin goal requires the active collaboration of both researcher and client, and thus stresses the importance of co-learning, as a primary aspect of the research process." O'Brian, Rory, An Overview of the Methodological Approach of Action Research.

R18. Promote technical and social innovations that can enhance people's access to and use of public transportation.

Promote technical and social innovations to improve people's access to transportation schemes, through an intelligent and interactive network¹⁰. This network should cover and integrate both local and trans-national travel in a flexible, user friendly and environmentally sound way.

R19. Develop avatars that are able to act as a remote physical representation of myself.

Start research on the many aspects of creating avatars, including research in brain-machine interface, technical research, research in legal and insurance issues and research in social consequences.

R20. Select or develop plants and techniques for areas with extreme climate conditions.

Increased research, development and use of plants adapted to extreme wet and dry areas and capable of resisting extreme climate conditions.

R21. Policies towards immigrants and refugees appreciation.

Policies towards immigrants and refugees should become less threat-focused. A new immigrant positive approach to educative, cultural, immigration and media policies is needed for changing the mental framework of citizens as well as bureaucracy towards the appreciation of immigrants.

R22. Foster the use of biorefineries*.

Implement a research program on biorefineries* that are able to produce natural based, biodegradable chemicals that can replace fossil-based chemicals, both on the European and national level, with focus on the interplay between local and international biorefineries*.

R23. Project for Finnish best practices to be disseminated and used in other countries.

Finland's success in innovation should be presented by Finnish science and technology policy makers, while other EU countries comment on it, identify its weak points, suggest complementary and/or alternative solutions.

R24. Go and re-appropriate countryside!

Foresight studies* should be conducted to develop new visions of the future for establishing attractive, contemporary life in the countryside. Foresight studies* should include mobility, cultural and political life, employment and balance between production and recreation in the countryside.

R25. European integrated policies on sharing work.

The need for new ways of working demands European level integrated policies on new models of work and employment. New integrated European models of work should be based on interdisciplinary research and overview of existing international studies of different work models.

R26. Develop effective urban infrastructures supporting a multigenerational lifestyle.

Support the development of communication and mobile technologies that support multigenerational families. Support urban design and infrastructural development that provide a friendly environment for large families and their changing needs during familial life cycles.

R27. Encourage alumni work in corporate governance*.

European companies should be stimulated to establish Elderly Councils for using the knowledge and know-how of the former employees as advisory teams.

R28. Worldwide collaboration on space technology.

Create popular support for worldwide research cooperation in the form of a new mega-programme along the lines of the space programme in the 1960s and to ensure the democratic way of the process. Funded

¹⁰ In most cases, a self-adapting network is an adaptive system that changes its structure based upon external or internal information that flows through the network during the learning phase. (Wikipedia)

internationally with the overall objective of ensuring the longer term survival of human culture when the world is burned out.

R29. Project to explore global governance.

Explore conditions for trans-national governance working for global justice and peace. The 8th Framework Programme* should begin with educational and exchange programmes for creating world citizenship identity.

R30. Stimulate research on human-machine interfaces.

New interfaces between humans and machines need to be developed to allow for a broader perception of sensory information. This raises a lot of technical, but also societal and ethical (health and safety) issues to be examined.

4.2 Recommendations which were validated in Austrian CC2 (Lang version)

R1: Humanistic research to explore what dignity during the dying process means to contemporary Europeans.

Description of the recommendation

Participatory research (anthropological) of an aging population in modern societies, where the impact of traditions and religion is fading should be conducted in a European comparative perspective.

This citizen-oriented activity will be done with an end to developing spaces, where citizens can dialogue with others to discuss and develop a community around their concerns about dignity during the dying process.

Evaluation of the recommendations by the experts

Novelty

Euthanasia* is novel in most EU member states while it is to a certain extent established in some EU and non-EU countries (Netherlands and Switzerland respectively)

Importance

It is essential with EU societies moving towards values that respect individual autonomy. There is a need to enhance harmonization in this respect. European identity means acceptance of certain European values. A liberal framework introduced in all member countries would solve the problem of death tourism.

Timing

Science and technology solutions already exist. Mentality and regulation ought to be changed together, along with an EU-wide communication campaign. This latter part can be included in FP8* since it requires some resources, while changes in the regulation could come as a result of this campaign.

These changes do not require additional resources. It is up to the Parliament to make the necessary decisions

Additional comments from the experts on the recommendation

Scientific and technological solutions exist, but the legal frameworks are different in EU member countries.

A communication campaign should be started to raise citizens' awareness of the problems and of the consequences of disparities in regulation (death tourism: rich people can afford going to a Swiss hospital where euthanasia* is allowed). This campaign is the start of a dialogue about European values and citizens can express their opinion about the necessity of changing national regulations. This dialogue process is part of the participatory research project that uncovers changing social perceptions, which then form the basis of changes in the regulatory framework.

Vision the recommendation was derived from

Vision 7: Being allowed to die in dignity, a companionship of dying in a network of family and relatives.

The recommendation is also related to:

vision 11: The death passport.

R2. Tools for disabled people.**Description of the recommendation**

A policy that explores the state of the art in the development of tools for disabled people.

Evaluation of the recommendations by the experts**Novelty**

The novel aspect has to do with the introduction of a balanced multidisciplinary approach to the issue, by involving experts from technological and social sciences.

Importance

It is a very essential issue for disabled and elderly people, in an ageing society.

Timing

The issue should be considered in the 8th Framework Programme and significant funding should be provided.

Additional comments from the experts on the recommendation

The policy should be elaborated in close consideration and participation with social scientists. There are two roles for involving sociologists and psychologists – the first being the design and implementation of the tools for disabled people and the second the regulation and guarantee of the rights for diversity and personal choice to join or reject the new technology, regardless one's social status.

Awareness campaigns directed towards social scientists should be carried out, prior to their active involvement in the policy formulation and the development of the tools.

The tools should not only address disabled but also elderly people, to tackle the consequences of an ageing society.

Vision the recommendation was derived from

Vision 9: Disabled people as fully valuable members of the society.

R3: European TV – unity in diversity. A permanent lab for experimentation on building and expressing identity (IdenTVLab).

Description of the recommendation

TV contributes to the creation of different forms of European identity and allows different cultures to cooperate, especially through the establishment of an experimental platform for collaborative projects developed by kids and youth.

Evaluation of the recommendations by the experts

Novelty

The “IdenTVLab” concept can be realized if the approach and the instruments for its implementation are adapted to the age of the target groups – children and young people of all European countries. New interactive combinations of media should be tailored for that purpose.

Importance

This interactive media will provide children and youth with educative and participatory means for learning the essentials on the European identity, thus building the prerequisites for developing and sustaining this identity.

Timing

The “IdenTVLab” concept should be supported by the “Socio-Economic Sciences and Humanities” thematic priority of the 8th Framework Programme.

Additional comments from the experts on the recommendation

The “IdenTVLab” is based on the idea that children and youth in Europe are Europeans by origin, but have to learn how to be European citizens. European citizenship identity should be created along with the national identities and by incorporating them. The design of the appropriate media and the interface with the viewers is a key element for the project’s success (virtual space and modern communications should be employed along with the TV media).

Vision the recommendation was derived from

Vision 10: TV for the creation of a European identity.

4.3 Austrian visions related to the three recommendations

In this section, four Austrian visions are presented that were used as input for recommendations to the science and technology policy.

Vision 7: To be allowed to die in dignity, a companionship of dying in a network of family and relatives

A short description:

In an aging society, the process of dying can be seen as a central experience. A chip implant will be used to document and monitor the process of dying and the details sent to a social-psychological hospice. On-demand, the dying person and their dependents will receive the service from a supervisor acting as a companion for the dying person. He accompanies the dying process as a coach for the "intangible legacy" of the dying person. This intangible legacy is intended to help the dying person to find internal peace and the families to develop social skills in dealing with this difficult phase of life.

The climax of the process of dying is accompanied by the self-organised funeral ceremony that is managed by the companion of the dying person and is a joint activity for the grief experience of survivors.

The formal closing is also a ceremony in which the companion of the dying person illustrates and describes the intangible legacy of the dying person for those left behind. If desired, the grieving dependents can become members in a community of survivors for further assistance.

Long description:

What is the vision?

In an aging society dying, grief and the farewell play an essential role in community life.

On demand and request by the family and the dying person, a mobile clinic from the Social Psychological Hospice (SoHo) provides assistance, starting with a medical check (physical and mental state).

From that moment on a professionally trained dying process crew (Death *companion* Experts for Social communities, Abbr. DESC-Help) are available to help the families and the dying persons in all matters.

Dealing with the process of dying will become a central phase of the personal development and mental maturity for the dying person and dependents. DESC-Helpers assist in life planning, life management and social skills (Period of staff Empowerment (POPE)). The DESC Helper assists the dying person to develop an intangible legacy as their mental inheritance (The testament is the tangible inheritance). It provides the survivors with the personal experiences of the dying person, his/her personal wishes and his/her wishes and hopes for survivors. The intangible legacy is the basis for the DESC Help for developing the social skills of survivors to live after the death of the dying person and to promote and develop these skills constructively.

The gradual development of this immaterial legacy under the guidance of DESC-Helpers (Presentation and Transformation in the Spirit of Heritage; PATHS) should help the dependents to experience and understand the common values of tolerance and mutual support. It should also help them to learn opportunities to participate actively in shaping their own lives consciously.

The climax of the death process is accompanied by the self-organised funeral ceremony by those left behind. The DESC-Help is responsible for the organisation of this ceremony

(Family of Social Funeral; FaSoF).

The intangible legacy will be illustrated and commented in the farewell ceremony at a favourite place of the deceased.

If desired, the grieving dependents can become members in a community of survivors for further assistance (Community of Dignity and Sorrow after Death (CoD-SaD)).

What are the benefits associated with it?

Benefits are the provision of experiences with joint social activities related to the death, removing the stigma associated with critical life phases such as death, and related pain and sorrow. It also helps to understand the need for the conscious shaping of life. Another benefit is to strengthen the capability for social self-organisation for shared concerns. Possible effect on saving of cemetery areas.

For who?

Dependents of dying people, dying people themselves, the social community and the government.

What are the negative repercussions of this future?

Examples are:

Unqualified personal of DESC-Help

Misuse of personal and intangible legacy.

On who?

Churches and other religious communities.

What is necessary for this future (knowledge, policies, resources, skills)?

Scientific analysis of the dying process and death, expert knowledge on socio-cultural rituals of death. This vision requires a social policy decision: Could the common significant experience as dying be analysed and used for the acquisition of social skills? Is there a willingness to bridge the gap between this world and beyond with "spirituality"? Should the responsibility of each citizen for the last phase of life and death be encouraged?

There is also a need for a curriculum for the training for DESC-Help.

Vision 9: Disabled people are fully valuable members of our society

A short description:

This is a vision for

- .) Affordable tools for disabled people
- .) Involvement of disabled people in daily life
- .) More research on the treatment and prevention of disablement.

Long description:

What is the vision?

Disabled-friendly Europe

Provision of a trouble-free life for people with a disability.

What are the benefits associated with it? For who?

Provide a trouble-free and easy life for everyone. Public transport is disability friendly. This means that it is easy to get in and out of the vehicles and that access to public transport is barrier free without many stairs.

Assistive tools are affordable and are provided by public assistance in certain cases. Non-disabled and disabled people work together easily without conflicts and complications, because we can use the individual potential of disabled people. Medicine is so far advanced that it can identify the type of handicaps and intensity very early or even before birth.

Therefore it is possible to use the cells from the amniotic fluid or from one a part with the same DNA breed organs and transplant them after birth or later where disabled person is already mature. But, of course a disability is not always just about the organs of the body. That is why medicine developed a method to intervene in the embryonic stage to prevent or reduce disability.

The reason is that everybody is affected by disability.

What are the negative repercussions of this future? On who?

No one, because everybody should care about the wellbeing of others.

What is necessary for this future (knowledge, policies, resources, skills)?

There is a need for technical and medical advances, to consider the needs of each individual and treat and support each person and his/her family individually. There is also the need to involve the minority and their relatives in the policy-making issues and their implementation. Research is also necessary.

Vision 10: TV for the creation of a European identity***Long description:******What is the vision?***

The programs aim to contribute to cultural understanding amongst the people of Europe and to strengthen the feeling of togetherness. Regional cultural differences should be retained and not standardized.

There is a central transmitter site that moves around in all European countries.

The transmitter is independent under public law and there is no advertising.

There are separate times for television forums.

People can communicate through the television entertainment forums. In cooking shows there is a kind of web cam allowing viewers from different countries to discuss together. You can test the cooked meals virtually.

There are rules and discussion facilitators, acting as an incorruptible objective virtual instance (Neutrum) to ensure that there is no manipulation.

All items should be available in all EU languages.

What are the benefits associated with it? For who?

The entire population

It is the largest peace project

Curiosity, mass enthusiasm for the EU

What are the negative repercussions of this future? On who?

It could generate too negative an image of certain regional peculiarities.

The risk of strange practices being disliked when specific local practices are shown.

Loss of regional identity.

What is necessary for this future (knowledge, policies, resources, skills)?

Idea of European identity must either exist or will be sought and strengthened.

Vision 11: Death passport***A short description:***

Voluntary personal death passport for passive euthanasia with a thorough medical examination at the beginning (combined with provision of information),

Duration is 10 years,

Passport can easily be renewed with minimum bureaucracy free of charge,

Individual death passports include the individual conditions that must be met.

Long description:***What are the benefits associated with it? For who?***

Dependents released from huge responsibility..

Autonomous decision about one's own death

What are the negative repercussions of this future? On who?

No participation of dependents.

What is necessary for this future (knowledge, policies, resources, skills)?

Clearer and exacter information

Transparency of the system