Funded by the Horizon 2020
Framework Programme of the
European Union

RETHINKING INNOVATION. TOGETHER.

CAPTURE LEARNING REPORT

KEA EUROPEAN AFFAIRS

May 2018

Contents

1.INTRODUCTION

Sparks – Rethinking innovation together is a European project aiming to promote and develop science engagement and education among European citizens, as part of the wider concept of Responsible Research and Innovation (RRI). RRI defines a transparent and interactive process in which the research community along with industries, citizens and politicians become mutually responsible for scientific and technological advances, taking into consideration their ethical acceptability, sustainability and social desirability, in order to properly better embed them in the society.

RRI initiatives seek to bring issues related to research and innovation into the public space, in order to decrease the distance between science and society and to actively involve citizens in discussions and debates on how science and technology can help create a more peaceful, fair and inclusive world.

Sparks is a project to familiarise and engage European citizens with the concept and practice of RRI through the topic of **technology shifts in health and medicine**. More concretely, Sparks aims to:

- **Communicate the benefits and challenges of using emerging technologies in healthcare and medicine** via a touring exhibition that was presented in 28 EU countries and showed 7 individual stories of citizen scientists, creative and disruptive visions of artists on the topic and local case studies
- **Actively involve EU citizens, scientists and innovators in discussions around health and well-being** through specially designed activities and workshops (*reverse science cafés, science espressos, pop-up science shops, incubation and scenario workshops and hackathons*)

Objectives of the present report

The present report marks the end of the Sparks project after 3 years of travelling of the exhibition, showcasing local success stories and engaging citizens and local stakeholders in brainstorming, debates and hands-on activities on the topic of health and its emerging technologies. As such, the **report's main objective** is to **conceptualise the knowledge acquired in the project**, in order to contribute to **the development of a wider Responsible Research and Innovation governance framework across Europe.**

To this end, the report presents the results of the empirical research undergone throughout the project with the purpose of measuring Sparks outcomes in 3 main conceptual areas:

- **Public engagement** with Sparks topic
- **Stakeholders** (education, administration, government, business) **engagement** with Sparks topic
- **Successful tools/practices** used to communicate to and engage citizens in the project

Additionally, the report highlights Sparks' **EU added-value** in the implementation of the wider concept of RRI which reflects in the local and overall outcomes of the project in relation with each of the 3 concepts mentioned above.

Moreover, the report provides information on the research methodology and on the limits and the difficulties encountered during the data collection and analysis in order to **provide recommendations for researchers involved** in similar science engagement projects and on the wider implementation of RRI.

2.METHODOLOGICAL APPROACH

As mentioned above, the research activity was developed within the project under the Work Package 4 'Capture Learning and Policy Outreach' in order to evaluate Sparks' success in relation to the engagement of citizens and different stakeholders in science debates on the topic of health and technology. The research was designed and carried out by KEA European Affairs.

Before informing on the methodological framework, data collection and analysis and main findings, one crucial aspect needs to be highlighted in relation to the **highly experimental nature of the research**, due to the novelty of the objects and topics of investigation. The formats of the Sparks activities and workshops (i.e. *Reverse Science Café, Science Espresso, Pop-up Science Shop, Scenario and Incubation Workshops*) were specially designed for the project, combining interactive elements to engage participants in idea sharing and debates. The exhibition's concept is also unique, aligning personal success stories of engagement in science and disruptive visions of artists on ways the future could be affected by the use of emerging technologies. The large scale on which Sparks was implemented, targeting citizens from all cultural and educational backgrounds, ages and genders across Europe contributes to the complexity and uniqueness of the initiative. Finally, the very concept of RRI reflected in Sparks' objective to engage citizens and different stakeholders in science developments around healthcare is still emerging and highly experimental.

As such, the research can only inform on emerging trends observed in relation to how citizens and different stakeholders reacted to and engaged with the topics, activities and success stories presented in Sparks. It will by no means provide strong causations between different variables, but merely correlations observed from the respondents' positioning in the surveys and from the more in-depth inputs provided by the project's local partners.

Therefore, the results made available in the present report can be used as a starting point in the development of a **stronger scientific and governance framework** to host and further promote the concept of RRI across Europe, so that all societal actors could benefit and contribute more to the shaping of research and innovation.

2.1. Conceptual framework

The research was conducted with citizens who visited the exhibition and participated in the activities organised in the frame of the project[1], as well as with Sparks local organisers. The investigated samples are as follows:

- **2608 respondents** out of a total of more than 1 million of individuals (1.111.504) who visited the exhibition in 26 venues across Europe[2];

[1] Reverse Science Cafés, Science Espressos, Pop-up Science Shops, Scenario and Incubation Workshops

[2] The total number of visitors does not encompass the number of visitors in Hungary and Lithuania, since these venues did not measure attendance to the exhibition. However, these two countries are still part of the sample since the questionnaires' data have been collected.

- **1754 respondents** out of a total of 6653 individuals who participated in activities in 24 venues across Europe[3];
- **27 local organisers** across Europe[4].

In order to obtain this sample number, local organisers were advised to gather responses from around **100 visitors** of the exhibition and **around 60 participants** in activities. Some venues collected more than the advised average of responses and some collected less, due to reasons which will be detailed in section 2.5 of the present report, dedicated to presenting the limits of the research.

In order to measure the project's success in the 3 conceptual areas referred to in section 1, a series of 6 indicators was developed which helped to structure the data collection tools and the data analysis (the investigative methods used in this research are presented in details in section 2.2). The table below presents the indicators in relation to the investigated conceptual areas. It equally points to the exact questions informing on the indicators from the surveys used to collect opinions.

Table 1: Conceptual framework of the research

CONCEPTUAL AREAS OF INVESTIGATION	CORRESPONDING INDICATORS	CORRESPONDING QUESTIONS IN THE SURVEYS
Public engagement	**Interest in the topic**	Exhibition: Q2.1, Q2.2, Q2.3, Q5.1 Activities: Q3.1, Q3.2, Q6.1
	Understanding of the topic	Exhibition: Q1.3, Q2.4, Q5.5 Activities: Q2.5, Q3.3, Q6.5
	Participation in the discussion	Exhibition: Q1.1, Q5.3, Q5.4 Activities: Q2.1, Q3.5, Q3.6, Q3.7, Q3.8, Q6.3, Q6.4 TLO: Sect.2, Q1, Q2, Q4
	Willingness to participate in future similar events	Exhibition: Q4 Activities: Q5 TLO: Sect2, Q3
Stakeholders engagement	**Identification of the most suitable actors in RRI**	Exhibition: Q3 Activities: Q4
	Willingness to organise future similar events	TLO: Sect.3, Q10
	Multi-actor dialogue	TLO: Sect.3, Q5
	Number of involved stakeholders per venue	TLO: Annex2, Sect.1
	Venues' adequacy	Exhibition: Q6

[3] Bulgaria, Czech Republic, Italy, Ireland and Romania have not provided the survey.

[4] The template from Czech Republic was not received and the information provided in the template from Bulgaria is largely incomplete.

Successful tools / practices		Activities: Q3.4, Q7 + descriptive documents prepared by certain venues emphasising situations conducive / non-conducive to dialogue
	Formats' interactivity	TLO: Sect.2, Q5.9

The research also informs on the following **socio-demographic characteristics** of the sample:

- **Age group**
- **Gender**
- **Education**
- **Employment**
- **Sector of activity**

These socio-demographic variables are used in the analysis in cross-tabulations with the variables informing on the indicators in the conceptual framework, in order to observe **possible correlations between the different levels of education, age, employment, gender and sector of activity and the engagement** with the topics promoted by Sparks.

2.2. Methods used

To this purpose, a **mixed research method** was used, combining quantitative and qualitative approaches. As such, two data collection tools were created:

- A **questionnaire** to collect anonymous input from Sparks exhibition's visitors and activities' participants. This tool generated **measurable data** used to quantify attitudes, levels of interest and participation in relation to Sparks events.
- A **template (TLO)** to collect input from Sparks local organisers. The tool equally produced **measurable data** used to quantify certain attitudes and impressions and collected **additional insights**, motivations and opinions regarding the organisation of the events and how they developed. Each template consists of two annexes: while the first one applies to the activities, the second refers to the local partnerships, the exhibition and the communication. The first annex, divided into three sections, consist of 10 questions combining both qualitative and quantitative type of responses. Each partner has been requested to fill in an Annex I per each chosen activity, among which the evaluations of two (out of six) Science Espressos and the Reverse Science Café were mandatory formats of activities in the project. The Annex II is also divided into three sections, whose questions require both qualitative and quantitative type of responses.

These data collection tools were distributed as follows:

- For the visitors of the exhibition:
    - One questionnaire dedicated to adults

    - One questionnaire dedicated to persons aged 12-18
- For the participants in activities:
    - One questionnaire dedicated to adults
    - One questionnaire dedicated to persons aged 12-18
- For local organisers:
    - One questionnaire

The questionnaires were distributed in each venue where Sparks was organised. The questionnaires for the exhibition's visitors were made available electronically on two tablets that travelled with the exhibition. The questionnaires for the participants in activities were distributed on paper.

2.3. Data collection and centralisation techniques

The electronic surveys were managed via **Open Data Kit (ODK)**, an open source set of tools which helps designing and fielding mobile data collection solutions. The questionnaires were built on the ODK platform and uploaded on a Sparks dedicated server from which local organisers could download them on the tablets via a Data collection app. The visitors were next interviewed by being presented the questionnaire on the tablets. The filled-in questionnaires were then sent back to the Sparks server via the app installed on the tablet. The responses were exported into readable files with **.CSV format**, before being centralised for the overall analysis.

The paper questionnaires destined for the participants in activities were filled in by hand. Next, the local organisers engaged in a reporting activity, by inserting all answers into a **reporting template created in Excel** which finally was sent back to KEA. The reporting files received were transformed into the same CSV format and afterwards centralised for the overall analysis.

2.4. Data analysis techniques

In order to proceed with the analysis of data, all CSV files (i.e. responses collected per venue and final centralised files for all venues per activities and exhibition surveys) were imported into **Google Fusion Tables**, an experimental web application to gather, organise, query and visualise data tables. As such, an analysis of both the outcomes of the exhibition and activities could be carried out at both local level and at overall EU level.

The tables obtained in such fashion were **queried** (i.e. filtered and summarised by several variables in order to calculate the **spread of data values** and the **central tendencies of the distribution of values**). These calculations helped establish the **tendencies of responses** in all the three main groups of indicators referred to in section 2.1. The obtained summaries were **cross-tabulated** in order to investigate the **correlations between different variables**. The findings will be detailed in the next section.

2.5. Limits of the research

The research was challenged by the **large geographical scale of the project**, which generated several difficulties in the management of the data collection across all venues in Europe, in terms of training, capacity, language barriers and centralisation. The main challenges of the research are listed and further detailed below:

- Timeframe of survey design
- Limited control over the data collection
- Language barriers
- External factors

a. Timeframe of survey design

In accordance with the timeline of the project, the 'Methodological Framework' (Deliverable 4.1) and 'Survey and template methodology and guidelines for local organisers' (Deliverable 4 2) were developed in parallel to the Concept of the Exhibition (Deliverable 2.2) by the Science Museum London and the 'Guidelines on how to implement the innovative formats of science cafés and optional participatory activities' (Deliverable 3.1) by Copernicus Science Centre and WILA (Science Shops Bonn).

This **concomitant timeframe limited the scope for phrasing precise questions**, especially on the exhibition with a higher risk of misleading or confusing questions for the audience.

Resolution: the research team designed the surveys in constant consultation with the partners responsible for the development of the exhibition and activities. Testing surveys during the first tour of the exhibition allowed to identified potential limits to the wording of questions and reword some of them to facilitate their understanding by the audience without introducing new questions that would have prevented comparison with other venues in the future.

Recommendations for future research:

Although the methodological framework including research questions, key indicators and data collection tools can be prepared from the inception of the project, it is advised to design data collection tools when the exhibition and activities to which they will apply are finalised in order to ensure the maximum level of adequacy and avoid misleading wording or inconsistencies.

b. Limited control over the data collection

The large number of venues where Sparks travelled to reflects a wide social and cultural diversity. This translated into considerable effort from KEA to train the organisers in distributing the questionnaires, collecting answers on the tablet and on paper and reporting them in a consistent way. At the same time, **the distance and the number of intermediates** between the researchers and the respondents (i.e. the event managers who receive the information on data

collection, the interviewers on the field, the persons who centralise the answers and report back to KEA researchers) made it **difficult to control the entire process of data collection and reporting**.

As such, several reporting files that KEA received on the paper version questionnaires **were incomplete** (i.e. lacking answers to one or several questions), possibly due to omissions upon filling-in by respondents or to interviewers or data managers' negligence. In what concerns the tablet questionnaires, there were cases where several responses were lost due either to **technical issues with the tablets** (which could not be resolved in time, due to the distance and lack of understanding of the whole issue by KEA researchers) or due to **wrong manipulation** of data by the local managers (who possibly did not correctly understand the guidelines to use the tablets). For what concerns the template for local organisers, it has also been registered that some templates have not been entirely filled. This is mainly due to omissions or negligence in filling in the templates by the data managers.

The data centralisation thus reported a certain percentage of responses deemed as 'incomplete/with problems' due to the above-mentioned difficulties. These questionnaires could not be used in the final analysis. The table below presents the situation in numbers.

Table 2: percentage of problematic responses

QUESTIONNAIRE	'INCOMPLETE / WITH PROBLEMS'	FINAL 'COMPLETE'
Exhibition	**5,8%** (160)	2608
Activities	**8,5%** (164)	1754

Resolution: Additional detailed guidelines on the use of the data collection tablets and software were produced to complete the data collection training session delivered to local organisers. The research team systematically asked local organisers to perform and send in-house tests of the surveys on tablets so that they would become familiar with the process and reduce the risk of error during the transmission of the data. Overall, the local organisers sent enough filled-in questionnaires, so subtracting the number of 'problematic' responses did not impact the relevancy of the final sample.

Recommendations for future research

It is very important that the research team is constantly in contact with the team of local organisers, in order to ensure that the guidelines are correctly understood and that the data collection is advancing as planned. Testing the functionality of the tablets before the interviews is recommended (i.e. organisers to send dummy filled-in questionnaires to the research team via the tablets to ensure that there are no technical issues). It is overall recommended to ask for mid-term updates (i.e. an update on the issues encountered and the number of responses collected at the mid-period of exhibition duration) in order to have time to address the eventual issues.

c. Language barriers

Collecting data via questionnaires across several countries raises the issue of **text comprehension in several languages**. As such, the questionnaires were translated from English into the local language by the local organisers for each venue. The encountered problem was of semantic nature, as some words or expressions used in the original English version were **translated differently in different languages** or even in the same languages but in different countries (e.g. French in France, Belgium and Luxembourg, Dutch in the Netherlands and Belgium, German in Germany and Luxembourg), according to the cultural use of language. This may have caused a slight change in meaning across venues, which could have altered / influenced the way respondents understood and answered to the questions.

Resolution: This was considered as a normal (and expected) development in the data collection, which actually informed on the cultural diversity across Europe. It is only normal that the different cultural backgrounds influence the way individuals understand and solve an issue. The translations could furthermore provide useful insights on how different cultures and societies position themselves in relation to the topic of healthcare and medicine in the wider concept of RRI.

Recommendations for future research

A good communication between the research team and local organisers is key for the proper understanding of the text and thus, for the most appropriate translation of key terms or expressions.

d. External factors

In addition to the issues arisen from the distance and high number of intermediaries, the process of data collection was also hampered by external factors which could not have been prevented during the exhibition time**. High temperatures during summer and holiday periods** were sometimes identified as factors which prevented people from visiting the exhibition or participating in the activities, **the inadequacy of venues destined to activities** (e.g. small or noisy spaces, venues targeted for niche audience such as families or children) could put the visitors / participants in the impossibility to respond to the survey due to low / lack of understanding of the topic. These factors explain some low number of visitors or responses received from some venues.

Recommendations for future research:

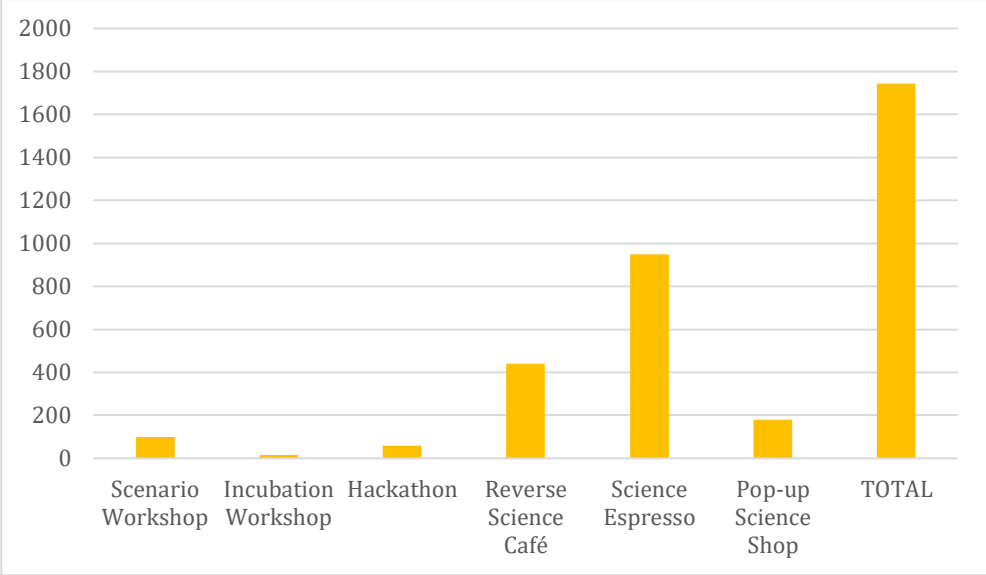
The low participation issues generated by these unexpected external factors provided a good learning exercise for improving the organisation of such type of events in the future. Ensuring that the event dates do not coincide with local or European holidays or with extreme temperatures in some geographical areas, or that host venues have audiences which are appropriate with the audiences targeted by the event are just some examples of a better, more thoughtful organisation.

3. SAMPLE OF RESPONDENTS: SOCIO-DEMOGRAPHIC CHARACTERISTICS

As mentioned in section 2.1, the analysed sample of responses originates from 2334 exhibition visitors from 22 locations across Europe and from 1475 participants in activities from 20 EU venues, correlated with the insightful input of 18 local organisers.

Graph 1 shows the repartition of respondents per type of Sparks activity. A large majority of responses were collected for the **Science Espressos** and to a lesser degree for the **Reverse Science Cafés**[5]. It should be noted that the organisation of these two types of activities was mandatory in each venue. Graph 1 does not consider those events which were organised in just one venue, as it is the case of the Hands-on Workshop (Portugal) and the Guided Tours of the Exhibition (Luxembourg).

Graph 1: Respondents' repartition per type of activity



This section is meant to provide useful socio-demographic information on the respondents, showing that the sample proved balanced in terms of **gender and age repartition** at different **levels of education and employment status** and in terms of represented **age categories** and is overall representative of the total population who participated in the Sparks event.

Tables 3 and 4 below show the general repartition of respondents in terms of age, gender, level of education, employment status and sector of activity.

[5] This is largely due to the fact that only one Reverse Science Café was organized in each location, while there were 6 science espressos.

Table 3: general socio-demographic characteristics of the sample

	AGE		GENDER		EDUCATION		EMPLOYMENT		ACTIVITY	
Exhibition	13-17	411	Female	1419	Primary	425	Science	617	Civil society	337
Activities		151		976		259	related	644	organisation	334
Exhibition	18-26	809	Male	1083	Secondary	797	No science	953	Education	731
Activities		493		719		500	related	512		545
Exhibition	27-64	1304	Other	14	Higher	1228	Unemployed	261	Research	375
Activities		903		10		754		240		356
Exhibition	> 65	84	Secret	92	Doctoral	156			Industry/Business	346
Activities		98		36		187				289
Exhibition									Government/Public	211
Activities									administration	214

Table 4: total number of underaged and adult respondents

	Young (12-18)	Adults	TOTAL
Exhibition	**754**	**1854**	**2608**
Activities	**325**	**1429**	**1754**
TOTAL	**1079**	**3283**	**4362**

The figures in Table 3 and 4 show, as expected, that the active individuals (27-64) were the most represented (50% among the exhibition's visitors and 51,5% among the participants in activities). Nevertheless, underaged individuals occupy also a significant share of 15,7% in the sample for the exhibition. The sample for activities displayed a lesser share of underaged respondents (only 8,6%).

There is a **prevalence of women respondents**, who are more numerous both as visitors of the exhibition and as participants in activities.

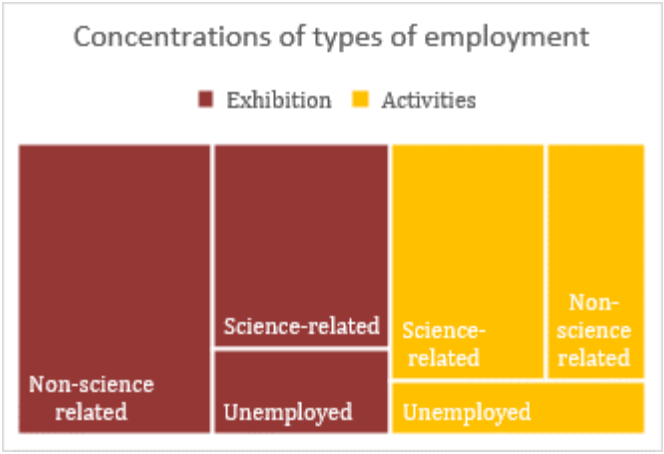
In what concerns the level of education, most respondents have higher education for both activities and exhibition, while doctoral studies are the least represented, aspect which recreates the larger societal pattern that characterises nowadays city dwellers across Europe. The significant numbers of primary and secondary levels of education reflect the high presence of underaged individuals and are not a sign of low levels of education at adult ages (as showed the cross-tabulation between age and levels of education).

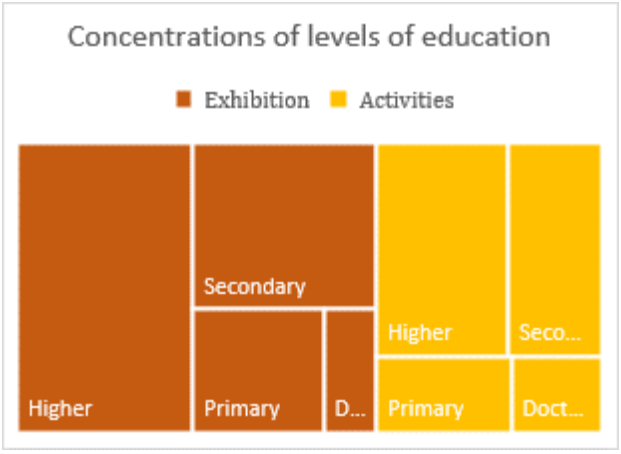
We observe a concentration of individuals employed in **non-science related fields among visitors of the exhibition** and mostly individuals working in **science fields as participants in activities**. These differences related to the nature of employment show that while the exhibition appealed to a wider part of the population (regardless of their profession), participation in the **activities tended to attract more prepared individuals, with specific scientific background**, thus in close relation to the topic of science, technology and healthcare. A similar comment can be made regarding the **doctoral level of education**, which, although overall low represented, showed a higher concentration among participants in the activities (highly prepared individuals in a certain sector) and thus lesser disparities between numbers of representatives of different levels of education, compared to the exhibition's visitors. This

situation could highlight the fact that the exhibition was intended as an 'entry point' to science engagement, thus attracting a wider audience, whereas the activities appealed mostly to people already engaged in science.

While this aspect has the potential to mark a trend in the way people perceive the different activities and exhibition in relation to the level of their professional preparation, the noticed **differences in numbers and clusters of categories are not substantial enough to bias the surveys' results towards a more 'scientific-educated' approach towards the topic presented.**

Graphs 2, 3: concentrations at type of employment and level of education

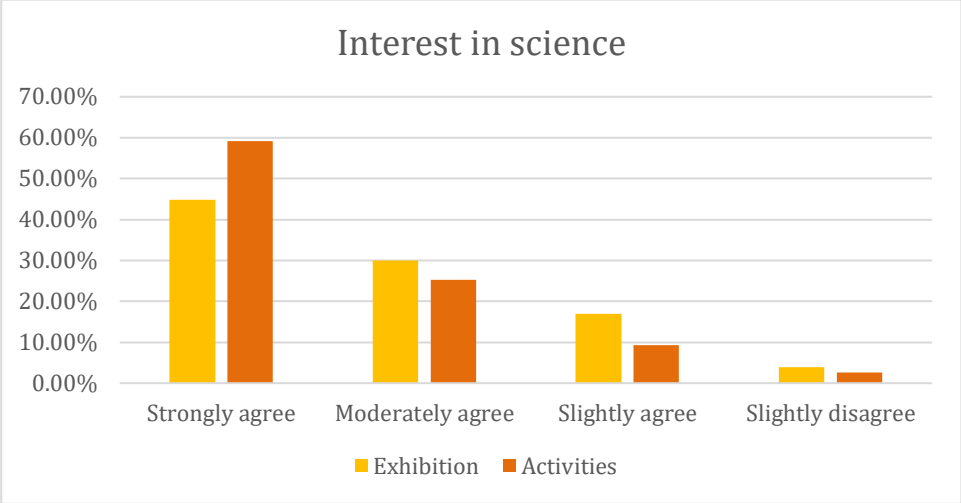


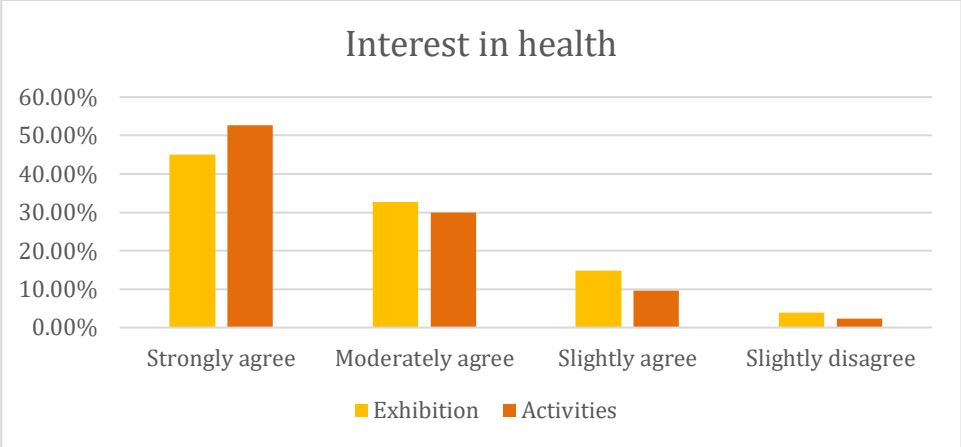


Respondents **displayed significant interest in the topics of science and health**. The large majority of the exhibition sample has indicated a strong interest in science (approximately 78%) and only 21% have shown a slight interest while the other responses - such as no interest at all or no opinion on the issue - registered insignificant percentages. Moreover, 78% of the respondents showed a strong interest in health, and only 19% showed a slight interest in this topic. This strong interest is replicated in the activities' sample: around 85% of respondents declared they were interested in science and 82% in health, while only 12% showed slight interest in both these topics.

The graphs below summarise the results regarding the sample interest in science and health for both activities and exhibition.

Graphs 4, 5: Sample responses in relation to their interest in science and health

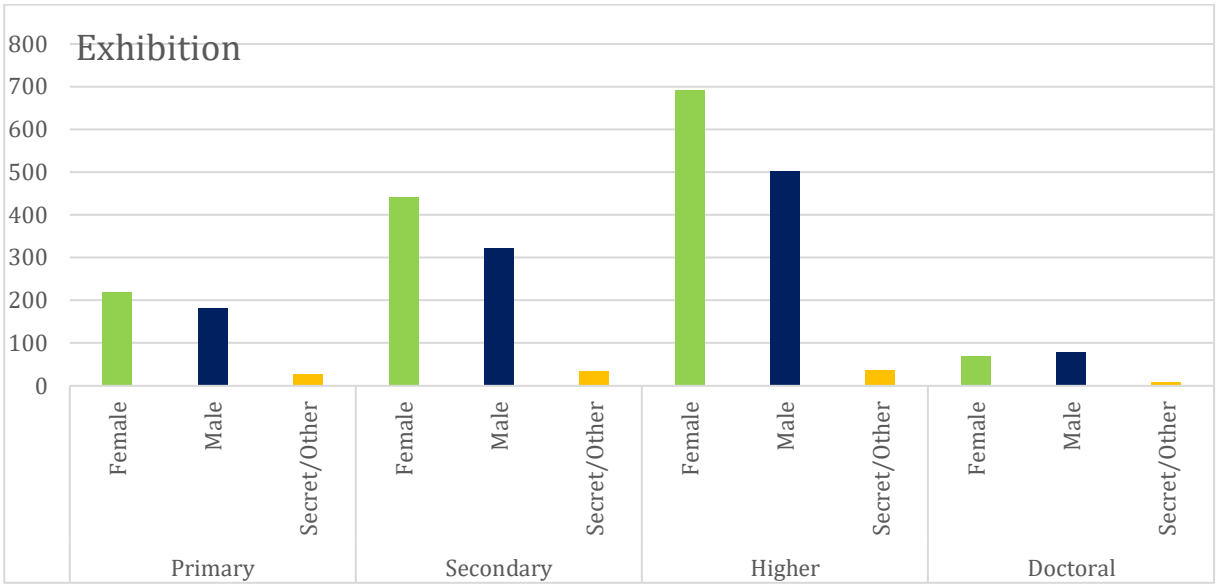


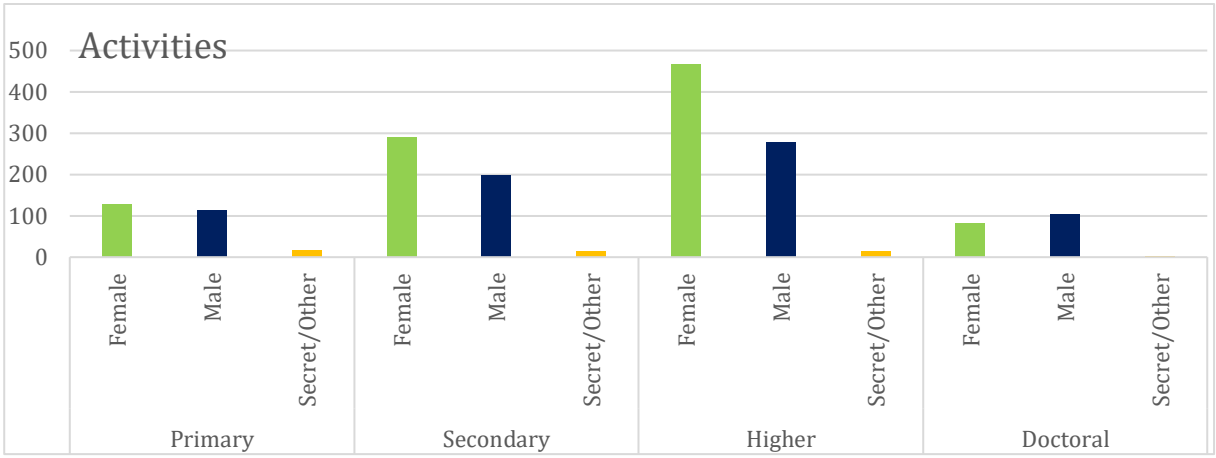


Interestingly, the research revealed a correlation between the respondents' level of education and their declared interest in science and health related topics, for both the exhibition and activities. As such, a high interest in these topics was generally noticed at respondents with a higher level of education (bachelor, master or doctoral degree), while other respondents displayed a more moderate interest in these fields

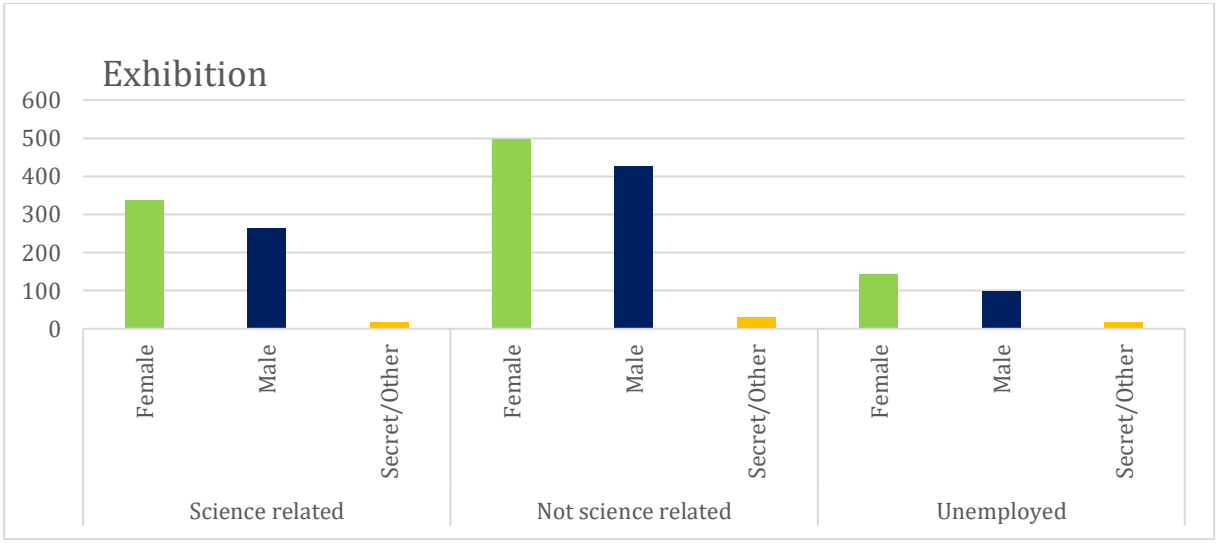
Overall, the sample reflected a **balanced gender repartition** in **all levels of education and types of work**. That is, the ratio between men and women in all education and work categories were similar and proportional with the overall ratio men-women, for both exhibition and activities. The following graphs visualise this finding, based on cross-tabulations between **gender, type of employment and education levels** variables.

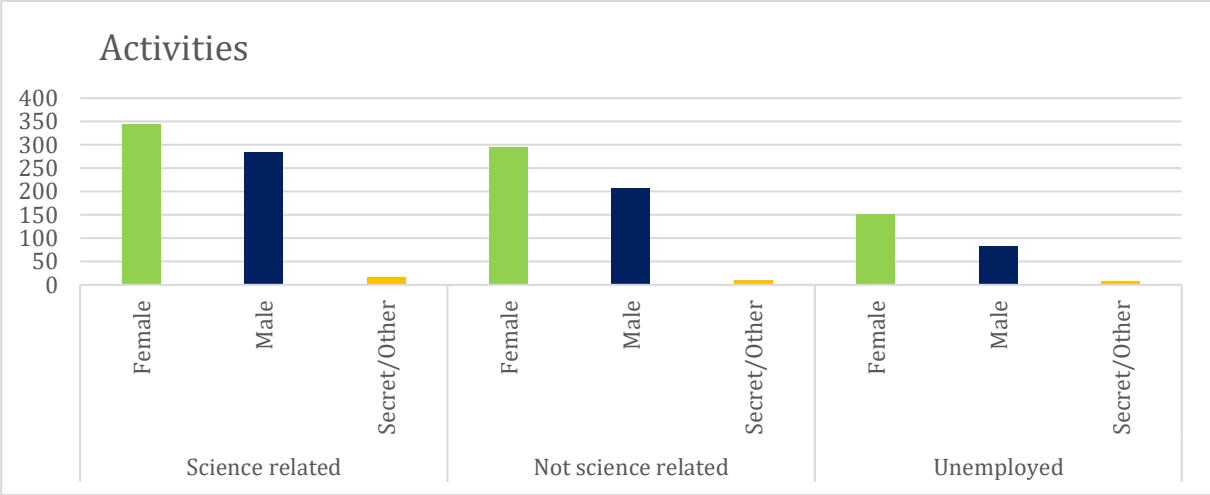
Graphs 6, 7: Gender repartition on levels of education





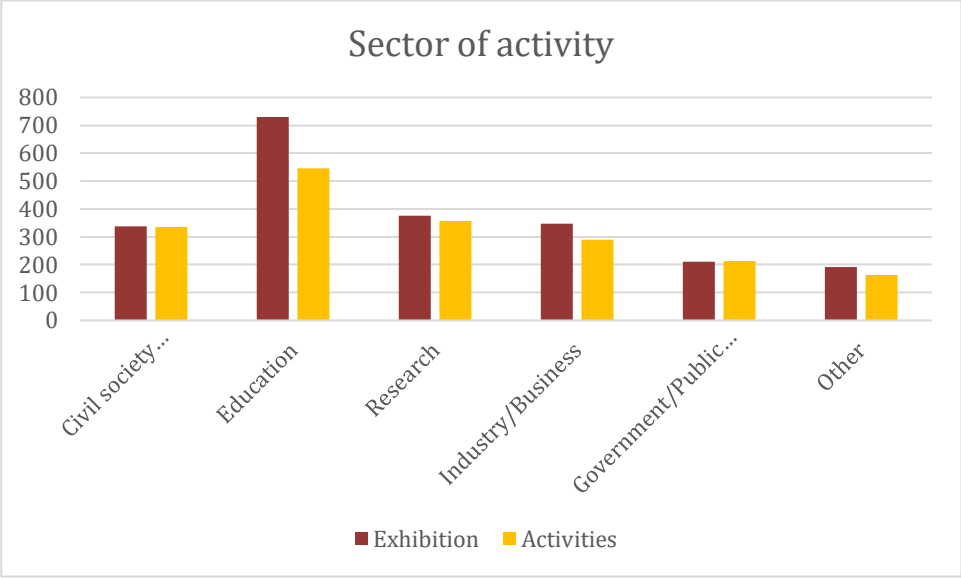
Graphs 8,9: Gender repartition on types of employment





The Education sector is the most represented in the sample (as the more specific sector of work and activity in general), for both the visitors of the exhibition and the participants in activities, followed by the **Research sector**. Overall, there is **a very similar repartition per work sector** for both the exhibition and activities, in relation to the overall participants numbers, as shown in the graph below.

Graph 10: Clustered repartition per work sector for exhibition and activities



The overall balanced sample regarding socio-demographic characteristics for both the activities and exhibition indicates that the results of the research are not biased towards a certain view associated with certain social and economic characteristics, but, on the contrary, provide a balanced image of the overall view on science engagement, as perceived by several representatives of different age cohorts, levels of education, sectors of activities across Europe.

Finally, the survey's answers for both the exhibition and activities were grouped by geographical areas, in order to explore potential patterns in the way individuals relate to the

topic of science and health and overall science engagement in four main regions: Northern, Western, Central/Eastern and Southern Europe. However, the geographical repartition analysis has shown that there is no substantial difference in the responses provided in the identified regions.

4. ASSESSMENT OF PUBLIC ENGAGEMENT

This section presents the research's findings in relation with the level of public engagement in the Sparks exhibition and activities. Four indicators inform on the public engagement:

- the visitors' and participants' displayed interest in the proposed topics,
- their understanding of the topics,
- the level of participation in the discussions
- their willingness to participate in future similar activities.

As described in table 1, the evaluation and assessment of the project will be based on the analysis of three different conceptual areas. These conceptual areas will then be at the base of the second layer of analysis, that will be aimed at identifying potential successful or unsuccessful factors of this project by operating different correlations between the indicators of these areas and the socio-demographic composition of the sample. The first conceptual area is related to the public engagement indicators. These indicators will be of significant importance to understand the actual extent of engagement and participation in the different project's activities.

4.1 Interest in the topic

In what concerns the exhibition, the analysis of the aggregated data showed a rather high interest of the visitors in the proposed topic. The responses to the survey questions listed in the table 1 reflect that the exhibited stories and artworks presented a high relevance for the viewers, being able to stir their thoughts and generate dialogue.

Similar results were observed in relation to the aggregated responses collected for the different types of Sparks activities. The respondents considered, in general, the topics as relevant and presented in a thought provoking way.

In addition to this, both visitors of the exhibition and participants in activities considered the topic of such events (i.e. its relevance for them) as an important factor to trigger their participation in future similar events.

The analysis further revealed interesting correlations between the respondents' level of education and the relevance of the topic and the artworks. Respondents with a higher education background (bachelor, master or doctoral degree) have generally considered the exhibition' and activities' topics as significantly relevant for them. The same was noticed in relation to the artworks presented in the exhibition, which have in general, triggered a stronger interest among the higher educated respondents. In addition to this, higher educated respondents were also those who, in general, considered the choice of the topic as an important trigger for them to participate to similar activities or exhibitions in the future.

Arts and Science in Sparks
Three selected artists following a call for residency at the Ars Electronica Futurelab all worked on the verge of art and science to develop projects reflecting visions of future healthcare and wellbeing. The outcomes were very diverse in their artistic approach and show well the potential of art as an enabler of RRI.

As different as the projects are, they all serve a common goal: to give the audience a feeling of what might be, to anticipate the consequences of technological shifts, art can serve as a shift in perspective. This approach aims to unlock new strategies to tackle unsolved challenges and to stimulate advanced approaches to innovation. The exhibits try to engage the public with a deeper and more human perception of the technological evolutions that are defining postmodern society. In a way, the art pieces serve themselves as mediator between public and science - as they interpret and question scientific approaches. The key is not present the artworks as 'something else', but as equal to the science stories. So, to better understand the scientific aspects of the artworks Sparks partners need to make the links and connections between art and science visible to the visitors, which has been a challenging aspect for a number of them.

4.2 Understanding of the topic

The aggregated data from the exhibition survey also informs about the level of understanding of the topic by the visitors. It could be observed that the perception of the respondents is significantly positive, showing a general high confidence in participating to discussions around health and that the amount of information provided was deemed sufficient in order to understand the topic. Finally, the analysis of the responses also showed the importance for participants to discover and familiarise themselves with new scientific tools and practices, in order to attend more similar events in the future.

The analysis of the aggregated data for the activities shows that, in general, the participants also displayed a significant understanding of the proposed topics. The respondents had enough information to understand the concepts and they felt inspired to continue the discussions after the event. The importance of discovering new scientific tools in order to attend to similar activities in the future was also highlighted in the responses.

4.3 Participation in the discussion

The third indicator aims to highlight the actual extent of participation in the discussion among the people involved in the activities and exhibition. This indicator was equally informed by the organisers' opinion, thus providing a double point of view on the matter.

The analysis shows that the format of the exhibition had chiefly encouraged the visitors to share their thoughts around the presented topic. The opportunity for participants to share their thoughts and to speak with experts is generally considered as a highly important factor to trigger to the participation in future similar events.[6]

The analysis of the aggregated data for the activities also shows positive results amongst respondents in what concerns the opportunities to participate in the discussions. The participants considered that they had the opportunity to share their thoughts and to hear about different point of views. Moreover, they felt that the moderator facilitated the dialogue, that there was sufficient time to engage in the discussion and that their contribution was treated equally to others'. Finally, respondents would also like to attend similar activities in the future if they have the opportunity to share their thoughts and to speak with experts. These points of view are shared by the organisers, who equally felt that, overall, the participants actively engaged in the discussions. According to the organisers, the discussions initially required encouragement from the chair/moderator, but they eventually easily moved forward and the participants continued the discussion also after the event.

These results generally show the importance of interactive formats and of the quality of the moderation to trigger higher participation from the audience (see further details in section 6.2).

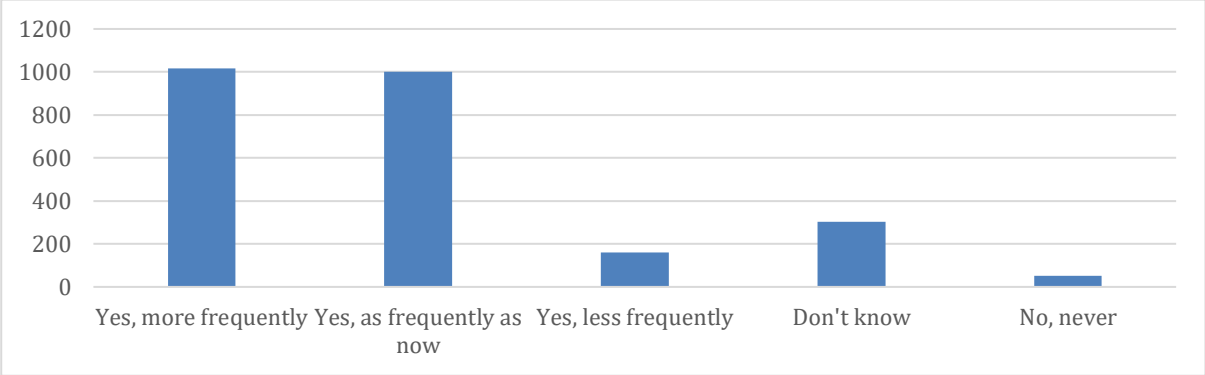
4.4 Willingness to participate in future similar events

The assessment of the willingness to participate in future similar events informs about the potential replicability of the Sparks activities. The indicator concerns the perspectives of both participants and organisers.

The analysis reveals that a strong majority of respondents are willing to take part in similar events in the future (approximately 80% of the respondents). The graph 11 below shows the number and degree of willingness to participate in future events expressed by the exhibition's visitors.

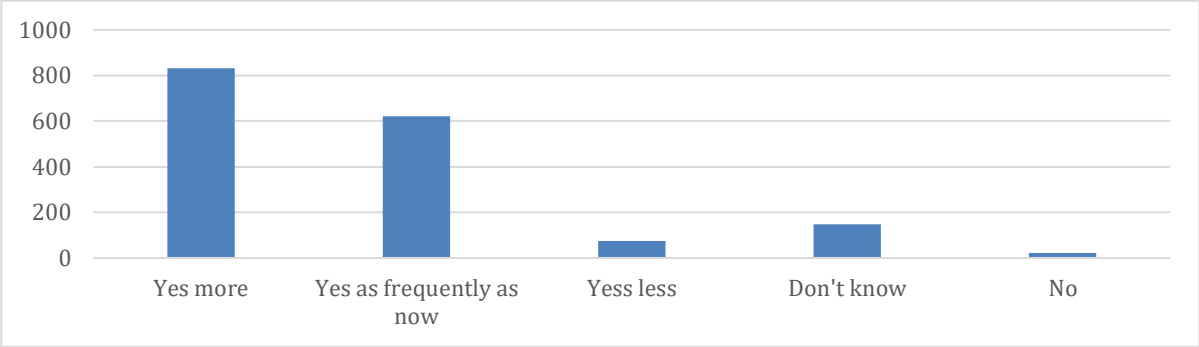
[6] Local organisers were encouraged to hold the science espressos in the Sparks exhibition event space therefore more links could be made between the activity and the exhibition and to complete the visitors' experience of the exhibition with interaction with an expert, a patient, a citizen scientist etc. invited to speak and interact with the audience.

Graph 11: Willingness to participate in future similar exhibitions

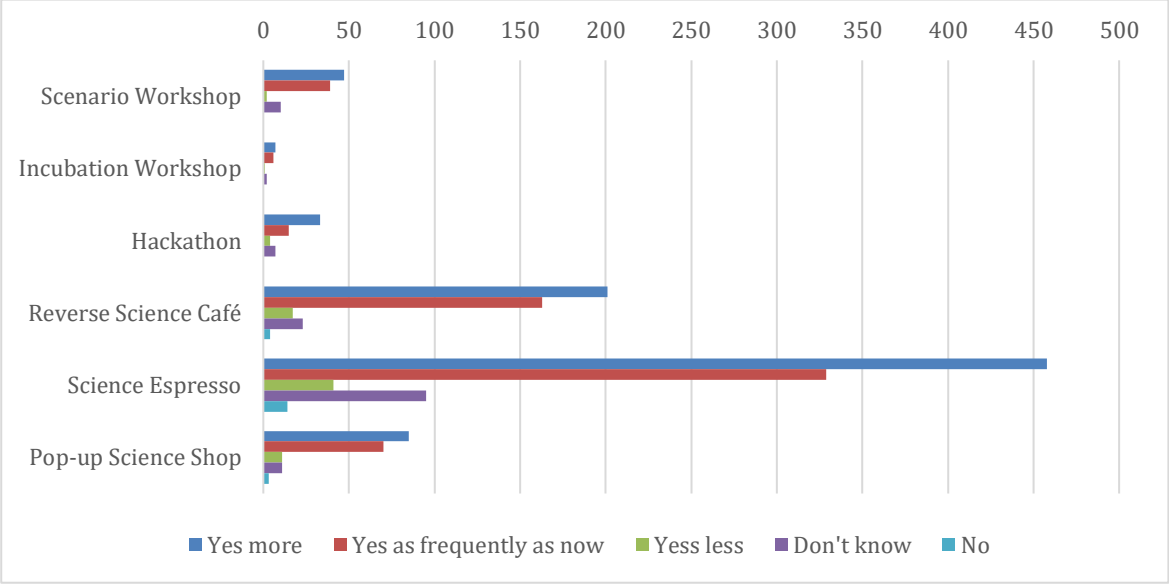


Equally, the activities' survey shows that a strong majority of respondents are willing to take part in similar activities in the future (around 90% of the participants). This is shown in the graph 12 below.

Graph 12: Aggregated data for the willingness to participate in future similar activities

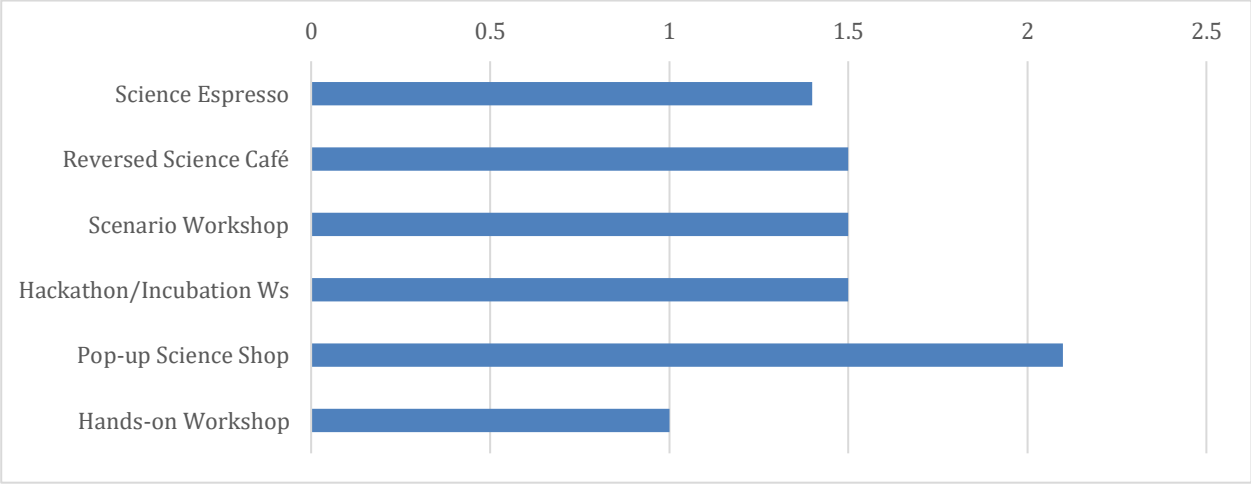


Graph 13: Willingness to participate in future similar activities per type of activity



The local organisers also share the above points of view. Graph 14 shows how the local organisers perceived the audience's willingness to participate in future similar events in relation to each type of activity.

Graph 14: Audience's willingness to participate in future similar events per type of activity – from the point of view of local organisers*



* the answers are computed via a weighted average which shows the willingness' score on a scale from 1 to 6 (1 corresponding to 'strongly agree', 6 corresponding to 'strongly disagree' values on the Likert scale of the question). As seen in the graph, all activities scored between 1 and 2.1, showing a general strong willingness to participate in future similar activities.

5. STAKEHOLDERS ENGAGEMENT

The success of the Sparks project highly depends on the promotion and organisation of the activities at local level. The local organisers were responsible for the identification and establishment of local partnerships with stakeholders from the education, administration, government and business fields. As a result, the level of stakeholders' engagement is informed from the organisers' perspective on their willingness to organise and take part in future similar events and on the level of the multi-actor (stakeholders) dialogue. Another important indicator relates to the respondents' perspective on the types of societal actors suited to play a role in research and innovation.

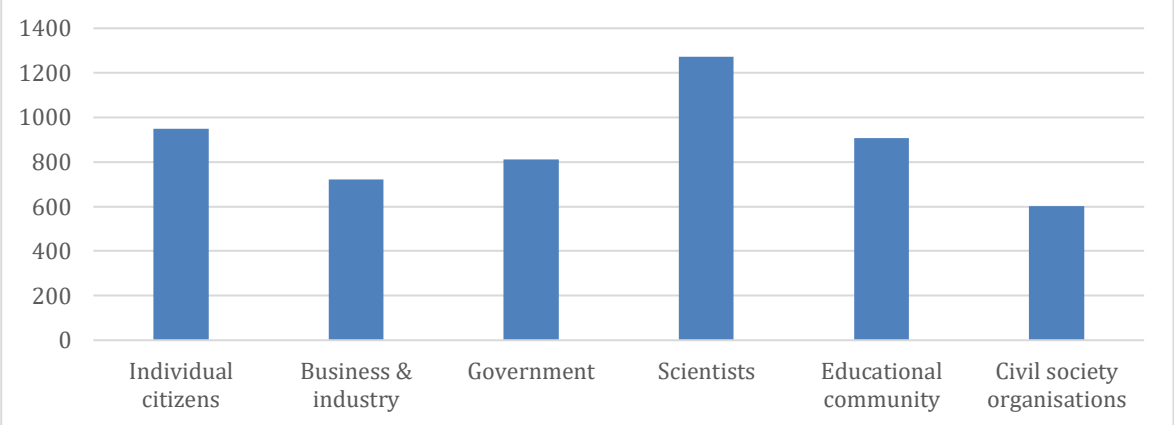
This section presents the findings in this area as well as a brief overview of the number and type of stakeholders involved per venue.

5.1 Respondents' perspective on suitable societal actors to play a role in RRI

In order to measure the level of engagement amongst the stakeholders it is also important to note which actors are the most suitable to play a role in Research & Innovation in the field of health, according to the Sparks events' participants.

In fact, the analysis of responses from activities' participants shows that the majority of responses pointed to scientist as the category of actors the most suited to get involved in the Research & Innovation health field. However, as shown in the graph below, respondents have, in general, different perspectives about this issue.

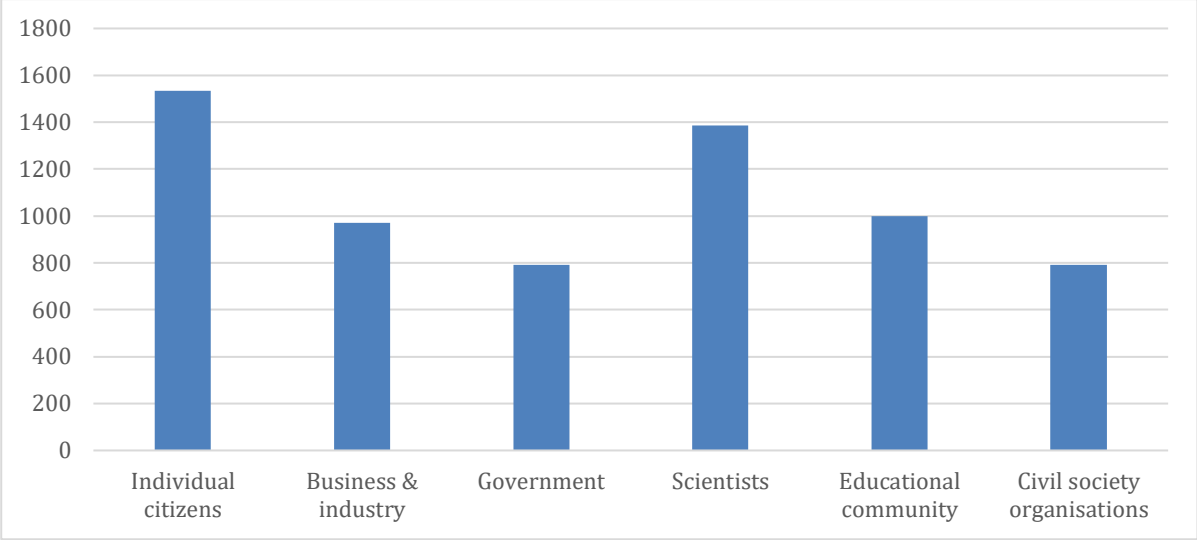
Graph 15: Type of actors that are viewed as suitable to engage in RRI in the field of health - activities



For what concerns the responses provided to the same question by the exhibition participants, it could be argued that, in this case, the majority of respondents retain that individual citizens –

and to a lesser extent the scientists – shall be engaged in Research & Innovation in the field of health, as also witnessed by the graph below.

Graph 16: Type of actors that are viewed as suitable to engage in RRI in the field of health - exhibition



This trend can be correlated to the very topic and curatorial approach of the exhibition that showcased personal stories of individual citizens empowered by technology to tackle health issues and take part in scientific research. Feedback gathered on local organisers' general impression on the exhibition highlighted the strong, personal-driven interest of visitors. The realistic character of the stories presented was reported to be conducive of identification and inspiration from the visitors' side. Many local organisers underlined that the novelty of the approach encouraged visitors to cast a new look on citizen contribution to research and innovation.
Some testimonies of Beyond the Lab hosts are presented below:

'What worked best was to focus on the individuals and to show, that scientists are citizens and citizens are scientists' (Ars Electronica, Austria)

'Visitors […] were very energized by the novelty of all the stories. Beyond the lab comes with an extremely positive outlook on the future and is a very empowering exhibition' (Norrköping Visualization Center C, Sweden)

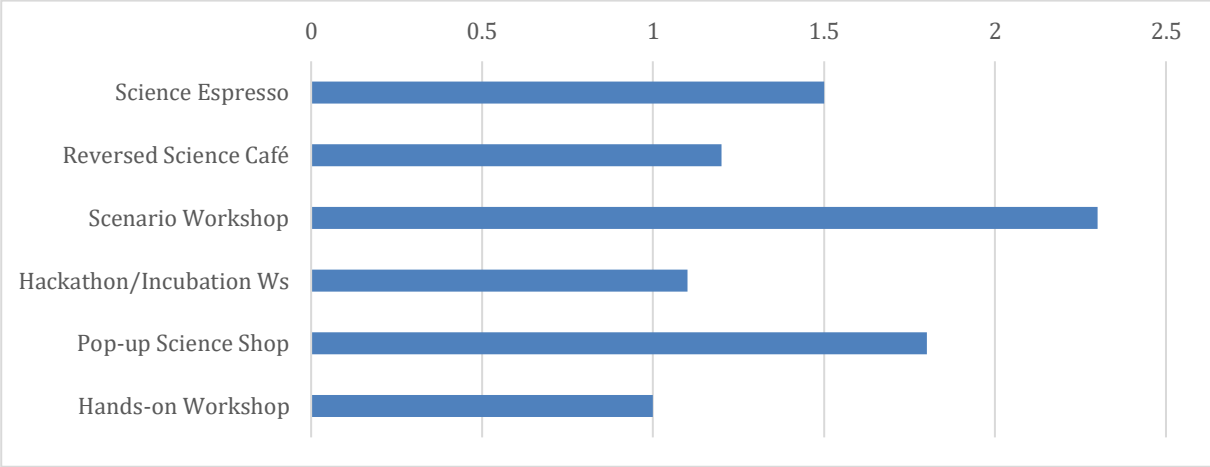
'Most visitors were very surprised to discover that people without background in medicine and/or engineering started to make incredible inventions that helped them and others to better life with their diseases. Many visitors underlined that this was the key message of the exhibition and also that motivated them to also get involved.' (Luxembourg Science Centre, Luxembourg)

5.2 Willingness to organise future similar events

The willingness of the local partners to organise future similar events shall be considered significantly important to assess, the impact of collaborations and partnerships at local level and to consider the project's sustainability.

The analysis shows that the organisers are generally keen to organise similar events in the future, as expressed by the large majority of organisers. The graph below shows the expressed willingness of local organisers to use again in the future the entire Sparks procedure (proposed theme, methodological guidelines, training, etc.) for each type of activity.

Graph 17: Willingness to organise future similar activities*



* the answers are computed via a weighted average which shows the willingness' score on a scale from 1 to 6 (1 corresponding to 'strongly agree', 6 corresponding to 'strongly disagree' values on the Likert scale of the question). As seen in the graph, all activities scored between 1 and 2.3, showing a general strong willingness to use again the Sparks formats in the future.

5.3 Multi-actor dialogue

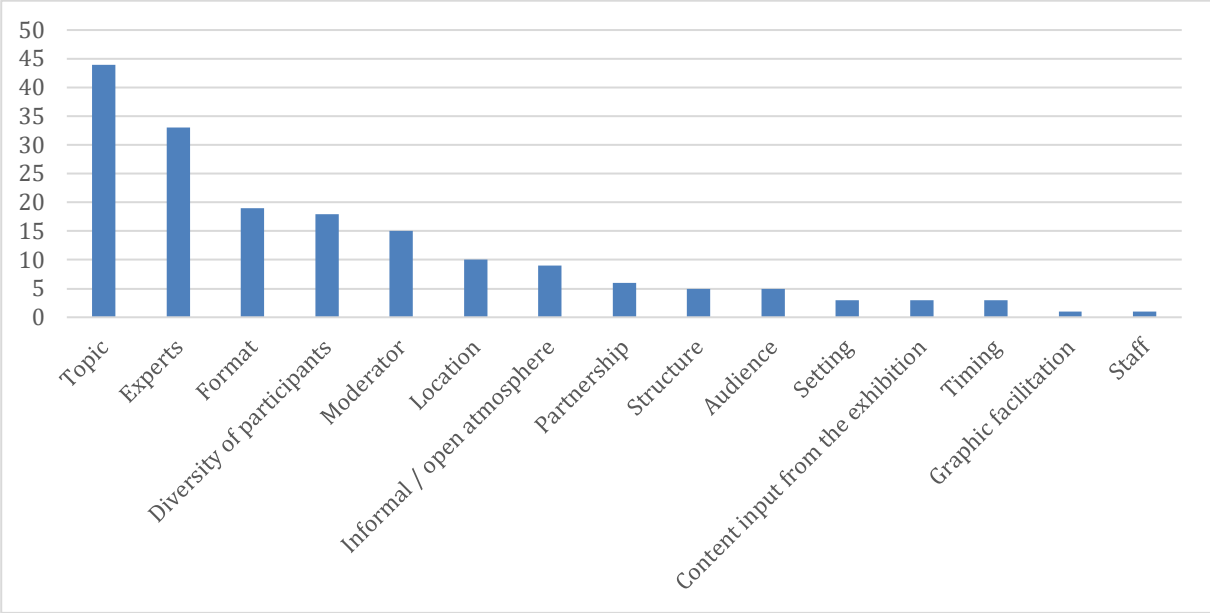
The analysis reveals a wide range of factors which have positively or negatively impacted the multi-actor dialogue. These are:

- **the chosen topic**
- **the content inputs from the exhibition**
- **the way the topic was presented**
- **the physical location**
- **the presence of different actors and points of view**
- **the way the moderator animated the session**
- **the availability of sufficient time to engage in the discussion**
- **the way in which the different contributions were treated**.

As shown in the graph 18, one of the most successful factor relates to the chosen topic, which fostered the debate and the multi-actor dialogue. Another recurrent successful factor relates to

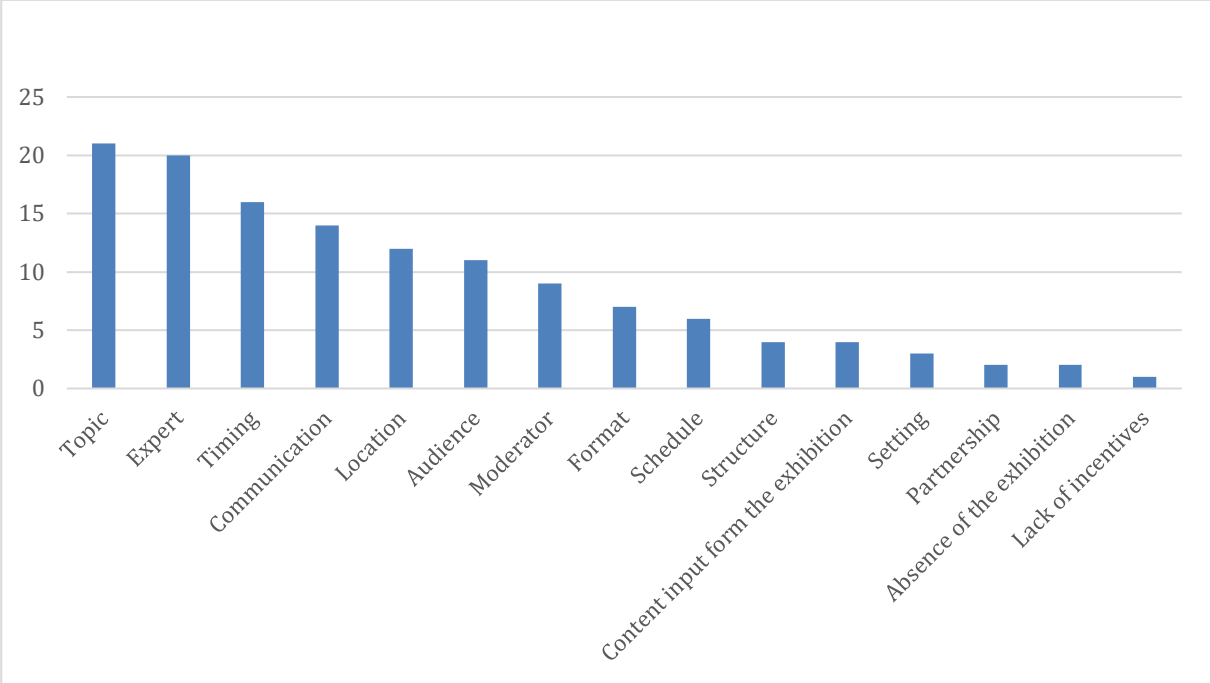
the quality and diversity of the experts: according to the organisers these characteristics have facilitated the dialogue within the different activities. Finally, the activities' formats have also played an important role in encouraging the multi-actor dialogue. In particular, the format has been mainly described as informal and interactive.

Graph 18: Successful factors influencing the multi-actor dialogue – aggregate results for all type of activities



Graph 19 shows that the most recurrent factors which have hampered the multi-actor dialogue according to the different organisers are also the choice of the topic and the quality of the experts. The fact that these two factors account for both the success and unsuccess of debates reveals topics and experts' pivotal role in the development of discussions. Furthermore, it is also worthy to mention the recurrence of two other factors that prevented the multi-actor dialogue: communication and timing. The first one refers to the perceived lack of communication aimed at securing and attracting attendances, the lack of information regarding the context and content of the different activities and finally the absence of press and media actors. On the other hand, the timing factor refers to the fact that, according to the organizers, there was not enough time for the discussions, or on the contrary, that the event lasted for too long, thus preventing an active engagement in the discussion by the activities' participants.

Graph 19: Unsuccessful factors influencing the multi-actor dialogue – aggregate results for all type of activities



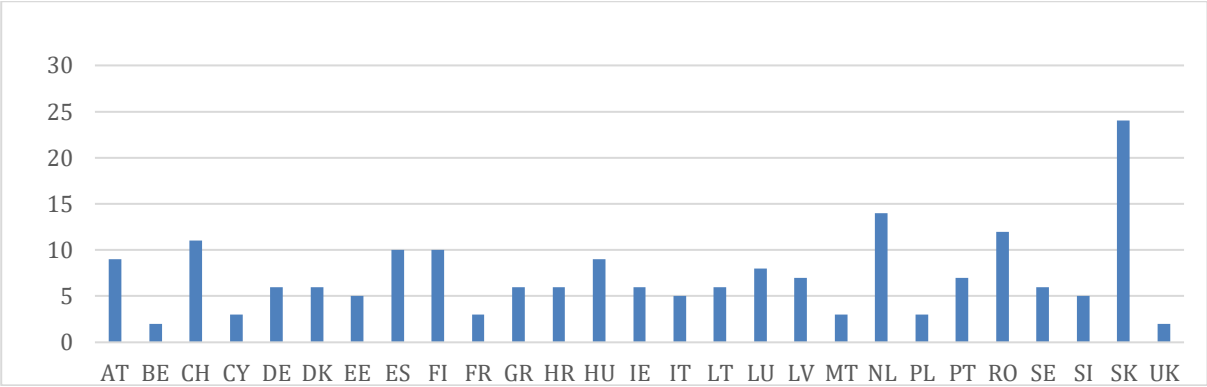
The list of factors and their related definition could be accessed in the Annex II.

5.4 Number and types of involved stakeholders per venue

The number and types of involved stakeholders per venue reveals, to a certain extent, the dimension of partnerships and collaborations at local level. The Toolkit will give more information on the roles of involved stakeholders in the different Sparks activities.

The aggregated data show rather high differences between the number of partners from country to country, ranging from 24 (Slovakia) to 2 (UK and Belgium). In total there were 194 stakeholders involved in the 27 different venues for which data was available. However, the data collected via the template does not show the importance or scale of the partnerships. As such, some local organisers could have established few large partnerships with big stakeholders, while others could have set up several collaborations with smaller local partners.

Graph 20: Number of involved stakeholders per venue



Furthermore, the data shows that the majority of involved stakeholders come from the education and research fields. Other recurrent types of stakeholders are represented by civil society organisations and to a lesser degree, actors from the industry and business sectors. Finally, the number of stakeholders relating to the government and media/marketing fields could be considered as the least involved for all the types of activity.

6. SUCCESSFUL PRACTICES

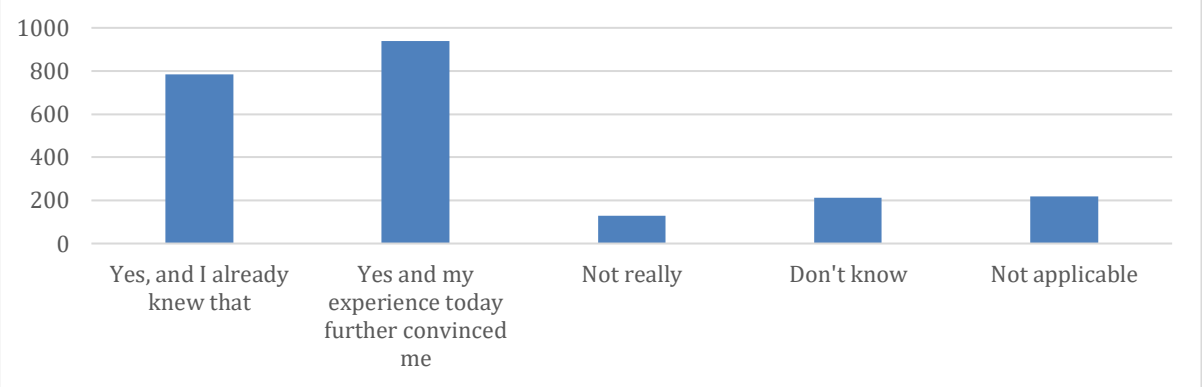
This section presents the overall tools and practices which proved to be relevant for the success of the Sparks events (i.e. contribute to fostering public engagement, multi-actor dialogue and proved to be important elements in the organisation of future events), according to both participants and organisers. The investigated tools and practices relate to the venue's adequacy and the specificities of the events' format.

6.1 Venues' adequacy

The chosen venues represent an important source of investigation, in order to understand whether science centres, museums or other types of venues shall be considered as suitable locations for these events. It is noteworthy to mention that 10 out of 17 local organisers held Sparks events a science museum or a science centre. The remaining 7 organisers used various type of locations, ranging from university, library and public school to resort, creative hub, technological park or other type of museums (e.g. historical museum). This variation in the type of exhibition and/or activities venues is due either to internal (the partner is not a science centre or museum and has to have Sparks events in its premises or at a local partner's) or external factors impacting the set-up of the exhibition (space, renovation works, etc.).

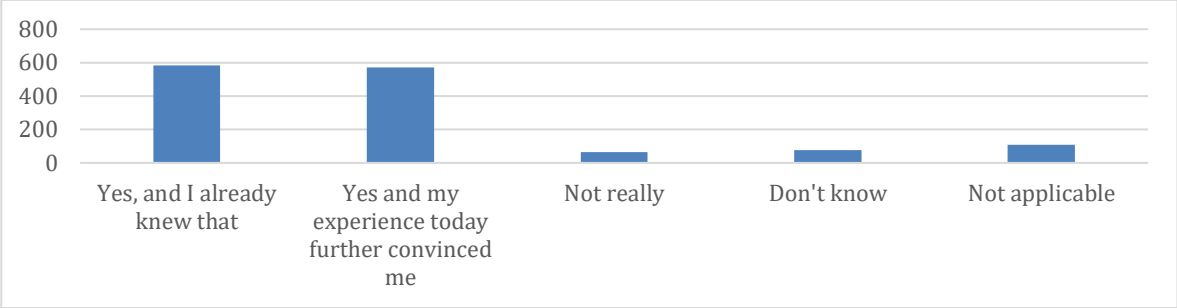
The exhibition's visitors' survey show that the large majority of respondents consider science centres and museums suitable, as these venues were perceived appropriate places for debates and discussions around the proposed topic. Graph 21 summarises the visitors view on the matter.

Graph 21: Science museums and centres as appropriate place to share thoughts and debate? - exhibition

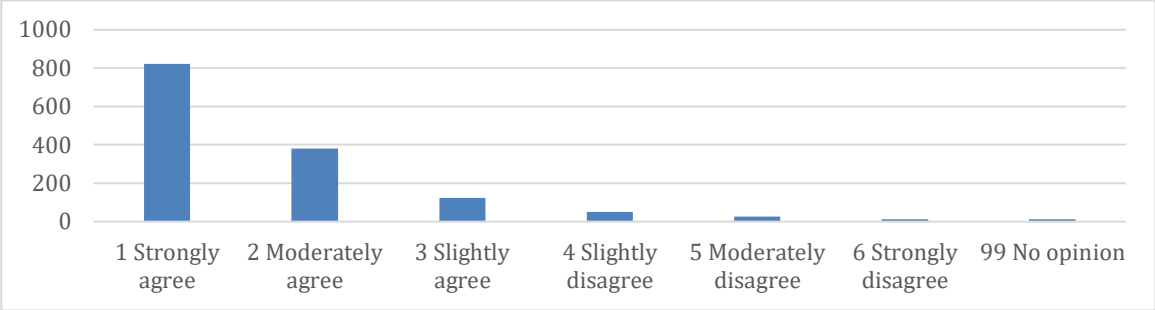


The results are similar in what concerns Sparks activities participants' views. The survey's results show that a large majority of the respondents find science museums and centres as appropriate places to share thoughts and debate. Moreover, respondents also considered the physical location as adequate to hear participants' contributions. The graphs 22 and 23 summarises these responses.

Graph 22: Science museums and centres as appropriate place to share thoughts and debate? - activities



Graph 23: Physical location as adequate place to hear contributions? - activities



More qualitative insights on the venues' adequacy were provided by the local organisers. Their inputs were very diverse and they weren't mandatory, since the venues' evaluation mainly refers to subjective perspectives, which are influenced by the diversity of the venues correlated with the several types of activities. Thus, it is very difficult to retain overall absolute advantages and disadvantages, given different contexts, social environments etc. As such, in order to summarize the outcomes of the qualitative insights it is necessary to define what 'venue adequacy' actually means for this report.

In fact, it is possible to argue that there are 3 general factors that influence the adequacy overall and characterize the venue as a suitable location for this type of events:

1. **Space (size, acoustics, setting…)**
2. **Location (near the exhibition, periphery…)**
3. **Environment (noisy, quiet, comfortable…)**

Thus, as emerged by the analysis of the qualitative data included in the templates for local organisers, it is important that the venue has enough space for the number of expected participants and that the space was correctly allocated amongst participants in order to involve them in the discussions. For instance, the French local organisers claimed that for the Science Espresso there was not enough space for all the participants.

For what concerns the choice of the location for the different activities, it has been pointed out that for the organisation of the Science Espressos, the location shall be outside of the exhibition

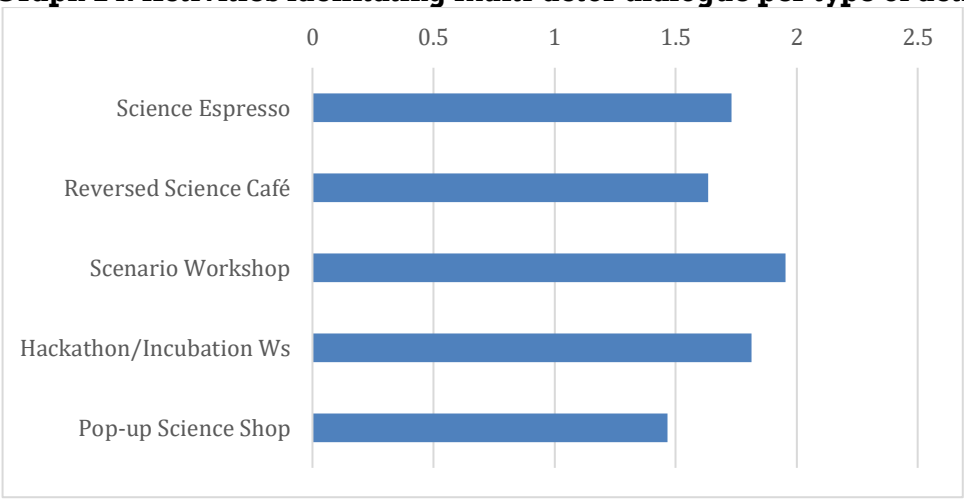
space, as for instance the entrance area of the museum. The organisers in Croatia and Sweden, point out that an unconventional space (e.g. a cafeteria in Sweden and a health resort in Croatia) might work better, since it encourages an open and informal atmosphere (Sweden) and because the topic might fit well with the location (Croatia). The Greek organisers also pointed out that when organising this type of events, it could be important to choose a location in the city centre or in places that could attract and facilitate the participation of everyone, thus avoiding peripheral locations. Finally, the venue should be characterized by a quiet and comfortable environment. Especially for what concerns the organisation of the Scenario Workshop, it has been pointed out that it could be more suitable to have this type of event organized in comfortable spaces, which seems to be more appropriate than setting up conference tables, since this would allow participants to open-up and getting out of their usually formal roles[7]. Another important feature at the base of the venues' adequacy regards the possibility of having locations that are not too noisy or busy, since this could prevent the occurrence of debates and discussions, as it has been the case for Copernicus Science Centre in Poland and Science Museum London in the United Kingdom which are both very popular and therefore bustling science centres.

6.2 Formats' interactivity

In order to establish the level of interactivity of different Sparks formats, the analysis focuses on the input provided by local partners, as they integrally organised and implemented the formats.

The data collected among the local organisers showed that the different formats are generally considered interactive facilitating multi-actor dialogue. Moreover, the analysis of qualitative outputs has also revealed that one of the most recurrent success factors – especially for the Science Espresso and Reverse Science Café formats - was the interactivity of the format.

Graph 24: Activities facilitating multi-actor dialogue per type of activity*



* the answers are computed via a weighted average which shows the value each activity scored on a scale from 1 to 6 (1 corresponding to 'strongly agree', 6 corresponding to 'strongly disagree' values on

[7] The setting has to be related to the length of the event: a Scenario Workshop lasting for 5 hours will need a more comfortable space than a 30 min Science Espresso (see table 5 on activities formats below).

the Likert scale of the question). This value indicated the multi-actor dialogue, which is a composed indicator, taking into consideration respondents' views on 9 issues: **the chosen topic, content inputs from the exhibition, the way the topic was presented, the physical location, the presence of different actors and points of view, the way the moderator animated the session, the time to engage in discussions, the way contributions were treated and the overall format of the activity**. As seen in the graph, all activities scored between 1,4 and 1,8, showing the multi-actor dialogue was successfully facilitated.

Moreover, an important outcome relating the interactivity of the format could be detected by operating a correlation between the characteristics of the activities' formats and the related responses provided by the activities' participants.

The research revealed that the interactivity of the formats is predominantly influenced by:

1. **the type and number of experts invited,**
2. **the presence of a specific number of moderators,**
3. **the expected length of each activity.**

The experts have proven to play an essential role in triggering the interest of the activity's participants, as well as the moderators in fostering the debate and the interactions from the audience. Finally, the timing of the event is also quite important to understand if the formats provide enough time for discussions. The table below shows the guidelines provided to the local organisers for the organisation of the Sparks activities according to their specific formats.

Table 5: Sparks activities' formats

Type of Activity	Number of experts	Moderators	Approximate duration of the activity
Reverse Science Café	1	1 main moderator + 1 moderator per group (according to the number of participants)	3 hours
Science Espresso	1	1	Between 30 and 60 minutes
Pop-up Science Shop	1 supervisor, 1 researcher/student and a pool of researchers		Varies (from 2 weeks to 2 months)
Scenario Workshop	Not specified	1	5 hours
Incubation Workshop / Hackathon	Participants intended as experts	Mentors (according to the number of participants)	6 days

The analysis of the indicators relating to the public engagement conceptual reveals, as expected, that there is a strong correlation between the characteristics of the formats of each activity and their interactivity. As mentioned in sections the sections 4.1, 4.2 and 4.3, the participants in activities generally felt encouraged to share their thoughts, to take actively part

in the discussion, to talk with people they did not know before and to continue discussing also after the event.

Moreover, the aforementioned analysis of the public engagement indicators has also revealed that, according to activities' participants, the topic was, on average, presented in a thought provoking way and that enough information was provided to understand it. Finally, the interactivity of the format – which is provided by the organisational tools listed in table 5 – could also be tested in relation to the perceived willingness of the activities' participants to attend similar events in the future if they can speak with experts and share their thoughts, but also if the format would be similar to the one of the events they have attended.

7. CONCLUSION

The aim of this report is to conceptualise the knowledge and identify the impact that the Sparks project had on communicating RRI practices at the intersection of health, science and technology. The report highlighted three main conceptual areas that inform on Sparks' main outcomes: **public engagement, stakeholder engagement** and the **successful practices** highlighting the potential replicability of the different formats and methodologies.

Within the public engagement area, the analysis of the collected data provided meaningful insights on the interest in the topic and its understanding by the public, the audience's involvement in the discussion and the audience's willingness to participate in future similar events. The overall results show that the public has been widely and strongly engaged in the different activities and in the touring exhibition of this project and that the audience showed interest in participating in similar types of activities in the future.

The stakeholder engagement area allowed the research team to understand to what extent the local organisers have benefited from local partnerships for the eventual success of the project in the different venues. The data analysis highlighted the local organisers' willingness to organise similar events in the future. Furthermore, the multi-actor dialogue indicator informed about the features of the project which helped in triggering and fostering debates and discussions, thus providing insights about the stakeholders' involvement in the project's activities.

One of the research's highlights was the identification of the most suitable societal actors to play a role in RRI from the perspective citizens engaged with Sparks' activities. Despite the fact that scientists represented the first option for the majority of respondents, other categories of actors like individual citizens and the educational community emerged as important in the shaping of RRI practices. These results suggest that amongst the core values of RRI, engagement of a diversity of stakeholders is consider important by the European society to better shape the future of research and innovation, align both the process and outcomes with its the values, needs and expectations.

The last conceptual area highlights successful practices at the base of this project, which inform on the potential replicability of the project's format, setting and methodology. The majority of participants and visitors retain science centres and museums as appropriate venues for the Sparks activities and in general, conducive to dialogue. In addition to this, the insights provided by the local organisers showed that there are in general three main factors which might affect the venue's adequacy: the physical setting of the space (size, acoustic, etc.), the geographical location (peripherical or close to universities, places of interest, etc.) and the type of environment (noisy, informal or comfortable, etc.). The activities' formats proved to be highly interactive. This characteristic is considered by the local organisers as an important factor able to affect the participation, the multi-actor dialogue and, more generally, the success of the specific activity. In fact, each type of activity has been characterized by a different methodology and format that is aimed at fostering interactions amongst participants.

The Sparks project has thus demonstrated that citizen engagement in RRI can be achieved through pan-European campaigns including exhibitions and hands-on activities.

Nonetheless, RRI needs places to happen and facilitate multi-stakeholder dialogue. Thanks to their connections in the field of science and research at local level and experience of science communication, science centres and museums can make a strong contribution to this infrastructure and ecosystem. They can be supported and complemented by other places and meaningful connections such as fab-labs, citizen scientists or makers. Sparks has provided spaces for citizen-led innovation advancing research for instance during hackathons as well a platform to make these innovations better known by the public, telling the stories of citizens and artists empowered by these new technologies such as 3D printing or bio hacking who are contributing to research in health and medicine.

There are strong communities in DIY science, health hacking, taking advantage of new technologies to communicate and share experiences[8] that need to be acknowledged and with whom interaction should be improved through nurturing places for debates and mutual learning online and through onsite activities. With these tested formats of public engagement activities, Sparks has open up spaces and formats for dialogue bridging the gap between research, education communities, civil society and policy.)

Interdisciplinary connections are a vital to come up with innovative solutions closer to societal needs. Sparks activities demonstrate the potential of bringing in different perspectives from the society, research and industry fields. They need to be acknowledged and valued at policy level and policy tools need to be adapted to improve dialogue between science and society. This is the object of the Sparks Policy Recommendations available on the project's website[9].

[8] See the stories presented in he exhibition 'Beyond the Lab': 'We are not waiting' diabetes community, Parkinson's patients sharing information online, Patient Innovation network, or the 'I like clean air' campaign as well as the local RRI case studies.

[9] http://www.sparksproject.eu/news/what-sparks-recommends-policy-makers

ANNEX I: Definitions of terms

Bellow we list the main terms used in the analysis of the formats' interactivity and the multi-actor dialogue, together with their definitions within this analytical context, for a better understanding.

Terms	**Definition**
Absence of the exhibition	In a Sparks local organisation, the location of the activities was different from the one of the exhibition or the exhibition arrived later than the activities had started, thus preventing from getting content inputs from the exhibition for the activities.
Audience	In some venues, the audience was adequately prepared and interested in the topic and its diversity contributed to the interactivity of the activities. On the other hand, in other venues, the audience was perceived as a factor that did not facilitate the debate, because people were, for instance, not enough informed about the topic or because they were stirring the discussion, thus preventing others' contributions to be heard.
Communication	All potential issues encountered by the organisers in dealing with the communication management, ranging from the stakeholders' engagement, to the event promotion and experts' and media invitations.
Content input from the exhibition	The adherence of the exhibition' content with the activities, meaning that the content of activities and exhibition were directly or indirectly connected or on the contrary, whether the content of the exhibition did not fit with the activities' topic.
Diversity of participants	The diversity or homogeneity of the participants' background, age group, sector of activity etc. It is arguable that this perceived diversity amongst participants could have played a significant role in fostering interactivity and, in general, the debates and discussions.
Experts	Experts refers to both the quality of the invited experts (in relation to their knowledge of the topic, their level of preparation, the quality of their presentation, their ability to interact with the audience) and the diversity of invited experts from different backgrounds that allowed multiple points of view to be expressed in the discussions.
Format	How the guidelines and methodology provided within the Sparks Handbook have been understood and adopted by the local organisers. This informs about how the format could have had an impact on the interactivity and organisation of the different activities.
Graphic facilitation	A graphic support tool used to stir the discussion through drawings. An illustrator is there to facilitate a problem-solving exercise.

Informal/open atmosphere	The quality of the exchanges between participants and between the audience and experts facilitated by the format of activities, as well as by the setting. The informal/open atmosphere was assessed as a factor which facilitated or made more difficult the flowing participation in the discussion during activities.
Lack of incentives	This mainly applies to Hackathons, a type of event that requires the provision of prizes or awards at the end of the activity, incentivising people to participate and dedicate time to the activity.
Location	The place where the activities have been held and the perceived adequacy of the venue, thus providing meaningful insights about the location that better fits these types of events.
Moderator	It refers to the perceived support of the moderators to the development of debates and discussions within the activities, thus mainly informing about the potential interactivity of the different activities.
Partnership	The network of third parties involved in the activities at local level (invited experts, content providers, host organisations etc.). The quality of the partnership with local stakeholders has been perceived as a pivotal factor in the successful implementation of activities.
Schedule	When in the month, week or day the event was hold. It also refers to the fact that the activity was or not scheduled as part of a larger event or in parallel to other activities. The schedule has been identified as a factor securing or hampering attendance to the Sparks events.
Setting	How the organisers perceived the spatial organisation of the venue hosting the activity and how it facilitated – or not – the participation and interaction with the audience.
Staff	The perceived support or issues in the team fulfilling the organisational tasks for the implementation of the activity.
Structure	Facilitation of the implementation of the activity by detailed guidelines, timeframe, roles and procedures to be respected.
Timing	Timing refers to the fact that, according to the organisers, there was or was not enough time for both presentations and discussion, or that the activity lasted for too long.
Topic	The main themes debated during the Sparks activities (connected to healthcare and technology).

ANNEX II: Exhibition and activities questionnaires

The questionnaires were elaborated in English by KEA in consultation with the Sparks main partners and then translated locally. The Annex II presents the original versions as presented in Deliverable 4.2.

VISITOR QUESTIONNAIRE FOR THE EXHIBITION - ADULTS

Introductory questions

Good morning, I am currently carrying out a survey to assess how well (*museum name*) stimulates dialogue about science and healthcare. Your opinion is crucial to us to understand how to better engage with you. Would you be willing to answer a couple of questions? (Duration: around 5 min.)

Are you 18 or older?

- Yes
- No

If yes, the tablet will automatically open the questionnaire for adults, otherwise it will open the version developed for young people (12-17). Only school groups with students between 12 and 16 years old will be approached.

Are you under 15?

- Yes
- No

Young people under 15 will be distributed a paper copy of the questionnaire together with a form for parents/tutors to fill-in in to approve their participation to the survey. Filled-in questionnaires and forms will have to be sent back to the partner organising the exhibition.
N.B: this question needs to be asked by the interviewer. It will not be displayed on the tablet. Please refer to the legislation that applies in your country for interviewing minor children.

PART I – ASSESSMENT OF SPARKS ACTIVITIES

1) **My impressions about the exhibition…**(*with show card*[10] *with Likert-scale*)

	1 Strongly agree	2 Moderately agree	3 Slightly agree	4 Slightly disagree	5 Moderately disagree	6 Strongly disagree	99 No opinion
I felt encouraged to share my thoughts	☐	☐	☐	☐	☐	☐	☐
I now feel more confident to participate in discussions around health	☐	☐	☐	☐	☐	☐	☐
I feel inspired to continue the discussion around health after visiting the exhibition	☐	☐	☐	☐	☐	☐	☐

2) **How much do you agree with the following statements?** (*with show card with Likert-scale*)

	1 Strongly agree	2 Moderately agree	3 Slightly agree	4 Slightly disagree	5 Moderately disagree	6 Strongly disagree	99 No opinion
The chosen topic was relevant to me	☐	☐	☐	☐	☐	☐	☐
The topic was presented in a thought provoking way	☐	☐	☐	☐	☐	☐	☐
The art works triggered my interest	☐	☐	☐	☐	☐	☐	☐
There was enough information to understand the topic	☐	☐	☐	☐	☐	☐	☐

PART II – READINESS TO ENGAGE

3) **After having visited the exhibition, who do you think should play a role in Research & Innovation in the field of health?** *(multiple answers possible)*
   1. ☐ Individual citizens
   2. ☐ Business & Industry
   3. ☐ Government

[10] See example in Annex III.

4. ☐ Scientists
5. ☐ Educational community
6. ☐ Civil society organisations
7. ☐ Other
   Please specify:_____

4) Would you like to take part to similar exhibitions in the future? (*with show card with answer options*)

1. ☐ Yes, more frequently than now
2. ☐ Yes, as frequently as now
3. ☐ Yes, but less frequently than now
4. ☐ Do not know
5. ☐ No, never

If you have answered 'yes', go to question 5. If you have answered 'Do not know' or 'No, never', go to question 7.

5) I would like to attend similar activities in the future if.... - Please rate the following items in terms of importance (*with show card with Likert-scale*)

	1 Extremely important	**2 Very important**	**3 Moderately important**	**4 Slightly important**	**5 Low Importance**	**6 Not important at all**	**99 No opinion**
The topic is directly relevant to me	☐	☐	☐	☐	☐	☐	☐
The format of the event is similar to the one that I have just attended	☐	☐	☐	☐	☐	☐	☐
I have the opportunity to share my thoughts	☐	☐	☐	☐	☐	☐	☐
I can speak with experts	☐	☐	☐	☐	☐	☐	☐
I can discover new scientific tools	☐	☐	☐	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐	☐	☐	☐

6) Do you agree with the following statement: "*I find science museums and centres an appropriate place to share thoughts and debate*"? (*with show card with answer options*)

N.B. = if the event that you have just attended did not take place in a science museum or centre, please choose the answer 'Not applicable'.

1. ☐ Yes, and I already knew it before this event
2. ☐ Yes, and my experience today further convinced me
3. ☐ Not really
4. ☐ Do not know
5. ☐ Not applicable

PART III – SOME INFORMATION ABOUT YOU

7) In which year were you born? ____

8) Please, indicate your gender:

1. ☐ Male
2. ☐ Female
3. ☐ Prefer not to say
4. ☐ Other
   Please specify: _____

9) What is the highest level of education that you have completed?

1. ☐ Primary Education
2. ☐ Secondary Education
3. ☐ Higher education (Bachelor or Master)
4. ☐ Doctoral or higher level

10) Do you work in any science-related field?

1. ☐ Yes
2. ☐ No
3. ☐ Currently, I am not working

11) How much do you agree with the following statement? (*with show card with Likert-scale*)

	1 Strongly agree	**2 Moderately agree**	**3 Slightly agree**	**4 Slightly disagree**	**5 Moderately disagree**	**6 Strongly disagree**	**99 No opinion**
I am interested in science	☐	☐	☐	☐	☐	☐	☐
I am interested in health	☐	☐	☐	☐	☐	☐	☐
I read or find out about science/health on a regular basis	☐	☐	☐	☐	☐	☐	☐

12) **In which field are you currently active? (for professional, volunteering or other reason) –** *multiple answers possible*:

	Yes	No
Civil society organisation	☐	☐
Education	☐	☐
Research	☐	☐
Industry/business	☐	☐
Government or public administration	☐	☐
Other:_____		

THANK YOU FOR YOUR COOPERATION!

Your responses will be treated in complete confidentiality and with anonymity.

VISITOR QUESTIONNAIRE FOR THE EXHIBITION – YOUNG PEOPLE

For persons between 12 and 17 years old

Introductory questions

Good morning, I am currently carrying out a survey to assess how well (*museum name*) stimulates dialogue about science and healthcare. Your opinion is crucial to understand how to better engage with you. Would you be willing to answer a couple of questions? (Duration: around 5 min.)

Are you 18 or older?

- Yes
- No

If yes, the tablet will automatically open the questionnaire for adults, otherwise it will open the version developed for young people (12-17). Only school groups with students between 12 and 16 years old will be approached.

Are you under 15?

- Yes
- No

Young people under 15 will be distributed a paper copy of the questionnaire together with a form for parents/tutors to fill-in in to approve their participation to the survey. Filled-in questionnaires and forms will have to be sent back to the partner organising the exhibition.

N.B: this question needs to be asked by the interviewer. It will not be displayed on the tablet. Please refer to the legislation that applies in your country for interviewing minor children.

PART I – ASSESSMENT OF SPARKS ACTIVITIES

1) **My impressions about the attended event…**(*with show card*[11] *with Likert-scale*)

	1 Strongly agree	2 Moderately agree	3 Slightly agree	4 Slightly disagree	5 Moderately disagree	6 Strongly disagree	99 No opinion
I felt encouraged to share my thoughts	☐	☐	☐	☐	☐	☐	☐
I now feel more confident to participate in discussions around health	☐	☐	☐	☐	☐	☐	☐
I feel inspired to continue the discussion around health after visiting the exhibition	☐	☐	☐	☐	☐	☐	☐

PART II – READINESS TO ENGAGE

2) **After having visited the exhibition, who do you think should play a role in Research & Innovation in the field of health?** *(multiple answers possible)*
   1. ☐ Individual citizens
   2. ☐ Business & Industry
   3. ☐ Government
   4. ☐ Scientists
   5. ☐ Educational community
   6. ☐ Civil society organisations
   7. ☐ Other
      Please specify:_____

3) **Would you like to take part to similar exhibitions in the future?** (*with show card with answer options*)

   1. ☐ Yes, more frequently than now
   2. ☐ Yes, as frequently as now
   3. ☐ Yes, but less frequently than now
   4. ☐ Do not know
   5. ☐ No, never

[11] See example in Annex III.

If you have answered 'yes', go to question 4. If you have answered 'Do not know' or 'No, never', go to question 6

4) **I would like to attend similar activities in the future if.... - Please rate the following items in terms of importance** (*with show card with Likert-scale*)

	1 Extremely important	2 Very important	3 Moderately important	4 Slightly important	5 Low Importance	6 Not important at all	99 No opinion
The topic is directly relevant to me	☐	☐	☐	☐	☐	☐	☐
The format of the event is similar to the one that I have just attended	☐	☐	☐	☐	☐	☐	☐
I have the opportunity to share my thoughts	☐	☐	☐	☐	☐	☐	☐
I can speak with experts	☐	☐	☐	☐	☐	☐	☐
I can discover new scientific tools	☐	☐	☐	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐	☐	☐	☐

5) **Do you agree with the following statement: "*I find science museums and centres an appropriate place to share thoughts and debate*"?** (*with show card with answer options*)

N.B. = if the event that you have just attended did not take place in a science museum or centre, please skip this question and go to question 8.

1. ☐ Yes, and I already knew before this event
2. ☐ Yes, and my experience today further convinced me
3. ☐ Not really
4. ☐ Do not know
5. ☐ Not applicable

PART III – SOME INFORMATION ABOUT YOU

6) **In which year were you born?** ____

7) **Please, indicate your gender**:

1. ☐ Male

2. ☐ Female
3. ☐ Prefer not to say
4. ☐ Other:
   Please specify_____

8) What is the highest level of education that you have completed?

1. ☐ Primary Education
2. ☐ Secondary Education
3. ☐ Higher education (Bachelor or Master)
4. ☐ Doctoral or higher level

9) How much do you agree with the following statement? (*with show card with Likert-scale*)

	1 Strongly agree	**2 Moderately agree**	**3 Slightly agree**	**4 Slightly disagree**	**5 Moderately disagree**	**6 Strongly disagree**	**99 No opinion**
I am interested in science	☐	☐	☐	☐	☐	☐	☐
I am interested in health	☐	☐	☐	☐	☐	☐	☐
I read or find out about science/health on a regular basis	☐	☐	☐	☐	☐	☐	☐

THANK YOU FOR YOUR COOPERATION!

Your responses will be treated in complete confidentiality and with anonymity.

PARTICIPANT QUESTIONNAIRE FOR ACTIVITIES

PART I – ASSESSMENT OF SPARKS ACTIVITIES

1) **I have just attended one of following activities** (*only one answer possible*):

N.B.: If you have attended more events, please choose just one and answer the next questions in relation to the event of your choice.

1. ☐ Scenario workshop
2. ☐ Incubation workshop
3. ☐ Hackathon
4. ☐ Reverse science café
5. ☐ Science espresso
6. ☐ Pop-up Science shop

2) **My impressions about the attended event**…

	1 Strongly agree	2 Moderately agree	3 Slightly agree	4 Slightly disagree	5 Moderately disagree	6 Strongly disagree	99 No opinion
I felt encouraged to share my thoughts	☐	☐	☐	☐	☐	☐	☐
I took actively part into the discussion	☐	☐	☐	☐	☐	☐	☐
I talked with people that I did not know before	☐	☐	☐	☐	☐	☐	☐
I now feel more confident to participate in discussions around health	☐	☐	☐	☐	☐	☐	☐
I feel inspired to continue the discussion after the event	☐	☐	☐	☐	☐	☐	☐

3) How much do you agree with the following statements?

	1 Strongly agree	2 Moderately agree	3 Slightly agree	4 Slightly disagree	5 Moderately disagree	6 Strongly disagree	99 No opinion
The chosen topic was relevant to me	☐	☐	☐	☐	☐	☐	☐
The topic was presented in a thought provoking way	☐	☐	☐	☐	☐	☐	☐
There was enough information to understand the topic	☐	☐	☐	☐	☐	☐	☐
The physical location was adequate to hear participants' contributions	☐	☐	☐	☐	☐	☐	☐
I had the opportunity to hear about different point of views	☐	☐	☐	☐	☐	☐	☐
The moderator facilitated dialogue amongst participants	☐	☐	☐	☐	☐	☐	☐
There was sufficient time to engage in the discussion	☐	☐	☐	☐	☐	☐	☐
My contribution was treated equally to others'	☐	☐	☐	☐	☐	☐	☐

PART II – READINESS TO ENGAGE

4) **After having taken part to the activity, who do you think should play a role in Research & Innovation in the field of health?** *(multiple answers possible)*
   1. ☐ Individual citizens
   2. ☐ Business & Industry
   3. ☐ Government
   4. ☐ Scientists
   5. ☐ Educational community
   6. ☐ Civil society organisations
   7. ☐ Other, namely:_____

5) **Would you like to take part to similar activities in the future?**

   1. ☐ Yes, more frequently than now
   2. ☐ Yes, as frequently as now
   3. ☐ Yes, but less frequently than now
   4. ☐ Do not know
   5. ☐ No, never

If you have answered 'yes', go to question 6. If you have answered 'Do not know' or 'No, never', go to question 8.

6) **I would like to attend similar activities in the future if…. - Please rate the following items in terms of importance**

	1 Extremely important	2 Very important	3 Moderately important	4 Slightly important	5 Low Importance	6 Not important at all	99 No opinion
The topic is directly relevant to me	☐	☐	☐	☐	☐	☐	☐
The format of the event is similar to the one that I have just attended	☐	☐	☐	☐	☐	☐	☐
I have the opportunity to share my thoughts	☐	☐	☐	☐	☐	☐	☐
I can speak with experts	☐	☐	☐	☐	☐	☐	☐
I can discover new scientific tools	☐	☐	☐	☐	☐	☐	☐

Other: _____	☐	☐	☐	☐	☐	☐	☐

7) Do you agree with the following statement: "*I find science museums and centres an appropriate place to share thoughts and debate*"?

N.B. = if the event that you have just attended did not take place in a science museum or centre, please choose 'Not applicable'

6. ☐ Yes, and I already knew it before this event
7. ☐ Yes, and my experience today further convinced me
8. ☐ Not really
9. ☐ Do not know
10. ☐ Not applicable

PART III – SOME INFORMATION ABOUT YOU

8) In which year were you born? ____

9) Please, indicate your gender:

1. ☐ Male
2. ☐ Female
3. ☐ Prefer not to say
4. ☐ Other:_____

10) What is the highest level of education that you have completed?

1. ☐ Primary Education
2. ☐ Secondary Education
3. ☐ Higher education (Bachelor or Master)
4. ☐ Doctoral or higher level

11) Do you work in any science-related field?

1. ☐ Yes
2. ☐ No
3. ☐ Currently, I am not working

12) How much do you agree with the following statement?

	1 Strongly agree	**2 Moderately agree**	**3 Slightly agree**	**4 Slightly disagree**	**5 Moderately disagree**	**6 Strongly disagree**	**99 No opinion**
I am interested in science	☐	☐	☐	☐	☐	☐	☐
I am interested in health	☐	☐	☐	☐	☐	☐	☐
I read or find out about science/health	☐	☐	☐	☐	☐	☐	☐

on a regular basis

13) In which field are you currently active? (for professional, volunteering or other reason) – *multiple answers possible*:

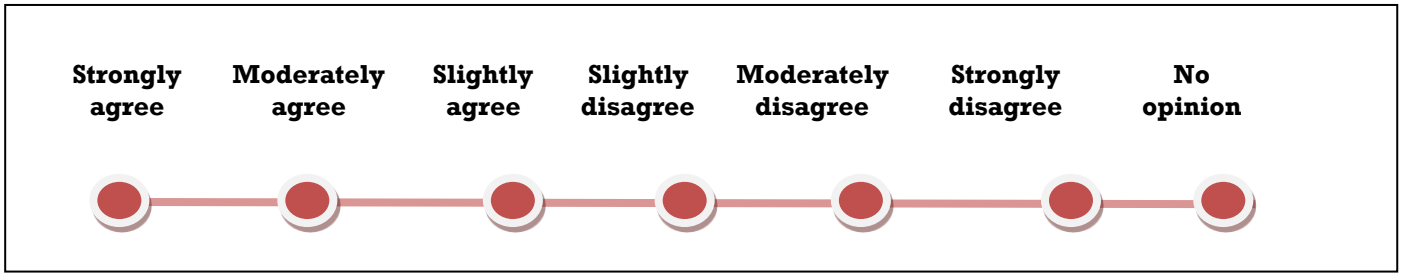
1. ☐ **Civil society organisation**
2. ☐ **Education**
3. ☐ **Research**
4. ☐ **Industry/business**
5. ☐ **Government or public administration**
6. ☐ **Other:**_____

THANK YOU FOR YOUR COOPERATION!

Your responses will be treated in complete confidentiality and with anonymity.

SHOW CARD

A show card is a visual list of answer options (e.g. Likert scale) that the interviewer will provide the respondent with to facilitate and accelerate the interview process.
Please translate the options in the example below (NB: 99 is the code for the 'no opinion' option, not an error in the numbering):



ANNEX III: Template for local organisers

Extracts from Deliverable 4.2.

Annex I – TEMPLATE FOR LOCAL ORGANISERS – Activities

Name of the local organiser: _____

Country: _____

Guidelines:

- **Count and take note of the number of participants to each participatory activity and report it here**:

	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Activity 6	Activity 7	Activity 8
Type of activity								
Number of participants								

TOT number of participants to all participatory activities (including invited experts):_____

TOT number of invited experts: _____

Fill-in **four** of the Template below **after each one of the following activities**:

- The **Reverse Science Café**;
- The **optional activity**;
- **2** of your own choice **out of the 6 Science Espressos**;

Please indicate the time and topic of **the other 4** below:

Science Espresso 1	Science Espresso 2	Science Espresso 3	Science Espresso 4
Date:_____ Time:_____	Date:_____ Time:_____	Date:_____ Time:_____	Date:_____ Time:_____
Topic:_____	Topic:_____	Topic:_____	Topic:_____

- **Send KEA the four Templates filled-in + TOT number of participants within 2 weeks after the end of the Sparks activities run locally.**

SECTION I – INFORMATION ABOUT THE ACTIVITY	
Date and time of the activity	

Chosen format of the activity	1. ☐ Scenario workshop 2. ☐ Incubation workshop/Hackathon 3. ☐ Reverse science café 4. ☐ Science espresso 5. ☐ Pop-up Science shop
Main subject/theme or guiding questions for the chosen activity	

Number of attendees for the chosen activity

Scenario workshop	**Incubation workshop/ Hackathon**	**Reverse science café**	**Science espresso**	**Pop-up Science shop**
TOT (including invited experts): _____	TOT (including all sub mentioned groups): _____	TOT (including invited experts): _____	TOT (including invited experts): _____	TOT (including all sub mentioned groups): _____
Number of invited experts: _____	Mentors: _____ Future users: _____	Number of invited experts: _____	Number of invited experts: _____	Clients:_____ Students/ researchers: _____ Other experts/ stakeholders involved (specify):_____

SECTION II – INDICATORS OF PUBLIC ENGAGEMENT

1. The discussion required encouragement from the chair/moderator	**1 Strongly agree** ☐	**2 Moderately agree** ☐	**3 Slightly agree** ☐	**4 Slightly disagree** ☐	**5 Moderately disagree** ☐	**6 Strongly disagree** ☐	**99 No opinion** ☐
2. The discussion easily moved forward (i.e. new issues are raised)	**1 Strongly agree** ☐	**2 Moderately agree** ☐	**3 Slightly agree** ☐	**4 Slightly disagree** ☐	**5 Moderately disagree** ☐	**6 Strongly disagree** ☐	**99 No opinion** ☐
3. The audience expressed its willingness to be involved in this kind of activities in the future	**1 Strongly agree** ☐	**2 Moderately agree** ☐	**3 Slightly agree** ☐	**4 Slightly disagree** ☐	**5 Moderately disagree** ☐	**6 Strongly disagree** ☐	**99 No opinion** ☐
4. The participants continued the discussion after the event	**1 Strongly agree**	**2 Moderately agree**	**3 Slightly agree**	**4 Slightly disagree**	**5 Moderately disagree**	**6 Strongly disagree**	**99 No opinion**

	☐ ☐ ☐ ☐ ☐ ☐ ☐

SECTION III – OVERALL ASSESSMENT

5. In your view, did any of these factors encourage multi-actor dialogue?

	1 Strongly agree	2 Moderately agree	3 Slightly agree	4 Slightly disagree	5 Moderately disagree	6 Strongly disagree	99 No opinion
The chosen topic	☐	☐	☐	☐	☐	☐	☐
Content inputs from the exhibition	☐	☐	☐	☐	☐	☐	☐
The way the topic was presented	☐	☐	☐	☐	☐	☐	☐
The physical location	☐	☐	☐	☐	☐	☐	☐
The presence of different actors and points of view	☐	☐	☐	☐	☐	☐	☐
The way the moderator animated the session	☐	☐	☐	☐	☐	☐	☐
Sufficient time to engage in the discussion	☐	☐	☐	☐	☐	☐	☐
The way contributions were treated	☐	☐	☐	☐	☐	☐	☐
The format of the activity	☐	☐	☐	☐	☐	☐	☐
Other:_____	☐	☐	☐	☐	☐	☐	☐

Out of this list, please present in more details the 2 "success factors" (or "do's") that stimulated multi-actor dialogue and the 2 "unsuccessful factors" (or "don'ts") and explain why/how:
Max 800 characters

_____
_____

This only applies to the Reverse Science Café, the Scenario Workshop and the Pop-up Science Shop

6. Amongst the participants, were there people who have the "power" to implement ideas and take action (e.g. director, CEO, head of service

1. ☐ Yes

How did you manage to involve them? (please present your approach/strategy)
Max 600 characters

_____
_____
_____
_____
_____

2. ☐ No

What was your main difficulty in engaging decision makers and why could not you overcome it?
Max 600 characters

_____
_____
_____

or administration)?	
7. What are the main outcomes resulting from this activity?	1. ☐ New research inputs generated from the public Please describe shortly: _____ 2. ☐ New (joint) projects Please describe shortly: _____ 3. ☐ A new strategy/action plan Please describe shortly: _____ 4. ☐ New or innovative collaborations taking shape Please describe shortly: _____ 5. ☐ Other:_____ For each of the marked options, please explain the purpose, the number of types of involved partners/stakeholders and timeline for implementation (if applicable): Max 600 characters _____

8. Are you overall satisfied with this activity format?	**1 Strongly agree**	**2 Moderately agree**	**3 Slightly agree**	**4 Slightly disagree**	**5 Moderately disagree**	**6 Strongly disagree**	**99 No opinion**
	☐	☐	☐	☐	☐	☐	☐

9. Overall, did the whole procedure (proposed theme, methodological guidelines, training, etc.) meet your expectations?	1. ☐ Yes 2. ☐ No Why? (max 600 characters) _____

10. Are you willing to use it again in the future?	**1 Strongly agree**	**2 Moderately agree**	**3 Slightly agree**	**4 Slightly disagree**	**5 Moderately disagree**	**6 Strongly disagree**	**99 No opinion**
	☐	☐	☐	☐	☐	☐	☐

ANNEX II – TEMPLATE FOR LOCAL ORGANISERS – Local partnerships, exhibition and communication

Guidelines:

- Towards the end of the exhibition period, collect feedback from the local partnership through a collective discussion during one of the four meetings foreseen or short online questionnaire and fill-in section I of the template below;

- Towards the end of the exhibition period reflect on your experience of hosting the exhibition with your team and share your thoughts in part II of the template below.

- After the end of the exhibition and activities, collect data regarding your communication outreach (online and offline) and fill-in part III of the template below.

- **Send KEA the Template filled-in within 2 weeks after the end of the Sparks activities run locally**

<table>
<tr><th colspan="2">SECTION I - LOCAL PARTNERSHIPS</th></tr>
<tr><td>Composition of the local partnership</td><td>For each member, please specify the following:

Organisation, Address, Represented stakeholder group (choose between Civil society, Education, Research, Industry/business, Government or public administration, Other (please specify)), Name and role of the contact person (not mandatory),</td></tr>
<tr><td>Involvement of the local partnership

To complete this section, local organisers are required to consult the local partnerships towards the end of the exhibition period. Local organisers may choose to organise a workshop or set up a short online questionnaire (for instance on SurveyMonkey: https://www.surveymonkey.net)</td><td>For each partner or all the partners, please specify:

Role in the activity:_____

Why they were involved (max 300 characters):
_____
_____
_____
_____

Meetings organised with partners:

<table>
<tr><th>Meetings</th><th>Date</th><th>Topic</th><th>Format</th></tr>
<tr><td>Meeting 1</td><td></td><td></td><td></td></tr>
<tr><td>Meeting 2</td><td></td><td></td><td></td></tr>
<tr><td>Meeting 3</td><td></td><td></td><td></td></tr>
<tr><td>Meeting 4</td><td></td><td></td><td></td></tr>
<tr><td>Other</td><td></td><td></td><td></td></tr>
</table>

Changes that have taken place (or may take place) as a result of this activity, that directly affect the partner(s):

1. ☐ Better understanding of the science museum/centre as a place to stimulate multi-actor dialogue (only applicable when the activity takes place in a museum/centre)
2. ☐ New research inputs generated from the public</td></tr>
</table>

	3. ☐ New (joint) projects 4. ☐ A new strategy/action plan 5. ☐ New or innovative collaborations taking shape 6. ☐ Other:_____ If you have marked options from 2 to 6, please explain the purpose, the number and types of partners/stakeholders involved and timeline for implementation (if applicable): Max 600 characters _____ _____ _____
List of organisations willing to engage after the project and proof (informal manifestation of interest, signed agreement, etc.)	*For each member, please specify the following:* *Organisation, Address, Represented stakeholder group (chose between Civil society, Education, Research, Industry/business, Government or public administration, Other (please specify)), Name and role of the contact person (not mandatory)*
SECTION II – EXHIBITION	
Dates when the exhibition was open to the public	From …/…./….. to …/…./…..
Total number of visitors (based on ticket count)	
Where did the exhibition take place?	1. ☐ Science museum or centre 2. ☐ Other Please specify the location name:_____
Which exhibit/story was the most engaging for your visitors?	1. ☐ Story 1 2. ☐ Story 2 3. ☐ Story 3 4. ☐ Story 4 5. ☐ Story 5 6. ☐ Story 6 7. ☐ Story 7 Please explain why, in your view: _____ _____ _____ _____ _____ _____ _____
Which one was the least engaging?	1. ☐ Story 1 2. ☐ Story 2 3. ☐ Story 3 4. ☐ Story 4 5. ☐ Story 5 6. ☐ Story 6

	7. ☐ Story 7 Please explain why, in your view: _____ _____ _____ _____
Please provide a detailed description of your local case study	What was the topic? Please describe the exhibit showcased: _____ _____ Who have you worked with to create it? _____ _____ _____ _____ How did you set up the team to create the local case study? _____ _____ _____ Was the RRI approach something difficult to tackle? Why? _____ _____ If so, how did you address these difficulties? _____ _____ *Please include maximum 3 high quality pictures or a short video (interview, virtual tour...) of max. 2 minutes, in the form of a YouTube/Vimeo link or a video file.*
What was the general impression of visitors of the exhibition? (when answering this question please consider what you heard from visitors or reactions on your social media)	*Please include a selection of max. 10 significant comments (positive and/or negative) from visitors on social media, your Golden Book or any other source (please specify the source). Please translate them in English.*
After running the exhibition, what do you think about the topic and the approach taken by Sparks?	
How good are participatory research and citizen science as topics to engage your public?	
Compared to previous exhibition(s) on similar topics/with similar formats,	

what did you find unique in Sparks? What did work best? What did not work?	
Describe please how the exhibition process met your expectations	
Please reflect on how the exhibition contributed to the understanding by the general public of a new way of doing science in the field of health and medicine	
In your opinion was the exhibition a successful means:	- to engage the public on the topic of RRI? 1. ☐ Yes 2. ☐ No Can you tell us what elements made this success? _____ _____ _____ _____ - to engage the public in technology shifts in health and medicine? 1. ☐ Yes 2. ☐ No Why? _____ _____
Is there anything you would have changed with the exhibition content or design and the way the process was organised?	
SECTION III – COMMUNICATION	
Communication activity *To complete the section on online communication activities, local organisers are required to consult the statistic tools linked to or embedded in their website, social media profiles and other*	- <u>Website</u> How many unique visits did your Sparks webpage/website get since its launch? _____ ____ - <u>Social media</u> Did you set up (a) separate Sparks account-s on social media? 1. ☐ Yes 2. ☐ No *If Yes* which social media?_____

communication platforms (e.g. Google Analytics, Facebook and Twitter statistics, Hootsuite, Buffer, MailChimp etc.)	how many followers did you get on each of them? _____ For each social media, how many people did the most successful (most liked/shared/retweeted) post about Sparks reach? _____ ___ _____ ____ - <u>Press release</u> Did you send a press release to announce the exhibition coming to your country?_____ _____ To how many people was it sent? _____ _____ Did you use other online communication tools (e-newsletter, e-magazine, etc.)?_____ _____ For each of them, how many people did you reach?_____ _____ - <u>Printed promotional material</u> How many postcards did you distribute? _____ Did you use other printed promotional material (printed newsletter, magazine, etc.)? _____ _ How many copies did you issue? _____
Media coverage	*Please provide the following information about the **media event** your organised:* Number of media invited: _____ Number of attendees: _____ *Please provide max. 3 (good quality) pictures <u>or</u> a short video (max. 2 minutes) of the event* *Please attach **all related press clippings** and/or **links** to articles/blogs/TV or radio programmes reporting on the project* Total number of local media reporting on the project: _____
Presentation at a local event	*Please provide the following information about the event:*

	Title:_____ ____ Organiser:_____ _____ City:_____ ____ Date:_____ ____ Number of attendees: _____ Audience type (e.g. policy makers, scientists, academy, etc.)_____ *Please attach the following material:* - 3 relevant high quality photos - press clippings - video recording (if available)