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Evaluation of the FP7 project CIVISTI

Final Report

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Acknowledgment

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1. Executive Summary

CIVISTI, a FP7 project, will identify new emerging issues for European Science and Technology by uncovering European citizens' visions of the future and transform these into relevant long term science, technology and innovation issues, which are of relevance for European policies of S&T and for the development of FP8. To ensure the scientific quality of the project, to provide the project consortium with timely and useful evaluation and feedback to the progress, methods, results and deliverables, and to provide the EU Commission Services with impartial information about the progress and results an independent external evaluation was commissioned, subcontracted to ZSI.

The Final Evaluation Report gives an overview of the major findings of the first part of the study as documented in the mid-term evaluation report and adds the results from the second part of the survey. Due to the comprehensive structure of the mid-term report the final report will be an enhanced version with strong emphasis on the observation of the expert-stakeholder workshop and CC2.

First part (as documented in mid-term report) is based upon:
- The analysis of available deliverables (in particular the analytical model) and information materials
- The observation of the Citizens' Consultation (CC1) in Austria and Bulgaria
- Two questionnaires (pre-test post-test design) addressing the citizens who participated in these two countries

Second part:
- The observation of the expert-stakeholder workshop in Sofia (14-16 June 2010)
- Two telephone interviews after the workshop with experts who participated in the expert-stakeholder workshop
- The observation of the second Citizens' Consultation (CC2) in Austria and Malta
- A questionnaire prepared for all participants (7 countries) in CC2

Following an introduction on the CIVISTI project and a description of the evaluation methodology chapter 4 presents a document analysis of the key CIVISTI deliverables referring to the used methodology and tools, deliverables regarding the recruitment of participants and the advance information ("Eyes on tomorrow" magazine) submitted to the citizens before the consultation meetings (CC1). The evaluation comes to the conclusion that the common methodology is worked out very well and was also followed closely in the actual process. The methodology in general is sensitive to crucial aspects of Citizen Consultations: The utilisation of different interactive settings (small groups, two groups providing each other with feedback, large group), a clear definition of the function of the organisational staff, the importance of the surroundings, etc. The observation of two Citizens' Consultations in Austria and Bulgaria also showed that the implementation guaranteed an undisturbed and focused working process.

Chapter 5 of this evaluation report focuses on the questionnaire we used to capture the expectations of citizens before the consultation meetings and their immediate assessment afterwards. In general the results indicate that the Citizen Consultations in Austria and Bulgaria achieved a relatively balanced participant profile regarding age, gender and level of educational attainment. Only in the Bulgarian case we observed a slight overrepresentation of academics in the CIVISTI sample. With regard to the assessment of the process and the support provided by the organisational staff the citizens' were nearly throughout satisfied. The assessment of the results (the elaborated visions) was slightly more deliberative but in general citizens were also satisfied with the achieved outcome.

Chapter 6 refers to the draft deliverable of the analytical model which links the elaborated visions with the further proceedings at the expert/stakeholder workshop. This workshop is aimed at discussing the visions from an experts' perspective and connecting them to current and future research activities. The analytical model will on the one hand cluster the visions according to thematic categories and on the other hand will provide the experts with guidelines on how to approach the citizens' vision. The document analysis indicates that the analytical model does well in combing a quantitative and qualitative empirical approach to investigate both, the frequencies of certain research topics comprised in the visions and a further explication of particular thematic aspects (for instance threats for society and nature identified in the visions).

The evaluation report closes with a chapter on conclusions and recommendations regarding the ongoing project process. Besides recommendations on how to further enhance the process and outcome this chapter will also include "considerations" which should be seen as an invitation to a further discourse on the interrelation between the objectives and focus of CIVISTI, the process and the outcomes.

Chapter 7 concerns the observation of the expert-stakeholder workshop focused on the identification of emerging issues in European science and technology on the basis of the validation of citizens' visions. Here we explore different aspects of the experts' approach of the citizens' visions and their ability to translate visions into practicable recommendations. In addition we included information from two expert interviews we conducted one month after the workshop.

Chapter 8 presents the results from the second questionnaire survey including all participants of the second round of the CIVISTI citizens' consultations (CC2) as well as our observation of the second round of citizens' consultations in Austria and Malta.

All these chapters include a short summary of the most important points at the end. In the final chapter 9 we try to summarise these findings in our conclusion.

2. Preface

CIVISTI, a FP7 project, will identify new emerging issues for European Science and Technology by uncovering European citizens' visions of the future and transform these into relevant long term science, technology and innovation issues, which are of relevance for European policies of S&T and for the development of FP8. The CIVISTI project will do this by a) consulting national citizens, b) developing an analytical model for transformation of the visions into relevant issues for future science and technology, c) by use of the analytical model, through stakeholder and expert participation processes, analysing the citizen visions and transforming them into possible priorities for research programmes and d) validating the identified priorities through a second round of Citizen Consultations.

The CIVISTI project is based upon the idea that the process of defining relevant and proactive research agendas could in many respects gain from the consultation of citizens. The major milestones of the project include two Citizen Consultations (CC1 and CC2) in seven European countries (Austria, Flanders/Belgium, Bulgaria, Denmark, Finland, Malta, Hungary), based upon a methodology manual defining the details of the process, an analytical model for the identification of emerging issues and their transformation into S&T priorities, and an EU Policy workshop.

3. Introduction and Aim of the Evaluation

To ensure the scientific quality of the project, to provide the project consortium with timely and useful evaluation and feedback to the progress, methods, results and deliverables, and to provide the EU Commission Services with impartial information about the progress and results an independent external evaluation was commissioned, subcontracted to ZSI.

According to the Agreement for "Evaluation Services in relation to the CIVISTI Project" between Teknologi-Rådet - The Danish Board of Technology (Denmark) and ZSI - Centre for Social Innovation (Austria) two evaluation reports will be delivered by ZSI. By the 30th of November 2009 a Midterm Evaluation Report analysing the Methodology Manual, CC1 and the latest draft of the analytical model for emerging issues will be delivered. In addition, a Final Evaluation Report by the 15th of February 2011 that will focus more on the expert and stakeholder involvement in the analysis of S&T themes, CC2, the EU policy workshop and the analytical model for emerging issues analysis.

The objective of the Evaluation Service is to support the CIVISTI consortium as external evaluator in its reflection of its activities, mainly the planning and execution of Citizen Consultations in the 7 participating countries (Austria, Flanders/Belgium, Denmark, Finland, Malta and Hungary).

As first part of the study ZSI evaluates the usefulness of methods developed and implemented in CIVISTI until August 2009, especially in the first round of Citizen Consultations by criteria listed below:
- Usefulness of the methods and tools developed,
- Usefulness of the information material developed and the consultations carried out
- Relevance of the information,
- Knowledge transfer between citizens and experts at different stages of the project (particularly in CC1 knowledge transfer from citizens to experts) and
- Usefulness and applicability of the analytical model (based on the available draft version).

The Final Evaluation Report gives an overview of the major findings of the first part of the study as documented in the mid-term evaluation report and the second part. Due to the comprehensive structure of the mid-term report the final report will be an enhanced version with strong emphasis on the observation of the expert-stakeholder workshop and CC2.

First part (as documented in mid-term report) is based upon:

▪ The analysis of available deliverables (in particular the analytical model) and information materials

- The observation of the Citizens' Consultation (CC1) in Austria and Bulgaria
- Two questionnaires (pre-test post-test design) addressing the citizens who participated in these two countries

Second part:

- The observation of the expert-stakeholder workshop in Sofia (14-16 June 2010)
- Two telephone interviews after the workshop with experts who participated in the expert-stakeholder workshop
- The observation of the second Citizens' Consultation (CC2) in Austria and Malta
- A questionnaire prepared for all participants (7 countries) in CC2

4. Evaluation Methodology

To obtain an accurate picture of CIVISTI in terms of the questions guiding this evaluation a mixed methodological approach has been chosen for this study.

4.1. Interviews (mail and telephone):

To begin with the evaluation and to obtain first information on the CIVISTI project, especially on the first round of Citizen Consultations (CC1), the national coordinators of Austria and Bulgaria have been asked to answer several questions regarding the structured method of the consultations, the CC1 Agenda and the recruitment of the citizens.

In the second part of the study we conducted telephone interviews with two experts who participated in the expert-stakeholder workshop based on an interview guideline

4.2. Document research:

To evaluate the usefulness of the methods developed in CIVISTI all deliverables, internal documents as well as the public information on the CIVISTI website were analysed in desk research based on the expertise and experiences of the ZSI team in the conduct of participation processes (e.g. European Citizens' Consultation 2009). The information material developed and disseminated to the citizens before and at the consultation meeting was analysed for its usefulness including feedback from citizens.

4.3. Participation in two Citizen Consultations: CC1 in Austria and Bulgaria:

A member of the evaluation team attended CC1 in Austria, another evaluator CC1 in Bulgaria. The evaluators observed the process according to an observation protocol. The protocol was designed to capture different elements of the process: The agenda respectively the overall organisational structure of the consultation meeting, the specific setting, the methodology and the feedback and immediate reaction of the participants.

4.4. Questionnaires

4.4.1. Questionnaires targeting participating citizens in CC1:

Based upon the information gathered, two questionnaires to participants have been applied in CC1. The target groups were participating citizens in Austria and Bulgaria. Topics covered by this survey comprised statements, opinions and specific citizens' expectations regarding the consultation itself as well as the results, usage and quality of the information material (the magazine "Eyes on Tomorrow"),

citizens satisfaction with the consultation process and outcomes and demographic characteristics of the citizens.

The first questionnaire addressed all participating citizens before the beginning of the consultation meeting, the second one was carried out at the end of CC1. A totality of 49 citizens has shared their experiences concerning the consultation process with us. The answers describe the impression Austrian and Bulgarian citizens had from the working conditions and results.

Due to the late start of the evaluation process it was not possible to use the questionnaires in all seven countries, but this is planed for CC2. For CC1 only results from Austria and Bulgaria are available. Therefore, statements on the level of individual countries should be regarded as opinions of a group of participating respondents and not as statistical evidence regarding the attitudes of citizens involved in the entire CIVISTI process or even of citizens in general.

As shown in Tab. 1 the response numbers have been 46 before and 49 after the consultation meeting. Three Austrian citizens could not fill in the questionnaire before the beginning of the consultation meeting because they joined CC1 just before the opening and had not had time to give there answers before the discussions started. At the end of the consultation weekend all participating citizens filled in the questionnaire.

CC1 – Number of responded questionnaires (pre / post)		
	pre	post
Austria	21	24
Bulgaria	25	25
Total	**46**	**49**

4.4.2. Questionnaires targeting participating citizens in CC2:

A newly designed questionnaire was developed for all citizens participating in CC2 (all 7 partner countries covered). Topics covered by this survey comprised the citizens' assessment of the second consultation as well as their more specific assessment of different dimensions of the experts' recommendations they had to validate in CC2. We thought it would be necessary to take a closer look at the assessment of these dimensions to be able to describe some aspects of the circular feedback and learning process (citizens – experts – citizens) that CIVISTI tried to implement.

In this second survey we achieved a complete coverage of all participating citizens. CIVISTI saw however a relatively high "drop-out" rate between CC1 and CC2 resulting in a final group of 87 persons who were participating in CC2 and could answer the questionnaire.

4.5. Analysis of the Analytical Model (final version)

The evaluating team assessed the final version of the analytical model for emerging issues analysis based on a SWOT approach. The strengths and weaknesses of the model, the opportunities when using this model, as well as possible threats in its application are described. Furthermore the first results will be reflected in an open discussion with the project team.

5. Analysis of CIVISTI's Methods and Tools

ZSI evaluated the usefulness of the methods developed in CIVISTI by analysing all deliverables and the information material developed and disseminated to the citizens before and at the consultation meeting in desk research considering the targets of the CIVISTI project and based on the experiences of the ZSI team in participation processes combined with the feedback of the citizens given in the two questionnaires. The analysed documents comprise the Methodology Manual including the so called CIVISTI "cook book", the invitation letter and the magazine "Eyes on Tomorrow", and the description of

the recruitment plans and criteria. Additionally, the evaluators attended two Citizen Consultation meetings in Austria and Bulgaria.

The focus of this enhanced report will however lie on an assessment of the *implementation* of these methods based on observations and the results of the second questionnaire survey.

5.1. Methodology Manual

As described in the introduction, the CIVISTI Methodology Manual (D1.1) is an internal work document that specifies the methodology and the design of the whole CVISTI project. It also describes the interdependencies between the different work packages. Each work package has its own chapter prepared in a well elaborated structure which gives a good overview of the objectives, deliverables, activities and methodologies. Furthermore the manual describes concrete and detailed tasks and responsibilities of the work package leader and CIVISTI partners, the time frame and estimated results for each work package.

As far as we could monitor the process and analyse the deliverables we do not doubt that all CIVISTI partners use the Methodology Manual as a common tool and method manual. This presumption was already verified at the start of the evaluation in June 2009. Before we obtained the Methodology Manuel we had been informed by national coordinators about the fact, that the first important step of CIVISTI – the first round of Citizen Consultations in seven countries - will have a very similar structure based on concerted methodological manuals, guidelines, check-lists, templates and training sessions for all project managers.

> COMMENT by a national coordinator: "*In principle we followed one and the same guidelines, but each partner had to tailor the approach according to the country's specifics[1]".*

The method of the consultation meeting which should be used by national partners in all seven countries is described in the CIVISTI cookbook, an annex to the Methodology Manual. It is a guideline for the process and the agreed agenda ("script") for the consultation meetings and includes helpful check-lists, templates for the project managers and guidelines for facilitators.

The observation by members of the ZSI evaluation team who attended the consultation meeting in Austria and Bulgaria verified that the overall process was very similar in both countries with only slight variations and followed the formal agenda very closely. We conclude that the Methodology Manual is a useful, applicable tool for all CIVISTI partners and should consequently be used throughout the project period. It ensured a common and concerted course of action. The controlled design enables the development of comparable results in all seven participating countries.

5.2. CIVISTI Objectives in comparison to citizens' targets and interests

CIVISTI will identify new emerging issues for European Science and Technology by uncovering European citizens' visions of the future and transform these into relevant long term science, technology and innovation issues, which are of relevance for European S&T policies and for the development of FP8. The CIVISTI project is based upon the idea that the process of defining relevant and proactive research agendas could in many respects gain from consultations of citizens. Therefore amongst others major milestones are two Citizen Consultations (CC1 and CC2) in seven European countries (Austria, Flanders/Belgium, Bulgaria, Denmark, Finland, Malta and Hungary).

Fig. 1 shows which expectations the citizens had with regard to the main objectives of the Citizens' Consultations in Austria and Bulgaria. The item in the questionnaire proposed five objectives. The citizens were asked to rank the three most relevant objectives according to their personal views. We analysed the resulting ranking by assigning three points to an answer for the first rank, two points for the

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[1]   e.g. venue of the consultation meeting, facilitation team, recruitment process of citizens, etc.

second rank and one point for the third rank – the values displayed in fig. 1 show the summed up points from the viewpoint of the citizens for each of the proposed answers.

Figure 1: Three most important objectives of the Citizen Consultation
(Ranking of most important objectives of the Citizen Consultation meeting (multiple answers) – first rank receives 3 points, second rank 2 points, third rank 1 point, the index sums up all points)
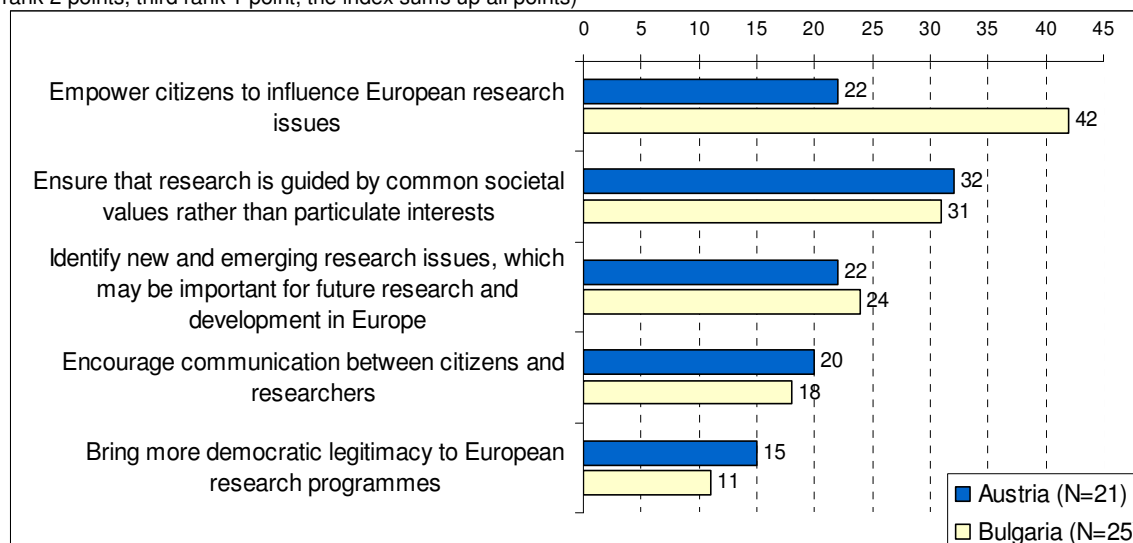
The statement that CC should empower citizens to influence European research issues is ranked first by Bulgarian citizens. This indicates that the Bulgarian citizens primarily understood the CIVISTI consultation as a means to influence European research issues. In contrast, this item is only ranked at second place with a much lower value in Austria. It seems that this initial difference is also reflected in the final evaluation at the end of the Citizens Consultation (questionnaire 2) – Bulgarian citizens agreed more on the proposition that the Citizens Consultation will indeed influence the design of European research programmes than the Austrian citizens. Interestingly, the participating citizens in Austria seem to be primarily concerned with the values and interests behind European research programmes (in Bulgaria this item ranks second), which is a surprising result to us, since this item (answer two in fig. 1) is arguably the most abstract among the five answers to choose from in opposing "common societal values" with "particulate interests".

At the one hand this may indicate that the citizens perceive the reflection of common societal values as their particular input to research planning and at the other hand it points to the fact that research programmes, including their funding and planning, are generally rather in-transparent to citizens and that it is therefore not sure – at least in the perspectives of citizens – if these processes are based on common societal values rather than particulate interests (e.g. economic interest of large industries, etc.). Thus, this result opens up a quite interesting perspective on the general meaning of Citizens' Consultations and might have implications for how to approach citizens and how to argue the relevance of their input.

Furthermore, the proposed objective to identify new emerging issues for European Science and Technology is the third most important objective in the perspective of the citizens if we sum up the Austrian and Bulgarian values.

All participating citizens responded that they are very or quite interested in new scientific and technological approaches and developments concerning future challenges in society. Nobody responded to be only hardly or not interested. As shown in fig. 2 the number of people who are very interested increased slightly (one[2] respond in Austria, two responds in Bulgaria) after CC1.

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[2] For another three Austrians we could not make the ex-ante versus ex-post comparison, since they did not respond to the ex-ante questionnaire due to their late arrival to CC1; one Austrian respond is missing.

Figure 2: General interest in new scientific and technological approaches and developments concerning future challenges in society before/after CC1

Figure 2 chart legend:
- AT before CC1 (N=21)
- AT after CC1 (N=24)
- BG before CC1 (N=25)
- BG after CC1 (N=25)

Very interested: 13, 17, 7, 9
Quite interested: 7, 6, 18, 16
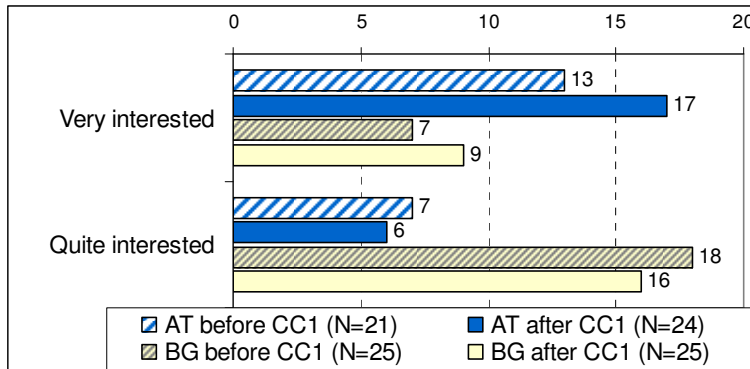
Taking into account citizens' responds to activities concerning future relevant issues in science and technology we can state that citizens were already interested in and roughly familiar with the topic before participating in CC1. Most of the participants had read a scientific magazine or book in the last 12 months before the consultation meeting. Around 50% of the participants had been active in a Non Governmental Organisation (NGO) which is addressing future relevant issues in science and technology and more than 1/3 had visited websites of scientific organisations or had joined a discussion concerning issues in science and technology (see fig. 3).

Figure 3: Activities concerning future relevant issues in science and technology in the last 12 months before CC1 (multiple answers)

Figure 3 data:
- Read a scientific magazine or book: 15 (AT), 20 (BG)
- Been active in an NGO which is addressing future relevant issues in science and technology: 12 (AT), 11 (BG)
- Visited a website of scientific organisations: 9 (AT), 9 (BG)
- Joined a discussion group on internet: 2 (AT), 5 (BG)
- Joined a discussion: 9 (AT), 7 (BG)
- Participated in another Citizen Consultation: 1 (AT), 1 (BG)

Legend: AT (N=21), BG (N=25)

5.3. Citizens as "lay-experts"

The CIVISTI project is based upon the idea that the process of defining relevant and proactive research agendas could in many respects gain from the consultation of citizens. Citizens are the carriers of the concerns and expectations to the future and with the right facilitating methods, such concerns and expectations can be collected and transformed into relevant research agendas. In CIVISTI, participants of the seven citizen panels should be in the role of consultants, hired to help European decision makers to prepare FP8. They should be "lay-experts", carrier of visions, which can contribute to a new research agenda (see CIVISTI cookbook, page 4).

What participating citizens in Austria and Bulgaria think about the role of "lay-experts" regarding scientific research and development is shown in fig. 4 (quotes for fully/rather agree). In Austria around 90% and in Bulgaria around 70% of the citizens think that research professionals can benefit from the views and experiences of lay-experts and that civic participation ensures that research is guided by common societal values rather than particulate interests. On the other hand approximately 1/3 of the Austrian and Bulgarian participants opine that most research topics are too complex to understand for persons like they are. Furthermore, 84% of the Bulgarian citizens indicated that research and development strategies should predominantly be designed and managed by professional experts. If we consider the quote for 'fully agree' only, we can assert that in Austria only two, but in Bulgaria 13 citizens (52%) agreed to the last statement. The citizens seem to be ambivalent in their self-assessment regarding their role as lay-experts and consultants in terms of their competence and knowledge in the field of research and science.

This result is not surprising given that the institutional context of research and science (in particular research planning and funding) is seldom an issue in public discourse, with the exception of controversial issues such as genetic engineering. Consequently citizens can not be expected to take their role as lay-experts without being sceptical about their competence and knowledge. However, the ambivalence also reveals a potential need for a fostered integration of citizens into research planning processes.

Figure 4: Role of lay-experts regarding scientific research and development
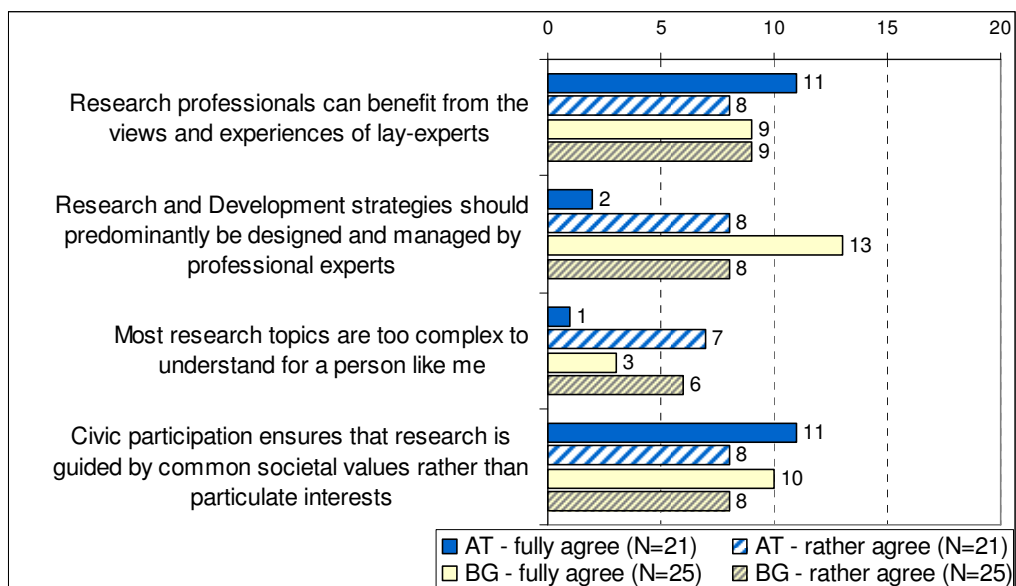
As a result of the analysis of the responses to reasons for participation we see that a strong motive to participate in CC1 was the expectation of an interesting experience – strictly speaking for about 48% of the Austrian and for 32% of the Bulgarian citizens (see fig. 5). The participating citizens are motivated by factors, which are in general valid for most participants, but we noticed that Bulgarian citizens wanted to have more influence on decision makers than Austrian citizens. Linked to the responses to the second statement in fig. 4 we could assess that Bulgarian citizens think on one hand that research and

development strategies should be designed and managed by professional expert but on the other hand that they want to have more influence.

Figure 5: Reason for participating in CC1
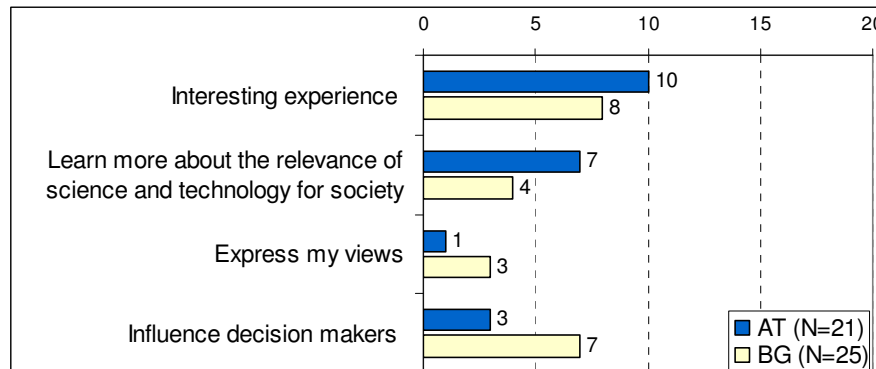
5.4. About the citizens

Recruitment of the participants is often one of the biggest challenges in participation processes, particularly in Citizen Consultations. In CIVISTI participants were invited to formulate their visions on what the future should look like. As described above they should be lay-experts and not experts in prioritisation, planning and decision making in the field of science and technology. To guarantee this and the comparability and transparency of the work of all citizen panels it is important that citizens are recruited and selected according to a similar set of criteria in all seven countries. Statistical representativeness is not important in CIVISTI, but it is important to have a demographically and socio-economically mixed panel. Therefore CIVISTI partners agreed on following parameters and criteria (see cook book, page 14):
- 25 citizens in each panel
- Age (18-25, 25-35, 35-50, 50-60, 60-75 – 5 from each group)
- Gender (12 F and 13 M – or vice versa)
- Educational level (equally selected from low, middle and high level)
- Occupation (from a variety of occupations in public and private fields).

All partners had to follow the general guidelines for recruitment and had to describe their plan for recruitment and selection of citizens.

Rather unclear remains for us the different age width of the single cohorts which might lead to an over- or underestimation of certain age cohorts in the Citizens Consultations.

After reading the seven recruitment plans we can conclude that the criteria for the selection of the citizens were identical in all seven countries. The recruitment strategies were to a large extent similar with some minor differences. In five of the seven participating countries an external research agency took over the recruitment. In some countries the recruitment started by advertising the Citizen Consultation in newspapers, websites and newsletters. In other countries contact databases from partners or from the recruitment agency were used for the first invitation. Interested citizens answered and their data were collected in an interim citizen panel. The next step was to select citizens from this first list taking into account the agreed criteria. Each country invited a quota-sample of the population from the capital city and a neighbouring region apart from Malta, where citizens from the whole island were invited. Each country should have provided at least a sample of 25 citizens and a reserve list of interested citizens to outbalance some drop-outs before the meetings.

The Austrian and Bulgarian citizen panel showed that the criteria were achieved with slight differences in both countries. In Austria 24 and in Bulgaria 25 citizens participated in CC1, 50% of the citizens were female, 50% were male. Age groups were well balanced (see fig. 7) in both countries. A difference can be found when looking at the distribution of educational levels. The citizen sample in Bulgaria, however,

includes significantly more citizens with higher education (university) than low and middle educated citizens[3] together (see fig. 6), and, thus, deviates in this criterion from the suggested format.
Figure 6: Level of education (left)
Figure 7: Age groups (right)
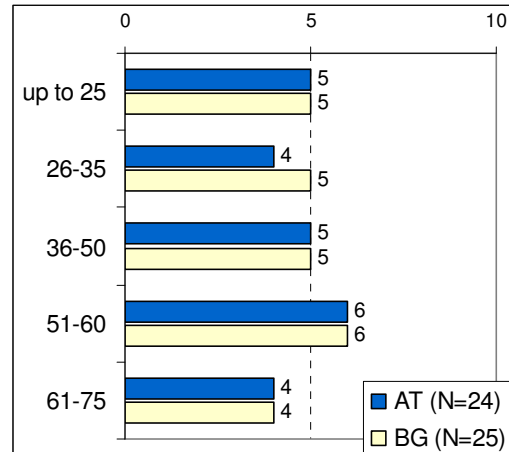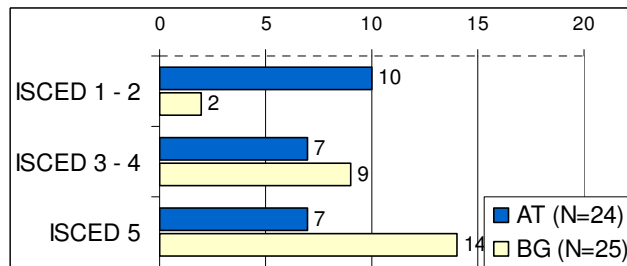
The distribution of data in fig. 8 shows the variety of the occupational situations of participating citizens in Austria and Bulgaria which is in accordance with the agreed criteria. In Austria, 7 employed participants have been seen alongside 16 not-employed citizens.
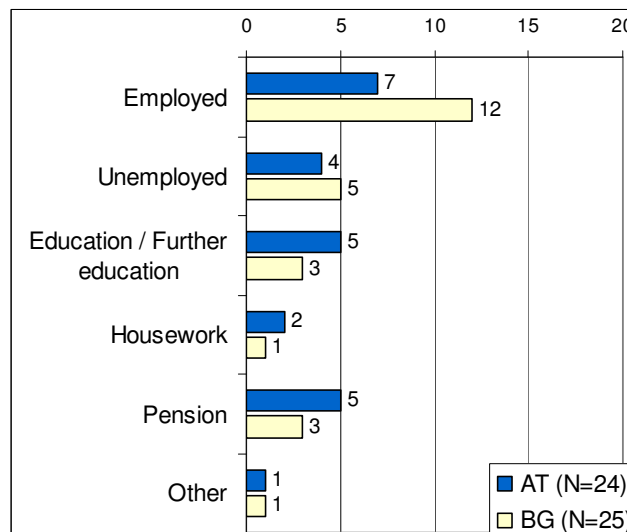
Figure 8: Occupational situation of participating citizens

5.5. Information Material for Citizens

In each of the seven countries the citizen panels received an invitation letter with sufficient and deliberate information on the CIVISTI project and all organisational details and additionally the magazine "Eyes on Tomorrow".

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[3]   Categories for education (see CIVISTI cook book, page 15):
- Lower education: Elementary School (7 years of schooling), Intermediate School (8 or 9 years of schooling), Vocational training (skilled level/craftsman's training)
- Middle education: Secondary school (high school graduation), Short-term higher education (less than 3 years of study)
- Higher education: medium length higher education (3-4 years of study), advanced higher education (more than 4 years of study.

The introduction material for citizens was well prepared and ensured a common knowledge base on organisational details. As we could see in the Austrian and Bulgarian invitation letter the citizens were also well informed about the targets of the CIVISTI project and their role in the consultation process.

The disseminated information material for the first round of the citizen consultation, in particular the magazine "Eyes on Tomorrow", should provide the citizens with a wide range of views upon future developments in Europe that could affect European S&T. As the CIVISTI project team describes, the magazine should inspire citizens when they formulate their own dreams, wishes and desires for the future of society. It should give a glimpse of different visions on what future can look like. Therefore visions and creative ideas by experts in various fields of science and technology as well as artists and citizens from all over the world were illustrated in the magazine. The material is based upon a variety of sources, such as existing horizon scanning reports and interviews with policy-makers, experts and stakeholders.

In fact, the magazine builds up a variety of different aspects and ideas to future challenges. The broad focus of the methodological design of the CIVISTI project is reflected in the magazine. It may encourage citizens to think about a wide range of possible new scientific and technological approaches and developments concerning future challenges in society. However, it should be taken into consideration that survey results show that only 3 Austrian and 8 Bulgarian participants read the whole magazine. About 52% of the Austrian and 32% of the Bulgarian citizens read most and about 24% respectively 20% only part of it. 4 Bulgarian citizens did not read it at all (see fig. 9).

Figure 9: Number of Austrian and Bulgarian citizen who read the whole magazine "Eyes on Tomorrow"
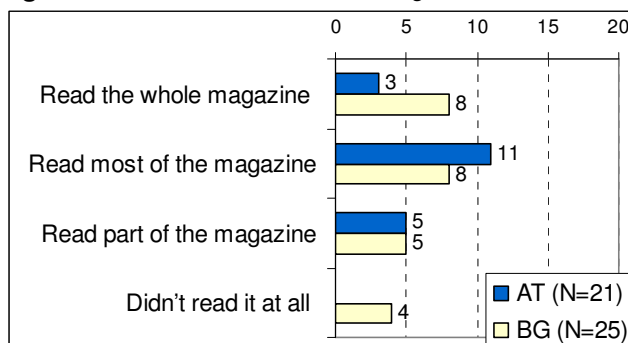
Thus, the results show that most of the citizens read only parts of the magazine. There are several possible reasons for this. The reason that citizens might simply not be used to read science related articles can rather be ruled out since the results in fig. 3 show that most of the citizens had experiences in reading such material. The question is if the magazine really provided knowledge of practical relevance for the Citizens' Consultation and in particular the process of vision making. The magazine is obviously conceptualised similarly to common popular science magazines which offer compacted and sometimes entertaining information on new trends in science and technology, but it doesn't have the appeal of a "practical guide". This becomes particularly evident in the way the questions which are meant to inspire citizens to think about their future are depicted – In fact they are presented only at the end of the magazine in a completely unstructured way. Besides being visually attracting it is arguable if such a presentation is really helpful for providing an initial orientation for the citizens.

Furthermore, when we look at the data we see that in fact only about 48% of the Austrian and 56% of the Bulgarian citizens replied that they completely understood the content of the magazine (see fig. 10). When reading the magazine we found the language appropriate in being – at least in general – not too complex or "scientific" – However, the real hurdle for a full understanding might have been the lack of structure and guidance that the magazine provides.

Figure 10: How Austrian and Bulgarian citizen understood the content of the magazine "Eyes on Tomorrow
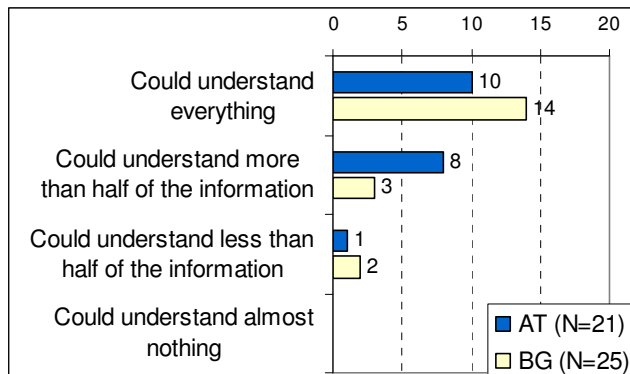
Another interpretation of the fact that not all citizens read the whole magazine could be that the content of the magazine overstrained the participants with too much different aspects and ideas upon future developments in Europe. We missed a central theme in the magazine and structured information was hardly to find. On the other hand, a reduction of the broad range of aspects in favour of a greater focus would have increased the danger of socially desired response behaviour.

In addition, it seems that the magazine did not have significant influence on the perception of competence of the citizens to discuss new scientific and technological approaches. After reading the magazine only two citizens in Bulgaria felt much more competent (see fig. 11). Nearby half of participating Austrian citizens felt equally competent as before reading it. 40% of the Bulgarian participants responded that they are feeling more competent. But nearly the same amount of citizens responded that they feel equal competent after reading the magazine as before reading it.
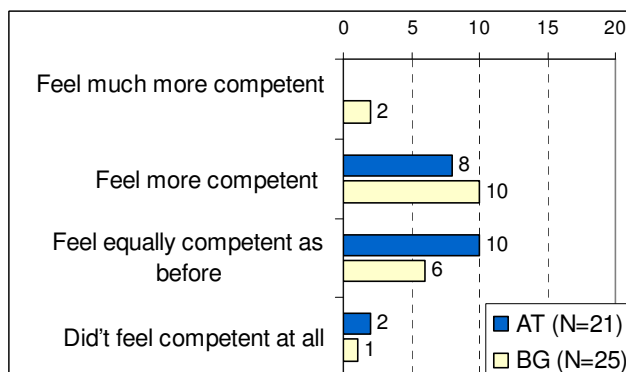
Figure 11: Feeling of competence to discuss new scientific and technological approaches after reading the magazine "Eyes on Tomorrow"

5.6. Observation of the Citizen Consultation (CC1) in Austria and Bulgaria

A deliberative climate in the consultation meetings is essential for the credibility of both the consultation process as a whole and the participant's visions produced. An unequal debate, dominated by few citizens, will not be widely accepted as the source of the voice of the citizens. To get an impression of the actual climate during the CCs the first part of the evaluation of the CIVISTI project highlights also observations of the consultation meetings in Austria and Bulgaria. A member of the ZSI evaluation team, capable to understand and speak the language used under the CC, joined the participants during the two days of the meeting and observed the process according to an observation record template. The record template was designed to capture different elements of the process: The agenda respectively the overall organisational structure of the event, the setting, the methodology and of course the feedback and immediate reactions of the participants. Additionally the two citizens' questionnaires included questions about citizens' satisfaction with the consultation meeting, e.g. the quality of discussion, the working atmosphere and the interaction between participants and organisers.

The observation records show that the overall process was very similar in the two countries with only slight variations and followed the formal agenda very closely. The introduction at the beginning covered all relevant fields and introduced the participants to the main thematic and organisational issues. The project, the policy framework (EU framework programmes) and the task to elaborate a vision were well explained. The introduction of a new task and the focus for the upcoming interactive sequences was immediately established as a routine, which was always carried out by the main facilitator. The participants had no problems in starting with their interaction and there were hardly any problems in understanding the upcoming task. Fig.12 indicates for all Austrian and Bulgarian participants with a high level of agreement that the instructions given were easy to follow and that they had received sufficient information on the agenda of the meeting.

Figure 12: Citizens' satisfaction with introductions and explanations given in CC1
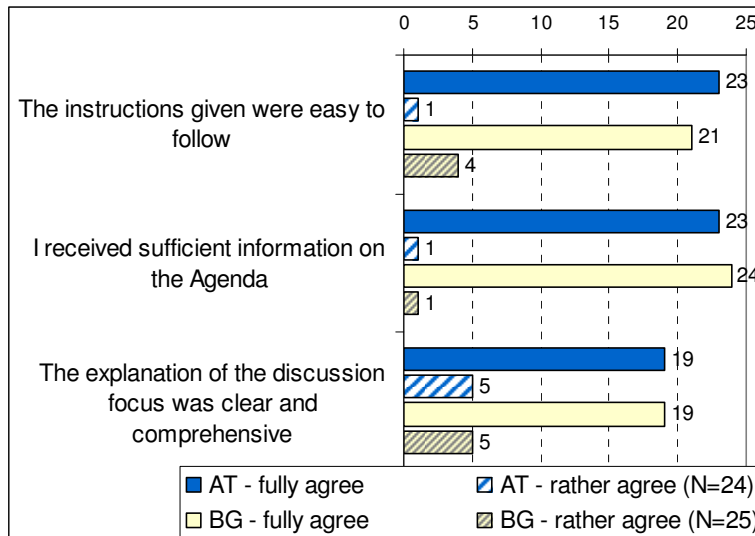
In Austria the assignment and explanation of the different roles within the organisation team was very clear from the beginning, while for Bulgaria it was reported that some of the roles and responsibilities were not defined and explained sufficiently. However, this had no negative effects on the process. We should remark that the language used by the presenters was plain and straightforward so that the participants should not have had any troubles in understanding the contents.

The structure of the agenda and the time frame for the discussion process also seemed adequate. Most of the participants were very satisfied with the structure (see fig. 13). Only 3 participants supposed that some points of the agenda disturbed the discussion. 5 Austrian and Bulgarian participants rather agreed to this statement. Several participants found that there was not enough time for discussion as shown in fig. 14. It is clear that the task to develop substantiated visions within two days is demanding for the citizens as well as for the organisational staff. Despite the fact that some participants had the impression that time for discussion was too short, we think that the organisational team managed to structure the tasks and to balance the more intensive work phases with recreational phases very well. Despite the unavoidable pressure of time there was always some room for discussion in all the work phases.

Figure 13: Citizens' satisfaction with the structure of CC1
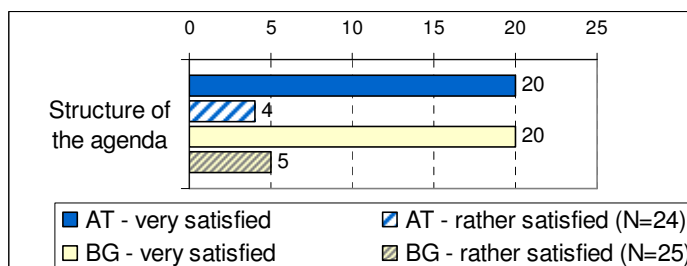
Figure 14: Citizens' satisfaction with the timeframe for the discussions
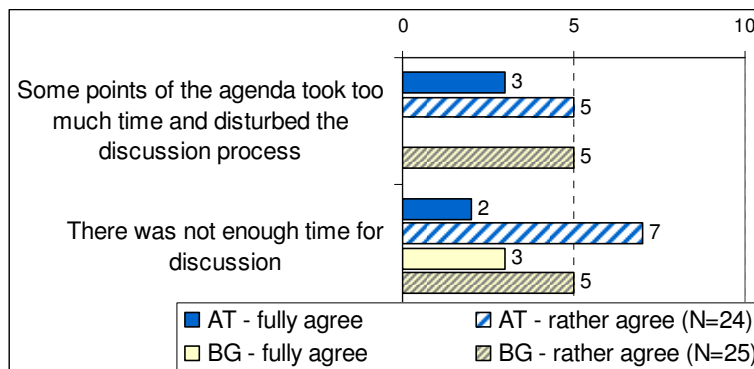
The easiness with which the participants spoke of themselves and their ideas remained a positive characteristic throughout the process. Our observers pointed out the general openness of the communication which was established shortly after the initial phase. We suppose that there are different reasons for this: The consultation meetings had an "inviting" character – the participants realised that their input was of high value for the project and that they were treated with the according appraisal and respect. The working atmosphere was in both countries described as being very good: the citizens concentrated on their work and also enjoyed the opportunity to have an exchange on political/societal topics. As fig. 15 show most of the citizens were very satisfied with the working atmosphere. 58% of the Austrian respectively 55% of the Bulgarian citizens were very satisfied, about 40% in each country rather satisfied with the quality of group discussion. Nobody responded that he/she was unsatisfied.

Figure 15: Citizens' satisfaction with the working atmosphere and group discussion
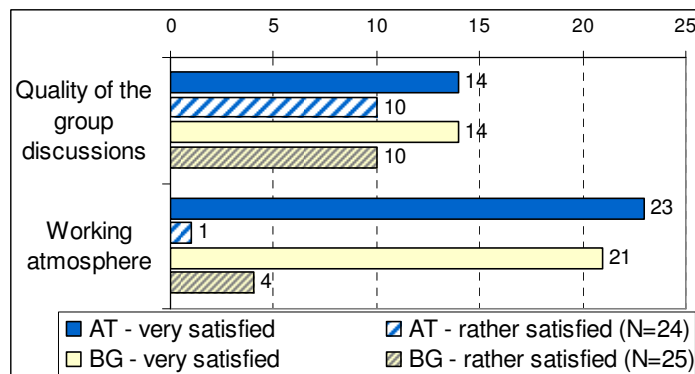
Regarding the interaction between participants during the group discussions, almost all Austrian and 80% of the Bulgarian citizens responded that they often were able to reach a consensus in the group despite different opinions (see fig. 16). About 90% of the Austrian and 64% of the Bulgarian citizens were able to express their views and to disagree openly in the group. Most of the participants had the opportunity to introduce a new topic for discussion, although the numbers are slightly higher for the Austrian citizens. About 79% of the Austrian participants answered with "often" or "sometimes" in contrast to 56% of the Bulgarian citizens. Furthermore, about 71% of the Austrian citizens thought that other participants "sometimes" dominated the discussion, while the Bulgarian participants experienced the dominance of certain participants to an even larger extent: 32% often and 40% sometimes. Just a few participants hesitated to express opinions that were different from the general view of the group.

In general, we can conclude that the inclusion of participants as well as their individual opinions was high in both countries, above all in Austria. It is rather food for thought than certainty that the dominance of citizens with higher education level in Bulgaria might biased the inclusion level (especially of non-academics) in Bulgaria or not.

Figure 16: Interaction between citizens in the group discussions
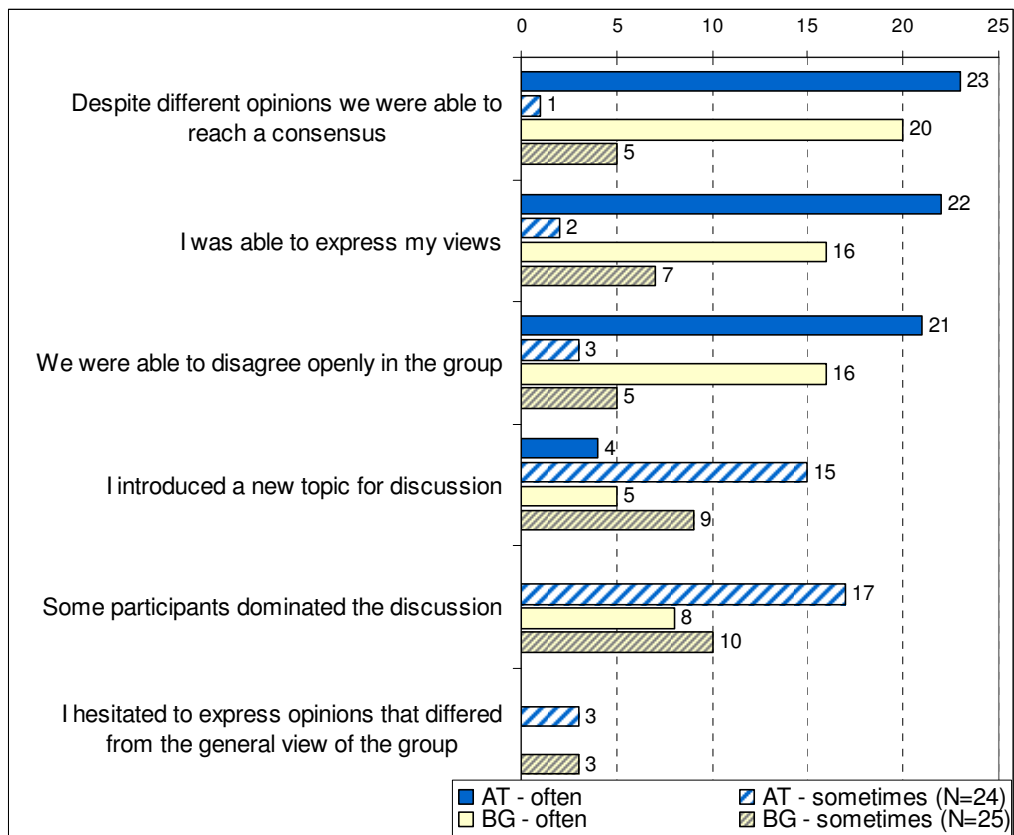
The main challenge for the methodological approach was to slowly and stepwise prepare the participants for the elaboration of the visions. The strategy was to start a discussion on past experiences and to move on to expectations for the future in groups. The participants managed the change from personal experiences to the more abstract and general level of social change without difficulty. In fact the interlocking of both levels was (at least implicitly) recognised. The differentiation into different "levels" stimulates a broader approach, but at the same time increases the complexity of the procedure (there was only 15 minutes time for each level).

An interesting feature of the whole methodology was the idea to work in very small groups of two to three persons or even letting single persons work on their "rough visions". The participants had no problems in choosing and elaborating their own vision – in Austria in fact they showed a quite high identification with their visions. It is questionable whether such an input – which is connected to personal interests and backgrounds – could be achieved in a larger group setting.

The design foresaw that the elaborated rough visions had to be reduced to a number of 10 final visions as a result of a voting procedure. The voting seems to be an adequate instrument not only for reducing the number of visions but also for securing their general acceptance and quality. However, the voting depends on many different factors and can also produce suboptimal results. For example, it is possible that discussed themes ("environment" in the Austrian case) are not in the finals voting list, and furthermore, that themes, which are highly significant for an individual, are not taken into further consideration. Also the "double selection" of similar themes could not be avoided.

In CC1 in Austria and Bulgaria the voting was followed by an important methodological decision: In Austria participants were randomly assigned to the remaining topics, whereas in Bulgaria the original authors stayed with their vision. Randomisation has positive and negative effects: On one hand it achieves a mixing of persons with different backgrounds who otherwise would not work together on the same topic. This might open up new perspectives on the subject. Furthermore, it may avoid that a topic

is dominated by the original author. However, the negative effects seem to overweigh: Authors who are identified with their vision and now have to work on a completely different topic might be disappointed and their special input and engagement for their original topic might be lost. Our observer in Austria noticed that this situation was apparent – for some groups the new topic worked, for others it did not seem to work that well. While these difficulties did not interrupt the ongoing process and most of the participants – even if some were disappointed in the beginning – carried on to work we assume that the random assignment had consequences for the final elaboration of visions which are characterised by immediately recognisable differences regarding the length, depth and level of detail of the visions and the contentedness with them (see fig. 17).

Looking at the citizens' satisfaction with the overall quality of the final visions elaborated at CC1 we see that 46% of the Austrian and 60% of the Bulgarian citizens are very satisfied with the results. 50% of the Austrian and 1/3 of the Bulgarian citizens are partly satisfied, not satisfied are 3 citizens – 1 in Austria and 2 in Bulgaria. Only 17% of the Austrian and 32% of the Bulgarian citizens think that the final visions express their personal views. 67% in Austria and 56% in Bulgaria feel their views rather considered and 17% of the participants in Austria and 8% in Bulgaria do not think there personal views are included (one Bulgarian respond is missing).

Figure 17: Citizens' contentedness with the final vision
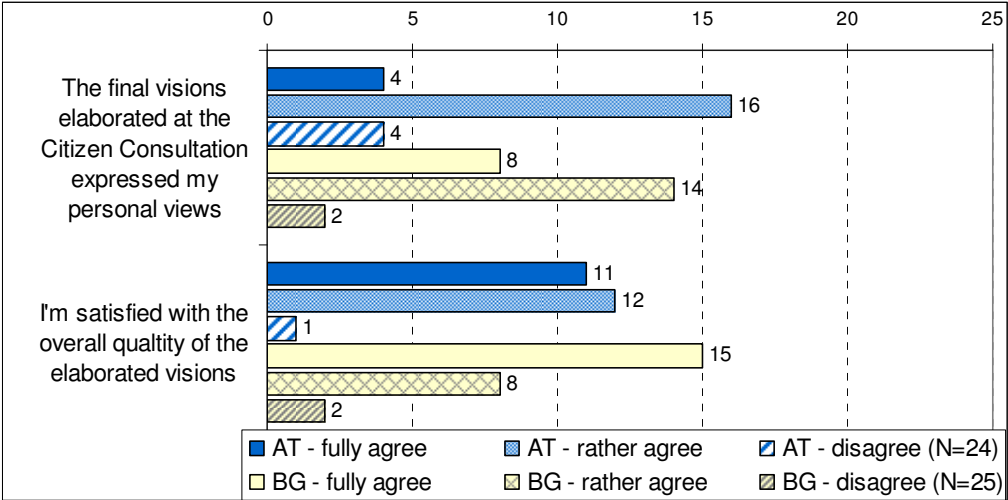
The opportunity to comment on the work of the other groups in a "round trip" while consuming a certain amount of time seemed to be important to create an atmosphere of a shared task. The face-to-face feedback mechanism was absolutely important too. It seems to have different functions: Firstly, it enables participants to talk in a more personal and direct way with each other, while the group setting fosters a different (and more controlled) way of self expression (presentation). Secondly, the feedback enables the participants to act in a different role – they are not only providing contents but they themselves are now in the position to evaluate and discuss contents. We think that this approach increases confidence in the produced results and also enables the participants to act and perceive themselves as "experts". Our observers noticed that while there was enough time for the face-to-face feedback on the "rough visions" in Austria as well as in Bulgaria the time to provide feedback on the final visions was rather short. In general there was not much time after the elaboration of the "final vision" to engage in further discussion and to do some revisions.

Some groups needed ongoing support from the facilitators who aimed not to interfere in the process of content creation and were rather asking the citizens questions to stimulate the conceptualisation and the writing process. The number of facilitators in Austria was sufficient to support all the groups. Our evaluator in Bulgaria even reported that the staff number seemed to be too large. The higher number of staff persons was reported to have a negative effect when groups where sometimes "disturbed" by staff persons who offered their support or simply observed the discussion. However, it seems that the writing process has to be guided by facilitators – it cannot be expected that all of the participants will achieve a written "final vision" without such kind of support.

For an event such as the citizen consultation meeting the setting and also the acoustic characteristics are of some importance: The Austrian meeting took place in a seminar hotel some kilometres outside the city of Vienna. The seminar room was sufficiently large to allow multiple group discussions at the same time and to ensure that the groups were not disturbing each other. Furthermore, the room fulfilled another important function – it stimulated the feeling of the whole group working together on a shared task even if the group was divided into smaller groups. Thus, the right room size has to balance both functions: allowing undisturbed working and stimulating a feeling of community. The Austrian setting achieved this balance to a very high degree. Also our observation in Bulgaria came to the conclusion that the setting was well chosen, even if the room was a bit too small which sometimes caused a relatively high level of speech volume.

COMMENT by a national coordinator

We had long been searching for an adequate seminar hotel. Of course the costs are an important factor, but the seminar hotel should also create an atmosphere of professional work and recognition of the participants as "experts" in their own right.

Considering the experiences while joining the process of the Citizen Consultation meeting as well as the reflection of the observation records we arrive at the conclusion that in both cases – Austria and Bulgaria – the realisation of the citizen consultation meeting was conceptualised, planned and implemented very well. In both cases the processes followed the predesigned "manual" very closely (even the time schedule), but without putting the participants under pressure. The organisational teams achieved to implement a very compact and demanding agenda (which is necessary to achieve the expected results) in a very personal and open way. We think that the general model of the CIVISTI citizens meetings show much potential but of course depends on the organisational effort, which is rather high considering the number of personnel, the training of the staff, the organisational effort in choosing and contacting the citizens, etc. Some starting points for a further "fine-tuning" of the general model have also been highlighted, in particular regarding the voting procedure, the feedback procedure and the role of the tutors.

5.7.   Summary of findings:

Open or structured focus?

The special character of CIVISTI Citizen Consultations is the broad focus, which hardly restricts the citizens in the formulation of visions concerning their hopes and fears. Despite such a broad focus CIVISTI aims at integrating citizens' visions and research planning. Research planning that is usually guided by confined strategies and rationalistic thinking more concerned with feasibility than holistic perceptions of a desirable future.
This consideration invites the consortium to reflect on the positive and negative consequences of an open approach in particular in the light of the visions that have been elaborated by citizens and the process of connecting them to research planning processes. This consideration will therefore contrast an open and a "structured" approach.
In the structured approach the pre-selection of a particular topic enables the citizens to elaborate different "dimensions" of research processes and research results (innovations) e.g. institutional context, ethical implications, social impacts, vested interests etc. A function of Citizens' Consultations following this approach is often the discussion of controversial societal topics. Thus citizens are expected to bring a different and critical perspective or "rationality" to research planning processes usually guided by experts and to further explicate ethical considerations and the interrelation between technological and social change (social impact of new technologies). In contrast CIVISTI is characterised by a thematically very open approach – the citizens should formulate their visions on future developments concerning technology and society. In this sense CIVISTI does not envisage a thorough explication of a particular topic (e.g. genetic engineering). The main objective is rather to identify new topics for research.
An overview on the elaborated visions indicates that the open approach had the consequence that the themes brought up by citizens (from terminal care to beaming) are rather heterogeneous regarding content related and formal characteristics. The contents generally refer to three different "levels of change": new values, new technologies and new social practices. Furthermore, the visions show a wide range from very specific to very general incentives and the "operational aspect" of a vision regarding the

prerequisites of implementation is seldom specified.

Thus, while providing citizens with the possibility to start from their own experiences and interests the open approach may have disadvantages regarding the depth and detailedness of the visions. However, the open approach should of course not be discarded in particular in the light of the very satisfying process characteristics of CIVISTI (see our notes on the conferences in Austria and Bulgaria). We would rather propose to think about possibilities to introduce a clearer structure of the visions and maybe to separate such elements as values, technologies and social practices or even to add institutional contexts (political opportunities, institutional support, institutional resistance, etc.) as another dimension. The citizens would then have to include all these aspects in their considerations which would possibly lead to more balanced visions. Of course this would also be more demanding for citizens and more time for the elaboration of visions would be needed.

Advance information – popular scientific magazine or guideline?

Citizens received a magazine on the topic of the Citizen Consultation in advance. The magazine in general had appeal in terms of presenting several scientific trends and comprising a wide range of scientific disciplines. The question is whether the magazine supported the citizens in preparing themselves for the event rather than only stimulating their interest. We think that the guiding questions could have been presented in a different and more transparent and comprehensible way.

Clarify the function of different group settings (single, two persons, group, two or more groups, plenum, etc.) and schedule enough time for the different phases:

The working process during CC1 in Austria and Bulgaria exemplified that group settings fulfil different functions when elaborating a vision and also yield different outcomes. For instance, the setting with only a single person working on a rough vision enabled the citizens to choose themes of personal relevance. In contrast, the small groups with two persons were adequate to elaborate the written description – in particular the writing process is often strenuous in larger groups.

Our observers noticed that while there was enough time for the face-to-face feedback on the "rough visions" in Austria as well as in Bulgaria the time to provide feedback on the final visions was rather short. In general there was not much time after the elaboration of the "final vision" to engage in further discussion and to do some revisions. The increasing time pressure made it difficult to maintain the feedback procedure until the end of the consultation meetings. In particular the getting together of two different groups to provide each other with feedback was too short to allow the citizens to rethink and revise the vision on basis of the feedback.

Thus there should be more time for the final feedback round and the citizens should be allowed to revise their vision. We think that this procedure would enhance the overall quality of the visions and would weaken the dominance of certain authors and broaden their perspective.

Provide an interaction setting for participants which pronounces their role as commentators respectively "experts":

We think that the role of citizens as commentators or experts could have been more emphasised. The best setting to do this is for instance the "group on group feedback" where citizens are able to comment critically on the visions of other groups. The citizens would sense that they are not only providing contents but that they themselves are now in the position to comment and evaluate contents. We think that the intensified utilisation of this approach enhances the quality of visions in terms of a more balanced focus and a reflexion of underlying value judgements. It could also increase confidence in the produced results.

Maintain the structure of a first and second round of the Citizen Consultations, whereas the first round does not include external experts and stakeholders:

The Citizen Consultation meetings (CC1) did not include any experts or political representatives. We think that with regard to the objective of CIVISTI and its open approach it was the right decision not to include any experts in the first round of the Citizen Consultations. While some commentators think that the presence of experts and political representatives pronounces the connection between political and research institutions and the Citizen Consultation meetings and thus enhances the credibility of the participative concept, we rather think that the presence of external stakeholders tends to "frame" the

event in certain ways which might not be in line with the viewpoint of the citizens. For instance political representatives tend to emphasise the official objectives of their political parties or the institutional contexts they are working in. In the case of CIVISTI and other similar Citizens' Consultations we had the impression that citizens have the expectation that their work stands in the centre of such events and not the inputs of external stakeholders. In this manner CIVISTI also managed to start with the actual group work very fast without losing time on additional statements.

Participants should have the possibility to work on a vision in which they are interested in:

In CC1 in Austria and Bulgaria the voting was followed by an important methodological decision: In Austria participants were randomly assigned to the remaining topics, whereas in Bulgaria the original authors stayed with their vision. Randomisation has positive and negative effects: On one hand it achieves a mixing of persons with different backgrounds who otherwise would not work together on the same topic. This might open up new perspectives on the subject. Furthermore, it may avoid that a topic is dominated by the original author. However, the negative effects seem to overweigh: Authors who are identified with their vision and now have to work on a completely different topic might be disappointed and their special input and engagement for their original topic might be lost. Thus the "assignment" of persons to certain topics should be more flexible and leave the decision as far as possible to the citizens.

Finding a balance between the utilisation of personal engagement and the "validity" of a vision:

When observing the Citizen Consultation meeting in Austria it became evident that several citizens had relatively clear ideas on their topic and they were rhetorically capable of formulating differentiated and detailed visions. On one hand we find it important to "utilise" such an engagement because it is obviously connected to a high working motivation and is based on a specific personal knowledge and experience. At the other hand such a focused approach may not be open for different perspectives and the consideration of contextual elements (e.g. value orientations). In a group dynamic perspective such authors may also be dominating others who are not as familiar with the topic. In this case we think that the facilitators should find appropriate settings to confront such citizens with broader and critical perspectives on their topic.

The voting procedure should comprise the possibility of integrating additional themes:

The voting seems to be an adequate instrument not only for reducing the number of visions but also for securing their general acceptance and quality. However, the voting depends on many different factors and can also produce suboptimal results. For example, it is possible that discussed themes ("environment" in the Austrian case) are not in the finals voting list, and furthermore, that themes, which are highly significant for an individual, are not taken into further consideration. Also the "double selection" of similar themes could not be avoided.

Vision or prevailing discourse?

A characteristic of many of the visions is that they are connected to current discourses and refer to themes/activities which are already recognised by politicians and researchers: protection of the natural environment, strengthening of a European identity, the use of information and communication technologies in government services and every-day life, etc. There are only a few visions which present new and interesting ideas beyond the prevailing political and social discourse. The question is whether the approach should have been even more focused on radical thinking than it did. Such an approach would render a more restricted focus necessary (for instance technological innovation or innovation in public services) to enable the citizens to concentrate more on the aspect of radical thinking and new ideas.

Clarify the objective(s) of the second round of Citizens' Consultations (CC2):

The second round of Citizens' Consultations can have several objectives: To indicate the connection between the citizens' visions and current/future research activities, to broaden the perspectives of citizens' in discussing the political and institutional contexts of research programmes, to explicate the visions and show their full potential, to provide citizens with a comprehensible overview on the visions and their contents, etc.

6. The analytical model

The deliverable D4.1describes an analytical model with the main function to analyse and cluster the visions elaborated by the citizens (Citizen Consultation meetings in seven countries) for the expert-stakeholder workshop. It also contains guidelines for the process of the expert-stakeholder workshop, in particular regarding the assessment of the visions. As described in the deliverable, this workshop will be aimed at assessing the citizens' visions and connecting them to relevant policy contexts and the development of new S&T themes for the 8th framework programme.

6.1. Comments on the revised draft on the analytical model

The first draft of the mid-term evaluation report (October 2009) referred to the draft D4.1_ver1 from 16/09/2009 which was then updated (13/10/2009). The update could still be included in the mid-term report and is also the document we refer to in this final evaluation report. The changes in content between the two versions are minor and refer to three points:
- "The level of impact" has been added in the terminology section. The level of impact indicates the "structural unit" or level which is influenced or impacted by a certain vision. The levels range from individual to global.
- An overview on the analytical steps of the clustering process has been added.
- In Step 3 (risk & concern analysis) of the clustering process the first typology has been changed to natural environment vs. social environment, which is in line with our initial recommendation to refine this particular typology.

We also received a short feedback from CIVISTI partners regarding the first draft of the mid-term evaluation and the ongoing discussion on the analytical model. It has been emphasised that experts and stakeholders should work with the authentic visions of citizens, whereas the **analysis should be focused at providing the experts with the full thematic scope of the visions**, which will additionally be supported by the usage of templates that link each visions to the major topics and expert recommendations. Furthermore, criteria will be provided to the experts and stakeholders to orient both the elaboration and prioritization of the recommendations based on the visions.

In our initial review of the analytical model we stated that the proposed methodology seemed generally adequate but was not fully comprehensible in detail due to the different and interlinked levels of analysis and the absence of concrete examples or graphical schemes. In update the presentation has not been changed significantly but we were informed that the draft of the **clustering report** entails such detailed descriptions.

In the SWOT analysis we mentioned the possibility that the methodology of CIVISTI could be developed into a standard methodology – if this would be the aim of the CIVISTI consortium we would still recommend to enhance the presentation of the analytical steps of the clustering analysis in D4.1.

6.2. Comments on SWOT analysis

One comment by CIVISTI partners to the first draft of the evaluation report (October 2009) on the SWOT analysis referred to the first point mentioned in the category "weaknesses". We noted that a more specific and content oriented focus on the specific type of "visions" that should be elaborated, would possibly enhance the quality of the visions in terms of specificity and level of detail, and would make it easier to analyse and cluster the visions. We agree with the commentators that this point rather refers to the general process of "data collection" and the structuring of the participation process than the analytical model itself.

6.3. Outline of the whole CIVISTI process

The deliverable starts with an outline of the step-by-step process of the CIVISTI project and clearly shows the necessity of an analytical model in terms of clustering the visions and preparing a thematic input for the expert-stakeholder workshop.

It is pointed out that the main focus will consist of S&T issues related to "scientific disciplines and technological development" as well as "complex trans-disciplinary challenges" (page 9). This broad focus is part of the methodological design of the CIVISTI project which aims at integrating "an extremely wide range of possible future issues" (page 7). This focus fits well with the objective to give citizens the opportunity to elaborate their visions unrestrictedly and in a self-directed way – but on the other hand this "open" approach might lead to unexpected results and results which vary between countries. The qualitative and quantitative analysis which is a part of the analytical model will finally show if there are indeed such differences (e.g. some countries with predominantly technological themes others with predominantly social/institutional themes) respectively if the open approach in general yields the expected results (e.g. are the final visions really visions of the future or rather an "evaluation" of current trends).

The following comment is meant to be a proposal for discussion for the CIVISTI consortium. We found that the difference between social/institutional and technological innovation and of course their interlocking is not explicitly discussed in the CIVISTI papers and not used for structuring the citizens' thematic input, although the thematic distinction is implicitly made (e.g. the CIVISTI magazine handed out to citizens entails examples for both, technological and social/institutional innovation).

The results of the Austrian and Bulgarian Citizen Consultation meetings revealed that some of the visions predominantly concern institutional changes which could be implemented by political reform – they seem to depend more on public opinion, social values and political willingness than scientific research. Other visions combine both elements – institutional/social and technological innovation. In the Austria Case there were only a few mainly technological visions. Thus, we recommend reflecting on this distinction and its possible application in the thematic structuring of the vision elaboration process. The differentiation of the STEEVP (Social, Technological, Economical, Environmental, Policy and Values) "clusters" seems to contain such a distinction but its relevance could be much more emphasised. The distinction could be used to structure the citizens input and thus to achieve a more balanced outcome regarding the different "types" of visions.

Another point is that the importance of institutional/social innovations as an element of the citizens' vision might reflect a significant characteristic of a citizens' approach to science and technology issues in contrast to a professional experts' approach which might be more guided by institutionalised directives such as "technological efficiency", "technological paths" or "economic value"[4]. Thus it would be interesting to use the proposed distinction also for analyzing the special characteristic of lay experts' visions in contrast to expert planning.

6.4. The statistical analysis of the visions

The statistical analysis is an adequate tool for structuring the visions, in particular the proposed "method mix", which combines quantitative and qualitative analysis, promises both, to capture the more general aspects of the 69 citizens' visions (e.g. frequencies of topics) as well as to extract important specific topics and proposals from the visions.

It is rather difficult to assess a methodological approach only on the basis of a short textual description. To assess the potential of the statistical analysis one would have to inspect the actual outcome (tables, diagrams) rather than the textual description. However, it seems that the development of the methods is already based on acquaintance with visions, their contents and their structure and is adequately adapted

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[4] In the questionnaire we elaborated for the CIVISTI Citizen Consultation meetings in Austria and Bulgaria there was a high level of agreement on the item "Civic participation ensures that research is guided by common societal values rather than particulate interests" (see Fig. 4) which can probably be taken as an indicator for the high importance of values in the views of citizens. Social/institutional innovations are intrinsically connected to values respectively are driven by societal values. This might explain their importance for citizens.

to it. The approach promises to provide a compact impression of the elaborated visions and – because of the additional qualitative approach – to avoid a loss of specific information.

We would like to make a short comment on the presentation of the methods. The differentiation between "visions", "topics" (concrete themes) and "clusters" (general themes) seems simple at the first glance but becomes more complex if it is considered that visions might contain several topics which are assigned to different clusters – as mentioned before, the interlocking between institutional/social and technological innovations is a part of many of the elaborated visions. Additionally there's the distinction between three levels of analysis: country level (comparison), cluster level, vision level.

The textual description of the analytical process is rather short and makes it quite difficult to get a clear picture of what will be done in the analysis. Therefore we suggest to add an example based on a concrete vision and to show how the topics are identified and assigned to different clusters and to provide a graphic scheme of the analytical process (similar to the graphic scheme of the whole CIVISTI process in figure 1, page 8).

6.5. Risk and Concern analysis

The risk and concern analysis is an important part of the structuring process. The question after analysing the first version of D4.1 was whether the proposed typologies are differentiated enough to provide a structured overview on the described risks and concerns. It was not completely clear why the first typology was reduced to "environment vs. other domains" and the second "type" remained unspecified.

The update of the analytical model included a new typology – instead of "environment vs. other domains" the revised typology differentiates between "natural environment vs. social environment" which is in our perspective a much more useful typology. It is still very general but the heterogeneity of the visions probably makes such rather general typologies necessary.

The second typology "catastrophic vs. decreased quality of life" (page 12) has not been changed but now the relation between the typologies is a bit clearer. If a further differentiation would be necessary we would still propose the following: The first typology could contain types such as social security, labour market opportunities, quality of life, etc. while the second typology could exclusively focus on the scale of impact (from catastrophic to severe, moderate, weak). It would then be possible to combine both typologies – to assign a "thematic type" and an "impact type" to a specific risk or concern which was mentioned by the citizens.

6.6. Proposals for new knowledge, policies, resources and skills

The structuring of the citizens' proposals with regard to the knowledge, resources and skills necessary for the practical application of a vision is of course important for transferring the visions to the level of future S&T strategies and for providing a clear and confined discussion focus to the stakeholders and experts.

It was decided to let the experts identify important proposals by themselves but supporting them in elaborating an additional typology which assesses the proposals according to their importance for policy design (From "strong trends" to "weak signals").

We would like to make a short comment on the interpretation of the resulting "types" or categories. It is not completely clear to us what is meant with the "comparison between the identified topics and clusters with a predefined set of themes repeatedly analysed in recent foresight studies" (page13). The proposed typology, however, seems to be based on the frequencies of topics in the CIVISTI sample. In this case it is rather problematic to simply generalise the results as proposed in the description of the different "types". For example: Does a moderate frequency for a certain topic in the sample really tell us that "only some segments of society find it an important issue"? For instance, in the Austrian case there was not a single vision dedicated to environmental issues (although there were rough visions on this topic) – of course no one would suggest that this topic is "below the radar" for Citizens.

Thus, we recommend to rethink the interpretation of the typology in terms of avoiding misleading generalisations and to refer more explicitly to other sources (data, studies) when assessing the different topics and presenting them to the experts.

6.7. Conclusion and SWOT table

The document on the analytical model has draft status and will be finished until January 2010. The basic elements of the procedure are already described and the main steps of the analytical process are comprehensible. We think that the proposed analytical approach is adequate to analyse and cluster the material and to provide a structured input for the expert-stakeholder workshop. However, the specification of the details of the procedure may need some further work, in particular concerning the proposed typologies. Also the presentation of the statistical analysis could be enhanced through a visualisation of the process and some examples of the concrete analytical procedure.

Strengths	Weaknesses
• The basic process – how new S&T guidelines will emerge from Citizen Consultations (including the feedback consultation after the expert-stakeholder workshop) – is transparent and well-thought-out. • The methodological mix including quantitative and qualitative methods is adequate to analyse and cluster the citizens' visions as well as to capture the more specific aspects. • The analytical model is sensitive for different "dimensions" of the citizens' visions, including the reflected value orientations. • The analytical model combines important functions which are clearly described: Structuring the input for the expert-stakeholder workshop and the second citizens' consultation, and analysing the citizens' visions on different levels (vision, country, cluster);	• The description of the visions sometimes gives the impression that typologies based on the collected visions are "representative" for larger populations. These statements should only be made if there is additional material (studies, data), which confirms the findings of CIVISTI (for example that environmental issues are of high importance for citizens, etc.) • Regarding "representativeness" it also seems problematic to generally rely on "frequencies" to judge the relevance of certain visions/topics for "the population". The assessment of relevance and prevalence is only possible on the basis of expertise and additional data sources. • It cannot be excluded that typologies will fail to capture important dimensions of the citizens' proposals if the categories are not sufficiently differentiated.
Opportunities	Threats
• The analytical model in combination with the CIVISTI approach to organising Citizen Consultation meetings has the potential to become a "blue print" for citizen consultations beyond the CIVISTI project.	• Experts and stakeholders will only focus on the "main topics" and will neglect visions which deal with topics aside from the mainstream. • Citizens' will not approve the restructured and commented visions respectively the developed recommendations for the European S&T agenda. • At the very end, when it comes to shaping FP8, citizens consultations might lose their visibility due to the prevalence of more commonly known mainstreamed approaches as well as due to political and financial factors lying outside the outreach of approaches usually applied to identify S&T priorities of the future.

7. The Expert-Stakeholder Workshop

The evaluation of the CIVISTI citizen consultation process includes the participation and observation of the "Expert and Stakeholder Workshop" in Sofia (14-16 June 2010). Therefore a member of the ZSI evaluation team joined the experts and stakeholders during the two day meeting and observed the process according to an "observation note". The template of the observation note was designed to capture different elements of the process: The agenda respectively the overall organisational structure of the event, the setting, the methodology and of course the outcome and feedback and immediate reaction of the participants.

The first round of citizen consultations in the partner countries concluded in spring 2009 and as a result 69 citizens' visions for the future have been defined. The next step in the process was the discussion of these visions by scientific and technological experts, policy makers and stakeholders during the workshop in Sofia with the intention to deliver possibilities how to turn these visions into actionable research priorities. During this consultation process, citizens' visions should have been systematically reconsidered and transformed into workable objectives.

The expert and stakeholder workshop focused on the identification of emerging issues in European science and technology and tried to bring together European experts, stakeholders and policy makers including scientists and policy analysts, NGOs and representatives of governmental bodies, involved in research, policy making and implementation.

The objectives of the workshops were:
- to have an informed discussion on the outcomes of the first round of CC1 workshops through involving experts and stakeholders from the participating countries, as well as EU-level experts and stakeholders
- to extract (identify and prioritise) new and emerging issues for S&T from the visions of the citizens
- to provide input to CC2 through formulating research questions and propose priorities for future research under FP8 as well as policy options for the benefit of Europe as a whole

7.1. Description for the Workshop

Before the workshop the visions were allocated to 36 topics subdivided into 6 groups (clusters). One key vision for each topic was chosen (see table below) based on the CIVISTI consortium decision on which topic contains/describes the explicit and/or implicit meaning of the citizen visions at the best. Then the visions were grouped - it was agreed among the CIVISTI partners that each vision should have been once a key vision assigned to a topic and could be classified as a "related" vision to other topics more than once.

6 workgroups (clusters) / each group includes 6 topics

Group 1	Group 2
▪ Healthcare and medical services ▪ Social care and services ▪ Quality of life and services ▪ Ageing ▪ Pension policy ▪ Genetics	▪ Education and learning ▪ Employment and new modes of work ▪ Legislation ▪ Reducing bureaucracy ▪ Multi-cultural and multi-lingual society ▪ Creativity and innovation
Group 3 ▪ Citizens' role and democracy ▪ Developing countries ▪ Identity ▪ Religion ▪ Family values ▪ Equality gender, minorities, disabled, ethic	**Group 4** ▪ Demography ▪ Energy ▪ Transport ▪ Infrastructure and urban design ▪ Local and regional development ▪ Role of media
Group 5 ▪ Agrifood technologies, organic production ▪ Waste management ▪ Animals and ecosystems ▪ Water management ▪ Climate and global warming ▪ Environmental awareness	**Group 6** ▪ ICT, automation and artificial intelligence ▪ Linguistic technologies ▪ Space technology ▪ Smart materials ▪ Disasters (natural and technological) ▪ War and peace

Participants
17 experts, 9 CIVISTI consortium (staff) members, 1 evaluator

Experts had different scientific and institutional backgrounds:
- International company (IBM)
- Ministries of Education
- Governmental organisations
- Research Agencies, Institutes or Academies (Social Science or Technology)
- European Networks
- Consulting companies

Consortium Members

Evaluator: ZSI

Welcome session (evening)

The workshop started with a welcoming session in the evening. The CIVISTI process were presented and the objectives of the workshop introduced by the project coordinator.

Working Day 1

The participants were broken up into 6 pre-defined groups of 2-3 experts per group and a member of the consortium facilitated the group.

For each topic there were 1-3 key visions and some additional relevant visions assigned. Each vision was used only once as a key vision. During the workshop each working group had to deal with 6 to 13 key visions within 6 topics and a lot of related visions. Printed versions of the visions were available in each group, as well as the preliminary content analysis.

Example: Group 3 / Topic "Citizens' role and democracy"

Key Visions:
BE06 – Where there's a will, there's work (Employment for all - a vision about the balance between work and private life, voluntary work and full employment).
DK07 – Mass communication replaced by masses communicating

Related Visions:
HU01 – Support for starting and maintaining a family – and the EU
DK01 – The EU president touring Africa
BE04 – Simplification, Easier structures 2040
FI03 – Europe-TV
BG06 – Link among the generations, space and time
FO04 – Joint citizen action – let's get going!

Each working group used a PC and filled in their comments in the provided online-template for recommendations. The participants had to address three key areas in the template: Policy options, Issues for Science Technology and Innovation (STI) and other recommendations. The timeframe for the discussion within the group was 1 hour per topic (6 topics = 6 hours).

Example of the first outcome: Group 3

Vision: Where there's a will, there's work (Employment for all - a vision about the balance between work and private life, voluntary work and full employment).

Policy option: Platform of the future work at local, regional and global level
▪ Platform of research about defining work, flexicurity and boarders between professional and voluntary jobs
▪ Research and development of flexicurity including the voluntary work
▪ Best practices of work-life balance, flexicurity, basic income, new jobs, social responsibility

Vision: Mass communication replaced by masses communicating

STI Issue: Multi-linguistic Mediators – Sheep Farmer's Conversation
▪ Using technology supported by multi-linguistic mediators
▪ Mediators are small councils with the capacity to facilitate a multi-linguistic conversation

STI Issue: Invest in Basic Research in Linguistic Technology
▪ Invest in linguistic technologies in facilitating communication

Other recommendation: Improvement of mobility of young people
▪ Policies that support the mobility of young people

Other recommendation: Mew foreign language culture
▪ More than on foreign language culture in education

The outcome of the first workshop day was 68 draft recommendations which were the input for the second working day.

Working Day 2

The second day the participants elaborated the recommendations of the first day in an open space discussion. The participants made their own agenda predefined by the outcome of the first day and organised their work by themselves along given 36 timeslots (therefore it was possible to elaborate 36 recommendation out of the ... draft versions from the first workshop day only). They worked with recommendations they found relevant and put their energy into finding solutions along three criteria within the recommendations had to be elaborated.

The agenda for the open space process was predefined by the outcome of day one and there were given specific time slots for discussing the recommendation which were selected by the experts in this session. Therefore the open space session started with the possibility for the experts to make there own agenda by choosing the recommendations the want to work with and placing them in a specific time slot of the agenda.

The agenda was already predefined into 36 time slots. Each participant took one to three recommendations and put them on a large time scheme that everybody could see. All other participants who were interested in the same recommendation wrote their names on to the sheet presented on the scheme. The participant who had chosen the recommendation was responsible for leading the work of elaborating it in open space discussions afterwards.

Time scheme

Time	10.00-10.30	10.30-11.00	11.00-11.30	11.30-12.00	12.00-12.30
Table 1	POL-95 (Frischen-schlager)	POL-24 (Larque)	POL-84 (Larque)	SIT-30 (Frischen-schlager)	POL-17 (Larque)
Table 2	POL-62 (Szalavetz)	SIT-86 (Szalavetz)	SIT-67 (Szalavetz)	POL-97 (Szalavetz)	SIT-69 (Szalavetz)
Table 3	SIT -118 (Hellriegel)	SIT-58 (Warnke)	POL-03 (Nielsen)	POL-61 (Staton)	POL-78 (Nielsen)
Table 4	POL-117 (Hronszky)	SIT-73 (Staton)	POL-102 (Dimlyn)	SIT-64 (Dimolyn)	POL-109 (Warnke)
Table 5	POL-77 (Chabanova)	POL-44 (Staton)	SIT-15 (Munksgaard)	SIT-32 (Munksgaard)	SIT-66 (Hronszky)
Table 6	SIT-19 (Schmatz)	SIT-55 (Fleischer)	POL-07 (Schmatz)	SIT-71 (Fleischer)	SIT-02 (Schmatz)

When the agenda was in place the participants started to work on the recommendations by following three criteria:

1: Novelty – how novel do you see it in delineating new ways for developing science, technology, innovation or other social challenges?
2: Essentiality – how essential do you see it in tacking with relevant STI-issues or solving important societal problems and challenges?
3: Timing – how relevant do you see it for the next EU framework programme planning or for other urgent EU policies?

The experts elaborated the recommendations by analysing and arguing why each recommendation is relevant and then defined the final version of the recommendation.

Feedback at the end of the workshop (see below)

Homework: The experts had to score the recommendations so that a prioritised list could be used in the second citizens' consultations. All experts were provided with a template for scoring and asked to send it back to the consortium.

Scores:
5: very novel / essential / relevant
4: quite novel / essential / relevant
3: don't know / do not wish to answer
2: not very novel / essential / relevant
1: not at all novel / essential / relevant

7.2. Findings from the observation

This chapter is a synthesis and interpretation of findings from the observation of the expert-stakeholder workshop. Additionally, we will include information from the 2 expert interviews we conducted about one month after the workshop. We also used information we collected during the feedback round at the end of the workshop where experts reflected on the past days and their perception of the process. We always tried to relate these opinions with the opinions of the two experts we interviewed to achieve a balanced (albeit not comprehensive) account of the experts' views. Paragraphs in *italic* are direct citations from the audio recording of the two telephone interviews with experts.

The chapter is structured according to the interview guidelines we developed for the expert interviews which comprised themes such as group compositions, perception of the citizens' visions and approach to the citizens' visions as well as other aspects of the overall process. We decided that experts should remain anonymous although the two experts we interviewed explicitly allowed us to use their names. Therefore we will only refer to expert A and B.

7.2.1. Composition of groups and professional backgrounds

In the workshop experts with different professional workshops were joined into groups to work on a set of thematically related visions. This chapter will try to explore how the group compositions actually looked like and how they influenced the process.

The first main distinction between professional backgrounds is that between social sciences and technical/nature sciences. These scientific domains are characterised by different scientific cultures, methods and languages, which – this is only a thesis – might also affect the approach to citizens' participation in general as well as the perception of citizens' visions. There is for instance some indication that social sciences are more inclined to a *context* related approach (attitudes, values) while technical/nature sciences are more inclined to a *content* related approach (means, objectives) to citizens visions, which can however not be verified on the basis of our documentation alone. We will take a closer look at this typology in the following chapters.

The other differentiation is that between scientific experts and "practitioners", which was even more difficult to explore in its consequences for the process. It is probably observable in statements regarding the ambiguity of the objectives, which will be discussed later on.

Groups 1,2,4,5 and 6 were characterised by significant differences in professional backgrounds, whereas group 3 was characterised by a rather homogeneous, social science oriented composition. In groups 2 and 4 these differences made it necessary to clarify the common starting point and to find a common approach and language. For these groups we observed more intensified discussions on how to perceive and work with the citizens visions – the facilitators could not always resolve this situation so that the participants had to negotiate among themselves. This also means that discussions had to start at a "meta-level" before going into details with the visions. Also group 1 had to discuss the basic work task – including a clarification of what should be the main rationale and the main target group of the recommendations. It was not clear to them whether FP8 and responsible administrative/expert bodies or the general political community was the main target audience.

We interviewed two experts: **Expert A** from group 2 ("heterogeneous") and **expert B** from group 3 ("homogeneous"). While expert A stated that the professional backgrounds were "*well adapted*" in her group and that she had the impression to work with inspiring and interesting people, expert B had a somewhat more differentiated viewpoint: "*Yes and No. I thought we were in a group were we maybe were too similar. All of us were social scientists and of course that made the communication easy but somehow we lacked a kind of challenge from more technical people.*"

Furthermore, expert B reports a "*high degree of communicative understanding*", a "*high degree of cooperativeness*" and a "*communication on high professional level*" which allowed the group to find a consensus on the recommendations based on their specific professional experience.

We can conclude that differences in professional backgrounds made it necessary to find a common language and to negotiate a common approach to the citizens' visions, which seemed to be more

complicated in some groups than in others. More homogeneous groups agreed more easily and faster on a common approach and seemed to share the same sensitivity for the citizens' visions, but as expert B pointed out, who was part of a very homogeneous group, this also excluded a potentially fruitful confrontation between social science and technical/nature science.

7.2.2. Selection of experts and citizens

Interestingly, the experts themselves brought up the question of whether the "right" experts were invited and assessed their work in a self-critical way. Several experts proposed a more intensive reflection on the selecting of experts and the matching of the right visions with the right expertise. For experts this could practically mean to invite more experts, to invite the "right" experts, to organise an additional expert meeting with "specific" experts or to provide experts with more time for preparation, for instance by sending them the visions they will work with in advance.
The composition of expert groups and the matching between experts and thematic clusters – which was solved quite well in our opinion – would probably have been even better if the organisers were not forced to cancel the first date for the workshop due to the ominous ash cloud, which forced several European airports to cancel all their flights. The number of experts was much lower than the organisers had originally envisaged (due to problems of re-scheduling the date, etc.). The experts were however satisfied with the overall composition and saw that matching problems were practically unavoidable given the heterogeneity and multi-dimensionality of the visions.

Generally, we think that CIVISTI actually managed to have a good composition of experts – given the heterogeneity of visions this was a very difficult task. The matching between experts and visions was however not perfect and could be improved by a more focused selection of experts.

Comments were also directed to the selection of citizens, albeit in a very general way. One expert saw a dominance of "urban" themes and obviously assumed that there could have been a selection bias. Expert A, whom we interviewed, also proposed to think about a selection of citizens which puts more focus on their "qualification" to elaborate visions. While this runs against CIVISTIs decision for an open participation model and is generally controversial, it cannot be ignored that citizens with higher educational attainment often took on a more active role during CC1 (based on our observation) as well as the fact that most citizens who participated again in CC2 had higher education – often university level, which points to the obvious drop-out bias between CC1 and CC2. The process seems to appeal more to persons with higher education who are trained to work with text material and to discuss technical or socio-political issues. Thus, open participation – while it may be normatively desirable and while it may have further advantages regarding the variety of themes – must also be reflected in terms of the perceived output quality (the final recommendations), the necessary skills and the participation pattern (drop-out rates).

7.2.3. Initial reactions to citizens' visions

Despite these minor difficulties in the beginning all groups took up their work to comment and discuss the visions. The observation protocol documented different initial reactions to the Citizens' visions. Some groups immediately engaged in constructive discussions on the visions, while others had difficulties in seeing the value of specific citizens' visions, which in their view comprised unrealistic or naïve assumptions.

Expert A openly stated that she initially expected much more elaborated visions and that she was negatively surprised by the poor language used in certain visions (A criticism that also came from the side of citizens when commenting on the experts' recommendations in CC2). However, also in these cases the expert stated that her group didn't comment or assess visions completely negatively according to this initial reaction but tried – as emphasised by the facilitators – to elaborate meaningful recommendations, understanding that "*citizens were promised to be treated seriously*": "*We didn't distinguish, but we talked about ethical and political implications, some visions had implications that were not "politically correct" or some technical experts said that this was just stupid*"

This reaction should not normatively be regarded as "wrong" or "inappropriate" (It has to be noted here that similar reactions were common among citizens when citizens could not seriously relate to other citizens' visions) – It is a simple fact that some of the collected citizens' visions included topics or argumentations which may seem idiosyncratic, technically impossible or politically inacceptable. We have to keep in mind that citizens have been challenged to think "visionary". Furthermore, the perspectives of experts are much more pre-structured by scientific and political standards compared to lay persons among citizens. This means that there will always be a confrontation between different frames of reference.

We think that CIVISTI resolved this confrontation quite good. Both, citizens and experts, could relate to the work of the other group. This is also supported by the results from our questionnaire survey (see chapter 8). In general, there will always be the potential "danger" that experts will be forced into an artificial approach of *accepting without really acknowledging* the accounts of citizens. This points to the necessity to think about possible ways of preparing and sensitising experts for the work with documents developed by citizens which will in most cases not come up to professional standards. It would be a challenge for citizen participation models to think more on methods for preparing the experts and providing them with tools to approach the accounts of citizens.

A completely different initial reaction was reported by expert B, who is himself professionally involved in participatory research and therefore familiar with approaches similar to CIVISTI. He was part of group 3 characterised by a more homogeneous professional background and a similar way of working which was documented in the observation protocol as well as stated by the expert himself.
Asked on his first impression on the visions he answered: "*The first thing was a big variety and a big differentiation in visions. To me that was kind of an information that we had some originality in the visions and not just what is 'blowing in the air'*"
We see that the initial assessment focused on other features than technical feasibility or political acceptability – the "variety" and "originality" of visions is not only emphasised but actually "searched for" which is pointing towards a more contextual approach which may create more possibilities for appreciating citizens' visions.
Expert B somehow relativises his first statement saying that he "*had the feeling that many visions were marked by the idea that they are trying to guess what the organisers expected from them*" and further: "*In some instances I felt that they were not totally free in the way they worked with very broad issues*"
The expert actually looked for original ideas which are not pre-structured by a professional context – and he obviously attempted to acknowledge the visions from this point of view.
Based on our observation of selected citizens' conferences in round 1 and 2 we would like to add that it was not our impression that citizens were pushed into a certain direction – a certain "normalisation" and "main-streaming" of visions might also have been the result of the citizens' own voting and selection as implemented in the first round. This is actually how we perceived it – the citizens' own selection resulted in a more consented and less idiosyncratic sample of visions, which was finally presented to the experts.

7.2.4. Different approaches: Content or Context related

From the initial reactions we shift now to the more general approaches which seem to guide the experts' expectations and assessments. We propose a very general typology distinguishing between a **content related** and a **context related approach** – more in-depth interviews would of course be necessary to further differentiate and expand this typology.

Expert A seemed to be primarily focusing on the contents and adopted a more pragmatic approach to the visions, concentrating at fulfilling the pre-defined task. For her group she reported that feasibility, if not there, was constructed by the experts. Expert A mentioned this in a general statement: "*If something was obviously not feasible experts tried to find solutions which come close to the vision but are feasible*". Feasibility in this approach was seen as a main focus and probably became a barrier for a deeper appreciation of citizens' visions.

In contrast, expert B immediately referred to the "context" when asked how he approached the visions: "*My first task was to try to come to an understanding of what the citizens really wanted, because that was not always easy to tell on the basis of the written visions.*" and further "*my assessment was more a*

question of trying to find out from which context do they speak and if I couldn't tell the context from where they spoke I had big difficulties coming further with the visions. I needed to find context."

Asked if he had problems to react to visions which didn't seem feasible, expert B answered: "*No, because I think that the visions were not formulated with an intention of being feasible. They were just wishes or utopian ideas and that's a good thing. But if I should work with these ideas I should be very clear about what is the wish and not just what is the idea.*"

This assumption, that feasibility is not the main focus, but rather "utopian" ideas, can not be regarded commonplace among the CIVISTI experts. The ambiguity is obviously caused by the translation of "visions" into "recommendations" and we could ask why visions should not remain visions only being enhanced by more explicit technical and political trajectories provided by the experts. It is however clear that the concept underlying CIVISTI explicitly aimed for the re-framing of visions – visions should be re-framed to fit into more concrete considerations targeted at research planning in the 8th framework programme. Some experts were focusing on FP8 and struggled with the generality of the visions and the task to translate visions into feasible options. Also on the side of citizens we noticed some irritation when commenting on the recommendations in CC2 (as documented in chapter 9). The criteria to assess a vision and a practical recommendation are simply different and the relation between both forms of accounts – from our viewpoint – never became fully transparent in the CIVISTI process. We observed however that in their practical work experts as well as citizens accepted this ambiguity and tried their best to resolve it and come to terms with their tasks. We see several reasons why participants managed to resolve this somewhat problematic aspect:
Besides the general high level of participant engagement, we think that the intensive support, the appreciation, the (necessary) strictness of the organisation and the credibility of the organisers regarding their focus on the full acknowledgement of citizens' visions helped citizens as well as experts to deal with this ambiguity. The need for full acknowledgement was clearly communicated to experts. On the basis of our observations, the interviews and the results from the questionnaire survey we can say that experts as well as citizens appreciated these efforts and therefore also took their tasks very seriously.

7.2.5. Preparation and Process

In general the feedback on the process was very positive, in particular regarding the first day of the workshop where experts elaborated their recommendations in small groups. The second day of the expert stakeholder workshop dedicated to the further elaboration and validation of recommendations was perceived a bit more critically. The observation showed that persons – due to the rearrangement of groups and the new task – again had to find a common language and approach, but this time within an even tighter schedule. Discussions which had been settled among group members the day before had to be opened up again when new persons joined the group.
Apart from these initial problems we observed a quite active engagement by new group members. Some experts however articulated their dissatisfaction with the open space process.

Expert B, who was generally very satisfied with the overall organisation, stated: "*The second day was very difficult. You had so many proposals on the table and in my opinion it might have been better to go a bit deeper into a smaller number of ideas, but of course that would have the consequence that a too small number of citizens' ideas would be approved. But I felt it was too superficial to work just on the surface*" (920) and further: "*I tried to change groups but it was not too successful. I went into a new group twice but I didn't succeed because the time schedule to connect myself to the dialogue in a productive way was too dense.*"

Two further experts mentioned that time became too short at the end of the open space process when finalising the recommendations – which in their opinion was partly caused by the need to discuss certain issues again.

Facilitators appeared to play a significant role in finalising the visions – we observed that facilitators supported the finalisation of recommendations in different ways and therefore had a significant impact on the final form – for this phase there didn't seem to be a common script for facilitators. We would highly recommend training for facilitators where these crucial phases of the process receive special attention. It

is unquestionable that the finalisation of written accounts needs guidance – for experts as well as citizens. CIVISTI facilitators surely provided this guidance, which sometimes needed to be adapted to certain group dynamics or individual characteristics, but it should possibly be more "standardised" or "routinised" and *specified for specific phases* on the basis of a special training.

7.2.6. Relation between experts and citizens

Expert B emphasised in the interview (as well as during the workshop) that the distance between citizens and experts – which he illustrated with the metaphor of a „thick wall" – was a problematic aspect of the process: "*I always had the feeling that we should have had some kind of spokesman for the visions and since we didn't have a spokesmen from the citizens at the workshop I think we had a big first task to find out what the ideas of the citizens were the wanted to communicate.*" and further: "*I missed to have the communication with the citizens because they could have easily communicated the context.*"

Also some other experts stated during the feedback round that it would be good to bring experts and citizens together or at least to have some kind of "*spokesperson*" for citizens. Expert B also mentioned videos as a possible "window" between experts and citizens. In this regard he also made the critical remark that the facilitator at his table was not present during the citizens' conference and therefore could not tell them more about the original elaboration process of the visions.

7.2.7. Objectives and translation of visions into recommendations

We already noted that the objectives of CIVISTI, while being clearly presented in the documents, had to be discussed during the expert workshop. The experts sometimes had a different understanding about what they should discuss and how the results of the discussion should look like. Some experts focused on the aspects of the recommendations which reflected the view of the citizens, other experts focused more on the outcome and the influence the recommendation should/will have on FP8. The difficulties to actually define the target audience of CIVISTI which was experienced by some of the experts might also have been caused by the ambiguities underlying the translation of "visions" into "recommendations" as described earlier.

During the feedback round an expert mentioned this difficulty stating for instance that the citizens formulated "long-term" visions, which could not be understood very well by experts. Another expert pointed out the obvious dominance of social, environmental and quality of life issues and supposed that it was more difficult for citizens to develop technical visions – which would probably fit better into the S&T framework of the whole project. In our mid-term report we already pointed out that CIVISTI made no attempts to find a balance between "social" and "technical" issues and definitively didn't emphasise technical issues in CC1. The same expert voiced the general opinion that S&T issues would be less attractive for citizens (also for younger generations). Another expert stated that he would have liked to emphasise the focus on influencing the framework programme – which he himself lost during some phases of the workshop. And finally the general difficulty of moving from the visionary to the pragmatic was mentioned.

Concluding, we can say that there was some irritation regarding the translation process and the envisaged outputs at the beginning of the workshop which could however be practically resolved allowing the experts to concentrate on their tasks.

7.2.8. Outcomes

During the feedback round outcomes were not discussed in detail. One experts mentioned that recommendations remained "on the surface" – which was explained by another expert as being a consequence of the fast switch between different visions, which didn't allow experts to go into much detail.

In our interviews we asked both experts if they could imagine that the recommendations would have been elaborated by a round of experts alone without the input of citizens' visions and what the difference to the actual recommendations would have been.

Expert B answered to this question: "*We would have seen more mainstream research proposals if it had only been elaborated by experts. Of course not all of the visions but some of the visions really brought in what many experts would initially call unfeasible. But since we gave ourselves time to work with it those more non-mainstream ideas got a chance to become promoted. So in general I think the idea of asking citizens about future research priorities is a good idea and it added something in this processes here.*" Thus, expert B saw an added-value which is connected to the non-conformity of citizens' visions with institutionalised expert discourses.

Expert A was more doubtful about the actual added value. Asked if she would see an added value to her work as an expert in the specific case of CIVISTI she answered: "*In my professional work I wouldn't, but I wouldn't say that my participation was absolutely useless. If we are speaking about my personal feeling I think it was useful from the point of view of networking, meeting all those splendid people, talking to them, meeting them. It was good to be together.*" Furthermore, expert A had the feeling that "*there were many recommendations we just prepared to prepare something, because every vision had to result in a recommendation to be able to present them to the citizens who prepared them and in some cases we wouldn't have prepared these recommendations.*" This is a very honest statement, which should however not be misunderstood as a complete disregarding of the qualities of CIVISTI which the expert could appreciate.

We certainly do not want to put too much weight on two expert interviews not having a response from all of the experts. For us this single negative assessment of the added value however points to general difficulties connected to citizen participation and also to the fact that experts themselves have to be prepared for working with citizens. In our opinion and based on observations and the results from the questionnaire survey CIVISTI did - on the organisational side - everything to enhance the quality of citizens' visions. If open participation without exclusive criteria regarding the "qualification" of citizens should remain a normative and methodological starting point, new strategies would have to focus on the pre-defined tasks for citizens and how these tasks could be adapted to allow both citizens and experts to develop a stronger thematic focus, a clearer objective and a greater contextual sensitivity. This also includes general considerations on the "added-value" we expect from citizens' inputs and how the ambiguity which accompanies "translation processes" can be reduced.

7.2.9. Facilitators

Both interviewees were very satisfied with the work of their facilitators. Expert A mentioned that the facilitator understood well to support the preparation of the deliverables and cared about time management, while also bringing her opinions to the discussion. Expert B perceived the facilitator more as a „secretary" than an active participant: "*In my group they mainly had a role as secretaries, rather passive, but that was due to the situation that our professional facilitator had not been participating in any of the workshops. I would have preferred a professional who had been more involved in creating the visions and I would have wanted that the professional could be a kind of advocacy for the citizens ideas but they were not because they didn't know the ideas better than I did. They became a secretary, but very clever secretaries, very good secretaries, it is not a critique of the task they did.*"

Expert B in this regard repeats his constructive criticism that the connection between citizens and experts could have been organised differently. He obviously could imagine that facilitators could take on the role of citizens' advocates.

Our observation confirms that all facilitators fulfilled their roles very well. Facilitators were appreciative of the efforts of experts and managed to combine their opinions achieving a consensus in the end.

The overall organisation was mostly perceived by experts as being excellent. While expert A told us that she never experienced such a strict schedule in a workshop before, she stated that the organisation was "*absolutely fantastic*". Expert B had a similar perception: "*I think the pedagogical and organisational performance was perfect*". Similar remarks were also recorded from the final feedback round at the workshop and can be confirmed by our observation.
The strictness of the schedule – for CC1, CC2 and the expert workshop – can also be confirmed by our observation, but also its necessity, the exemplary implementation and the high acceptance on the side of participants.

7.3.   Summary of findings

- The overall organisation of the expert-stakeholder workshop was very good – despite the problems caused by the cancelation of the first date due to the "ash cloud".

- CIVISTI solved the problem of thematic clustering of visions and group composition regarding the professional backgrounds of experts quite well – despite the high heterogeneity of visions. The majority of groups was composed of different professional backgrounds (social sciences/technical and nature sciences; scientists/practitioners) – While it is desirable when visions are discussed from different perspectives and different professional knowledge is included in the recommendations, it also has some "costs", because experts need to find a common language and starting point. More homogeneous groups seemed to be able to start with constructive work more quickly.

- Experts approached visions differently. We proposed a typology which distinguishes between a content related and a context related approach. There is some indication that social sciences are more inclined to a *context* related approach (attitudes, values) while technical/nature sciences are more inclined to a *content* related approach (means, objectives) to citizens visions. Context related approaches help to appreciate the work of citizens and stick to their ideas, while content related approaches might have been more oriented on achieving the task of creating "usable" recommendations – It has to be reflected which approach fits better into a given concept and how it relates to the defined objectives. Thus, training for experts could probably increase the understanding, the work process and the quality of outcomes.

- The translation of "visions" into "recommendations" seems to have some problematic aspects. The criteria to assess a vision and a practical recommendation are simply different and should have been reflected in more depth during the CIVISTI process. We observed however that in their practical work experts as well as citizens accepted this ambiguity and tried their best to resolve it and come to terms with their tasks. Besides the general high level of participant engagement, we think that the intensive support, the appreciation, the (necessary) strictness of the organisation and the credibility of the organisers regarding their focus on the full acknowledgement of citizens' visions helped citizens as well as experts to deal with this ambiguity.

- Facilitators played an important role during the finalisation of recommendations. We would recommend training for facilitators where crucial phases of the process receive special attention. It is unquestionable that the finalisation of written accounts needs guidance – for experts as well as citizens. CIVISTI facilitators surely provided this guidance, which sometimes needed to be adapted to certain group dynamics or individual characteristics of individuals, but it should possibly be more "standardised" or "routinised" and specified for specific phases on the basis of a special training.

- While open participation is normatively desirable and while it may have further advantages regarding the variety of themes – it must also be reflected in terms of the perceived and

expected output quality (visions/recommendations), the necessary skills (in particular working with text) and the participation pattern (drop-out rates).

- The connection between citizens and experts could have been organised differently although we understand the decision of the CIVISTI consortium to separate citizens and experts and thus to avoid a strong expert influence on citizens' visions. In addition to separated sessions, where both groups can work independently, we would propose to think about further sessions where interaction can take place. This would create new experiences for both groups.

- However, since visions from different countries were mixed up, we are aware that a facilitator couldn't have possibly known the elaboration process of all of them. Furthermore, one could think about other ways of better connecting experts and citizens – video presentations or a "spokesperson" function could for instance be used.

8. The second round of Citizens' Consultations (CC2)

In this chapter we will present the results from the questionnaire survey including all participants of the second round of the CIVISTI citizens' consultations (CC2) as well as our observation of the second round of citizens' consultations in Austria and Malta.

8.1. Questionnaire survey for CC2

For CC2 we developed a new questionnaire which should collect basic information on citizens (demographic data) which will be used to investigate the composition of the second "wave" of participating citizens, the general satisfaction with the CIVISTI outcomes, the organisation, the facilitators and the setting and more specific information on the citizens' perception of the experts' recommendations. The validation of the recommendations was the core task of CC2 and we intended to use the questionnaire survey for the purpose of collecting a general feedback on certain dimensions of the recommendations from all the citizens. The questionnaire was answered by all 87 participating citizens in CC2.

The first observation, which has of course already been critically reflected by the consortium during the project, is the relatively high "drop-out" rate between CC1 and CC2. In several countries only about half of the persons who participated in CC1 participated again in CC2. The consortium decided – out of good reasons – not to invite new citizens to CC2, which were not involved in CC1. We also think that it would have been difficult for new participants to orient themselves among the visions, recommendations and also the other participants. To some degree a certain drop-out was expected – not least due to the long interval between CC1 and CC2 (over 1 year). Similar experiences have been made in panel studies or quasi-experimental designs. Nevertheless, the drop-out rate is relatively high, despite the very high satisfaction levels of citizens we recorded for CC1 in Austria and Bulgaria (first questionnaire survey) and the very positive verbal feedback from citizens.

According to the information provided by participating citizens they had been contacted at average 4.6 times (exact mean) between CC1 and CC2 and the majority of those who participated also stated that they were well or very well informed on the ongoing process (see Figure 24).

	Participants in CC1	Participants in CC2	drop-out (absolute)	drop-out (percentage)
Austria	24	**9**	-15	-63%
Belgium	21	**11**	-10	-48%
Bulgaria	25	**18**	-7	-28%
Denmark	24	**10**	-14	-58%
Finland	23	**16**	-8	-35%
Hungary	22	**14**	-8	-40%
Malta	25	**9**	-16	-64%

Next we will have a look at the basic demographic data. As shown in Figure 18 the gender distribution is with 43% women and 57% men relatively balanced, men being slightly overrepresented in CC2. Also the age distribution is balanced – in this regard CIVISTI also achieved in its second round to include younger persons (below 25), elderly persons (above 66) as well as the "working population" (see Figure 19).

Figure 18: Gender (N=87)
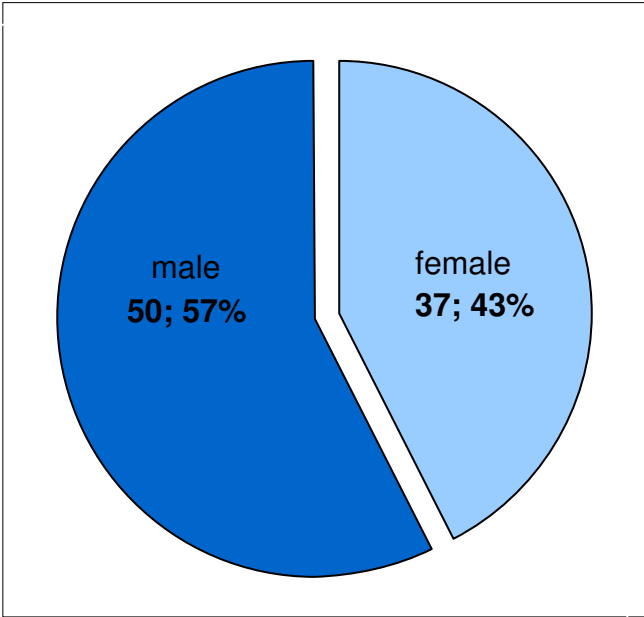
Figure 19: Age distribution (N=86, 1 missing)
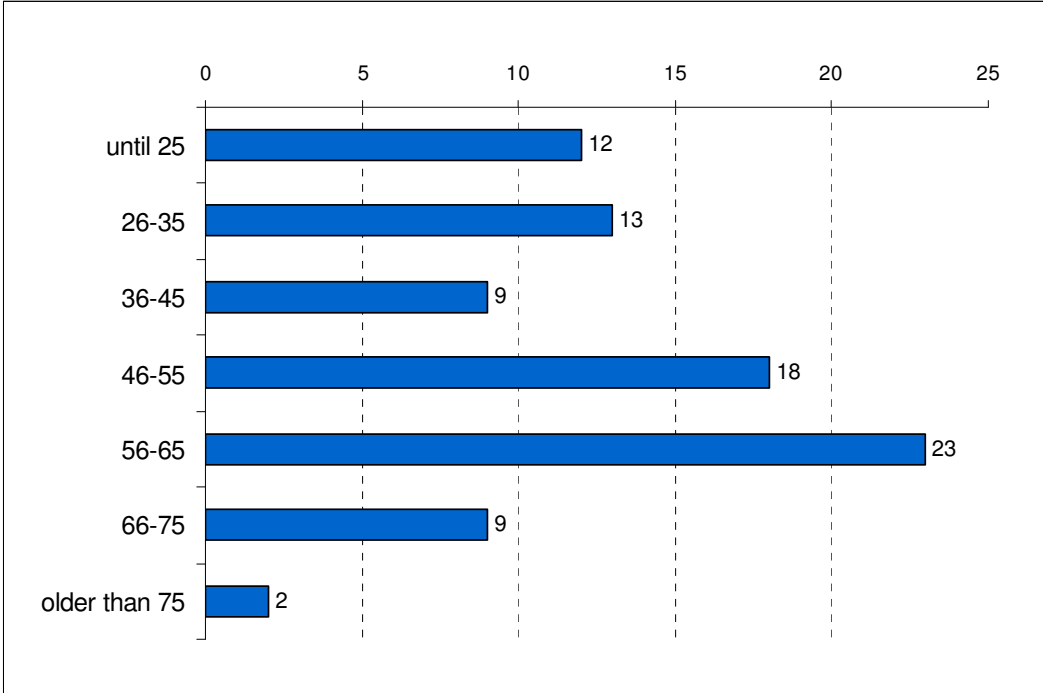
In contrast, the distribution of the highest completed educational attainment is leaning towards ISCED 5, which comprises university related education. Our impression was that CIVISTI probably experienced a systematic drop-out with a higher probability of participating a second time for persons with higher education. This issue was discussed with the consortium during the presentation of the final report – several partners emphasised that in their perspective the drop-out was rather random and associated to a multiplicity of factors and not only or primarily to educational background. Potential participants had of course been contacted before CC2 so that organisers usually had the information why participants could not come. Given the small size of the sample in each country it is indeed difficult to rule out a random drop-out on this level. We think however that there is at least a weak overall tendency that drop-out is connected to education.

For Austria and Bulgaria we can compare CC1 with CC2 as shown in Figure 21. Bulgaria is probably not the best illustration because it showed a dominance of higher educated participants already in CC1. What we see however is that in both countries CC1 participants with ISCED levels 1 and 2 didn't participate in CC2. While we don't have CC1 data for the other countries the country comparison for CC2 as shown in Figure 22 supports the assumption that the other countries have seen a similar trend.

Figure 20: Highest level of educational attainment (N=86; 1 missing)

ISCED* Categories:

ISCED 1: First stage of basic education; Primary education

ISCED 2: Second stage of basic education; Lower secondary education

ISCED 3: (Upper) secondary education

ISCED 4: Post-secondary non tertiary education

ISCED 5: First stage of tertiary education

*International Standard Classification of Education
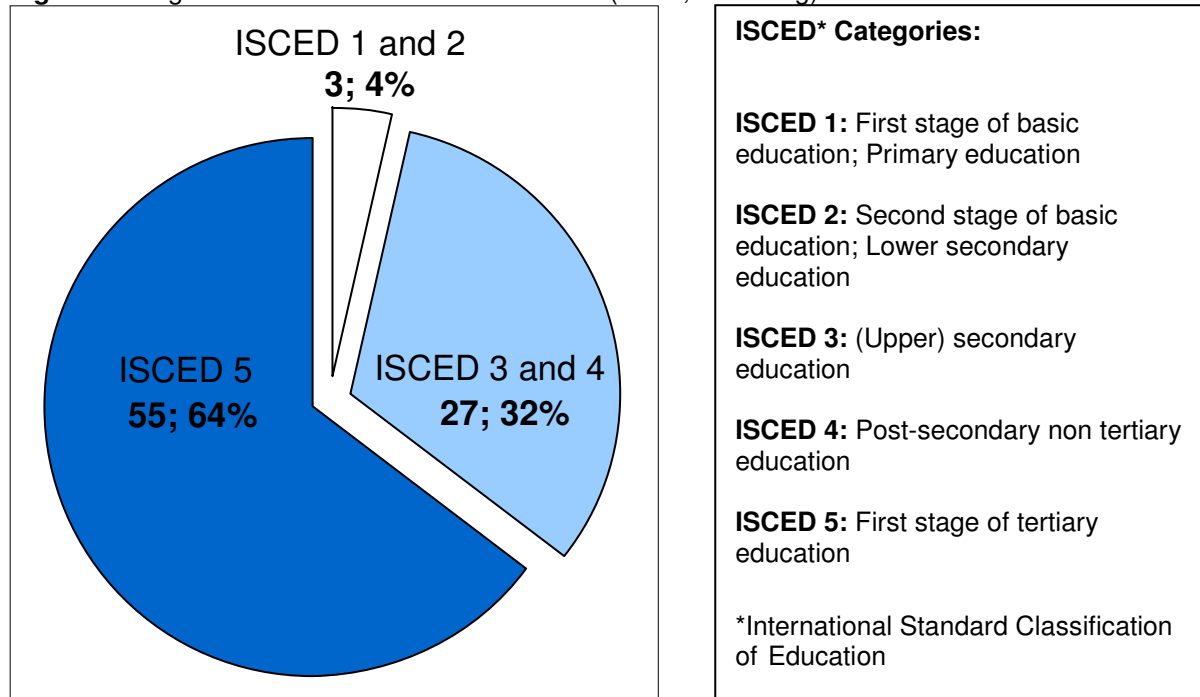
Figure 21: ISCED level distribution: Comparison between CC1 and CC2 for Austria and Bulgaria
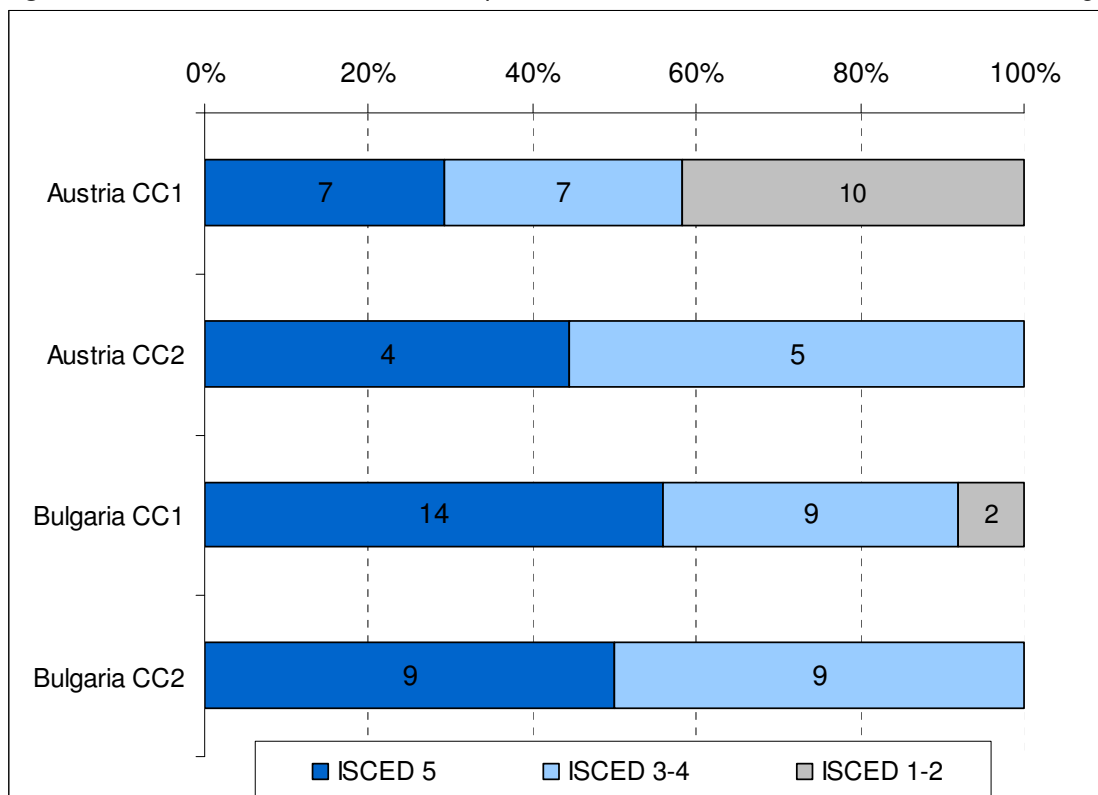
Figure 22: Country comparison: ISCED distribution (N=85, 2 missing)
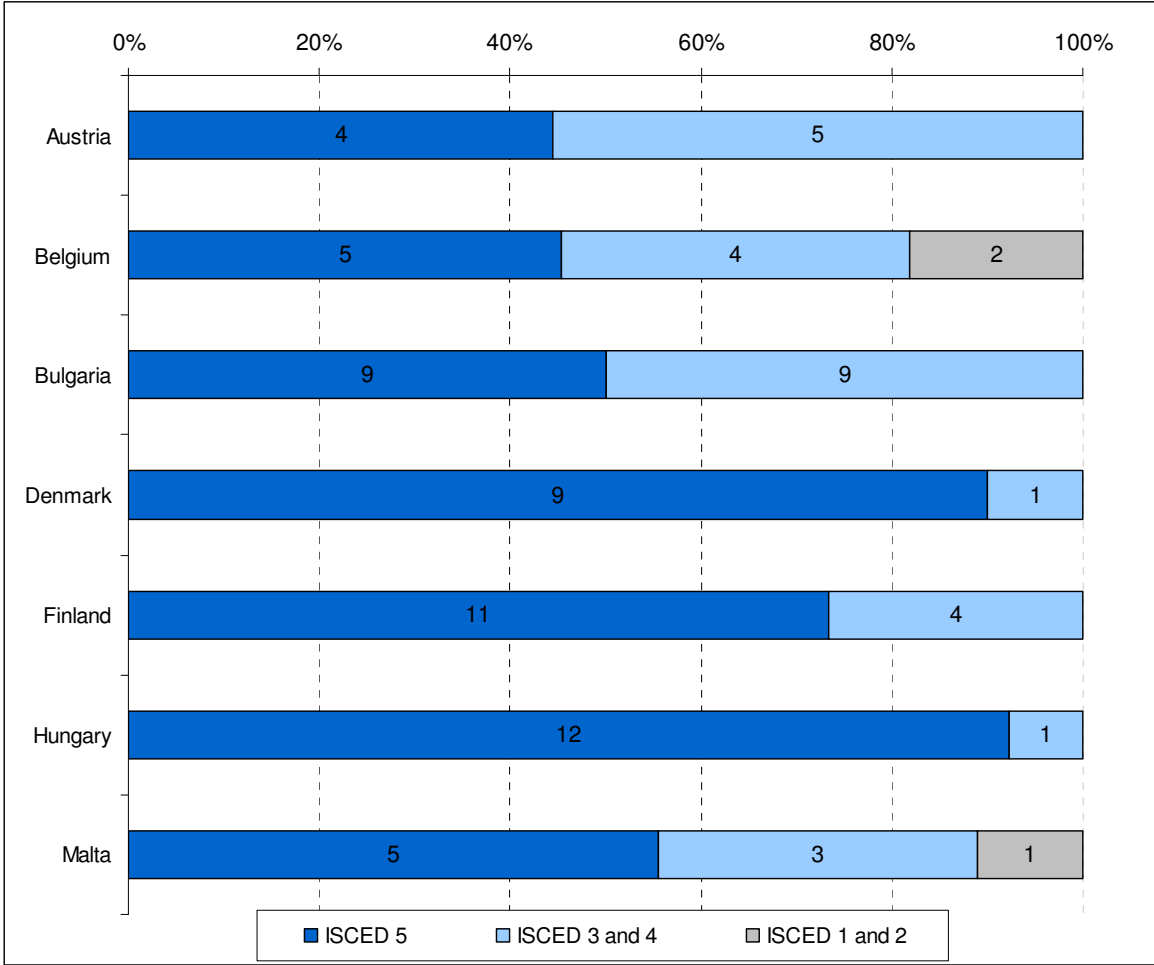
The next figure provides an overview on employment status and other typical activities (see Figure 23). Persons could indicate more than one activity resp. status but did so in only very few cases. Therefore we simply show the distribution of activities for all participants. 46% of participants stated to be in employment, 8% stated to be unemployed. Pensioners (20%) and students (13%) are also represented.

Figure 23: Current situation

Please indicate which of the given categories best describes your current situation. Multiple answered are allowed.

- 9; 9%
- 2; 2%
- 12; 13%
- 43; 46%
- 19; 20%
- 2; 2%
- 8; 8%

Legend:
- ☐ Employed
- ☐ Unemployed
- ☐ Housework
- ☐ Pensioner
- ☐ Student
- ☐ Maternity leave
- ■ Other
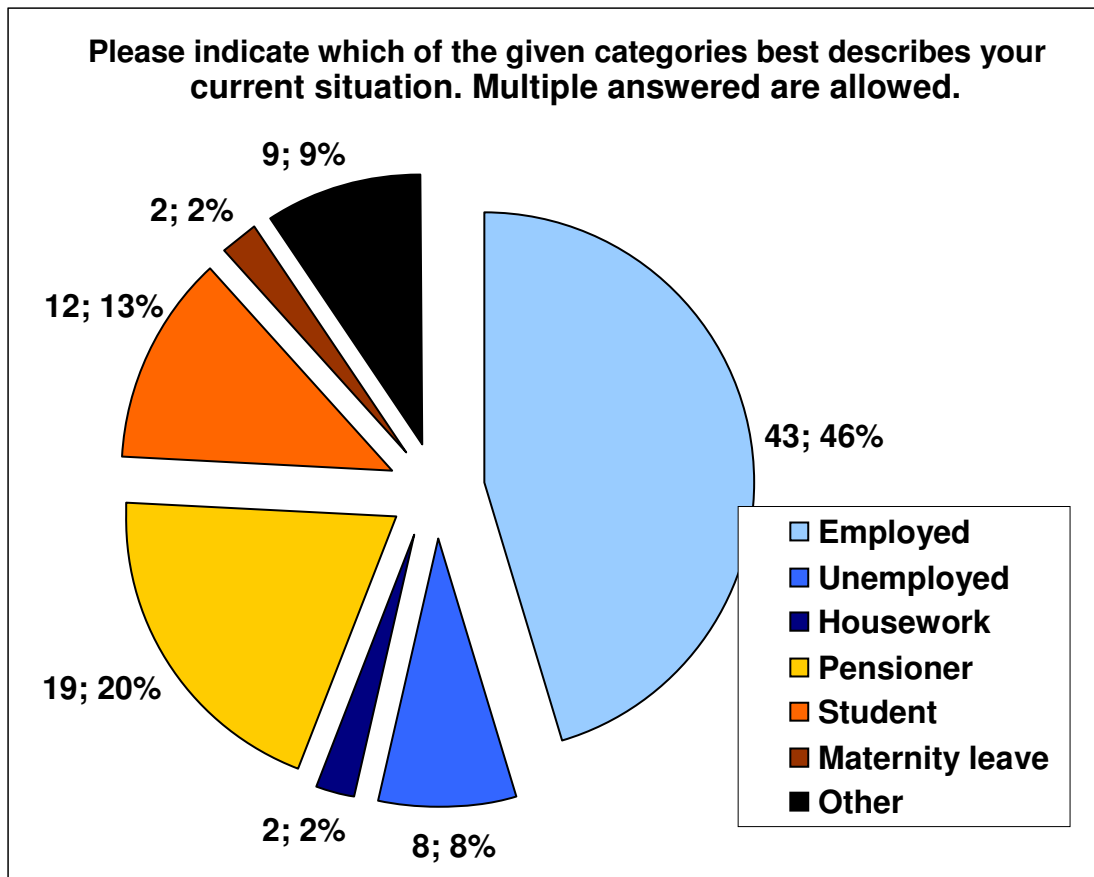
Figure 24: Information (N=87)

How well have you been informed about the purpose of the second CIVISTI meeting in advance of the meeting

Very well informed	49
Well informed	32
Hardly informed	6
Not informed at all	0
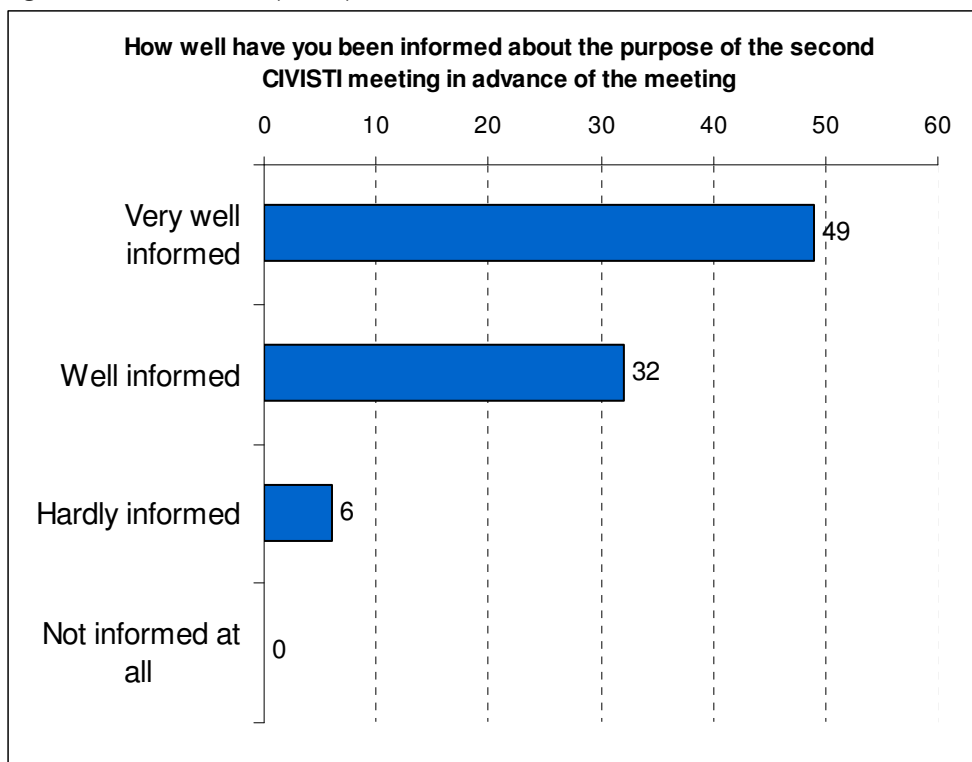
We now move on to the content related part of the questionnaire, where we asked citizens for pre-defined aspects to which degree these were considered in the experts' recommendations in their opinion. These aspects were necessary technical and social developments, citizens' ideas and positive or negative impacts on society. For most of these dimensions a majority of citizens thought that they had been at least adequately considered. The only exception is the dimension "possible unfavourable impacts" where a majority actually thought that they were considered inadequately. An important aspect was of course if citizens had the feeling that their ideas were considered. 19 thought they were considered very well, 37 thought adequately, but there were also 24 participants who thought that citizens' ideas were inadequately considered. We conclude that the general perception in this regard was positive, even if not "ideal" – given that considering citizens' visions was a basic task for experts.

Figure 25: Assessment of recommendations 1/3

We would like to know your opinion on how well the following aspects have been considered by the experts in their recommendations.

The technical developments which are necessary for successful implementation of the recommendations: 13 | 57 | 12 | 5

The basic ideas of the citizens' visions: 19 | 37 | 24 | 2 | 2

The social developments (e.g. policies, social movements) which are necessary for successful implementation of the recommendations: 18 | 41 | 19 | 3 | 4

The positive impacts on society: 21 | 46 | 11 | 2 | 6

Possible unfavourable impacts which may be caused by the implementation of the recommendations: 4 | 30 | 35 | 7 | 10

■ Very well considered ■ Adequately considered ■ Inadequately considered ■ Not considered at all ■ I don't know

In another question block we combined positive and negative statements on the recommendations and citizens should indicate for how many cases of recommendations these applied in their opinion. We decided to use the categories "in all cases", "in many cases", "in some cases", "in hardly any cases" and "never" because we wanted to avoid forcing citizens into a general attitude towards all recommendations assuming that assessments would be quite different from one to another. For the presentation in this report we combined positive (Figure 26) and negative statements (Figure 27). We see that a majority of citizens agreed to three of these positive items for "many" or "most cases". The exception is the item "the experts' recommendations make me feel more confident that the visions can be achieved" where the assessment was a bit more sceptical, whereas not negative. Furthermore, citizens had the strong impression that they had equal chances to voice their opinions, which shows that CIVISTI achieved to create a high level of engagement and "inclusion".

Figure 26: Assessment of recommendations 2/3
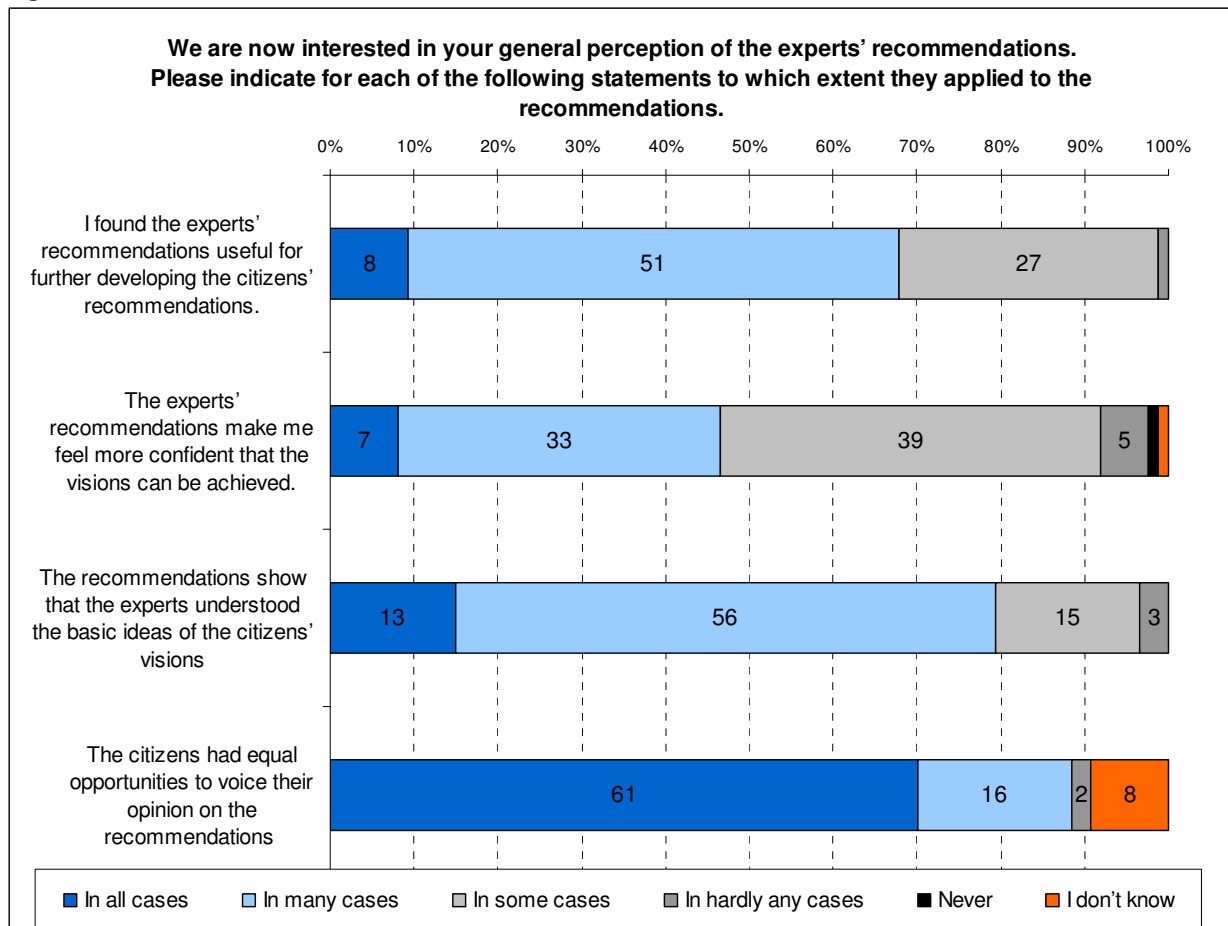
For the negative statements in Figure 27 we see a similar picture (only reversed). An important result is that the majority of citizens didn't seem to have problems in understanding the recommendations.
It seems that citizens would have generally enjoyed being able to discuss recommendations directly with experts. 10 citizens would have preferred to discuss recommendations with experts in "all cases", 18 in "many" and 29 in "some" – given the strong meaning of the term "preferred" this is a clear signal that a group of considerable size missed the possibility to talk to experts about the recommendations. Furthermore, we asked if the experts' recommendations neglected important aspects of the visions. 17 citizens agreed to this statement for "many cases" and 41 citizens for "some cases". We conclude that a majority of citizens did see some neglected aspects, but in most cases this concerned specific recommendations and not the recommendations in their totality.

Figure 27: Assessment of recommendations 3/3
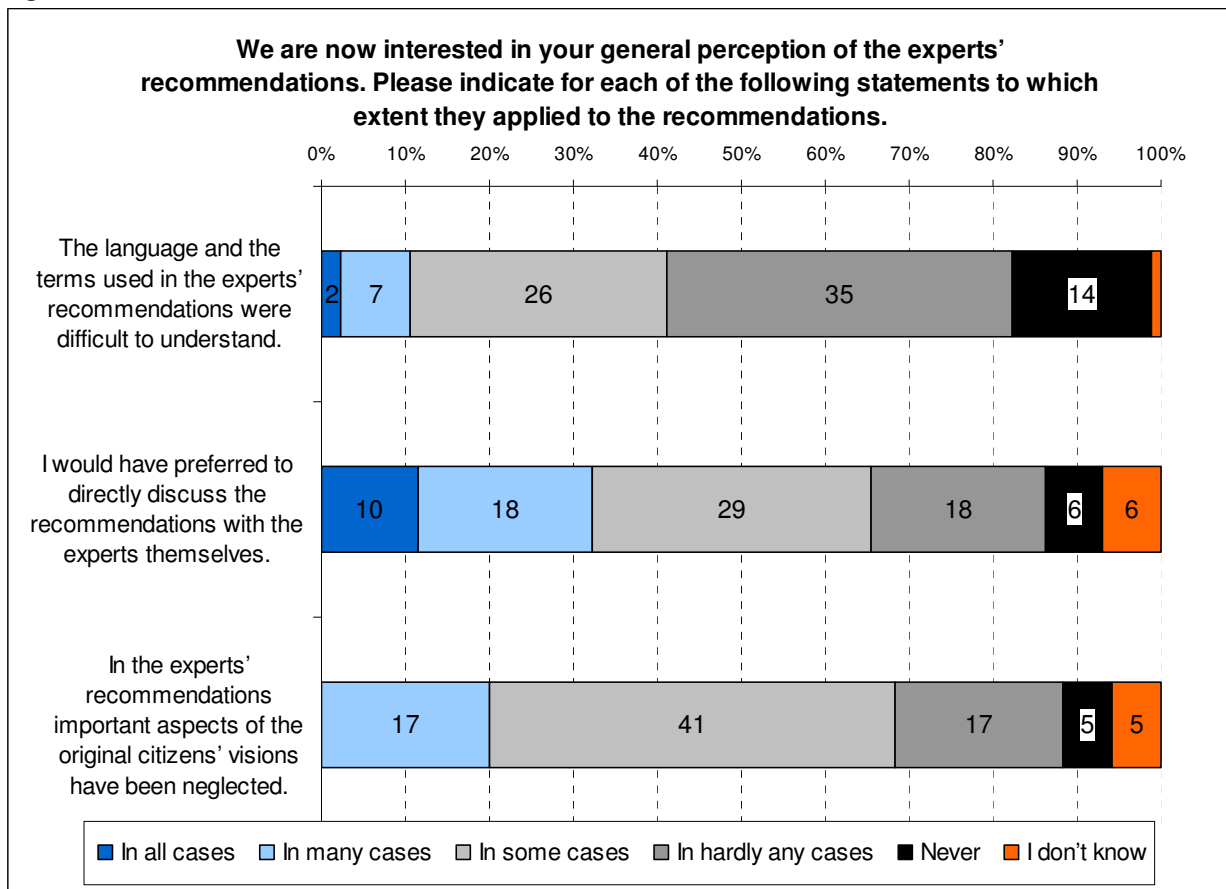
The satisfaction with the final outcome can be regarded to be high as shown in Figure 28. 32 citizens have been very satisfied, 52 very rather satisfied – only 2 persons were rather unsatisfied. The expectation of practical outcomes in terms of influencing the future research agenda of the EU mirrors these results, albeit being a bit more contained (see Figure 29). The vast majority of citizens think that outcomes will have an influence, which actually indicates quite a lot of trust and confidence. Only 3 persons think that outcomes will have no influence at all. Thinking of all the criticism towards the EU of being far away from citizens or being too bureaucratic it seems that hopes are high in this case that citizens voices will have some weight. And finally we have a very strong statement by citizens: The vast majority thinks that Citizens' Conferences such as CIVISTI should be arranged on regular basis (see Figure 30).

Figure 28: Satisfaction with final outcome (N=87)
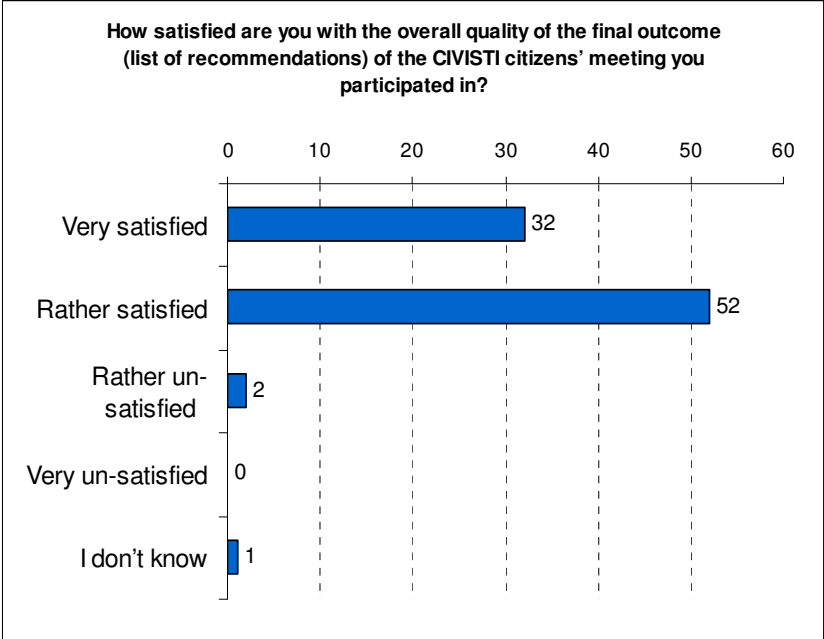
Figure 29: Influence on research programmes (N=87)
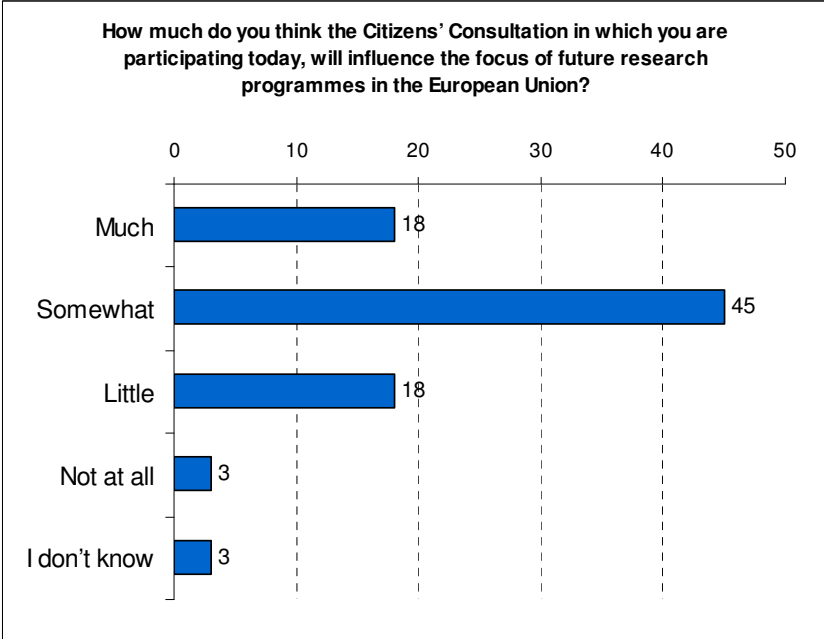
Figure 30: Regular implementation (N=87)

Do you think that Citizens' conferences such as this one should be arranged on a regular basis to guide decisions in research planning?

Yes	82
No	2
I don't know	3
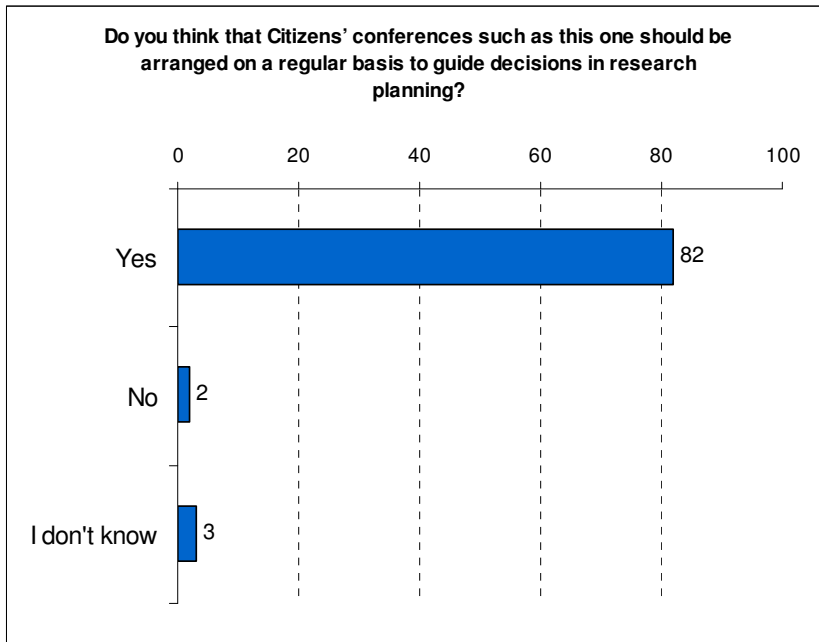
The last figure shows the overwhelmingly positive assessment of the organisation including the overall assistance, the structure of the agenda, the work of the facilitators, the working atmosphere and the setting. The quality of group discussions was also assessed very positively (see Figure 31).

Figure 31: Assessment of the organisation, the facilitators and the setting (N=87)

Here we would like to have your opinion on some organisational aspects of the second citizens' conference. Please indicate how satisfied you were with the following aspects:

	Very satisfied	Rather satisfied
Overall assistance from the organizers	85	2
Structure of the agenda	67	18
Quality of the group discussions	59	25
Work of the facilitator(s) at your table	74	11
Working atmosphere	80	7
Setting (surroundings, equipment, arrangement of group tables, acoustics, etc.)	78	9

Legend: ■ Very satisfied ☐ Rather satisfied ☐ Rather un-satisfied ■ Very un-satisfied ■ I don't know

Summary of findings:

- The level of satisfaction with the final outcome was high.

- Citizens generally have the expectation that their work will influence the planning of research programmes on European level, albeit to a rather moderate extent.

- Nearly all citizens answered "yes" to the question if Citizens' Conferences such as CC1 and CC2 should be arranged on a regular basis.

- The assessment of the organisation including the overall assistance, the structure of the agenda, the work of the facilitators, the working atmosphere and the setting was overwhelmingly positive. The quality of group discussions was also assessed very positively.

- There was a relatively high "drop-out" of participants between CC1 and CC2. In several countries only about half of the persons who participated in CC1 participated again in CC2.

- CIVISTI probably experienced a systematic drop-out, with a higher probability of participating a second time for persons with higher education. This issue was discussed with the consortium during the presentation of the final report – several partners emphasised that in their perspective the drop-out was rather random and associated to a multiplicity of factors and not only or primarily to educational background. Potential participants had of course been contacted before CC2 so that organisers usually had the information why participants could not come. Given the small size of the sample in each country it is indeed difficult to rule out a random drop-out on this level. Despite these legitimate replies we think that there is at least a weak tendency that drop-out is connected to education.

- Participating citizens were however regularly contacted between CC1 and CC2 (at average about 5 times) and the vast majority was well informed on the process of CIVISTI before CC2.

- The citizens' assessment of the experts' recommendation showed that they generally thought that experts considered the most important dimensions (technical and social developments, citizens' ideas and positive impacts on society). An aspect which was not considered at the same level was "possible negative impacts on society" – which is however not the most crucial dimension.

- More important seems to be that a majority of citizens thought that citizens_ ideas had been considered adequately. There are however also citizens (about 25%) who stated that citizens' ideas were not considered adequately.

- It seems that citizens would have generally enjoyed being able to discuss recommendations directly with experts. 10 citizens would have preferred to discuss recommendations with experts in "all cases", 18 in "many" and 29 in "some" – given the strong meaning of the term "preferred" this is a clear signal that a group of considerable size missed the possibility to talk to experts about the recommendations.

- The majority of citizens had no problem in understanding the experts' recommendations and the language experts used.

8.2. Description of the CC2 process in Austria and Malta

CC2 in Austria and Malta followed the general time schedule very closely. CC2 was planned as a 1-day session and consisted of an update on the past and current activities associated with CIVISTI, an introduction to the expert-stakeholder workshop (including a presentation of the objectives and the agenda), the validation of recommendations associated with national visions as the main part, a presentation of these validations and after lunch the presentation and prioritisation of all 30 recommendations which were elaborated by the experts followed by a final presentation and discussion of results and the evaluation procedure (participants filled in the questionnaire).

In Austria the consultation took place during the week on a Friday (15th of October) and in Malta on a Saturday (2nd of October).

Both settings were well chosen and provided everything participants would need to work and to feel comfortable. In Austria this was the "Festsaal" of the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management and in Malta the Villa Bighi right at coast of Kalkara.

In both countries the number of participants was rather low: In Austria 9 from initially 22 persons participated in CC2 and in Malta also 9 from initially 25.

In both cases several people dropped-off in the last minute due to very different reasons, including illnesses, job obligations, family obligations, etc.

In both countries facilitators had to wait a bit until the last participants finally arrived. Due to the small number of participants facilitators in both countries decided to divide participants into two groups whereas every group should discuss all recommendations associated with national visions. The setting in Austria was probably a bit more adapted to group work, with two dedicated group tables. In Malta the tables were arranged in typical conference style. For group discussions participants were sitting in two circles of chairs.

In both countries 3 recommendations were validated.

Recommendations validated in AUSTRIA:

Recommendation 1: Humanistic Research
Participatory research (anthropological) of an aging population in a post-traditionalist and post-religious environment should be done 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.

Derived from vision 7 - Being allowed to die in dignity, a companionship of dying in a network of family and relatives
Related to the death passport – vision 11.
Related to Aging Man/Woman as a Resource - vision 33

Recommendation 2: Tools for Disabled People
A policy which investigates the state of the art in the development of tools for disabled people. In other words, how far along are we in creating tools for disabled people.

Derived from vision 9 - Disabled people as fully valuable members of the society

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Recommendation 3: European TV – unity in diversities. A permanent lab for experimentation on building and expressing identity (IdenTVLab)
TV that contributes to the creation of different forms of European identity and to the cooperation of diverse cultures especially through the establishment of an experimental platform for collaborative projects developed by kids and youth.

Derived from vision 10 - TV for the creation of a European identity

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Recommendations validated in MALTA:

Recommendation 1: World wide collaboration on space technology
Space transportation (orbit and other planets)

Derived from vision 60 - Outer Space Exploration for Future Solution

Recommendation 2: Project to explore global governance.
Explore conditions for transnational governance working for global justice and peace.
Start looking at EU institutions in the first phase.

Derived from vision 63 - A Brighter Future – or Just a Dream?

Recommendation 3: Stimulate research on human machine interface
by all natural human communication channels and brain interface.
Pre-process unstructured data (gesture, video, language) and provide the results to humans via brain interface to stimulate the interpretation of information but not to replace it.

Derived from vision 69 - Natural Access to ICT Services Everywhere!

8.3. Findings from the observation

8.3.1. Update and Introduction

In both countries the update and introduction was welcoming and comprehensible. Participants seemed to understand the focus and objective of the second meeting very quickly. In Austria the general introduction was followed by an input by the Austrian expert Andrea Höglinger (FFG) who participated in the expert-stakeholder workshop. She talked about her experiences during the workshop and tried to explain to participants how the experts approached their visions. In Malta no expert could be present.

8.3.2. Reading exercise

Following a short presentation of the recommendations citizens were asked to read both the visions and the recommendations again. The exercise of reading everything again, albeit necessary, also seemed to be a bit "tedious" for participants in particular right at the beginning of the conference. People really had to concentrate on the text and had to read both the recommendation and the vision at the same time thinking about the relation between the two. This was a quite demanding task and supposedly particularly difficult for persons who are not used to work with such texts.

In any case it seemed to be necessary to have more time for comparing the visions with the recommendations. Participants in both countries actually resolved that difficulty in the ongoing discussion, but a dedicated comparison exercise with discussions would have made the whole process more transparent.

The format of the handout (recommendations, visions) was slightly different in Austria and Malta. In Austria visions and recommendations were stitched together, whereas they had been separated in Malta, which left the decision what to read first and how to compare up to citizens. The reading exercise already revealed some confusion on the relation between visions and recommendations and how/if they should be compared. In both cases citizens had about one and a half hour time for the validation exercise.

8.3.3. Group composition

The group compositions were achieved rather randomly. In Malta the assignment was actually not very well balanced. There was one group with four young man (all involved in higher education) and one middle aged man and another group with 2 middle aged men, one middle aged women and an elderly man. However, having such a small sample of persons it is difficult to achieve a good composition, but we think that the young men should have been assigned differently. For the following group dynamics it is however difficult to say how they have been influenced by composition.

Due to the drop-out of participants between CC1 and CC2 several original authors of the visions were not present anymore and could not further elaborate their ideas – visions seem to need a person who acts as a "champion" and has an original motivation to think about the vision. If this person was not present other citizens obviously faced difficulties in adapting their interests and their knowledge to the discussed visions. Also the written account of a vision is often not enough to understand the underlying values. This points to the problem of avoiding high drop-out rates between the conferences, a problem which is difficult to solve. A comfortable environment, a good participation experience and a good organisation don't seem to be enough. An issue here might be the time intervals between conferences which seemed to be unnecessarily long in the case of CIVISTI. Citizens had to wait for more than a year for CC1 while only 1 workshop had to be arranged in between. We think that such a time frame could have been more tightened to ensure a much faster follow-up conference.

8.3.4. From single to group work – or the other way round?

After the reading exercise the Austrian participants were advised to think about the first dimension of the validation and to fill their comments and quantitative assessments in the template. This meant beginning with a single exercise and then moving on to the group exercise, which was the same process as in CC1 when citizens started with their single vision and then formed groups. This allowed citizens to concentrate on their own perspective before engaging in discussions. We think that this approach is among the strongest features of the CIVISTI concept. The differences between citizens regarding their outspokenness and eloquence or simply their level of general engagement are significant – In Malta, but also in Austria we observed group discussions quickly becoming dominated by more eloquent speakers or speakers which were through their profession or education stronger related to the topics of CIVISTI. Therefore, it is important that all citizens have time to make up their mind and formulate their opinions on their own.

In Malta the succession was reversed staring with the group discussion which was followed by the individual assessment. This meant that participants were engaged in discussion and consensus finding before having made up their own mind – the group discussions in this first phase were not very dynamic. It actually seemed to be too early for participants to have a clear opinion on the recommendations. The ambiguity of the relation between vision and recommendations became visible – citizens sometimes skipped their frame of reference and were not completely clear about the meaning of the assessment criteria. This seemed to be the same for Austria and Malta. In Austria this became evident when the individual quantitative assessments were discussed – people assigned different "numbers" but actually had a different frame of reference – sometimes they meant the vision, sometimes the recommendation – and also assessment criteria had to be discussed. In Austria this process was better accompanied by the facilitators, whereas the group discussions in Malta were not being moderated in the beginning.

The output from these first sessions was more thoroughly discussed in Austria; also the individual assessments and the differences in participant's opinions became much more visible. In Malta participants had difficulties (at least the group we observed) to fill in their individual templates *after* the group discussion and – as far as we could see – didn't write down very much.

The Maltese facilitators however reacted to this situation and observed and supported groups more intensively after the first sessions.

In Malta the group composition as well as individual characteristics of participants also seemed to be responsible for a somewhat slow start into the first exercise which had nothing to do with the behaviour of the facilitators. People felt comfortable but were at the beginning rather calm and contained. This might also be connected to language skills – while English was chosen as the working language, several participants didn't seem to feel completely confident when speaking in English and their command of the English language was not as good as one would expect from Maltese citizens (independent from educational background). Citizens clearly seemed to articulate themselves more confidently when skipping to Maltese, which one group constantly did after the first session. Then discussions became livelier, but the communication with the facilitators still had to happen in English.

8.3.5. Relations between recommendations and visions

We anticipated that the differentiation between recommendations and visions could cause some irritation, in particular in cases where recommendations strayed from the original visions including different contents or values.
The assessment categories didn't take into account the multiplicity of relations which can exist between a recommendation and a vision. In several instances the context of assessment seemed to remain unclear – for instance: a vision describes the implementation in much detail and the citizens would like to give it a high score, but the recommendations didn't take this implementation into account (out of whatever reasons – sometimes probably because of the lack of time to elaborate comprehensive recommendations). This causes a dilemma for the citizens being "forced" to give a low score based on the recommendation while he/she supports the vision. It is not clear how and to which degree this ambiguity actually influenced the final result of the quantitative assessment. The discussions together

with the facilitator after the single exercise (as organised in Austria) in any case played an important role in reflecting on the assessments and the criteria once again – some assessments were also re-adjusted by citizens themselves during these discussions.

8.3.6. Recommendations research oriented / Visions action oriented

When discussing the expert-stakeholder workshop we pointed out some difficulties the experts experienced when having to translate a vision into a recommendation respectively to skip from the visionary to the practical. The "practical" so to say actually seemed to be what citizens were expecting. Recommendations however were in many instances *research* related, pointing out necessary research trajectories (which was part of the official task the experts were assigned with) while visions sometimes comprised rather detailed *practical implementation paths* which we can confirm from our comparisons. In this regard the citizens seemed partly "disappointed" with the recommendation which lacked the substance of the original vision. Research trajectories were sometimes elaborated in a very general way – for instance pointing out that social science research should be financed to further explore a topic. I remember a citizen humorously commenting that probably experts would create new work and financing opportunities for themselves in proposing these trajectories. While this is of course only a funny side remark it points to the fact that the pre-defined tasks and aims of experts and citizens didn't completely match – expectations on the side of citizens seemed to be attached to more action oriented, pragmatic thinking – How could the visions become alive? – While experts were partly concerned with prerequisites and research oriented tasks.

We think that the questions – "What is a good recommendation from the view point of citizens?" and "What is a good vision from the view point of experts?" – could have been discussed in more detail. While there was a specific exercise for citizens where they made up their minds on criteria a good recommendation should meet, there was no such exercise for the experts.
Citizens in Austria and Malta actually came up with very useful criteria during this exercise, but the further function of these criteria did not became completely clear since the actual assessment criteria (truthfulness, effectiveness, desirability) had been pre-defined by the organisers. The productive exercise certainly raised awareness for certain aspects of recommendations, but probably this could have been more directly connected with the actual assessment.

8.3.7. Presentation of all 30 recommendations

A task which promised to be tedious for facilitators as well as citizens (and the participating evaluator) was the presentation of all 30 recommendations in a row before the final voting could happen. The only means to make this exercise meaningful and endurable is to have a good and well prepared (and humorous) facilitator who is able to quickly grasp the main idea behind a vision and to present it as plainly as possible to the citizens. We want to point out that Mr. Peissl from ITA did this job in an exemplary way explaining every recommendation in his own words. In Malta the organisers chose a more formal presentation style reading the short descriptions of recommendations to the citizens. I had to concentrate to be able to follow both presentations but the freely spoken summary proofed to be much more comprehensible than the formal presentation. In both cases I think that citizens which are not used to lengthy presentations had their difficulties to understand the contents. Of course there was time for orientation and a second look at the recommendations after the presentation. Citizens made use of this opportunity to different extents – while some were wandering around, others quickly decided for their favourites.

8.3.8. Presentation of the voting results and feedback

Here we just have to say that the citizens in both cases seemed to be satisfied with the results of the voting and that facilitators received a very warm feedback from participants. The very high levels of participant satisfaction are also documented in the results from the questionnaire survey.

8.3.9. Questionnaire exercise

Finally, the climax of CC1 – the questionnaire exercise. The evaluator handed out the questionnaires and participants had to answer a variety of questions with closed response categories – the sort of questions people usually like the most. In both countries participants were much disciplined in filling out the questionnaires. In the other countries this also seems to have been the case which resulted in a complete coverage of the participants of CC1 and questionnaires which were filled in correctly and comprehensively. Thank you to the facilitators who supported us in Austria and Malta and the other partners who carried out the questionnaire survey on their own!

8.4.   Summary of findings:

- The organisation of CC2 was again very good, in particular in Austria. In Malta the framework organisation was also good, while a little more emphasis on the guidance of citizens during the conference and strictness in following the common method would have been desirable.

- The relation between visions and recommendation was ambiguous which also had an effect on the assessment criteria which became less clear to citizens. More time would have been necessary for citizens to comprehensively compare visions with recommendations – probably there should have been more opportunities for the citizens to describe and record the characteristics of these relations.

- We think that the questions – "What is a good recommendation from the view point of citizens?" and "What is a good vision from the view point of experts?" – could have been discussed in more detail and could have been more directly connected to the actual assessment of recommendations/visions.

- Several original authors of the visions were not present anymore and could not further discuss their ideas respectively the corresponding recommendations – visions seem to need a persons who acts as "driver" and has an original motivation to think about the vision. If this person was not present other citizens obviously faced difficulties in adapting their interests and their knowledge to the discussed visions.

- Recommendations were in many instances *research* related pointing out necessary research trajectories (which was part of the official task the experts were assigned with) while visions sometimes comprised rather detailed *practical implementation paths* which we can confirm from our comparisons. In this regard the citizens seemed partly "disappointed" with the recommendation which lacked the substance of the original vision

- The quantity of produced textual accounts and the corresponding reading exercises are problematic for citizens as well as for experts. In addition to the reduction of produced text material one could think about the possibility to use other forms of "accounts" such as video (whereas the practical implementation, recording, translating, etc. might be very demanding). However, it is clear that CIVISTI also had to rely on textual accounts, which have the advantage to "force" people to be clearer about their ideas.

- Probably a stronger presence of experts would have been an advantage for CC2

9. Conclusions

The summaries of the different parts of this evaluation report already outline the most important topics we see with regard to CIVISTI and the further development of similar concepts for citizen participation in the context of S&T. We will now shortly try to draw a general conclusion from these summaries.

The first thing which has to be said about CIVISTI is the high quality of coordination and organisation with joint efforts by all participating partners. We witnessed this quality as observers of four citizens' consultations and the expert-stakeholder workshop and can confirm it through the participants' feedback during these events and our questionnaire survey. In particular the participating citizens reported a very high satisfaction with the organisation. An important element of this quality is the clear dedication of the consortium to a number of well defined objectives: Ensuring an open thematic approach (visions!), ensuring a broad and balanced participation (different age groups, male/female, different levels of educational attainment, different occupations, employed/unemployed, etc.), ensuring that citizens can freely and equally express their opinions, ensuring that these opinions are acknowledged without being "censored" or "standardised" and ensuring that the final outcome is validated by the citizens themselves. We think that CIVISTI generally achieved these aims to a very high degree.

The high level of participant satisfaction does however not mean that the citizens' consultations and the workshop were organised in order to please participants: The national organisers implemented a very strict and demanding working programme, where participants really had to get involved and had to provide significant input, while receiving all the support they needed. This strict and demanding framework was in our perspective necessary to achieve an output with a certain quality. This kind of implementation of course needed appropriate resources, which comprised a quite high number of organisers, facilitators and observers who participated in the different national events as well as appropriate settings and equipment.

CIVISTI used a well designed methodological approach which guided the national implementation. It could not be implemented without some necessary improvisation, but the overall level of standardisation seemed to be very high.

The main elements of the methodology were the circular validation process (citizens – experts – citizens), the idea to go from open "visions" to "recommendations", to work with a balanced sample of participants and an well-thought-out combination of single work, group work and quantitative assessments (e.g. ranking of visions and recommendations).

Compared to other citizen conferences we observed, the implementation of single work exercises at the beginning of CC1 seemed to be a special feature, which worked out very well – while other conference concepts immediately start with group work, the single exercises seemed to give citizens more freedom in developing their ideas at first, whereas the other stages – small groups, cross group discussion, rating – ensured that a vision (and then the recommendation) was validated from different perspectives. Through this "soft selection" and "quality management" process CIVISTI could ensure a selection of visions with a certain quality while at the same time including a wide variety of citizens' ideas.

Despite this selection, CC1 produced a lot of material which had to be managed by the experts in the next step – how to deal with the written accounts, how to cluster them and how to assign experts to these clusters is obviously a very difficult task.

The methodology for doing so called "the analytical model" tried to organise and arrange the material in a way that it could be handled by the experts and utilised a combination of quantitative and qualitative (categories and typologies) methods. The methodology obviously had to be adapted to the actual (and before unknown) output of the first stage (CC1), which was characterised by heterogeneous (=wide range of different topics) and multi-dimensional (=different topics combined in one vision) visions. The solution of defining key visions and attaching other similar ones to such a vision seemed to be practicable and made the clustering process more clear. The experts themselves understood the heterogeneity and multi-dimensionality and therefore appreciated the organisers' effort to create a better overview.

This brings us to the expert-stakeholder workshop where experts had to "translate" citizens' visions (elaborated in CC1) into recommendations targeted at political authorities in the European commission who are responsible for planning the 8th framework programme (FP8). This demanding exercise was the first test for CIVISTI and would show whether experts could adapt to the output of citizens. While the organisation was again very good the difficulties of the concept also began to show.

Some experts had to struggle with the generality or unfeasibility of the visions in their attempt to formulate research guidelines while at the same time feeling obliged to acknowledge all the citizens' visions. There were however also experts who could adapt quite well to the visions following a more context-oriented approach, who didn't just look for feasible ideas, but also for non-conformity and new non-mainstream ideas. We think that this contextual approach is quite important to understand the added value of citizen participation – but this must also be reflected with regard to the expected outcome. Probably the translation of visions into recommendations was too much of a short-cut and should have been organised with more intermediary steps. The other option would of course be to choose a narrower thematic focus for citizen participation. From the beginning there was the risk that the elaboration of "visions", which could comprise anything from technological, environmental to social issues and all possible combinations, would result in a very broad and unspecific output.

CIVISTI could – through its methodology and exemplary organisation – prevent this to happen, but some negative consequences could in our opinion not be avoided. Multi-dimensionality in the visions made the elaboration of recommendations more difficult and probably made several of them rather unspecific. Furthermore, the broad range of themes could not be completely covered by the experts. Some experts themselves voiced the self-criticism that they were probably not the right persons to comment on specific visions. The recommendations remained in some instances quite general and could not draw research trajectories or implementation processes in much detail.

This might also be connected to the fact that CIVISTI did not create a direct connection between experts and citizens. They actually exchanged through elaborating written documents (visions and recommendations) without having direct, face-to-face contact. Although we understand and support the decision of the CIVISTI consortium to separate citizens and experts and thus to avoid a strong expert influence on citizens' visions we would propose - in addition to separated sessions, where both groups can work independently - to think about further sessions where direct interaction can take place.

This surely would have enriched the CIVISTI experience for both groups of participants and was also brought forward by experts as well as citizens. Of course this would have been a challenge for the organisers and would have also needed additional resources.

Another issue is the relation between visions and recommendations which we discussed in chapter 7 and 8. The relation between visions and recommendation remained ambiguous which also had an effect on the assessment criteria used by citizens for validating the recommendations which became less clear. More time would have been necessary for citizens to comprehensively compare visions with recommendations – probably there should have been more opportunities for the citizens to describe and record the characteristics of these relations.

A more technical issue is the high drop-out of participants between CC1 and CC2. A comfortable environment, a good participation experience and a good organisation do not seem to be enough to secure ongoing participation of citizens. A problem might have been the long time interval between CIVISTI consultations. Citizens had to wait for more than a year for the second round while only one workshop had to be arranged in between. We think that the time frame could have been tighter to ensure a much faster follow-up consultation. In fact the option of a "fast-track" version was discussed during the CIVISTI policy workshop.

Summarising our impression on CIVISTI we can say that we enjoyed being a part of this process which – due to its well coordinated and organised implementation – opened our perspective for conceptual questions, providing us – and hopefully interested readers too – with very specific starting points for a further discussion and development of citizen participation models.

10. Appendix: Questionnaires to the citizens

QUESTIONNAIRE 1 (addressed all Austrian and Bulgarian citizens before the beginning of CC1)

> At the beginning of the Citizen Consultation a team of researchers would like to ask you a few questions for the purpose to support the further development of the Citizen Consultation.
>
> Please read the questions carefully and take your time to answer them. The answers you provide in this questionnaire will not be connected to your name. You will remain anonymous.
>
> After completion of the questionnaire, please hand it over to one of the members of the organisation.
>
> Thank you very much for your support!

Question 1: What do you perceive to be *the three most important objectives* of the Citizens' Consultation? Please insert "1" for most important, "2" for the second most important and "3" for the third most important.

- ☐ Encourage communication between citizens and researchers
- ☐ Empower Citizens to influence European research issues
- ☐ Bring more democratic legitimacy to European research programmes
- ☐ Ensure that research is guided by common societal values rather than particulate interests
- ☐ Identify new and emerging research issues, which may be important for future research and development in Europe

Question 2: What was your *reason for participating* in the citizens' consultation?

- ☐ Interesting experience
- ☐ Learn more about the relevance of science and technology for society
- ☐ Express my views
- ☐ Influence decision makers
- ☐ Other: _____
- ☐ I don't know

Question 3: Generally speaking, how interested are you in *new scientific and technological approaches and developments concerning future challenges in society?*

- ☐ Very interested
- ☐ Quite interested
- ☐ Hardly interested
- ☐ Not interested at all
- ☐ I don't know

Question 4: How well informed do you consider yourself to be about *new scientific and technological approaches and developments concerning future challenges in society?*

- ☐ Very well informed
- ☐ Well informed
- ☐ Hardly informed
- ☐ Not informed at all
- ☐ I don't know

Question 5: If you think about the last four weeks: *How often have you discussed new scientific and technological approaches and developments concerning future challenges in society* with people such as your friends, family or work colleagues? Such discussions might have been face-to-face talks, via e-mail, telephone, chat rooms or letters.

- ☐ Often
- ☐ Sometimes   ☐ Never
- ☐ Rarely   ☐ I don't know

Question 6: We would like to know a little more about your interest in science and research. During the last 12 months, have you pursued any of the following activities? Please indicate your answer by checking for each statement the appropriate column.

During the last 12 months: Have you...	yes	no	I don't know
Participated in another Citizens' Consultation related to future relevant issues in science and technology?			
Joined a discussion on future relevant issues in science and technology?			
Joined a discussion group on the Internet on future relevant issues in science and technology?			
Visited websites of scientific organisations, which are concerned with future challenges in society?			
Been active in an NGO which is addressing future relevant issues in science and technology?			
Read a scientific magazine / book concerning future challenges in society?			

You received the magazine „Eyes on tomorrow", provided to you by the organizers of the Citizens' Consultation. We would like to ask you a number of questions on the quality and usefulness of it.

Question 7: In how far did you read the whole document?

- ☐ I read the whole document
- ☐ I read most of the document
- ☐ I read only part of the document
- ☐ I didn't read it at all (Go to Question 11)
- ☐ I don't know

Question 8: In how far could you understand the content of the magazine?

- ☐ I could understand (almost) everything
- ☐ I could understand more than half of the information
- ☐ I could understand less than half of the information
- ☐ I could understand almost nothing
- ☐ I don't know

Question 9: After reading the magazine, do you feel more competent than before to discuss new scientific and technological approaches and developments concerning future challenges in society?

- ☐ I feel much more competent
- ☐ I feel more competent
- ☐ I feel equally competent as before
- ☐ I don't feel competent at all
- ☐ I don't know

Question 10: We would like to have your opinion on the role that laypersons can play with regard to scientific research and development. Could you please indicate for each of these statements how much you agree or disagree?

	Fully agree	Rather agree	Rather disagree	Fully disagree	I don't know
Research professionals can benefit from the views and experiences of laypersons					
Research and Development strategies should predominantly be designed and managed by professional experts					

Most research topics are too complex to understand for a person like me					
Scientific research has a profound impact on society and the everyday life of people					
Civic participation ensures that research is guided by common societal values rather than particulate interests					
Usually scientific research is not oriented at the real needs of people					

Question 11: How much do you think the Citizen Consultation in which you are participating today, will influence the focus of future research programmes in the European Union?

- ☐ Much
- ☐ Somewhat
- ☐ Little
- ☐ Not at all
- ☐ I don't know

These last questions refer to your personal background

Question 12: What is your year of birth?

Question 13: Are you male or female?

- ☐ Female
- ☐ Male

Question 14: Please indicate your highest level of educational attainment:

- ☐ Compulsory Education
- ☐ Regular Secodary School
- ☐ Vocational School for Apprentices
- ☐ VET schools
- ☐ VET colleges
- ☐ Secondary Academic School (upper level)
- ☐ College
- ☐ University

Question 15: Please indicate which of the given categories best describes your current situation. Multiple answered are allowed.

- ☐ Employed
- ☐ Unemployed
- ☐ Education (school)
- ☐ Non-academic further Education
- ☐ Academic further Education
- ☐ Housework
- ☐ Job-seeking
- ☐ Pension
- ☐ Other

Thank you very much for your support!
Please hand this questionnaire over to one of the members of the organisation.

QUESTIONNAIRE 2 (addressed all Austrian and Bulgarian participating citizens at the end of CC1).

> At the end of the Citizens' Consultation in [COUNTRY], we would like to ask you once more a small number of questions that will be necessary for the evaluation of the process you participated in.
>
> Please read the questions carefully and take your time to answer them.
>
> The answers you provide in this questionnaire will not be connected to your name. You will remain anonymous.
>
> After completion of the questionnaire, please hand it over to one of the members of the organisation.

Question 7: Looking backwards to the Citizens' Consultation of the last two days, we would like to have your opinion about some aspects of the whole process. Please indicate how satisfied you were with the following aspects:

How satisfied were you with the...	Very satisfied	Rather satisfied	Rather un-satisfied	Very un-satisfied	I don't know
Overall assistance from the organizers					
Structure of the agenda					
Quality of the group discussions					
Work of the facilitator(s) at your table					
Working atmosphere					
Setting (surroundings, equipment, arrangement of group tables, etc.)					

Question 8: We would also like to have your opinion on several specific aspects. Could you please indicate for each of these statements how much you agree or disagree?

	Fully agree	Rather agree	Rather disagree	Fully disagree	I don't know
The instructions given to me during the consultation were easy to follow					
I received sufficient information on the Agenda					
Some points of the agenda took too much time and disturbed the discussion process					

Question 9: Discussion is one of the most important elements of a Citizen Consultation. Therefore we would like to ask you some questions on how you perceived the discussions. Could you please indicate for each of these statements how much you agree or disagree?

	Fully agree	Rather agree	Rather disagree	Fully disagree	I don't know
The explanation of the discussion focus before a new round of discussion was clear and comprehensible					
During the discussions all participants had equal speaking opportunities					
There was not enough time for discussion					

My own knowledge about the topics was sufficient to participate in the discussions					
The group size was optimal for discussion					
We discussed too many different issues without having a clear focus					

Question 10: We would like to know about the interactions between you and other participants during the group discussions. Could you please indicate *how often* the described situation occurred?

	Never	Rarely	Some-times	Often	I don't know
We were able to disagree openly in the group					
I hesitated to express opinions that differed from the general view of the group					
I introduced a new topic for discussion					
Despite different opinions we were able to reach a consensus					
Some participants dominated the discussion					
I was able to express my views and they were understood by the other participants of the discussions					

Question 11: Your assessment of the outcomes of the consultation is very important for the assessment of the whole process. Could you please indicate for each of these statements how much you agree or disagree?

	Fully agree	Rather agree	Rather disagree	Fully disagree	I don't know
The final visions elaborated at the Citizen Consultation expressed my personal views					
Some participants had more influence on the final formulation of the visions than others					
I'm satisfied with the overall quality of the elaborated visions					
The working atmosphere at the Citizens' Consultation encouraged my creativity					
Citizens' Consultations like this one should be arranged on a regular basis					

Question 12: How satisfied are you with the general outcomes of the consultation?

☐ Very satisfied
☐ Rather satisfied
☐ Rather unsatisfied
☐ Very unsatisfied
☐ I don't know

Question 13: How much do you think the Citizens' Consultation in which you are participating today, will influence the focus of future research programmes in the European Union?

☐ Much
☐ Somewhat
☐ Little
☐ Not at all
☐ I don't know

Question 14: Generally speaking, how interested are you in *new scientific and technological approaches and developments concerning future challenges in society*?

☐ Very interested
☐ Quite interested
☐ Hardly interested
☐ Not interested at all
☐ I don't know

Question 15: How well informed do you consider yourself to be about *new scientific and technological approaches and developments concerning future challenges in society?*

☐ Very well informed
☐ Well informed
☐ Hardly informed
☐ Not informed at all
☐ I don't know

Question 16: How motivated do you feel, following the discussions at the Citizens' Consultation, to discuss with people such as your friends, family or work colleagues, the issues and discussions of the Citizens' Consultation?

☐ Strongly motivated
☐ Motivated
☐ Hardly motivated
☐ Not motivated at all
☐ I don't know

Question 17: How motivated do you feel, following the discussions at the Citizens' Consultation, to actively search for further information on *new scientific and technological approaches and developments concerning future challenges in society*?

☐ Strongly motivated
☐ Motivated
☐ Hardly motivated
☐ Not motivated at all
☐ I don't know

These last questions refer to your personal background

Question 12: What is your year of birth?

Question 13: Are you male or female?

☐ Female
☐ Male

Question 14: Pease indicate your highest level of educational attainment:

☐ Compulsory Education
☐ Regular Secodary School
☐ Vocational School for Apprentices
☐ VET schools
☐ VET colleges
☐ Secondary Academic School (upper level)
☐ College
☐ University

Question 185: Please indicate which of the given categories best describes your current situation.
Multiple answered are allowed.

- ☐ Employed
- ☐ Unemployed
- ☐ Education (school)
- ☐ Non-academic further Education
- ☐ Academic further Education
- ☐ Housework
- ☐ Job-seeking
- ☐ Pension
- ☐ Other

Thank you very much for your support!
Please hand this questionnaire over to one of the members of the organisation.

QUESTIONNAIRE 3: For all participants of CC2 (7 countries)

At the end of the second Citizens' Consultation in [COUNTRY], we would like to ask you a small number of questions that will be necessary for the evaluation of the process you participated in.

The answers you provide in this questionnaire will not be connected to your name. You will remain anonymous. Please read the questions carefully and take your time to answer them.
After completion of the questionnaire, please hand it over to one of the members of the organisation.

Thank you very much for your support!

Question 19: Please try to remember approximately how often you have been contacted and informed about the ongoing steps in the CIVISTI process by the CIVISTI organisers between the first conference in 2009 and the second conference today.

Number of contacts:

Question 20: How well informed did you feel about the purpose of the second CIVISTI meeting in advance of the meeting?

- ☐ Very well informed
- ☐ Well informed
- ☐ Hardly informed
- ☐ Not informed at all
- ☐ I don't know

Question 21: We are now interested in your general perception of the experts' recommendations. Please indicate for each of the following statements how much you agree or disagree and check the corresponding box.

	In all cases	In many cases	In some cases	In hardly any cases	Never	I don't know
I found the experts' recommendations useful for further developing the citizens' recommendations.						
The language and the terms used in the experts' recommendations were difficult to understand.						
The experts' recommendations make me feel more confident that the visions can be achieved.						
I would have preferred to directly discuss the recommendations with the experts themselves.						
In the experts' recommendations important aspects of the original citizens' visions have been neglected.						
The recommendations show that the experts understood the basic ideas of the citizens' visions						
The citizens had equal opportunities to voice their opinion on the recommendations						

Question 22: The following question refers to the experts' recommendations you have discussed today. We would like to know your opinion on how well the following aspects have been <u>considered by the experts</u> in their recommendations.

	Very well considered	Adequately considered	Inadequately considered	Not considered at all	I don't know
The technical developments which are necessary for successful implementation of the recommendations					
The basic ideas of the citizens' visions					
The social developments (e.g. policies, social movements) which are necessary for successful implementation of the recommendations					
The positive impacts on society					
Possible unfavourable impacts which may be caused by the implementation of the recommendations					

Question 23: How satisfied are you with the overall quality of the final outcome (list of recommendations) of the CIVISTI citizens' meeting you participated in?

- ☐ Very satisfied
- ☐ Rather satisfied
- ☐ Rather unsatisfied
- ☐ Very unsatisfied
- ☐ I don't know

Question 24: To what extent did your participation in CIVISTI motivate you to follow political debates on EU research issues?

- ☐ Much
- ☐ Somewhat
- ☐ Little
- ☐ Not at all
- ☐ I don't know

Question 25: How much do you think the Citizens' Consultation in which you are participating today, will influence the focus of future research programmes in the European Union?

- ☐ Much
- ☐ Somewhat
- ☐ Little
- ☐ Not at all
- ☐ I don't know

Question 26: Do you think that Citizens' conferences such as this one should be arranged on a regular basis to guide decisions in research planning?

- ☐ Yes
- ☐ No
- ☐ I don't know

Question 27: Here we would like to have your opinion on some organisational aspects of the second citizens' conference. Please indicate how satisfied you were with the following aspects:

How satisfied have you been with the…	Very satisfied	Rather satisfied	Rather un-satisfied	Very un-satisfied	I don't know
Overall assistance from the organizers					
Structure of the agenda					
Quality of the group discussions					
Work of the facilitator(s) at your table					
Working atmosphere					
Setting (surroundings, equipment, arrangement of group tables, acoustics, etc.)					

Question 28: What is your year of birth?

Question 29: Are you male or female?

☐ Female
☐ Male

Question 30: Pease indicate your highest level of educational attainment:

[national education categories according to ISCED]

Question 31: Please indicate which of the given categories best describes your current situation.
Multiple answered are allowed.

☐ Employed
☐ Unemployed
☐ Housework
☐ Pensioner
☐ Student
☐ Maternity leave
☐ Other

Thank you very much for your support!
Please hand this questionnaire over to one of the members of the organisation.