



**Global Model and Observatory for  
International Responsible Research and  
Innovation Coordination**

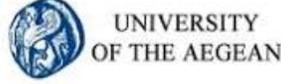
## D4.4 Monitoring Report



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## Abbreviations

Terms	Description
RRI	Responsible Research and Innovation
OBS	Observatory
GA	Google Analytics
PDS	Post Discussion Statement
HTML	HyperText Markup Language
SAS	Statistical Analysis Software
SPSS	Statistical Package for the Social Sciences
UI	User Interface
EVA	Entity Views Attachment
IP	Internet Protocol
URL	Uniform Resource Identifier
PDF	Portable Document Format
CSV	Comma-Separated Values
TSV	Tab-Separated Values

## Glossary of Terms

Term	Description
Public Consultations	Questionnaires or Citizen Jury about the topic that is discussed in the Workshop or other RRI public events.
Experts' discussions	Final outcome of the Forum Innovation Café.
Fine-Tuning	A method concerning the use of feedback system to refine results of some discussions.
Delphi method	A forecasting method based on the results of questionnaires sent to a panel of experts. Several rounds of questionnaires are sent out, and the anonymous responses are aggregated and shared with the group after each round. Experts are encouraged to revise their earlier answers in light of the replies of other members of their panel. Then, results will be converging to "correct" answers [1].
Citizen jury	A group of people who are selected at random from local population and asked to provide their perspectives on a topic in the form of a sharp decision.

## Executive Summary

This deliverable deals with task 4.3 “Monitoring Activities” and task 4.4 “Social Laboratory”. The purpose of task 4.3 is to define findings and fine-tune the results of public consultations and experts’ discussions. In order to fulfil the requirements, different tools are built and embedded in Forum discussion. This deliverable provides theoretical background of these tools and the details of their implementation in Observatory/Forum platform. Task 4.4 Social Laboratory is a result of a social laboratory, where the material has been prepared and tested in workshops in real environments. The training addresses the individual researcher and the university students (not experts in RRI). The first step was by creating awareness to these groups, as to give them a ground to think about critical issues for their work, not directly related to their everyday life. Training consisted of development of scenarios, educational awareness and developing skills in reflective thinking around RRI (RRI-Package). The structure of the deliverable is as follows.

In the first section we discuss the requirements and design goals of this task. In particular, three different tools are proposed, which are Public Questionnaire, Online Citizen Jury and Google Analytics. All the results from Public Questionnaire and Online Citizen Jury are collected in Discussion Dossier, which is sent to reviewers for feedback on the decisions made by the experts in the discussion. Based on the result from reviewers, RRI Government can restart the process with another discussion in Dynamic Coalition and Innovation Café (Figure 1.1) to fine-tune the results.

The public Questionnaire is discussed in section 2. This online method has shown many advantages with respect to the conventional paper-like survey methods. It represents a useful and easy way to gather individuals’ opinions with less time and cost. It also has the capacity to access a large population, i.e. the Observatory/Forum platform users. In our implementation on Observatory/Forum platform, the questions in the questionnaire are made by participants and moderator of the Innovation Café, and are placed in the Suggestion Board so that all community members of RRI platform can access. The result is taken into account by the moderator and RRI Caucus Government, and can be considered both as findings for a new discussion and fine-tuning the results of experts’ discussion in Innovation Café.

On the other hand, section 3 presents Online Citizen Jury module, which is implemented with the purpose of fine-tuning the results of the Innovation Café (fine-tuning process). This module allows moderator of the Innovation Café to create a poll and permits a group of jurors to vote on a new RRI decision or policy after the discussion in the Innovation Café. The jurors are selected at random among all members of the RRI platform in order to generate a constituency as heterogeneous as possible.

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The Google Analytics tool is described in section 4. This module is used to obtain statistics on the usage of RRI platform. These statistics can provide an overview on how RRI platform appeal to people, thus giving some insights for RRI Caucus Government to propose new issues and to improve the platform. A cookie module is also implemented in order to be compliant with EU cookie policy. In this module, an option for opting out of Google Analytics tracking is embedded. This option allows users to exclude themselves from being tracked by Google Analytics so that their activities on RRI platform will not be recorded.

Finally, section 5 presents the training material generated by the social laboratory and the feedback of two workshops conducted on the bases of these material.

## 1 Requirement and Design Goal

The Monitoring activities are described in the project's DOW as follows: "The Monitoring activities will be integral part of the Observatory, defining the findings and fine-tuning the results of public consultations and experts' discussions". Thus, this task is carried out at two levels: (i) Statistics on the use of the Forum/Observatory tools and (ii) Consultations with experts and the widest audience. As for statistics, these are collected by means of Google Analytics that registers the usage and accesses to our website [2]. These statistics can be monitored regularly and can help the RRI Caucus Government to understand the use of the website and other important details (e.g., country, etc.) in order to have a feedback and refine the strategy for the visibility and use of our RRI tools. Other important tools for supporting the identification of findings and feedback process are public consultations and expert's discussions. Basically, public consultations will be achieved by means of Online Questionnaires [3] [4] and Citizen Jury [5] that are online tools of the Forum. On the other hand, expert's discussions take place in Innovation Café meetings. These processes are described below and also represented in Figure 1.1: Determination of RRI findings and fine tuning process (whole process concerning tasks 4.3).

### Public consultations

A questionnaire is generated by the moderator of an Innovation Café meeting in order to obtain a better knowledge on a topic as an input to a discussion. In particular, participants in an Innovation Café meeting can discuss and decide about questions for the questionnaire. The moderator will set up the questionnaire and Citizen Jury after the Innovation Café meeting finishes. These tools are integrated in the Forum by using Drupal 7 [6]. The generated questionnaires are available on the RRI platform (<http://observatory-rri.info/?q=caucus-topic-proposal>) so that every member of the RRI website can access and answer these questionnaires. On the other hand, documents from Discussion Dossier are sent to Citizen Jury participants in order to allow them to investigate and give their votes on the RRI issues provided by the moderator.

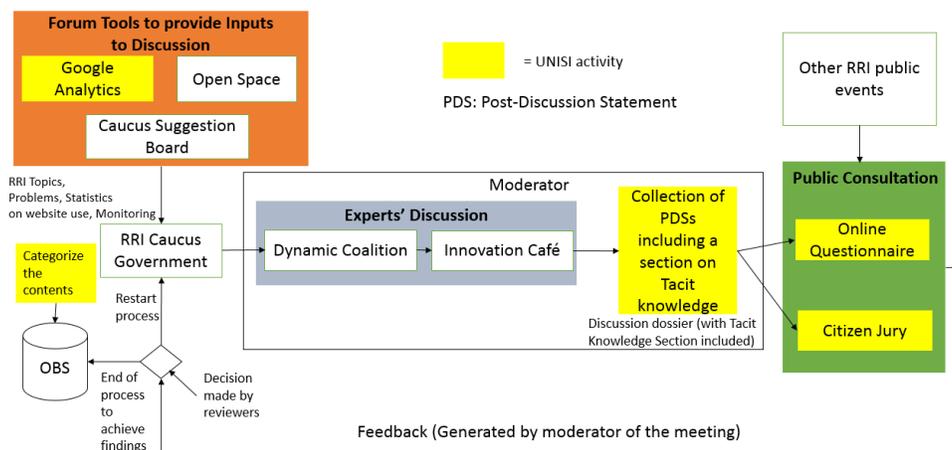
### Experts' discussions

The outcomes of public consultations will be the *findings* that are collected by the moderator and RRI Caucus Government<sup>1</sup>, who can prepare a new Dynamic Coalition

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<sup>1</sup> The **RRI Caucus Government** refers to the organisation responsible for running and maintaining the **Responsibility Forum**. It consists of the Secretariat (an individual or organisation with overall responsibility) and the Advisory Board (consisting of expert stakeholders and senior RRI researchers). The RRI Caucus Government is initially chosen by the project partners and possibly the partners from the other FP7 projects, and eventually replaced by a secretariat nominated by the stakeholders. The duty of

and Innovation Café meeting for the fine-tuning process with RRI experts. Then, experts' discussions take place in Innovation Cafés after preliminary steps for the preparation of documents, tools and scenarios in Dynamic Coalition. Post discussion templates including questions for capturing participants' tacit knowledge (Tacit Knowledge section according to Task 4.5) are provided to Innovation Café participants. They fill in the templates and answer the questions before sending everything back to the moderator of the meeting *who collects all the materials and generates a Discussion Dossier*. This dossier is sent back to the RRI Caucus Government (feedback) that can either restart the whole process with a more refined view with respect to the previous phase (fine-tuning) or store the findings in the OBS. This process of sending the Discussion Dossier to the RRI Caucus Government for inspection has already been implemented in the Forum.



**Figure 1.1: Determination of RRI findings and fine tuning process (whole process concerning tasks 4.3)**

## 2 Online Questionnaire

### 2.1 Short Literature Survey on Online Questionnaire

Online Questionnaire is an effective tool to have public consultations from members in the Forum. In order to evaluate trends in a variety of disciplines, people may find the

the RRI Caucus Government is to identify the topics for upcoming Caucuses, to initiate the process and to monitor the quality of the outcome.

Internet a fruitful area for conducting survey research. Virtual communities have increasingly flourished online, and people regularly participate in discussions on a variety of issues and interests. Thus, the Online Questionnaire gives rise to a lot of advantages in conducting large scale surveys.

### **2.1.1 Access to Large Populations**

One of the benefits of online survey research is that it takes advantage of the Internet to access to groups and individuals who would be difficult, if not impossible, to reach through other channels. For example, it would be difficult to find a large, concentrated group of people conducting face-to-face discussions of topics such as sustainability, online stock trading, and the pros and cons of Internet of Thing. One advantage of virtual communities as sites for research is that they offer a mechanism through which one can gain access to people who share *specific* interests, attitudes, beliefs, and values regarding an issue, problem, or activity. In contrast, with traditional survey research methods it may be more difficult to reach a large number of people who are interested in a topic or activity [7].

Moreover, the Internet enables communication among people who may be hesitant to meet face-to-face. For example, individuals with unpopular political views may hesitate to express themselves in front of other people, thus it is difficult to gather them in one place and conduct a survey. These individuals and groups often can be reached on the Internet in larger numbers than would be possible using face-to-face research methods<sup>2</sup>.

### **2.1.2 Time**

A second advantage is that Internet-based survey research may save time for people who want to conduct survey research. As already noted, online surveys have the ability to reach thousands of people with common characteristics in a short amount of time, despite possibly being separated by great geographic distances. People interested in surveying hard-to-reach populations can quickly gain access to large numbers of such individuals by using forums, emails, chat rooms, and message board communities. In the face-to-face research environment, it would be considerably longer, if it were possible at all, to have an equivalent number of people with specific attributes, interests, and attitudes in one location.

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<sup>2</sup> Online questionnaire also poses some issues of biased results and reliability of the collected data. Due to many reasons, it is difficult for certain populations to access internet and to respond to online questionnaires. In addition, there also might be cooperation among people who answer questionnaires since it is very easy to talk to other people nowadays via internet.

Online surveys may also save time by allowing people to conduct survey and collect data while they work on other tasks [8]. Once an invitation to participate in a survey is posted to the forum of a community of interest, emailed to people by using website tools, or distributed through an online survey research service, people may collect data while working on other projects and activities [9]. Responses to online surveys can be transmitted immediately via email, or posted to an HTML document or database file. This allows one to have preliminary analyses on collected data while waiting for the desired number of responses to accumulate [8]. Recently, online survey creation software packages provide a variety of templates to create and implement online surveys more easily, as well as to export data to statistical software packages such as Google Forms [10] or Google Consumer Survey [11]. Moreover, a number of online survey services provide survey design assistance, generate samples, analyse, and interpret data.

### 2.1.3 Cost

Online survey researchers can also save money by moving to an electronic medium from a paper format. Paper surveys are usually costly, even when using a relatively small sample, and the costs of a traditional large-scale survey using mailed questionnaires can be enormous due to postal services [8]. The use of online surveys circumvents this problem by eliminating the need for paper and other costs, such as those incurred through postage, printing, and data entry [12]. Similarly, conducting online interviews, either by email, via online meeting tools, or by using chat, offers cost savings advantages. Costs for recording equipment, travel, and the telephone can be eliminated [13]. As mentioned in [7], page 3: *“Transcription costs can be avoided since online responses are automatically documented. Newer online survey creation software and web survey services costs can vary from very little to thousands of dollars depending upon the types of features and services selected; however, this is relatively inexpensive compared to the cost of traditional paper-and-pencil surveys”*.

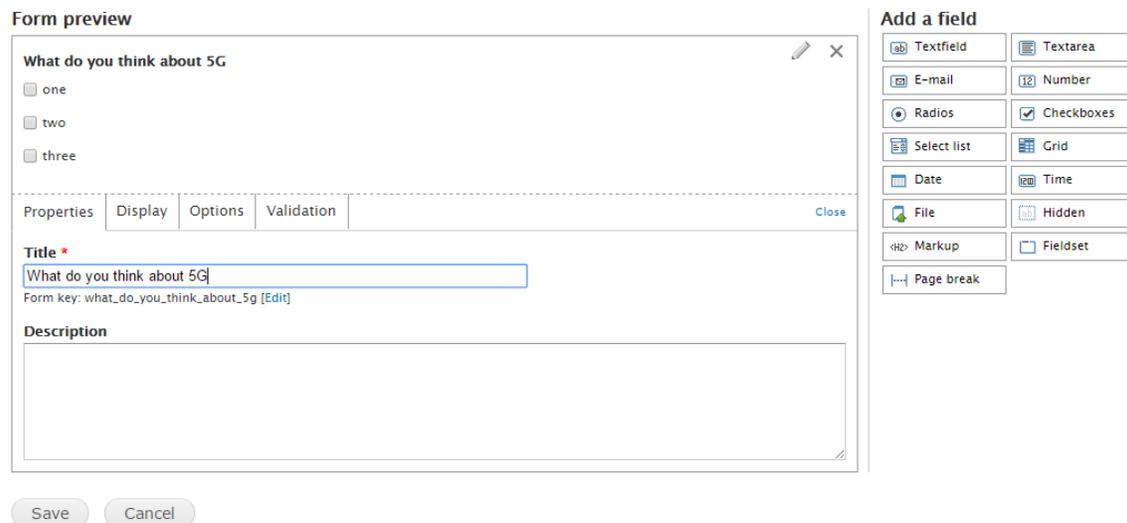
## 2.2 Online Questionnaire Module Implementation

The Online Questionnaire module has been implemented in the Observatory/Forum platform as follows: First, a section which contains a button to create a new questionnaire is added to the Innovation Café and it is only visible to the moderator of the Innovation Café as shown in Figure 2.1. This prevents participants of an Innovation Café from creating new questionnaires by themselves.



Figure 2.1: Button to create a new questionnaire

When the moderator clicks on the button, a new content type “Obs: Public Questionnaire” is created where the moderator can fill in the title and start adding multiple-choice questions by moving to “webform” tab, which appears after the new content type is saved. This content type is implemented using Webform module [14], which allows users to make a new questionnaire, set deadline and provide a number of other settings. The deadline of the questionnaire can be set by using “Form Setting” in Webform module. In addition, we use “Form builder Webform UI” [15] module in order to help the moderator to add a new questionnaire in an intuitive way by just dragging/dropping new question as shown in Figure 2.2. In particular, the moderator only needs to drag a field under tab “Add a field” and drop it under “Form preview” tab. Then, the moderator can fill in the form with question and add options for answer.



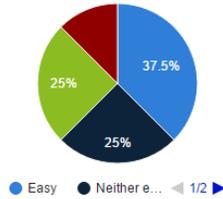
The screenshot displays the FormBuilder interface. On the left, the 'Form preview' window shows a questionnaire titled 'What do you think about 5G' with three radio button options: 'one', 'two', and 'three'. Below the preview are tabs for 'Properties', 'Display', 'Options', and 'Validation', along with a 'Close' button. The 'Title' field contains the text 'What do you think about 5G' and the 'Form key' is 'what\_do\_you\_think\_about\_5g [Edit]'. A 'Description' field is also present. On the right, the 'Add a field' panel lists various form elements: Textfield, Textarea, E-mail, Number, Radios, Checkboxes, Select list, Grid, Date, Time, File, Hidden, Markup, Fieldset, and Page break. At the bottom of the interface are 'Save' and 'Cancel' buttons.

**Figure 2.2: FormBuilder integrated in Webform to create new questionnaire**

The result of the questionnaire is also displayed in graph format by using Webform Charts module [16] as shown in Figure 2.3. All questionnaires are shown in Suggestion Board so that members of RRI platform can access easily to view and answer questions. The result is shown in Discussion Dossier of the Innovation Café.

How easy was it to understand the Caucus Process?

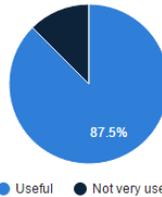
Chart options >



Easy	3
Neither easy nor difficult	2
Difficult	2
Very difficult	1

How useful is the Caucus Process for discussing/facilitating an awareness of RRI?

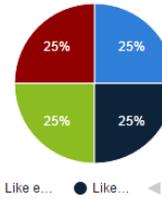
Chart options >



Useful	7
Not very useful	1

How much do you like the Caucus Process?

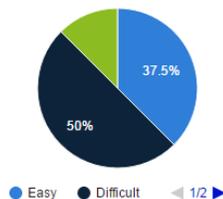
Chart options >



Like extremely	2
Like moderately	2
Neither like nor dislike	2
Dislike moderately	2

How easy did you find it to use the Dynamic Coalition in the Caucus Process?

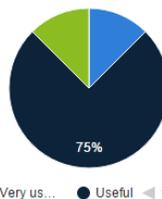
Chart options >



Easy	3
Difficult	4
Very difficult	1

How useful is the Dynamic Coalition for discussing/facilitating an awareness of RRI?

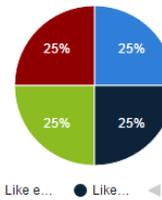
Chart options >



Very useful	1
Useful	6
Not very useful	1

How much do you like the Dynamic Coalition?

Chart options >



Like extremely	2
Like moderately	2
Neither like nor dislike	2
Dislike moderately	2

Figure 2.3: Result displayed by using Webform Charts module

### 3 Citizen Jury

#### 3.1 Citizen Jury Overview

Democracy is based on the idea that elected officials and public agencies carry out the will of the people. Frequently, however, it is difficult for public policy decision-makers to know exactly what the public wants to do about an issue. They may hear from lobbyists or a few activists, but rarely from a broad cross-section of lay citizens. Public opinion polls can tell officials what people think by responding to a telephoned question. The actual “will of the people” may be somehow different [17].

According to [17]: *“The Citizens Jury process is designed to allow decision-makers to have the people’s voice and public consultations on an issue. A Citizens Jury provides an unparalleled opportunity for citizens to learn about an issue and deliberate the topic together to find a common ground solution. Decision-makers who carry Citizens Jury project or listen to a jury’s recommendations are able to learn what an informed public wants, and why. This information can be an invaluable resource for elected officials and other decision-makers at the local, state, and national levels.”*

The participation to Citizen Jury can lead to well-inform and thoughtful results, and increase public support for the new solutions and policies. The jury, usually consisting of 18 to 24 individuals, is composed of a representative sample of a target population in order to achieve a panel that is not biased. They hear from a variety of expert witnesses and present their own opinions on the issue.

**Table 1: Special characteristics of the Citizens Jury process [17] [5]**

Random Selection of Jury Pool	The members of the Jury Pool are randomly selected by using randomization techniques.
Microcosm of the community	This method ensures that, as much as possible, the perspectives of the community are represented in the jury.
Informed	“Witnesses” (the moderator and participants of the Innovation Café in RRI context) provide information to the jury on the key aspects of the issue. Witnesses present a range of perspectives and opinions. The jury engages the witnesses in a dialogue to guarantee that all questions are answered.
Impartial	Witness testimony is carefully balanced to ensure fair treatment to all sides of the issue.
Deliberative	The jury deliberates in a variety of formats and is given a sufficient amount of time to ensure that all of the jurors’ opinions are considered.

## **Use When**

Citizen Juries should be adopted when there is the need to inform citizens about a new public policy and to obtain public consultations before the final decisions are made. In addition, one should guarantee a sufficient amount of time for the juries to deliberate the topics and to answer all the questions in order to achieve optimal outcomes.

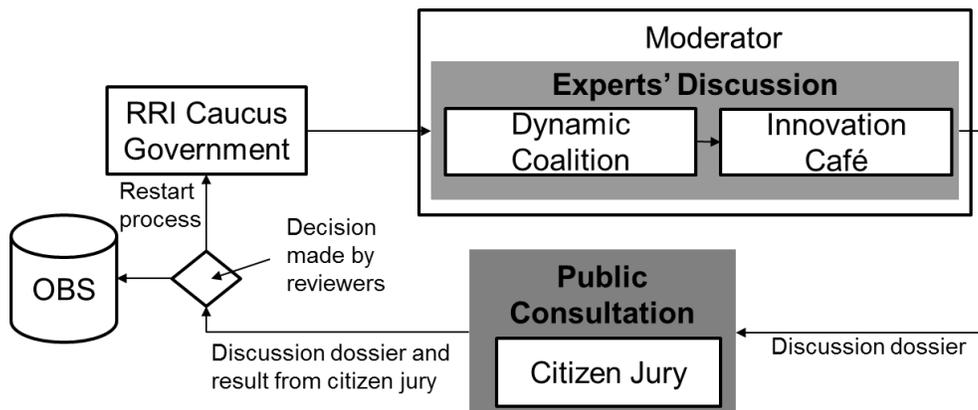
## **Use For**

Citizen Juries are appropriate to see the potential impacts of a new policy, to raise the level of public debate and create recommendations on the new policy [18].

As part of defining the fining and fine tuning process, the Online Citizen Jury module has been implemented, as described in the next section.

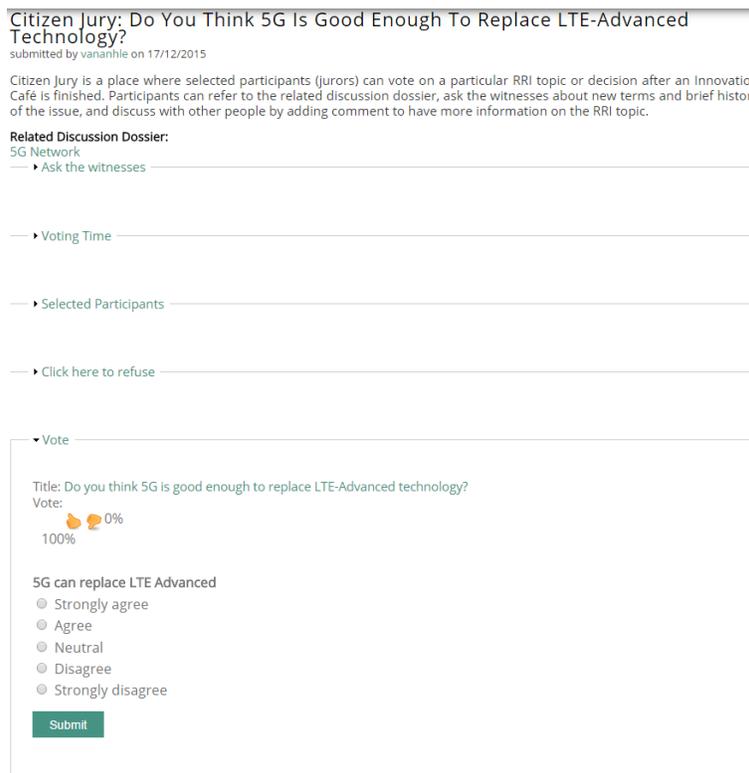
## **3.2 Citizen Jury Module Implementation**

The Citizen Jury module is implemented in the Responsibility website at <http://observatory-rri.info/> as shown in Figure 3.1 and Figure 3.2. This Online Citizen Jury for RRI can be considered as a simplified version of the Citizen Jury model, which is an offline, face-to-face method, described in the Citizen Jury Handbook [17]. First, a normal Citizen Jury project has a complicated process with the involvement of project director who is responsible for overseeing the entire project, project staff who prepares the agenda, materials, selects advisory committee and jurors, establishes the charge, manages the hearing, etc. Instead, the Online Citizen Jury module takes advantages of Innovation Café by using the materials from Discussion Dossier, adding a vote section automatically to collect opinions from jurors. Jurors can also contact moderator for more details on the topic. Second, jurors in our Online Citizen Jury module are randomly selected among members of RRI website, not from the population in an area and they might not be good representatives. Thus, we added an option for jurors to withdraw from jury board if they think that they are not suitable or cannot attend due to other duties. The platform will select other members to be jurors automatically in case of this event. Moreover, the deliberation process is also performed online by reading digital materials provided by means of Discussion Dossier, sending messages and discussing via online tools which are available in the RRI platform and can be accessed easily from Citizen Jury page.



**Figure 3.1: The Citizen Jury module**

The Online Citizen Jury module is one of the core innovations within the Forum modalities. This module engages public members to RRI decision-making process, enables them to give their opinions and shows an actual manifestation of RRI approach in being inclusive, deliberative, practice oriented and facilitating various stakeholders' interaction. The details about the implementation are provided below.



**Figure 3.2: Example of Citizen Jury module in RRI website.**

First, we created a new content type, called “(OBS) Public Consultation: Citizen Jury”. Only the moderator of an Innovation Café is able to see the button “Create new Citizen Jury” to create a new citizen jury. The moderator can provide a "title", which should be in the form of a Yes/No question, and the link to the Discussion Dossier that the participants can read as reference. In addition, the moderator will select some RRI members to become jurors. This process also can be done automatically by the platform. In particular, the moderator can enter the needed number of jurors and the platform will automatically select participants at random. Then, an email notifying about the selection will be sent automatically to every selected juror by using Rules module [19]. There is also the option for a juror to refuse to participate to a Citizen Jury by clicking on “Refuse to participate” link. In case of this event (one of the participants refuses to be juror), the platform will automatically make a substitution by randomly selecting another member of the website, who is not yet a participant. An email message will be sent to the moderator notifying about the refusal and another email is sent to the new participant notifying about the juror selection. This is also implemented by using Rules module. A button “Return to Innovation Café” is also added to this content type to allow the moderator to come back to Innovation Café after a Citizen Jury is created.

As for the deliberation process, the Discussion Dossier, which contains all materials from the Dynamic Coalition and Innovation Café, is attached to the Citizen Jury page so that the participants can study and have better understanding about the current issues. In addition, the participants can send messages to witnesses by means of a witnesses board [17]. Witnesses are experts in the field and can explain issues to the participants in case they have any questions. This functionality is installed using PrivateMsg [20], View [21] and EVA [22] modules. The participants can also discuss with others by using a comment section at the bottom of the page. A poll is automatically added when new Citizen Jury is created. Moreover, the moderator can add a short questionnaire by using a webform tab. The questionnaire generator is designed in an intuitive way so that non-technical people can easily create new questionnaires. The poll and questionnaire are implemented by using Rate [23], Webform and Form builder Webform UI modules. One of the most difficult issues is that poll and questionnaire are only visible to the participants of the Citizen Jury. This functionality is created by using contextual filter functionality in Views and EVA modules. Finally, the moderator can set the duration of each Citizen Jury and can change it in case there is the need to provide more time to the participants to reach the final decision. The output of a Citizen Jury is visible to everyone via both the Discussion Dossier and the Citizen Jury page. The results are shown in form of graphs and percentages of vote, which is displayed at the voting section and in “Voting Results” tab as shown in Figure 3.2 and Figure 3.3. In addition, the questionnaire results are shown in form of pie chart as shown in Figure 3.4.

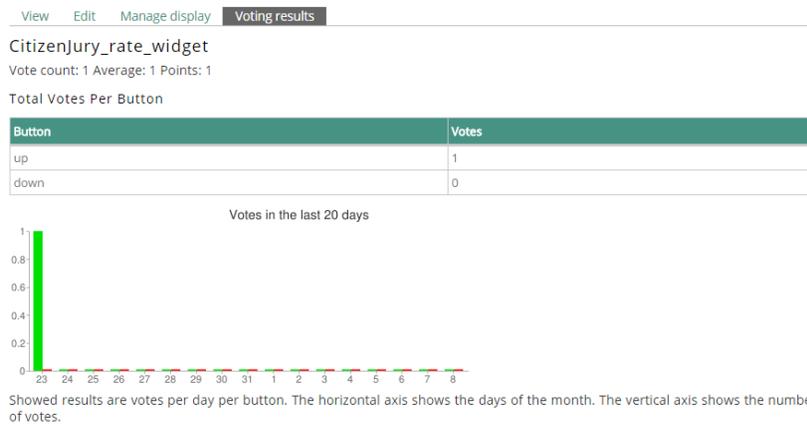


Figure 3.3: The voting results showing votes per day per voting option

### 5G can replace LTE Advanced

Chart options »

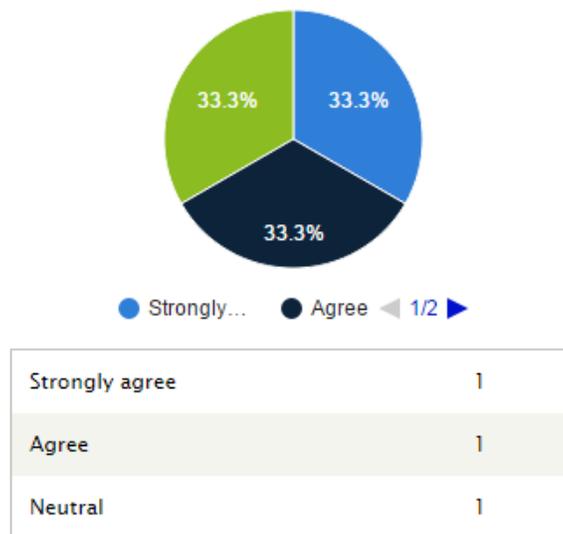


Figure 3.4: Results of questionnaire for Citizen Jury

## 4 Google Analytics

The RRI platform has been registered to be monitored by Google Analytics, which provides information on website activities. A cookie module is also implemented to notify user about using cookies to gather information as well as to allow the user to refuse being monitored. The details about Google Analytics are described in the next sections.

### 4.1 Google Analytics Features

- **Visits / Session:** This count represents the times our website was visited by an individual. Though the definition seems pretty straight forward, there is much more to understand in it. The Visit is recorded any time you visit the blog or website. Now, for instance, you visited using Mozilla and you are viewing it. Again, you visited the same site from chrome while our initial session of Mozilla is still Active, GA will calculate it as two visits rather than one.
- **Unique Visitors:** This count represents how many individuals actually visited our website. If a person visits a blog on Monday and again on Tuesday, the counter won't increase to 2, his initial visit will only be considered. Moreover, if you initially visit a blog from Internet Explorer on Monday and from Mozilla on Tuesday, the unique visitor count will become 2 rather than one. Because it will check from which browser you are visiting and it will consider you as a separate individual.
- **Page views:** Page views as the name itself suggests is the number of pages people have viewed during their visits to our website.
- **Pages/Visit:** Pages/Visit is actually the average number of pages viewed by people during their visits to our website. For example, during one visit a person viewed 10 pages and in his next visit he viewed 8 pages, the Pages/Visit becomes 9 for him. Likewise, it is calculated for every person visiting our website and the overall average is represented in the report.
- **Avg. Visit Duration:** Avg. Visit Duration is the average time people spend on our website. It is calculated in the same way as Pages/Visit.
- **Bounce Rate:** This is one of the most important parameters to be considered in order to improve a website. Bounce Rate is actually the rate at which people visit our website and exit viewing only the home page without navigating any further in the website. If this rate is higher, it can be a point of concern for website designers who want people to visit their websites.

- **%New Visits:** This parameter is also an important parameter to be considered. %New Visits tells us, out of the total number of people visiting our Website, how many are new and visiting for the first time. Now, this can both good and bad. For example, if a page has 124 total visits and %New visits is 67.74%, which indirectly means that 84 people (out of 124) have visited the website for the first time and rest 40 people are returning visitors

**Other features:** Apart from Visits, Page Views and Bounce Rate, there are more reports/visualizations which can help us to determine if our website is being visited often and from where are the audiences.

The first is Time Plot where we can see the Bounce Rate on particular dates. Since Time Plot can be used to compare two variables with a time, we can also compare two attributes at the same time with respect to time. Here we can compare few already defined metrics with each other. We can also see how many people are visiting our website with respect to how many people are bouncing just after landing on our website.

Regarding the traffic sources and the region from where visits are actually coming to a website. In demographics column, there are Language, Country/Territory and City. Language basically is the Language set at the browser level of the Visitor. Apart from Language, we can view from which Country we are getting Visits from. We can also view from which cities we are getting visits.

Apart from this, we can view many other reports such as: The Screen resolution, Internet provider, Operating system and many more. It depends on the audience, which we want to target and the nature of our business.

## 4.2 Cookies Content Interpretation

Google Analytics uses four main types of cookies as follows:

- UTMA - The Visitor Identifier
- UTMB - 30 Minute session identifier
- UTMC - On Exit session identifier
- UTMZ - Visitor segmentation

### 4.2.1 UTMA

This cookie is primarily used to identify the users accessing a website. If we are visiting the website for the first time, it will create a `_utma` cookie else it will update it, every time we happen to visit the website. The validity of this cookie is 2 years from last updating or creation. The cookie is created when the javascript library executes and no

existing `__utma` cookies exists. The cookie is updated every time data is sent to Google Analytics. The example of this cookie information is shown in Table 2.

**Table 2: UTMA cookie contents example**

Name:	<code>__utma</code>
Content:	215087888.139793869.1399966718.1401783684.1401785786.9
Domain:	<code>.vanleanh.uphero.com</code>
Path	<code>/</code>
Send for:	Any type of connection
Accessible to script:	Yes
Initial:	Tuesday, June 3, 2014 10:56:25 AM
Expires:	Thursday, June 3, 2016 10:56:25 AM

The fields in the UTMA cookie are described below.

- Domain Hash: The first number “215087888” is the domain hash. This is set by all cookies from this domain.
- Visitor ID: The second number “139793869” is a random "unique ID".
- Initial visit: The third number “1399966718” is the unix time stamp for the initial visit and is set as soon as we enter the site. By combining the random unique ID and the time stamp, we get the Visitor ID for the session. This is what Google Analytics uses to determine unique visitors.
- Previous Session: The fourth number “1401783684” is the unix time stamp for the previous session.
- Current Session: The fifth number “1401785786” is the unix time stamp for the start of the current session. The time on page is determined by taking the time stamp of the current session and subtracting the time stamp of the previous session. Or in the case of the second page load, the current from the first. If we are on the first pageview of the site then all three numbers will be the same.
- Session number: The last number “9” is the number of the session.

#### 4.2.2 UTMB

UTMB is a session identifier. Generally these just contain the domain hash, and (in B's case) sometimes some additional values. The key with this cookie is in its expiry date. UTMB expires after 30 minutes—unless it is re-written—indicating the end of a session. If this cookie expires then GA knows to end the session for that visitor. The cookie is created when the javascript library executes and no existing `__utmb` cookies exists. The

cookie is updated every time data is sent to Google Analytics. The example of this cookie information is shown in Table 3.

**Table 3: UTMB cookie contents example**

Name:	__utmb
Content:	215087888.1.10.1401785786
Domain:	.vanleanh.uphero.com
Path	/
Send for:	Any type of connection
Accessible to script:	Yes
Initial:	Monday, May 26 2014 10:55:02
Expires:	Monday, May 26 2014 11:25:02

The fields in the UTMB cookie are described below.

- Domain Hash : Here number 215087888 states the domain visited in the same way it was in \_\_utma cookie.
- Page Views: Here the number 1 denotes number of pages viewed during a visit.
- Outbound Link: The third field 10 denotes the number of outbound link clicks counting down from 10.
- Current Session: This number 1401785786 denotes the time stamp of the current session.

#### 4.2.3 UTMC

UTMC is session identifier. The UTMC expires when the user closes the browser. If this cookie expires then GA knows to end the session for that visitor. This cookie operated in conjunction with the \_\_utmb cookie to determine whether the user was in a new session/visit. The example of this cookie information is shown in Table 4.

**Table 4: UTMC cookie contents example**

Name:	__utmc
Content:	215087888
Domain:	.vanleanh.uphero.com
Path:	/
Send for:	Any type of connection
Accessible to script:	Yes
Initial:	Tuesday, June 3, 2014 10:56:25 AM
Expires:	When the browsing session ends

The fields in UTMZ cookie can be found in UTMA cookie explanation.

#### 4.2.4 UTMZ

This cookie gives information about how exactly people are reaching a website (for example, from Google search or reference link in another website or directly from browser). This cookie is valid till 6 months and gets updated every time we visit the website. This cookie is created when the javascript library is executed and is updated every time data is sent to Google Analytics. The example of this cookie information is shown in Table 5.

**Table 5: UTMZ cookie contents example**

Name:	__utmz
Content:	215087888.1399966718.1.1.utmcsr=(direct) utmccn=(direct) utmcmd=(none)
Domain:	.vanleanh.uphero.com
Path:	/
Sent for:	Any type of connection
Accessible to script:	Yes
Initial:	Tuesday, June 3, 2014 10:56:25 AM
Expires:	Tuesday, December 2, 2014 9:56:25 PM

The fields in UTMZ cookie are described below.

- Domain Hash: The first number 215087888 is the domain hash.
- Time Stamp: The second number 1399966718 is the time stamp.
- Session #: Like in utma, this counts the visitors sessions.
- Campaign #: This counts each time a visitor arrives from a different campaign.
- utmcsr: This is the source of the visitor.
- utmccn: This is set by the campaign value (unique identifiers to your destination URLs so that they are labelled with specific names when they are reported in Google) of the url, or in the case of organic traffic (traffic that comes to your website from unpaid search engines such as Google, Bing), then it is marked as (organic).
- utmcmd: This is set by the medium defined by the URL.
- utmctr: This is the keyword that brought the visitor here in search engine campaigns.

### 4.3 Google Analytics on RRI Platform

Google Analytics could be used as a tool to help selected users (i.e. RRI Caucus Government) to manage various kinds of information about RRI website use and also make decisions whether a topic and problem should be discussed.

The following information is displayed in Google Analytics report.

- Pages / Visit: The pages per visit, i.e. how many pages on average our readers are viewing before they leave our web site.
- New users vs. returning users: This report gives us a quick look at the ratio of new to returning users by number of sessions and percentage of sessions.
- Most visited page: the most popular pages of the website. This information can give us some insights on which pages of the RRI platform are really accessed (see Annex).
- Country: The country of visitor.
- Operating system: The operating system of device.
- Type of access: The type of device (computer, smartphone).

On the basis of the information to be displayed, information collection is performed as follows.

#### Identify the information

- 1) Device information: hardware model, operating system version, and mobile network information.
- 2) Location information: City, region, country. This information is based on IP address.
- 3) Log information: How you used a website, browser type, browser language, the date and time of our request and referral URL, our search queries.

#### How is the information collected?

- 1) Google Analytics will collect aggregated information from visitors to the Responsibility's website(s) using a combination of JavaScript and first party cookies from the google.com domain.
- 2) The selected users (i.e. RRI Caucus Government) have access to aggregated data from Google Analytics

- 3) The selected users (i.e. RRI Caucus Government) will use this data to track the Responsibility's website(s) usage and make informed updates

### Privacy issues

- 1) To minimize any possible privacy risk to visitors of the Responsibility's website(s), Responsibility will not allow sharing of Google Analytics data with any of the Google products.
- 2) The Responsibility's privacy policy provides information on how to opt-out of having cookies stored in the visitor device by means of a module in Drupal. Visitors who do not accept cookies will be able to visit the Responsibility's website(s) and no information about their website experience will be processed by Google Analytics.

### How and why Responsibility uses the information?

- 1) The aggregated information collected by Google Analytics is used for the purpose of improving usability, evaluating visitors' usage of the Responsibility's website(s), and compiling reports on website activity for website operators and RRI government in general.
- 2) This aggregated information is intended to provide feedbacks about the usage of Forum and Observatory.
- 3) Only pre-approved Responsibility registered users will have access to the Google Analytics account and aggregated data. These users are RRI Caucus Government people. The Google Analytics account password will be set according to best practice rules.

## 4.4 Google Analytics Implementation

The Google Analytics module has been implemented in RRI website by using Google Analytics [24] (Figure 4.1), Google Analytics Reports 7.x-3.x-dev [25]. A custom script is also added to Google Analytics module to allow user to deny being tracked (to stop Google Analytics Cookies for that user).

↳ STATISTICS

ENABLED	NAME	VERSION	DESCRIPTION
<input checked="" type="checkbox"/>	Google Analytics API	7.x-3.x-dev	API to access statistics from the Google Analytics Data Export API. Requires: OAuth (enabled) Required by: Google Analytics Reports (enabled), Google Analytics Views (enabled)
<input checked="" type="checkbox"/>	Google Analytics Reports	7.x-3.x-dev	Provides interface to access Google Analytics API statistics. Requires: Google Analytics API (enabled), OAuth (enabled), Chart API (enabled)
<input checked="" type="checkbox"/>	Google Analytics Views	7.x-3.x-dev	API to access statistics from the Google Analytics Data Export API. Requires: Google Analytics API (enabled), OAuth (enabled)

Figure 4.1: Drupal Modules Implementation

After the module installation, we will be able to create a new view with the option to use GA data as shown in Figure 4.2.

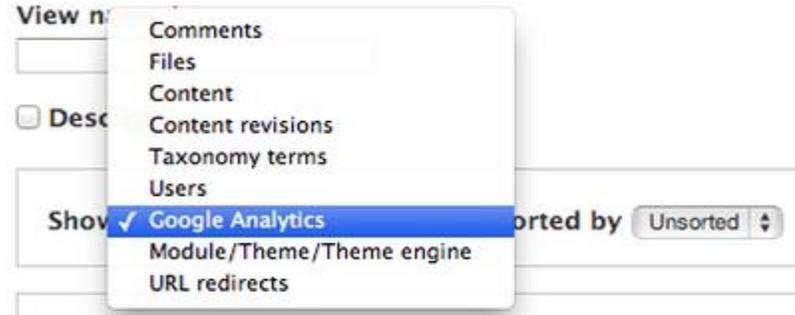


Figure 4.2: Using Google Analytics in Views Module.

We can set up and send a report via email to [responsibility.fp7@gmail.com](mailto:responsibility.fp7@gmail.com) in one of the following formats: PDF, CSV, CSV for Excel, TSV . We can also schedule a report to be sent via email on one of the following schedules: Once, Daily (sent each morning), Weekly (sent the day of the week you select), Monthly (sent the day of the month you select), Quarterly (sent first day of each quarter). Emails are sent for a period of 12 months. If you want to continue sending the same email after that expiration period, you can simply change the *Effective Date* under *Admin > Views > relevant view > Assets > Scheduled Emails*. The detailed report on website activities has been set up to send to [responsibility.fp7@gmail.com](mailto:responsibility.fp7@gmail.com) on weekly basis as shown in Figure 4.3. The report is also accessible at <http://www.google.com/analytics/> and the full report is shown in Annex section.

**RRI Statistics**

Oct 19, 2015 - Nov 18, 2015



**Figure 4.3: RRI Statistic Report**

## 5 Social Laboratory Report

Based on the analysis in task, where the RRI package has been created, the training material was developed further as a result of a social laboratory where, the material has been tested in real environments. This was done through exhibitions and training sessions. The training addresses the individual researcher and the university students (not experts in RRI). The first step was by creating awareness to these groups, as to give them a ground to think about critical issues for their work, not directly related to their everyday life. Training consisted of development of scenarios, educational awareness and developing skills in reflective thinking around RRI (RRI-Package). The results of two training sessions (workshops) will be presented through the feedback collected at the end.

### 5.1 Training Material of the Social Laboratory

#### 5.1.1 Introduction Session



The slide features a teal header bar with the 'SIGNOSIS' logo on the right. The main title is 'SOCIAL LABORATORY FOR TRAINING MATERIAL' and 'PREPARATORY WORKSHOP FOR TRAINERS' in red. Below this is the 'RESPONSIBILITY' logo and the date 'Brussels, 6 July 2015'. The footer includes the 'RESPONSIBILITY' project name, its description as a 'Global Model and Observatory for International Responsible Research and Innovation Coordination', funding information from the European Commission's 7th Framework Program, and logos for the 7th Framework Program and the European Union. A small number '1' is in the bottom right corner.

**SIGNOSIS**

**SOCIAL LABORATORY FOR TRAINING MATERIAL**  
**PREPARATORY WORKSHOP FOR TRAINERS**

 Brussels, 6 July 2015

**RESPONSIBILITY**  
*Global Model and Observatory for International Responsible Research and Innovation Coordination*  
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## Background of Social Laboratory

- **WP 4:** *Observatory*      **Task 4.4.** *Social Laboratory for Training Material*
- **Duration:** *From October 2014 to February 2016*
- **Content:** *“Based on the analysis in task, 3.4-WP3 where the RRI package will be created, the training material will develop further as a result of a social laboratory where, the material will be tested in real environments. This will be feasible through exhibitions, training sessions. The training addresses the individual researcher and the university students (not experts in RRI). The first step is to create awareness to these groups, as to give them a ground to think about critical issues for their work, not directly related to their everyday life. Training will consist of development of scenarios, educational awareness and developing skills in reflective thinking around RRI (RRI-Package).”*
- **Partners involved:** *Fraunhofer IPK, Signosis, DMU, FUNDP, TUB, UOXF, GEO, UNISI, UNIMAS, UCHILE, SAMARITER*

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## How to implement the Social Laboratory

- ① Testing of the RRI package through engagement with researchers, students and other stakeholders with an interest on the subject.
  - *Organization of 10 to 12 creative workshops in different EU and non-EU countries*
- ② Testing through the RESPONSIBILITY FORUM
- ③ Review and finalization of training material  
*(Collection of feedback from participants and drafting an Assessment Report)*

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## Training Workshops

- Ten – twelve one day training workshops with an average of 15 participants each (overall participation of aprox. 150 individuals)
- Workshops will be held in the national language of the organizing partner
- Common content / structure of the workshops on the basis of the training material produced in the context of Task 3.4
- Collection of participants' feedback

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## Objectives of training workshops

- Explain the concept of RRI to researchers, practitioners, students
- Present and discuss the key aspects of RRI
- Raise awareness
- Collect feedback on the training material, the RRI package and the Observatory
- Share approaches on the practical implementation of RRI in the academic and business context

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## Preparatory Workshop for Trainers

- ✓ Develop common understanding on the scope and process of training workshops
- ✓ Define what training is required for each group of participants
- ✓ Go through, test and review some indicative training material and case studies
- ✓ Inform the trainers on the content of training material and guide them on the process for organizing and assessing the Social Laboratory in various countries
- ✓ Identify critical aspects and gaps for the successful implementation of the Social Laboratory

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## Participants Expectations

- Why did you come today?

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## Agenda of the day

- Training material – Which material can be used?
- Session on Theories and Principles of RRI
  - Case study and group exercise 1
- Session on the organization of RRI
  - Case study and group exercise 2
- Session on the Implementation of RRI
  - Case study and group exercise 2
- Designing the national workshops
- Next steps

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## Training Material compiled in RRI Package

1. Responsible Research and Innovation in ICT - Identifying and Engaging with the Ethical Implications of ICTs (paper)
2. Towards Responsible Research and Innovation in the Information and Communication Technologies and Security Technologies Fields Research and Innovation Policy (policy document)
3. ICTs, the Internet and Sustainability: A discussion paper
4. The impact of ICT on sustainable development (paper)
5. A Complex Systems Approach to Sustainability (slides presentation)
6. Exercises on Networking technologies and RRI (exercises)
7. Framework for Responsible Research & Innovation in ICT (slides presentation)
8. Opinion Dynamics and Responsible Research and Innovation (slides presentation)
9. Framework for Responsible Research and Innovation in ICT (Tool)
10. [https://www.edx.org/course/responsible-innovation-delftx-ri101x#\\_VIGN7E1yb3g](https://www.edx.org/course/responsible-innovation-delftx-ri101x#_VIGN7E1yb3g) (on-line resource / course)
11. Social Robots For Supporting Autonomy and Well-Being of Elderly People (case study – slides presentation)
12. IT for a better future: how to integrate ethics, politics and innovation (paper)
13. Responsible Innovation - Food Sector (slides presentation)
14. ....

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## Which training material

- Each organizer / trainer is free to choose the most appropriate material for their groups
- Cover both the basic theoretical and practical dimensions of RRI
- Adaptation of training material to national or organizational context and priorities of the university / research institute
- Contribute to the development of a validated proposed material for further exploitation and use
- Place the training in the wider context of the RRI package and RRI implementation

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### 5.1.2 SESSION 1: THE CONTEXT FOR RESPONSIBLE RESEARCH & INNOVATION

## SOCIAL LABORATORY FOR TRAINING MATERIAL PREPARATORY WORKSHOP FOR TRAINERS

### SESSION 1 THE CONTEXT FOR RESPONSIBLE RESEARCH & INNOVATION



Brussels, 6 July 2015

**RESPONSIBILITY**

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## What is Responsible Research and Innovation

- *“Responsible Research and Innovation is a transparent, interactive process in which societal actors and innovators become mutually responsible to each other with view on the **ethical acceptability, sustainability and society desirability** of the innovation process and its marketable products (in order to allow a proper embedding of scientific and technologies advances in our society)”*. (Rene Von Schomberg)
- *“RRI means that societal actors work together during the whole research and innovation process in order to better align both the process and its outcomes, with the values, needs and expectations of European society.”* (European Commission)
- *“Responsible innovation means taking care of the future through collective stewardship of science and innovation in the present”* (Richard Owen – Jack Stilgoe)

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## The motivation behind RRI

- Researchers often believe that their primary responsibility is to do “good science” and not what products / applications will be developed based on their research or who will use them and what societal challenges will be addressed
- Public is expecting that their research or technological innovations “will do good in the world”
- Research and Innovation that can generate profits or Research and Innovation that can fulfill societal needs and take into account ethical concerns
- In today’s world, the reach and impact of research and innovation is such that it can no longer be left to scientists and researchers alone. All citizens are stakeholders of research and innovation, partly because they provide required resources, partly, because they have to deal with the consequences.
- *“For modern innovations, responsibility for the consequences of implementation is primarily related to the properties and characteristics of the products or the technology and less to the privileged owners and creators of the technology.”* (Von Schomberg)
- But in recent research history research on genetically modified organisms (GMO), nanotechnology or human ICT implants, resulted in controversies and ethical issues had a broad resonance in society

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## Why be responsible researcher / innovator?

- Successful innovation is about commanding confidence
- Doing the right thing must be based on intention and choice
- Technological innovations and scientific excellence must be built on integrity, trust, compliance and ethically acceptable behaviour
- What is fair, trustworthy and acceptable is what those who matter for the specific field of research or technology deem to be acceptable

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## What happens if there is no RRI?

### What could happen?

- No communication
- Poor understanding
- Confusion
- Wasted energy
- Missed opportunities
- Unmet needs
- Stand-off
- Conflict
- Violence



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## Policy background

- European policy initiative for research and innovation
- RRI has been introduced in the FP7-Science in Society Work Programme in 2012
- Early seeds in 2000; science society and the citizen..2007... Lund Declaration for a Europe that" must focus on the grand challenges of our time" 2009
- The EU, as well as most other political and economic powers, relies on R & I to achieve its policy goals.
  - ⊙ Improve competitiveness
  - ⊙ Development of European Research Area (ERA)
  - ⊙ Development of of Innovation Union
- RRI is a cross-cutting issue in Horizon 2020
- The EU aims to develop an RRI Framework defining processes, instruments and criteria for RRI (Normative – Substantial – Instrumental dimensions of RRI)

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## The areas of RRI in the EU context

1. Citizen engagement and participation of societal actors in research and innovation
2. Science literacy and scientific education
3. Gender equality in research and innovation and gender dimension in research and innovation content
4. Open Access to scientific knowledge research results and data
5. Research and innovation governance
6. Ethics (compatibility with fundamental values and rights)

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## Is RRI a voluntary process?

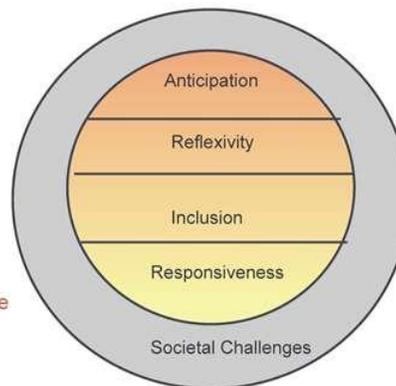
- The European Commission has considered the option of introducing a mandatory regulation for RRI and a reporting scheme on RRI activities and address the full amount of funding (€250 billion) for RRI by a legally binding initiative which amounted.
- However, the EU opted for an improved coordination with the Member States and for voluntary measures such as incentives for RRI, Codes of Conduct, RRI standards...

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## The process of RRI

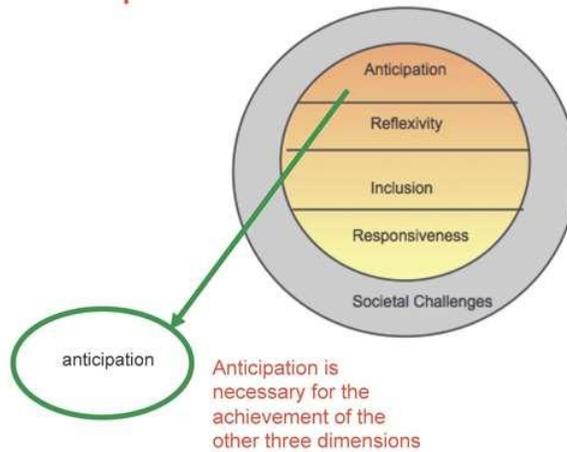
- Anticipation
- Reflexivity
- Inclusion
- Responsiveness

Together the four characteristics support the realisation of the RRI process with the aim to address the "Grand Challenges" of our time



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## Anticipation



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## Anticipation

### Principle

- Researchers should envision the future and understand how innovation or current research could shape it.

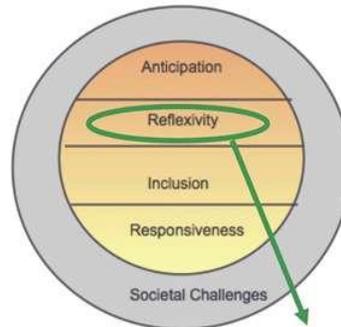
### Definition

- *“Anticipation involves systematic thinking aimed at increasing resilience, while revealing new opportunities for innovation and the shaping of agendas for socially-robust risk research”*

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## Reflexivity

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Reflexivity relates to science governance and determines the moral responsibilities of researchers, funders, regulators and other actors of RRI

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## Reflexivity

SIGNOSIS

### Principle

- Researchers should scrutinise value systems and theories that shape science, innovation and their governance.

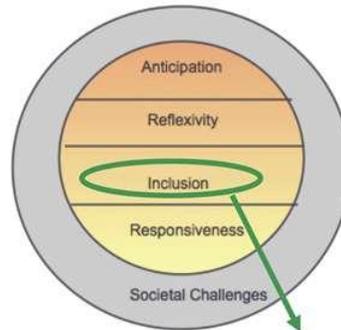
### Definition

- *“Reflexivity means rethinking prevailing conceptions about the moral division of labour within science and innovation. Reflexivity directly challenges assumptions of scientific amorality and agnosticism.”*

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## Inclusion

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Inclusion relates to the involvement of society to the innovation process from the beginning to the end

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## Inclusion

SIGNOSIS

### Principle

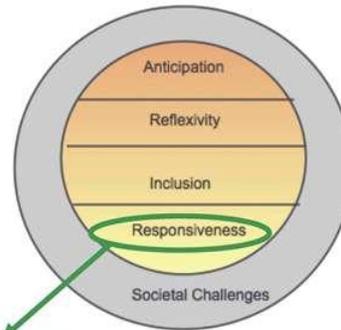
- Research and Technological Innovation shall be inclusive

### Definition

- “For a research organisation that accepts its accountability to those on whom it has an impact and who have an impact on it (e.g. funders), *inclusion is the participation of stakeholders in developing and achieving an accountable and strategic response to ethical concerns and social needs*”

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## Responsiveness



Responsiveness is the decisions, actions and performance related to emerging knowledge, perspectives, views and norms

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## Responsiveness

### Principle

- Research organisations shall respond to stakeholder issues that affect their performance.

### Definition

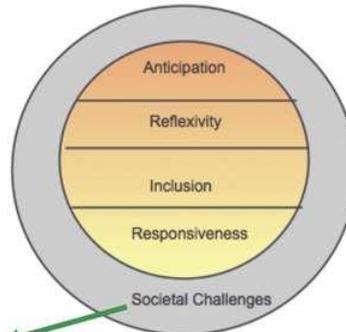
- Responsiveness is an organisation's response to stakeholder views and changing circumstances on societal challenges that affect its performance and is realised through *decisions, actions and performance, as well as communication with stakeholders.*

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## Societal Challenges

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- Climate Change
- Demographic Ageing
- Water scarcity
- Security
- Supply of energy
- .....



R&I should adapt and respond to the grand societal challenges

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## Societal Challenges are key to R&I

SIGNOSIS

Can technological innovations succeed in a society that fails?



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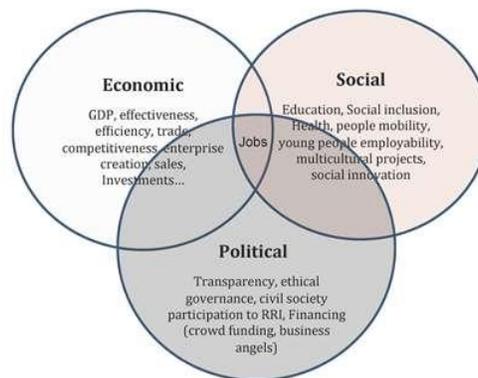
19

## Enabling mechanisms of RRI process

- Precautionary Principle (incl. risks assessment)
  - ✓ *Transparency*
  - ✓ *Legal Compliance*
- Technology assessment / foresight
- Innovation Governance
- Multi-stakeholder involvement and engagement
- .....

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## RRI Benefits



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## RRI Benefits - economic

RRI Benefits related to implementation lead time		Time-frame		
		Short term	Medium term	Long term
Benefits	Economic	Increased economic performance on terms of <ol style="list-style-type: none"> <li>new services/products creation</li> <li>number of services/products delivered to the market</li> <li>social innovation</li> <li>knowledge deployment in the market product/services</li> </ol> Lowering barriers of entrance to the market due to less initial investments  New enterprises establishment	Increased R&I performance on terms of Sustainability  Acceptability of new services/products, when in the market, avoiding financial losses of non-acceptance  Increasing of employment  Increasing the workforce efficiency	Increased R&I performance on terms of Sustainability  Avoiding the costs of innovations' rejection from the society  Flourishing business environment

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## RRI Benefits - social

RRI Benefits related to implementation lead time		Time-frame		
		Short term	Medium term	Long term
Benefits	Social	Increase on creativity and innovative capacities of the society  Increased risk-taking attitudes from entrepreneurs  Faster circulation of knowledge  Acceleration of innovations due to the minimisation of risk of non-acceptance of the market	Increasing risk-taking attitudes from entrepreneurs Increased participation  New jobs creation  Protection of citizens from the negative impacts of new and emerging technological services/products  Minimise undesirable impacts of innovation  Increased attractiveness of science and innovation careers	Increased trust between science and society  Democratisation of R&D  Respect for the societal values and ethics supporting societal coherence and prosperity  Knowledgeable and participating society in all innovation processes  Co-construction of research and innovation circle  Ethical awareness of the impacts of innovation from the researchers; ethics considerations' increment

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## RRI Benefits - environmental

RRI Benefits related to implementation lead time		Time-frame		
		Short term	Medium term	Long term
Benefits	Environmental	Protection of citizens from the negative impacts of new and emerging technological applications	Sustainability on environmental resources  Faster solutions for acute environmental issues	Increased R&I performance on terms of Sustainability  Better quality of life

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### 5.1.3 SESSION 2: HOW TO ORGANISE RRI

## SOCIAL LABORATORY FOR TRAINING MATERIAL PREPARATORY WORKSHOP FOR TRAINERS

### SESSION 2 HOW TO ORGANISE RRI



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## Why do we involve society in R&I?

- Inclusive approach to research and innovation requires public engagement
- Opens R&I to society and vice versa
- Social / ethical reflexivity entails ongoing involvement of society to R&I design and implementation
- Legitimacy of research funding and accountability of funders for the consequences of innovation
- Acceptability of innovation and research results
- The external drivers and contexts (e.g. ERA / EU Policy) for society's involvement in R&I are continually evolving.
- Meta-learning through broader networks and partnerships accelerates the R&I process.
- Stakeholder engagement is shifting from a strategy for defense to relationship building to innovation and anticipating R&I outcomes addressing societal challenges

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## What are RRI Stakeholders?

- People (individuals or categories) who:
  - Can influence or are affected by the R&I results and processes
  - Have an explicit or implied contract with the research organisation
  - Possess information, resources and expertise needed for strategy formulation and implementation
- *Citizens / Consumers*
- *Civil Society Organizations*
- *Scientists*
- *Industry*
- *Research funders*
- *Research authorities/ Policy makers*
- .....

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## How to involve society in R&I? Aims of Public Engagement

Stakeholder engagement is focused on:

- Improving accountability of researchers to stakeholders affected by research impacts
- Improving performance of R&I practices
  - ✓ New insights
  - ✓ Product & Process innovation
  - ✓ New approaches
  - ✓ New opportunities and risks
  - ✓ Acquire society and industry relevant knowledge

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## A classic case study IBM and SeniorNet



Classic approaches to stakeholder engagement:  
IBM commissioned SeniorNet to staff a help desk providing support to users and feedback to IBM.

Process innovation:  
SeniorNet worked with its clientele to beta test new technology

Product innovation:  
IBM develops accessibility technology which allows users to change the way the web is displayed to make it easier to read, understand and interact with.

Stakeholder engagement:  
IBM's Community Relations Unit brokered a partnership between IBM's research labs and the non-profit organisation SeniorNet



Insights: What accessibility features do SeniorNet's clientele with vision, motor and memory impairments need?

New opportunities:  
The market for disability friendly products is rising: 25% of the global population will be effected by 2020.

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## Examples of Stakeholders

- Research funders
- Scientists / Colleagues
- Consumers
- Research and Industrial Partners
- NGOs, pressure groups
- Citizens
- Government and regulators
- Local communities
- Academic community
- Media

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## Which Stakeholders are instrumental for R&I?

- How much “affect” is sufficient for a stakeholder to be instrumental?
- Who determines the degree of which “affect” is sufficient?
  - Government / Society / Stakeholders ? (then what is the process of legitimization)
    - If a group is “affected” by the reach of another group affected by R&I practices and outputs are they also legitimate stakeholders?

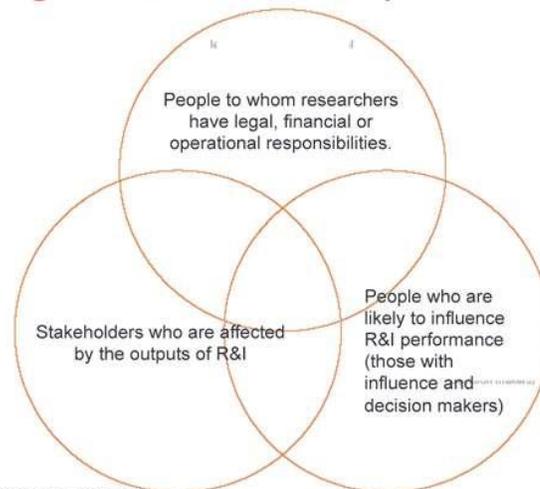
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## Stakeholder identification and mapping

- **Categorising stakeholders:**
  - eg internal/external, primary/secondary, local/ international, key/non-key
- **Characterising relationships:**
  - Length of relationship
  - Nature of relationship
  - Key events/history
  - Level of influence to R&I practice
  - Willingness and/or ability to engage
  - Stakeholder expectations/perceptions of research impacts
  - Organisation's perceptions/expectation of stakeholders

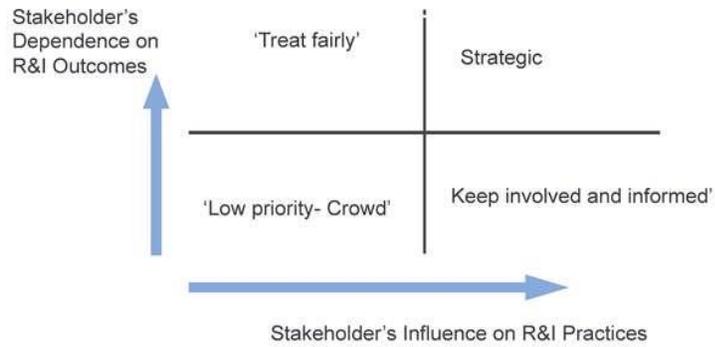
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## Mapping Stakeholders – step 1



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## Prioritizing Stakeholders – step 2



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## IDENTIFYING KEY ISSUES FOR STAKEHOLDERS

What are we going to talk about to our stakeholders ?

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## Questions related to RRI Process

- Issues which have the potential to impede R&I performance (specific or general )
- Identify and address issues where:
  - R&I is perceived to have a positive or negative impact on stakeholders.
- AND
  - There is a gap between what the R&I is doing or perceived to be doing, and what stakeholders expect R&I to be doing in terms of management of impacts, ethics or outcomes

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## Criteria for selecting questions

- Issues that have direct impacts to R&I process / Technology Assessment
- Issues regarding statements of a strategic nature – commitments to research funders and key stakeholders
- Peer-based norms
- Issues that stakeholders consider important enough to act on (now or in the future)
- Issues which are considered social or ethical norms (as indicated by regulations, likely future regulation or institutionalised norms and ethical standards)

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## 5.1.4 SESSION 3: TRYING OUT RRI IN PRACTICE



# SOCIAL LABORATORY FOR TRAINING MATERIAL PREPARATORY WORKSHOP FOR TRAINERS

## SESSION 3 TRYING OUT RRI IN PRACTICE



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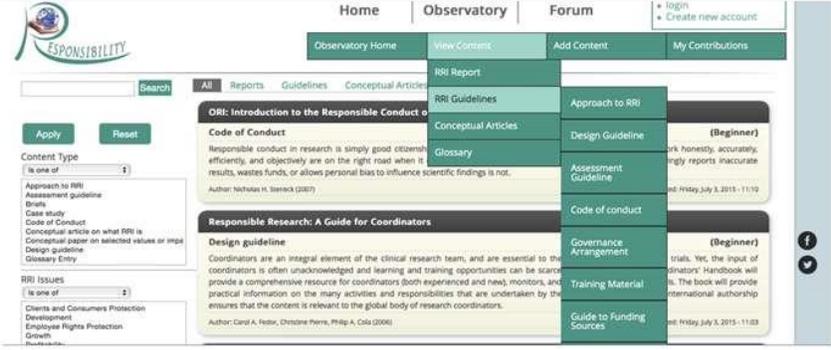



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# RRI Observatory – How to use it?



The screenshot shows the RRI Observatory website interface. It features a navigation menu with 'Home', 'Observatory', and 'Forum'. The main content area displays a list of articles, including 'RRI: Introduction to the Responsible Conduct of Research' and 'Responsible Research: A Guide for Coordinators'. The interface includes search bars, filters, and a sidebar with social media icons.

<http://observatory-rrr.info/?q=obs-home>

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## The RRI Package

- RRI Guidelines
  - *Researchers and public research organisations*
  - *Industry, commercial research organisations*
  - *Policy makers*
  - *Civil society organisations (CSOs and NGOs)*
  - .....
- Practical implementation of Responsible Research for a specific stakeholder
- Guidelines for Researchers.....

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## GUIDELINES FOR RESEARCHERS

### WHAT IS OUR OVERALL OBJECTIVE?

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Conduct responsible R&I to better serve society

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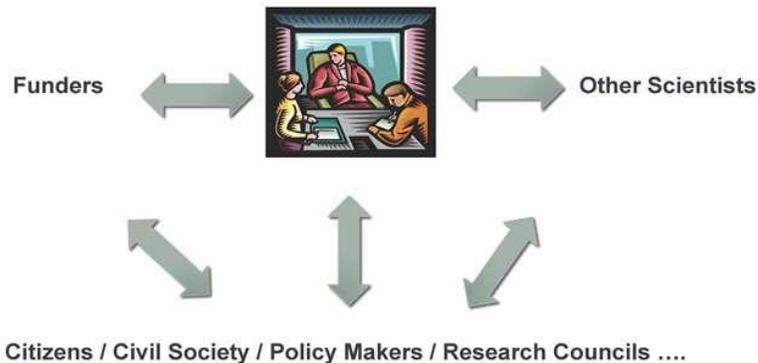
## Key Questions to Answer Before Public Engagement Can Take Place

- Who are your stakeholders?
- Why do you want to engage with them?
- Why do they want to engage with you?
- What do you want to talk about?
- Why do your stakeholders want to talk about?
- What do you both want out of the engagement?
- How will you know the engagement was successful?
- Is that outcome realistic and achievable?

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## Process for Engagement

To whom do Researchers listen?



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## Managing Stakeholders

- Some researchers just manage stakeholders– They don't respond
- Respond to stakeholders

### Simple Rules

- Who is affected
- Who can influence
- Taking this into account .....

  - Can open opportunities for new insights and for legitimization
  - Provide opportunities to our stakeholders

  
- “Invisible stakeholders” – non negotiating / no leadership

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## The “ladder” of engagement

- **Information:** Providing information / gathering information
- **Consultation:** Asking opinions
- **Involvement:** Seeks more than just opinions; participants may be part of the Innovation or the research process
- **Partnership:** Direct involvement in decision-making and action
- **Devolved power:** Giving away decision making, resources and control



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## Guidelines for meaningful engagement

- To achieve this, engagement with society and stakeholders needs to:
  - Be a dialogue, not a one-way information feed
  - Allow stakeholders to assist in the identification of societal needs and ethical issues
  - Be between parties with sufficient preparation and briefing to make well-informed decisions
  - Involve stakeholders in defining the terms of engagement
  - Allow stakeholders to voice their views without restriction or without fear of penalty or discipline
  - Stakeholders should be clear about how information about R&I is collected and should be collected
  - Meaningful engagement requires that the researchers are accountable and that they take decisions based on an accurate and full understanding of stakeholder aspirations and needs



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## Collecting Information

- Information is collected about RRI performance against identified indicators
- RRI information is available from:
  - The peers / peer review group
  - Research data
  - The end users of R&I products
  - The stakeholders

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## Methods and tools - I

- Methods used to collect information include:
  - Interviews (face-to-face and distant)
  - Group sessions (interviews and focus groups)
  - Questionnaires / surveys
  - Workshops and seminars
  - Public meetings
  - Stakeholder panels
- Collection methods depend on:
  - The situation (e.g. size, nature, scope etc)
  - Capacity (e.g. staff, money, etc.)
- Sampling can be used, but data must be representative

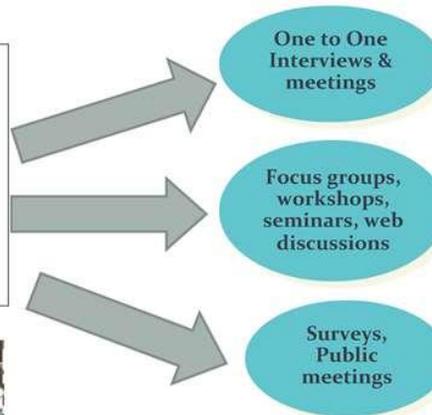


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## Engagement Techniques ..... Questions of Scale

### Who do you need to talk to?

- End users
- Scientists / peers
- Activists / CSOs
- Regulators
- Funders
- Local Communities

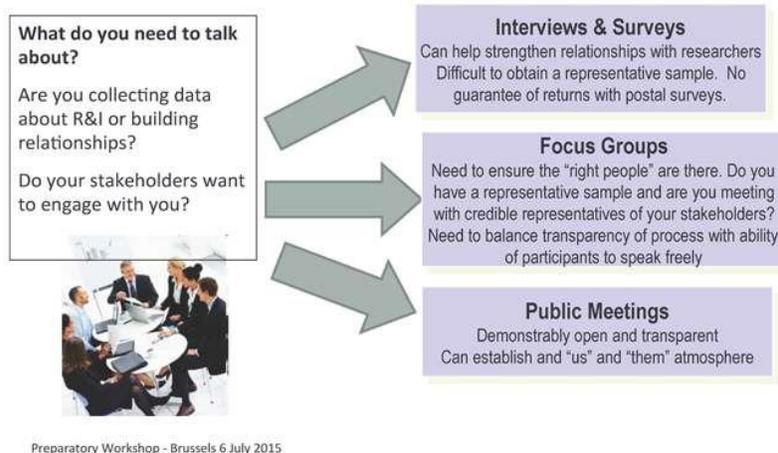


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## Engagement Techniques ..... Questions of Trust



## Engagement Techniques ..... Questions of Purpose



## Questions for assessing engagement methods – I

- Does it help the researchers to establish the kind of relationships that they want?
- Can it generate the outputs they need to reach their strategic RRI objectives?
- Will it generate the qualitative or quantitative information that the researcher needs for making decisions?
- Do I have sufficient resources and time for applying this method / mix of methods?
- Does it work for the stakeholders that the researchers want to engage with?
- Does it suit the stakeholders' current level of awareness and understanding about the content and process of R&I?
- What practical issues need to be considered and addressed in order to make the engagement accessible/attractive to them?

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The aim of next stage is to translate new learning, insights and new approaches

**to ensure that R&I stakeholders understand how you conduct research**

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## Process

- Operationalizing
  - Planning and monitoring agreed strategic and operational changes to R&I design and products from involvement of the society / stakeholders
- Reporting and feedback
- Review of the engagement process
  - Focusing on learning from successes and failures to feed into the next cycle of public engagement

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## Thus an adequate response should include:

- acknowledgement of ethical concerns and needs
- a prioritisation of issues (including how this was determined),
- what has taken place since the dialogue,
- benchmarks
- next steps within a fixed timeframe



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### Considering objectives set, what outcomes have been achieved?

- What are potential operational and strategic implications for R&I process?
- What are the next steps which may have been agreed with stakeholders and timing for delivery?
- What are remaining questions or issues?
- Who is responsible for implementation and monitoring follow-up?
- How will we communicate back to stakeholders appropriately?
- If need to take action, should SMART targets be used?

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### Communicate back to stakeholders appropriately through:

- One to one conversations
- Follow up telephone briefings
- Letter of thanks summarizing results and next steps
- As part of regular reporting activities



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### The acid test of reporting back to stakeholders and to wider society is whether the researcher:

Reflects an adequate response to questions and ethical concerns surfaced by the engagement processes.

The principle of responsiveness require that the researcher take into account societal needs and stakeholder concerns and interests, and responds coherently and consistently to them through the process and outputs of research.

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### Reviewing the RRI process

- Did it happen?
- Did it work?
- Overall, how well did it go?
- What went according to plan?
- What didn't go according to plan?
- Did the engagement with society made an impact on stakeholders' views and/or concerns about the R&I process?
- Did the engagement make an impact on the researcher's views and/or R&I practices?

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## 5.1.5 SESSION 4: NEXT STEPS – ORGANIZATION OF TRAINING WORKSHOPS



### SOCIAL LABORATORY FOR TRAINING MATERIAL PREPARATORY WORKSHOP FOR TRAINERS

SESSION 4  
NEXT STEPS – ORGANIZATION OF TRAINING WORKSHOPS

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### Organization of workshops

- Selection and adaptation of training material
- Translation of training material to the languages of organizers (if necessary)
- Schedule the workshops (September – November 2015)
- Publication of training workshops (or send personal invitations)
- Running the workshops
- Collection of participants' feedback (questionnaires)
- Feedback / reports from trainers (SIGNOSIS will provide template)
- Drafting, reviewing and submission of assessment report

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And that's it!

Congratulations on completing today's workshop! Any questions?

## 5.2 Workshop at Fraunhofer IPK – Berlin

### 5.2.1 Questions for Feedback from trainers after the workshop

1. How well did the workshop flow?

Working with the participants was very pleasant. All have been surprisingly interested and open for discussions. All in all, the workshop was a great success and seemed to have a learning effect.

2. How did participants engage with the RRI material?

The material seemed generally comprehensible. Some content seemed questionable to the participants, this, however, led to fruitful discussions. Overall participants were interested in the subject and the material provided.

3. What were the challenges for you as trainer?

Participants brought different degrees of prior knowledge about responsibility and RRI. In the beginning, there seemed to be reservations that the subject could be imposed by policy makers. However, explaining that responsibility and its integration into design processes is neither easy nor unambiguous, helped losing these reservations.

4. What changes would you propose to the training material out of your experience?

The material has been adjusted with respect to the target group and framework conditions. This is recommendable in order to respond to skills, knowledge and interests of the participants. In this case, the workshop has been conducted with students and future engineers, therefore general information about what is RRI have been more concrete to the participants than for example, details about stakeholder engagement from a project management perspective.

Considering exercises, role playing and group discussions, it is important to establish a relation to current debates and discourses, in order to gain attention.

## **5.2.2 Workshop Report**

### *5.2.2.1 Short background*

The workshop took place with two trainers and four student participants who are jointly working in a common division of Fraunhofer IPK. The trainers have a professional background in Social Sciences and Science and Technology studies and are experienced in RRI through their commitment in the RESPONSIBILITY project. Hence, trainers are sensitized on the concept's emergence and theoretical roots, the current academic and political discourse and the practical challenges RRI is referring to. Also, trainers are aware of the concrete function of the workshop with regard to the overall embedding in the RESPONSIBILITY project.

Both are experienced in organising and facilitating workshops, in particular towards a diversity of target groups and specific participant-centred process requirements. The trainers have become acquainted with the participants' specific working contexts, professional background and interests before the actual workshop organisation and definition of learning outcomes took place.

### *5.2.2.2 Results from workshops*

The workshop has been conducted in German with four student engineers working at Fraunhofer IPK in different projects about computer vision and automatization. All participants have a professional background in either computer science or computational engineering. So far, the subject of responsibility has not been part of the participant's education and most of them haven't been familiar with the concept of RRI. Nonetheless, all of them brought at least some prior knowledge and their own perspective on the notion of responsibility into the workshop.

Participants had been selected because of their special role of being future engineers and future decision makers. However, being students they accumulated rather limited work experience so far which makes it both, particularly relevant and potentially unbiased towards a training of RRI and its implementation.

The workshop was designed with an aim to raise awareness of the issue of RRI and questions of responsibility in general. Particularly, participants had been encouraged to

bring different views up for discussion by changing perspectives and roles. In order to gain the students interest and keep their attention, a variety of materials and methods had been chosen. On the one hand participants were provided with information about RRI and its governance background, likely to be used in their work life. This input derived from the training material provided by SIGNOSIS, which has been translated into German language and adjusted with respect to time schedule and framework of the workshop. Participants were supposed to understand the meaning and background of RRI and develop ideas on how to integrate RRI into familiar technological design processes. On the other hand, the workshop was designed to promise an interactive and multifaceted experience, firstly by leaving questions open to the audience and especially by using a role-play as a didactic method to point to the ambivalences of RRI in practice.

Since the participants brought different degrees of prior knowledge about responsibility and RRI, it has been vital to keep the materials basic, in order to productively raise awareness and engage the participants for the significance of RRI. Hence, the chosen materials focused on covering the core dimensions and the governance dimension of RRI, but most importantly, put emphasis on practical case studies relating to the interest field of the participants (in our case, a role play on the topical subject of the Volkswagen emission scandal). Learning about the relevance of RRI in the context of a practical example (and even, real case) that actually relates to the students very own working fields emerged to be very successful and, according to participants feedback, the central learning experience.

As it became increasingly obvious during the workshop that participants felt a need to discuss more profoundly the notion of responsibility in its diverse facets and possible accounts than the actual policy framework, trainers promoted this dynamic with extended time, thereby drawing relation how RRI provides a potential response.

As the students are still beginners regarding working experiences, the workshop exploited the first two sessions of the SIGNOSIS training materials, i.e. the content and function of RRI and its integration into their very own lifeworld experiences.

The implementation of RRI was introduced with regard to the present working context of the participants in collaborative research projects and highlighted in terms of needs and adequate responses RRI aims to render. In particular, the identification of stakeholders and a reflexive perspective on prevailing demands and interests have been of interest for the participants and caused irritation as well as learning effects.

Regarding their own research experience participants pointed to organizational constraints (i.e. hierarchy, obedience) and modes of coordination within research teams. As the participants framed themselves as organizational embedded researchers

their consideration of RRI profoundly addressed organizational learning and organizational integration/institutionalization of RRI principles.

In general, it proved to be important that trainers are aware and knowledgeable of both, the emergence and impact of RRI as well as the individual participants' working field and interests. Moreover, the moderated, interactive and practically oriented training approach is recommendable in this setting rather than a mere classic lecture format in order to achieve the outcomes defined prior to the workshop.

### 5.2.2.3 Conclusion: Main insights from trainers' and trainees point of view

The material has to be adjusted with respect to the target group and framework conditions. This is recommendable in order to respond to skills, knowledge and interests of the participants that form the basis for a successful uptake of the training. Due to our specific setting, the materials provided by SIGNOSIS have been exploited selectively. Not all the information (e.g. the process of RRI, a linear model of integrating RRI) and particularly, the case study, were useful or relevant for our target group and situational conditions.

Considering exercises, role playing and group discussions, it is important to establish a relation to lifeworld experiences of participants and to current debates and discourses, in order to gain attention and increase willingness to contemplate. The practical demonstration and open reflection upon RRI dimensions should be preferred to a mere theoretical account.

Similarly, the RRI package can only be introduced and grappled with if participants are provided with information that is both meaningful and comprehensible. The deliberate refurbishment of materials and target group-sensitive process construction therefore is necessary to pave way for the appropriate embedding of the RRI package.

### 5.2.3 List of Participants (anonymized)

Participant #	Current Position	Organization	Country
1	Student (Computer Engineering)	Fraunhofer IPK	Germany
2	Student (Computer Engineering)	Fraunhofer IPK	Germany
3	Student (Computational Science)	Fraunhofer IPK	Germany
4	Student (Computer Engineering)	Fraunhofer IPK	Germany

## 5.3 Workshop at University Sienna – Sienna

### 5.3.1 Questions for Feedback from trainers after the workshop

1. How well did the workshop flow?

The workshop was carried out very well with the attendance of 13 master students, 3 PhDs and Prof. Giovanni Giambene.

2. How did participants engage with the RRI material?

The participants had shown their interests on the topic and focused deeply while working on group exercises to identify the dimensions of RRI process, stakeholders of the project and RRI issues related to the project.

3. What were the challenges for you as trainer?

One of the difficulties for me as a trainer is how to explain the RRI concept and its elements to the participants. In particular, the RRI process and its dimensions seem too abstract and difficult for the participants to catch the ideas.

Another challenge is to engage people to do group exercise to practice RRI concept. Fortunately, it went very well since the participants were interested in the topic.

4. What changes would you propose to the training material out of your experience?

The training material should have more examples in order to help participants understand the RRI concepts and aspects easily.

### 5.3.2 Workshop Report

#### 5.3.2.1 Short background

The target groups are students including 13 Master students and 1 Ph.D. student in the Networking field from University of Siena, Italy who are not experts in RRI and don't have any experience on organizing RRI.

#### 5.3.2.2 Results from Workshop

#### **Methodological reflection:**

The training material from Signosis was selected to present to the participants the RRI concepts and elements. The case study selected is BATS project. This is a project in ICT field in order to attract the participant's attention and engage them to do group exercise and practice RRI concepts and aspects. The workshop was divided into three sessions to be consistent with the training material. Each session lasted more than 1 hour on average. There were 17 participants. Out of them, 13 participants are Master Students in Engineering, 3 participants are PhD students in Telecommunications and one Professor. The participants were chosen since they are likely to apply the concepts

of RRI to their works as young researchers and can contribute to the awareness of RRI among their friends and colleagues.

**Overview of workshop:**

1. Feedback on the appropriateness / usefulness of the selected training material to cover the needs of participants

The RRI material was selected to be coherent with the field of study of the students; thus it was able to attract the participant's attention. In particular, we had chosen an ICT project to be the case study. This case study is then used for students to practice RRI concepts and aspects. The participants had shown their interests on the topic and focused deeply while working on group exercises to identify the dimensions of RRI process, stakeholders of the project and RRI issues related to the project.

2. What were the questions on Research and Innovation that the different sessions / material responded to?

Different sessions had different group exercises, which are related to both the RRI concepts and the ICT case study.

3. Were these issues addressed in the workshop / covered by the training material?

The issues addressed during the workshop were covered by the training material from Signosis.

*5.3.2.3 Conclusion: Main insights from trainers' and trainees point of view*

The Workshop was successful. The participants were very excited while working on the Group Exercises to figure out the RRI process including four dimensions, to identify stakeholders and map and categorize/prioritize all the stakeholders and to identify the RRI key issues. From the evaluation questionnaires, all most the participants feel the training material and the case study selected were quite useful and appropriate.

### 5.3.3 List of participants

Number	Name	Email	Country
1	Mohammadmadhdi Ataei Zaher	<a href="mailto:ATAENG1984@gmail.com">ATAENG1984@gmail.com</a>	IRAN
2	Artem Tyulyakov	<a href="mailto:aatulyakov@gmail.com">aatulyakov@gmail.com</a>	Russia
3	Hossein Rasi	<a href="mailto:Rasi.hossein@gmail.com">Rasi.hossein@gmail.com</a>	IRAN
4	Feba Somarajan	<a href="mailto:Feba.ku@gmail.com">Feba.ku@gmail.com</a>	INDIA
5	Tharun Vempati	<a href="mailto:t.vempati268@gmail.com">t.vempati268@gmail.com</a>	ITALTY
6	Maloth Shyam Komer	<a href="mailto:malothshyam@gmail.com">malothshyam@gmail.com</a>	India
7	Khoa Tran	<a href="mailto:anhkhoayy@gmail.com">anhkhoayy@gmail.com</a>	Vietnam
8	Oryesuchi Cosmas Nkume	<a href="mailto:nkumeineghu@gmail.com">nkumeineghu@gmail.com</a>	Nigeria
9	Alessandro Figura	<a href="mailto:Allessandro.figura@gmail.com">Allessandro.figura@gmail.com</a>	ITALY
10	Muqeed Parvaz Mohammed	<a href="mailto:muqeedparvaz@gmail.com">muqeedparvaz@gmail.com</a>	INDIA
11	Sareh Hassani	<a href="mailto:Sareh.hassanitt@gmail.com">Sareh.hassanitt@gmail.com</a>	IRAN
12	Bacaji Kirubaicaran	<a href="mailto:forgivenessar@gmail.com">forgivenessar@gmail.com</a>	INDIA
13	Roshita Sebastian	<a href="mailto:sebastianarr@gmail.com">sebastianarr@gmail.com</a>	INDIA
14	Nicholson Eugene	<a href="mailto:Nicholson89@gmail.com">Nicholson89@gmail.com</a>	INDIA
15	Doanh Kim Luong	<a href="mailto:kimdoanh89@gmail.com">kimdoanh89@gmail.com</a>	Vietnam
16	Van Anh Le	<a href="mailto:vanla3190@gmail.com">vanla3190@gmail.com</a>	Vietnam
17	Giovanni Giambene	<a href="mailto:giambene@unisi.it">giambene@unisi.it</a>	Italy

## 5.4 Training Material of the “Integrating Ethical Reflexivity in Research Projects” Social Laboratory

### 5.4.1 Introductory presentation



No.	Partner Name	Logo
1	Fraunhofer IPT	
2	Signosis SpA	
3	De Montfort University	
4	University of Namur	
5	Technical University of Berlin	
6	University of Oxford	
7	Geolmaging Ltd	
8	University Sienna	
9	University of the Aegean	
10	University Malaysia Sarawak	
11	Universidad de Chile	
12	Kyushu Institute of Technology	
13	Arbeiter Semaither Bund Wien Gesundheits und Soziale Dienste Gemeinnützige GmbH	

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## Integrating Ethical Reflexivity in Research Projects




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01.09.2015 - Paris

## This workshop is about ethical issues in technology development

**1/ RRI framework**

- Justification of the RRI approach
- RRI and Horizon 2020
- RRI notion

**3/ Exercises**

- Case study presentation
- Case study analysis
- Reports from the groups
- Discussion

**2/ What is ethics?**

- How to specify an ethical issue?
- The ethical dilemma
- How to detect and address ethical issues?

**4/ New hypothesis for ethics in research**




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## General aim of the workshop

- We will not determine BODEGA's ethical issues;
- We will not provide ready-made solutions for all ethical issues (this is logical since ethical issues need to be contextualized);

BUT

- We will try to determine
  - what ethics is,
  - what are the conditions of its implementation, and
  - what are the conditions of ethical reflexivity.



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## Integrating Ethical Reflexivity in Research Projects

- Throughout the day we are interested in what you have to say;
- We are particularly interested in how you come to a decision about something (the process you use);



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## Programme

- 09:30-10:45 – Introduction
- 09:30-10:00 – *RRI framework determination*
- 10:00-10:45 – *General ethics introduction*
- 10:45-11:00 – Break
- 11:00-11:15 – Case study presentation
- 11:15-13:00 – Case study analysis exercise
- 13:00-14:00 – Lunch



## Programme

- 14:00-14:40 – Discussion of initial feedback from the participants
- 14:40-15:30 – New hypothesis regarding ethical reflexivity and the research context
- 15:30-16:00 – Break
- 16:00-17:30 – Implementation of ethics reflexivity
- 17:30-17:40 – Closing remarks, conclusions, future directions



## 5.4.2 Ethics introduction

### ETICA findings and FP7 ICT ethics

- + treatment of humans
- + Privacy
- + Security
- + Autonomy
- + Identity
- FI: Trust
- + specific individuals

- Nature of society
- Culture
- Surveillance
- Responsibility
- Legal liability
- Risk
- Equity / distribution
- Property / ownership
- Power / relationships
- Environment / sustainability
- AI: Gender biases
- AI: Underestimation of the consequences of AI
- Rob-mil: Lower barriers for war

Likely to find

Likely to find aspects

Unlikely to find

A significant proportion of ethical issues of emerging ICTs are not captured by FP7 ICT ethics processes.

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### General Principles

- **Six general principles** can effectively be deployed to try to determine potential ethical issues:
  - The principle of autonomy
  - Veracity
  - Beneficence
  - Non-maleficence
  - Confidentiality
  - Justice
- **Autonomy** refers to the right of the user to decide what should happen as result of a given situation. **Veracity** implies that the user knows exactly what information the system collects about the user. **Beneficence** is the expectation that the use of the system will be for doing good; “**non-maleficence**” is the expectation that the system will not be used with bad intent. **Confidentiality** ensures that the information collected by the system will not be freely available. **Justice** is the expectation that the system’s decisions will be fair.

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## Emerging Technologies – Shared Features

- Natural interaction
- Invisibility
- Direct link
- Detailed understanding of the user
- Pervasiveness
- Autonomy
- Power over the user
- **Market driven**



[http://www.civilsociety.co.uk/finance/news/content/3229/ncvo\\_misses\\_out\\_on\\_capacitybuilders\\_ict\\_funding?topic=&print=1](http://www.civilsociety.co.uk/finance/news/content/3229/ncvo_misses_out_on_capacitybuilders_ict_funding?topic=&print=1)

## Predictable Ethical Issues (examples)

- Privacy, but:
  - New types of data
  - New ways of linking data
  - New quantities of data
- Security
- Trust
- Liability
- Digital divides



<http://www.dividedbytechnology.co.uk/what.html>

## Less Obvious Ethical Issues (examples)

- View of humans
  - Therapy / enhancement
  - Normality
  - Mortality
  - Identity
- Power relationships
- Environment
- Nature of society
- Changing cultures



[http://www.sec-ed.co.uk/cgi-bin/go.pl/article/article.html?uid=36203;type\\_uid=2](http://www.sec-ed.co.uk/cgi-bin/go.pl/article/article.html?uid=36203;type_uid=2)



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## Current ways of addressing these issues

- Based on medical ethics
  - Does not question the principle of intervention
  - Concentrates on process (informed consent), ignores product
  - Compliance-oriented
- Expressed in check-list
- Concentration on selected substantive issues (e.g. privacy, animals, implants, dual use, developing countries)
- Assumes clear answers
- Ignores context
- Expert-oriented
- Legalises ethics



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## Ethics in its Social Context

- First: Ethical issues and social issues aren't necessarily the same thing – ethics isn't sociology
- Two basic 'medical' views on ethics:
  - ethics can be a *symptom* of something: an underlying discomfort with a situation, coming from puzzlement about conceptions about good and evil
  - ethics can be a *remedy* to something: ethics can provide you with a solution to your problem
- Ethics is about situations, experiences, and reasons for practice and conduct
  - Ethics is mainly linked to the **meaning** given to action and conduct



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## Descriptive *versus* Normative

- The way in which the inclusion of ethics is sought has to avoid *ad hoc* measures
  - **Descriptive** lists of perceived problems with technology are coloured by interests and tacit value judgements: Framings
    - But recall Hume's guillotine...
  - A **normative** approach is required
    - Ethics has to deal in 'oughts'

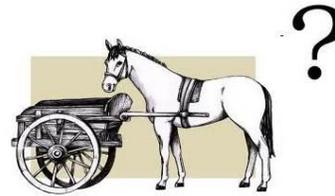


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## Status Quo

- Issues are seen to arise in the context of change that has already occurred
  - We might question the instrumentalisation of human beings in terms technological developments, but only once they occur
- Ethics here is **reactive**
- This can't account for what change **means for people**



## The Problem

- Ethics intersects with reality when it questions the rational choices for the management of the limitations of our capacities
- Ethics must assume a normative authority, free of contextual constraints
  - Otherwise, ethics is simply submissive to technical, scientific, or economic forces, and used as a justification for decisions that have already been made, which may not necessarily be ethically founded
- We can acknowledge there are two alternatives:
  - either an ethical legitimisation without any effect
  - or action, with a focus on effectiveness, but without ethical legitimisation – here, social acceptance is the main goal

## What are the common underlying problems in ethical reasoning?

- Assume a *rationalistic* perspective by reducing every responsibility to a pre-determinable assessment based on calculation of probability
- Proceduralist approaches that fails in being effective presupposing the context



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## How are Norms Constructed?

<b>Intentionalist Presupposition:</b>	<b>Schematising Presupposition:</b>	<b>Mentalist Presupposition:</b>
The norms' effects are supposed to be deducible from the simple intention to adopt the norm. Additionally, we find the implicit presupposition that an actor will have full capacity and intention to contribute in the discussion when involved in a participatory approach.	The norms' application is a simple formal deductive reasoning on the basis of rules themselves. The determination of the norm is linked to these rules, such as ethical guidelines, laws, or other schemes, that is consider able to predetermine the effect and therefore the application of a norm. External constraints are not taken into account.	The norms' application is deduced by an imaginary set of rules (scheme) that the mind is supposed to have. Also here the context doesn't play any active role and a process 'interruption' is considered as expression of irrational attitudes or behaviors.



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## *We need to develop Context-sensitive Procedures that implement Ethics in Technology Governance*

***This will be addressed throughout the workshop***

Thanks for your attention!



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8	University Siena	
9	University of the Aegean	
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## Ethics, Technology and Governance



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## Outline of this presentation

- What is 'ethics' referring to?
- How does it relate to governance in research?
- How is ethical governance done now?



## Ethics: Facts, Values, and Norms

- Ethics is not about facts, but about values and norms
- Facts don't have notions of good and bad
  - "Hume's guillotine": You cannot draw conclusions regarding value judgements from fact judgements
- Values and Norms
  - Values are individual, subjective, evaluative
  - Norms are collective, objective, prescriptive



## Ethics: Facts, Values, and Norms

- A **norm** is an action-oriented statement
  - Most commonly: commands, permission, prohibitions
  - They are the reasons we act in a particular way
  - They are prescriptive of how the world *should* be (not descriptive of how the world is)
  - Some norms can create obligations (you ought not to kill)
  - Norms cannot be reduced to facts (Hume)
- A **value** is a property of objects
  - This can include physical objects as well as abstract objects (e.g. actions)
  - Ethical value denotes something's degree of importance, with the aim to describe the value of different actions
  - If it has a high level of importance, it is considered ethically "good", and if it has a low level of importance, it is considered ethically "bad".
  - There is a distinction between relative (personal, cultural) values and absolute values (philosophically absolute, independent of personal or cultural view)



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## Ethics: Facts, Values, and Norms

- A **principle** is a prescriptive fundamental law, doctrine, or assumption
  - It can be a normative rule or code of conduct
    - Principle of utility: to achieve the goal, x and y must be done
    - Principle of ethics: to achieve the goal, x and y must be done in relation to a value that is universal & unconditional
      - If it were conditioned by the context you wouldn't be free to determine your own relationship
      - The reason for action must be an exercise of your own will
- With these definitions in mind, ethics consists of a **critical reflection** on the **values** and **principles** that are accepted as **references to norms** and that influence our individual and collective **practice**. It orients **human conduct in a specific context**, respecting the conditions of ethical thinking.



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## Ethics is not...

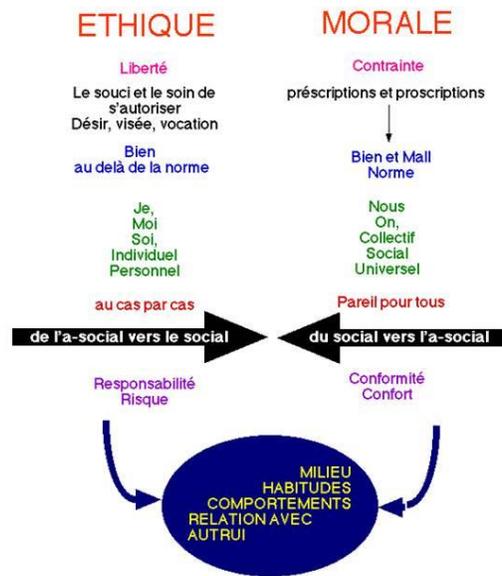
- A fact
- Taboo compliance
- Legal compliance
- Deontology
- Moral compliance



## How should we think about ethics?

- We cannot presuppose that guidelines, written by experts, are sufficient to influence contexts
  - Theoretical justification is different from application
  - When we talk about people's actions, their conduct, we have to think in terms of how that person sees what they do
- The following conditions are fundamental for ethical thinking:
  - Construction of the context
  - Avoid confusion of non-ethical issues for ethical issues (e.g. social issues, economic imperatives)
  - Involvement of stakeholders (community, etc.) in constructing the ethical norms, respecting ethical criteria, so that they will be interested in being affected by the norms
- Reflection on the processes used to construct the norms & context





## Sectorial Ethics

- You can't define an ethical judgement taking sectorial criteria as the only reference (without looking at more fundamental human dimensions)
  - Sectors: e.g. "ICT ethics", "Nanoethics", "Bioethics"
- Ethical references (privacy, etc.) are beyond all sectors
  - These refer to wider human interests
  - Ethical issues are not sectorial but can be expressed in a sector
- Sectorial ethics promotes reduction of ethical concepts to rules without content
  - Abstract, hard to identify with. Not action-guiding without significant interpretation.



### 5.4.3 Ethics technology and governance



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# Ethics, Technology and Governance: limits of the actual approaches




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## Aims

- We aim to provide different perspectives on ethical governance practices
- What to do about ethical issues
  - Criteria for efficiency of ethics *within projects*




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## Why?

- We discovered a lack of efficiency of ethics within projects
  - Projects overwhelmingly saw ethical issue determination as an end in itself
  - Expertise was the sole source of normativity
  - Contexts were ignored
  - Reflexivity was missing
    - Within projects
    - At the ethical review stage



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## Difficulties of ethics

- Sectorial ethics reinforces social differentiation characteristic of modernity by proposing an internal and specific framing for moral problems.
- Ethics is never in the answer but well in this movement of questioning before the effective action and on a border which separates our subjective existence from the constraining externality
- If a moral freedom of positioning is fundamental, if ethics must assert a normative authority ", it is necessary to question their conditions, and to consider the relationship between ethics and rationality.



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## Difficulties of ethics II

- To provide concrete guidance on ethical governance that can be applied **throughout a technical development project**.
  - Ethical issues must be addressed as part of the overall process of technological development
  - The efficiency of the ethical norm in context is paramount
- Paradigmatic approaches currently dominate
  - ‘Intellectual reflexes’ that underlie any given example of governance
    - Presuppositions about reason and acceptance
    - Experts as source of normativity
- The problem here relates to:
  - The construction of a norm in context
  - An account of ‘reason’ limited to argumentative rationality



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## Theoretical problem

- Deep-seated theoretical issues underlie the problems seen with ethics in research:
  - **Reason doesn’t contain within itself its own determinations**
    - From pure principles of thought, logic, consistency we don’t get substantive content
  - **The reasons to accept an argument as valid aren’t necessarily reasons to accept its conclusion as a maxim for action**
    - We have to value the content of an argument, besides accepting its validity, to adopt its conclusions
  - **This is a problem between proceduralism and substantivism**
    - We see the limits of proceduralism in substantial contexts
    - E.g. “Privacy” is well established by argument as something worth protecting – but what does it mean *here, now, in this* context?



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## Example

- We can provide arguments as to why someone ought not to have faith in astrology
  - It's unverifiable and unfalsifiable
    - If something seems to 'work' you can't prove it was the stars
    - If something doesn't 'work' you can blame anything besides the stars
    - It posits causal relations between items no longer in existence (stars) and the real
- The adherent of astrology might accept the argument but retain their faith
  - There are other reasons that are relevant to human beings besides argument
  - 'Narrative' rationality involves making sense of one's place in the world
    - Astrology might have narrative significance for an individual who can't accept an empty, meaningless universe

## Practical problem

- In processes of ethical assessment in projects:
- Norms presupposed
- Cognitive capacity presupposed
- Arguments presumed to motivate anyone who hears them
  - But without reference to values, arguments lack *significance*
  - Insignificant arguments offer no incentive for adoption
- The decontextualisation of norms must be addressed
- To permit governance injunctions to have significance and thus be adopted by their addressees

## Example

- **Ethics checklist**
  - Compliance attitude through apparent 'tick box' approach to ethics
    - Intended as a means to begin ethical reflection
- **Ethical issue determination only**
  - Taken as an end in itself
- **No reference to any context – the form is universal**



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## Practical agenda

- **Social perspectives are the locus of value and norm-perception among parties to whom governance injunctions are to be addressed**
  - Learning is the means by which social actors conceptualise incentives required to alter their motivations
  - Governance has the task of incentivising behaviours perhaps not native to a pre-existing motivational basis
- **Existing governance tools incorporate normative assumptions**
  - Linking types of normativity to values and tools will allow the full potential of the tools to be exploited
- **Close the gap between expert and 'lay people'**
  - To allow for the *significance of arguments* to be evolved in context and so to *facilitate the adoption of injunctions*
  - *These efforts are to contextualise norms, enabling their uptake*



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## Value and Norm: private conviction vs. public reason

- **In established approaches to ethics, values are seen as results of private experiences**
  - Contrasted with public norms – subjective elements are suppressed to prevent domination of ways of life
- **Political legitimacy linked to public reason**
  - This is seen in the ubiquitous recourse to experts
    - Experts are supposed to speak in *value neutral* ways
- **Freedom is conceived of negatively**
  - Freedom is used as a meta-norm to justify other norms



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## Value and norm

- It is assumed that free societies must **exclude value** from social regulation to permit individual value choice
- The suppression of value amounts to a suppression of social perspectives
  - This is why projects can't construct norms in contexts
  - Perspective is missing, including actors' positions, values, reasons for doing/thinking/believing as they do
- Positive law as social regulation
  - Positive law is a means to avoid ethical debate or reduce it to legal issues
- Values absent from regulation
  - Without values, no incentive to follow law from a social perspective



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## Ethics and Law

- Research must be legal **and** ethical
  - 1982/2006/EC, art. 16 (1§), “all research activities must be in compliance with fundamental ethical principles.”
- Two requirements
- **Using law can be practical – quick, requires little discussion**
- **But a recourse to law is an ethical failure**
  - Law is compulsion
  - Ethical behaviour must be free
- A change in perspective on ethics is required
- **We need to create the space for the possibility of ethics**
  - We need to think of how to incorporate this space at every level of research from project assessment, ethical issue determination, ethical impact assessment (within projects)



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## Transformed Perspectives: Researchers, CSOs, Industry

- The recommendations are to transform perspectives on ethics
- This requires a perspective on ethical issue determination, and on monitoring the effects of ethics throughout the life of a project
  - view ethics as a creative aspect of project design
  - The ethical perspective required is a reflexive one, one wherein views are constructed in terms of the view-holder
  - the necessity of constructing norms in terms of the context of application
- This requires getting out of the intellectual reflex of utilising only argumentative reason and expertise
  - Thinking about values and norms
  - Stopping the resort to expertise as the sole source of normativity
  - Seeing ethics and law as two requirements on research



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## Transformed Perspectives: Researchers, CSOs, Industry

- **In order not to presume the capacity for ethical reflection among project workers**
  - The institution of an ethical committee *within projects* ought to be standard
    - The reports and advice of such committees ought to be passed to Project Officers in order to ensure independence of the process
    - Such reports ought to deal with **ethical issues and the impact of ethics** itself within projects
    - Reports should also detail their own processes of production
- **To overcome the problems of sectorial framing it is required that the parties involved in research think about ethics and reflect on that ethical thinking**
- This prevents the reduction of ethics to any sectoral concern, freeing the ethical impetus from being purely circumstantially constrained



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## Facilitating transformed perspectives: tool use

Measure	Treatment	Practical Consequence
Ethical guidelines and Check list	Supplementary note giving content to terms; training users on ethical approach	A starting point, not an end in themselves; Opening cognitive closure; capacitating proposal-writers.
National Ethics Committees and Fora	Use as communicative bodies, an expert voice implicated in a wider conversation	Public engagement and education; Establishing a frame-destabilising discourse between expert and non-expert
Experts and expert panels	Emphasise the nature of expertise and what it brings to dialogue	Self-consciously bringing sectoral views – setting horizons
Ethics review procedure and Ethics Review Report Procedure	Promote dialogical encounters based on leading questions; implement open-ended training	Discursive engagement, mutual learning, not just legal compliance. Opening of framing, implementing reflexivity. Capacitation of reviewers and project-proposers.
Follow up and audit	Implement detailed, guided dialogical encounter	'Check-up' and steering – ensuring ethics isn't seen as something to be gotten 'out of the way' but is implemented in the life of a project.



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## Recommendations: Policymakers

- The creation of a regulatory framework that emphasises the processes of ethical reflection *to underwrite the action at project level*
- This is so as to avoid a compliance attitude. Through incentivising *via* policy a more nuanced approach, the quality of ethical reflection in research and development can be raised
  - enhanced training for those involved with ethics in research at the Commission and the project-level (training that emphasises reflexivity)
  - that ethics be given a higher profile in public consciousness (through education)
- Provide regulatory framework which will support Ethical Impact Assessment within projects
- Emphasis currently is on ethical issue determination as an end in itself
  - Centred upon ideas of compliance, consent or authorisation
- The efficiency of ethics more broadly needs to be promoted



## Recommendations: Policymakers

- **Establish a forum for stakeholder involvement**
- The forum would facilitate interchange between existing bodies in a manner that would be *institutionalised*
- It would contribute to discovering what issues are 'relevant' among all implicated stakeholders.
- Given a horizontal, egalitarian makeup of such a forum and a diverse membership, this is a means of incorporating more than just argumentative reason in policy deliberation
  - This allows arguments to gain **significance** for their addressees
  - The gap between expert and lay-people is closed
  - The construction of norms in context is permitted
- Allow the question of *which norms* upon which ethical issues ought to be determined to be opened
  - Dialogue is predicated on a basis broader than argumentation
  - Content shapes the approach rather than form annexing content



## Review Consequences

- Criteria for assessment pay more attention to the procedures put in place to deal with ethical problems
  - Tools used, rationale for use
  - Impact of ethical reflexivity
    - Does ethics change anything?
- Context considered in terms of the *meaning* of the technology (rather than just economic constraints, consumer desire etc.)



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## Summary

- **Problems**
  - Decontextualisation of norms
  - Unquestioned framings
  - Reliance on argumentative rationality
    - Presumption of parallel between rational argumentation and personal motivation



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## Consequences

- Context reduced or ignored
- De facto 'top-down' structure
- Normative authority identified with expertise
- 'Tick-box' perception of ethics among researchers
- *Compliance* rather than *ethics*



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## Treatment

- Only by accounting for values and norms during the processes of technical development can we ensure **ethics conditions development** and is thereby **proactive** in research and development
  - This requires reflexive accounting for values and norms
  - Incentivisation via policy instruments
  - An opening of discussion on ethical matters across hitherto divided levels



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## Treatment consequences

- The ethical review process deals with concrete significance for people for whom ethical issues might arise
  - Understanding and uptake is facilitated by acknowledging the need to construct context
- Policy incentivises an authentically ethical mindset among reviewers and among project proposers



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***We need to develop Context-sensitive  
Procedures that implement Ethics in  
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Thanks for your attention!



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## 5.4.4 Responsible research and innovation



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6	University of Oxford	
7	Geomaging Ltd	
8	University Sienna	
9	University of the Aegean	
10	University Malaysia Sarawak	
11	Universidad de Chile	
12	Kyushu Institute of Technology	
13	Arbeiter Samariter Bund Wien Gesundheits und Soziale Dienste Gemeinnützige GmbH	

### RESPONSIBILITY

Global Model and Observatory for International Responsible Research and Innovation Coordination

# Responsible Research and Innovation






Blagovesta Nikolova, University of Namur  
Integrating Ethical Reflexivity in Research Projects  
01.09.2015 - Paris

## Changes in the research and innovation context

- Globalisation of research and innovation
  - competition;
  - globalized and highly complex knowledge-production process;
  - the increasing role of uncertainty: unforeseen consequences, unintended effects, wild cards, etc.
- Grand societal challenges
  - the non-neutral impact of “neutral” technology;
  - the need to steer S&T towards societally desirable ends;
  - systemic unfairness in innovation structures;
  - seeking new modes of governance of the innovation process.
- Ethical concerns from the public
  - broken trust between the scientific community and the public;
  - acceptability.






Blagovesta Nikolova, University of Namur  
Integrating Ethical Reflexivity in Research Projects  
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## “Irresponsible” innovation

- Neglect for ethical principles
- Technology push
- Policy pull
- Lack of foresight and precaution

*Examples:*

Resistible and highly contagious strains of Flu

GMO



## The evolution of the European framework programmes

From Public Understanding of Science to

Public Engagement in Science

“Science and Society” (FP6, 2002-2006)

“Science in Society” (FP7, 2007-2013)

“Science with and for Society” (Horizon 2020)



## Responsible Research & Innovation

- How to ensure that outcomes resulting from R&I will be adequate for society in the long run?
- How to be sure that R&I solutions to the societal challenges will correspond to the needs of the various societal actors?
- The response is inscribed in the concept of Responsible Research and Innovation



## Responsible Research & Innovation – Horizon 2020

RRI has been integrated into Horizon 2020 programme in two ways:

- RRI has been adopted as a ‘cross-cutting issue’ that all Horizon 2020 projects will have to address to some extent
- RRI is the central guiding framework for the ‘Science with and for society’ (SWaFS) stream in Horizon 2020



## Priorities in Horizon 2020

1. Excellent science
  2. Industrial leadership
  3. Societal challenges
- Concerns of citizens and society/EU policy objectives (climate, environment, energy, transport etc.) cannot be achieved without innovation
  - Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
  - Promising solutions need to be tested, demonstrated and scaled up



## Responsible Research & Innovation – institutional perspective

Six “key” thematic elements of RRI implementation in Horizon 2020:

1. Engagement of citizens
2. Gender equality
3. Science education
4. Open access
5. Ethics
6. Governance



## RRI definitions

“Responsible Research and Innovation is a transparent, interactive process by which societal actors and innovators become **mutually responsive** to each other with a view to the **(ethical) acceptability, sustainability and societal desirability** of the innovation process and its marketable products( in order to allow a proper embedding of scientific and technological advances in our society).”

(Rene Von Schomberg, 2011)



## RRI definitions

“Responsible [Research and] innovation is **a collective commitment of care for the future** through **responsive stewardship** of science and innovation **in the present**”

(Owen et al., 2013)

- “Instead of trying to get better knowledge of future development the **change of perspective** consists of raising the question **what could be learned by analyzing the visionary narratives about the contemporary situation**”

(Grunwald, 2013)



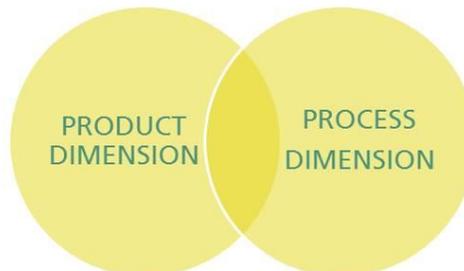
## Responsibility in R&I

- Distinctive feature of RRI is the renewed focus on *responsibility* (not actively discussed in other approaches, e.g. TA)
- Implication is that responsibility needs to be re-examined as key normative concept
- Problematic concepts of responsibility:
  - Legal: High burden of proof, attribution to natural or legal persons ('individualist'), backward-looking
  - 'Consequentialist': Hard to predict consequences of innovations, therefore difficult to attribute consequentialist responsibility



## RRI: Product and Process Dimension

These key RRI features are realised by focusing on two dimensions of the innovation process:



## RRI features

- Participation
  - Deliberation
    - Reflexivity
      - Anticipation
        - Transparency



## Responsible research and innovation

- a search for an *adequate governance framework* for the innovation process;
- not the solution, but *a process* of elaborating solutions;
- not a recipe, but *engagement*;
- a *well-known consideration* under a new guise;
- emerges to *reassure the innovators*, not to restrict them;
- *questions the temporal distance* between innovation and regulation;



## Ethics and RRI

Just one “key” feature of RRI implementation?

or

**The umbrella** that need to guide **the overall process** of the responsible governance of research and innovation?



### 5.5 Workshop at University NAMUR – NAMUR (Integrating Ethical Reflexivity in Research Projects LEGIT, University of Namur - RRI Workshop, Paris, 01.09.2015)

#### 5.5.1 Questions for Feedback from trainers after the workshop

1. How well did the workshop flow?

The workshop went quite well. The participants were responsive, eager to do the exercises and involved in the discussions. Overall, the training was well received by the attendees as a response to their need to know more about a particular aspect of RRI - ethics in the governance of research and innovation.

2. How did participants engage with the RRI material?

First step: The participants were supposed to examine closely a case study of problematic innovation (existing EU-funded research project) and identify (within a group discussion) the emerging ethical issues that need to be addressed.

Second step: The attendees had the opportunity to reflect on their own reflexes as to what constitutes “obvious ethical issues” and further comment on the adequacy and sufficiency of certain institutional measures (e.g. the establishment of Ethics Board and Ethics Issues Manager) that aimed to solve ethics problems in the research project in question.

### 3. What were the challenges for you as trainer?

The main challenge in the workshop was to make the participants delineate ethical from legal issues. Most of them reacted in accordance with the usual legal compliance approach and identified the conventional research ethics issues (informed consent, data protection, privacy, etc.) without problematizing the meaning of the technology itself. This was at the heart of another challenge – making them to notice the difference between acceptance and acceptability in ensuring the public uptake of innovation.

### 4. What changes would you propose to the training material out of your experience?

To be added a separate background material with details on the institutional changes undertaken as a response to the Ethics Review of the examined project.

## 5.5.2 Workshop Report

### 5.5.2.1 Background

The RRI workshop “Integrating Ethical Reflexivity in Research Projects”, held on 01.09.2015 in Paris, France, aimed at introducing its respective audience with a particularly important aspect of RRI, namely ethics. The event comes in a moment of growing importance of Responsible Research and Innovation (RRI) as a novel governance framework which puts particular emphasis on ethics, public engagement, gender equality, science education and open science.

The event focused on both the theoretical as well as the implementation challenges of RRI by considering the possibility of ethical reflexivity beyond the usual legal compliance approach and opening room for addressing the issue of the acceptability of a technology/innovation product throughout the lifetime of a research project.

The audience was a multi-profile one – it included 19 researchers and professionals from the realms of human factors and ergonomics, automation, security, education, border control, political science, anthropology, etc. Very few of the participants were already aware of Responsible Research and Innovation as a novel governance framework; most of them were familiar with the ethics “key” but only in the narrow sense of research conduct standards.

### 5.5.2.2 The Workshop

The workshop addressed the issue of integrating ethics reflexivity in the design of research projects by using the following means: presentations, 2-step case study exercise and discussions. The aim was to stimulate the participants to examine the limits of current approaches and gain new insights into the importance of ethics in innovation governance.

Presentations:

- “RRI framework determination” (30 min., morning session) – introduced the participants to Responsible Research and Innovation as a novel approach in addressing an array of problems of the contemporary knowledge-creation process, including the science-society relations; it overviewed key RRI definitions, RRI achievements and weaknesses; it paid attention to the place of ethics within RRI.
- “General ethics introduction” (30 min., morning session) – aimed to “tune” the attention of the attendees to the question of what is and what is not ethics. They were presented with main concepts with regard to ethical thinking (value, norm, principle, morality, context, sectorial ethics, reflexivity, etc.) and sketched the limitations of current approaches in addressing ethics in R&I (dominance of medical ethics, tick-box approach, ignoring the context, expert-oriented, etc.).
- “Ethics, Technology and Governance: limits of the actual approaches” (50 min., afternoon session) – took place after the case study exercise and the discussions that followed. It focused the participants’ attention on the existing difficulties in integrating ethics reflexivity in the governance of innovation, provided more in-depth explanations on the limitations of current approaches, accentuated on the legal-ethical distinction and proposed some practical recommendations for opening room for ethics reflexivity in the implementation of research projects.

**Case study exercise (105 min., morning session):**

During the workshop the participants were presented with an example of problematic innovation – an EU-funded research project in the realm of security (surveillance technologies), which caused a great deal of public indignation.

**First step:**

The attendees were given a background information material on the research project, its objectives and prospective activities. Separated on groups (that was not planned but turned out to be necessary since the attendees were more than expected) of four they had to answer to questions below. The aim was to make them reveal their intellectual reflexes on what constitutes an ethical issue.

- Does this project raise Ethical Issues?
- Which ones?
- Could you justify how you identified them?
- Would you differentiate the Social and the Ethical Issues?

---

**Second step:**

After presenting their group answers they were given information on how the European Commission approached the problem and what measures were prescribed to be taken by the project partners. Then they had to compare their initial answers with the Ethics check-list (for an Ethics screening procedure) and reflect on its limitations on one side, and on the in/sufficiency of the proposed measures of the EC on the other. The aim of this phase of the exercise was to make the participants problematize not only the institutional framing on ethics (its place and how could it be handled) but also their own cognitive framings with regard to what appears to be ethically problematic.

**Discussions:**

Discussions were inevitable element of the workshop. The aim of opening the participants' minds for the limitations and the presuppositions of their own cognitive framings required intensive interaction with the audience not only during the exercises but also during the presentations of the trainers. The focus of the conversations was on several key points: legal compliance does not exhaust ethics, the usual approaches to ethics can ensure the acceptance but not necessarily the acceptability of certain innovation, the problematic nature of "ethics expertise", the meaning of context, etc. It was cleared out that the aim of the exercises was not to train them to give the "right answers" about ethics in research but to make them reflect on the limitations of their own reflexes on the matter.

**Reactions of the participants:**

The participants responded well both on the presentations and the case study discussions. They were neither hostile nor dismissive with regard to being introduced to the importance of ethical reflexivity. On the contrary, they were eager to "know ethics better". Their initial expectation was that they will be made familiar with ethics expertise and referred to the trainers as "specialists on ethics". This is problematic in itself but the leading trainer (prof. Goujon) turned it into one of the key issues of the discussions which led later to the realization by the participants that ethical reflexivity presupposes a mutual learning process rather than one of top-down instruction (by "ethics experts"). Also, at the very end of the workshop they were able to delineate legal from ethical, having in mind their initial reaction stipulating that if something is embedded in law it must have been ethically unproblematic. With regard to the materials they have been given, they suggested that an additional background material (with details on the institutional changes undertaken as a response to the Ethics Review of the examined case study project) is needed.

### 5.5.2.3 Conclusion:

There are several very important conclusions to be drawn from the experience within the “Integrating Ethical Reflexivity in Research Projects” RRI workshop.

First, legal compliance approach dominates in the minds of those involved in EU-funded research projects. Most of them identify obvious ethics issues the way they are defined by the EC for the purposes of the Ethics Appraisal Procedure (human embryos and fetuses, humans, human cells/tissues, personal data, animals, third countries, environment & health and safety, dual use, misuse, and other). This makes it difficult to problematize the meaning of a technology and to reflect on it beyond the proposed lines of consideration.

Second, the usual reflex is to view ethics as an external source of expertise and guidance rather than as implied in the process of governance of innovation. Participants often strive towards “the right answers” when identifying ethical issues, the proper “ethical solution” in handling a problem; thus they sometimes needed to be reminded that RRI and ethics is not about ready-made answers and recipes but about the process of searching for the adequate institutional arrangements that would open room for ethics reflexivity in a process of participation and deliberation.

Third, the existing institutional framework and intellectual reflexes make very difficult for participants to touch upon not so obvious problems when considering emerging technologies. Very easily they boil down the thorny question of the acceptability of innovation to one of acceptance (reflected in the legal compliance approach and some Public understanding of science (PUS) initiatives). Trainers need always be vigilant about this occasional conceptual retreat and focus the discussions back on the right track.

### 5.5.3 List of participants

01.09.2015  
UIC, Paris

**Integrating Ethical Reflexivity in Research Projects**  
**Workshop Participants List**

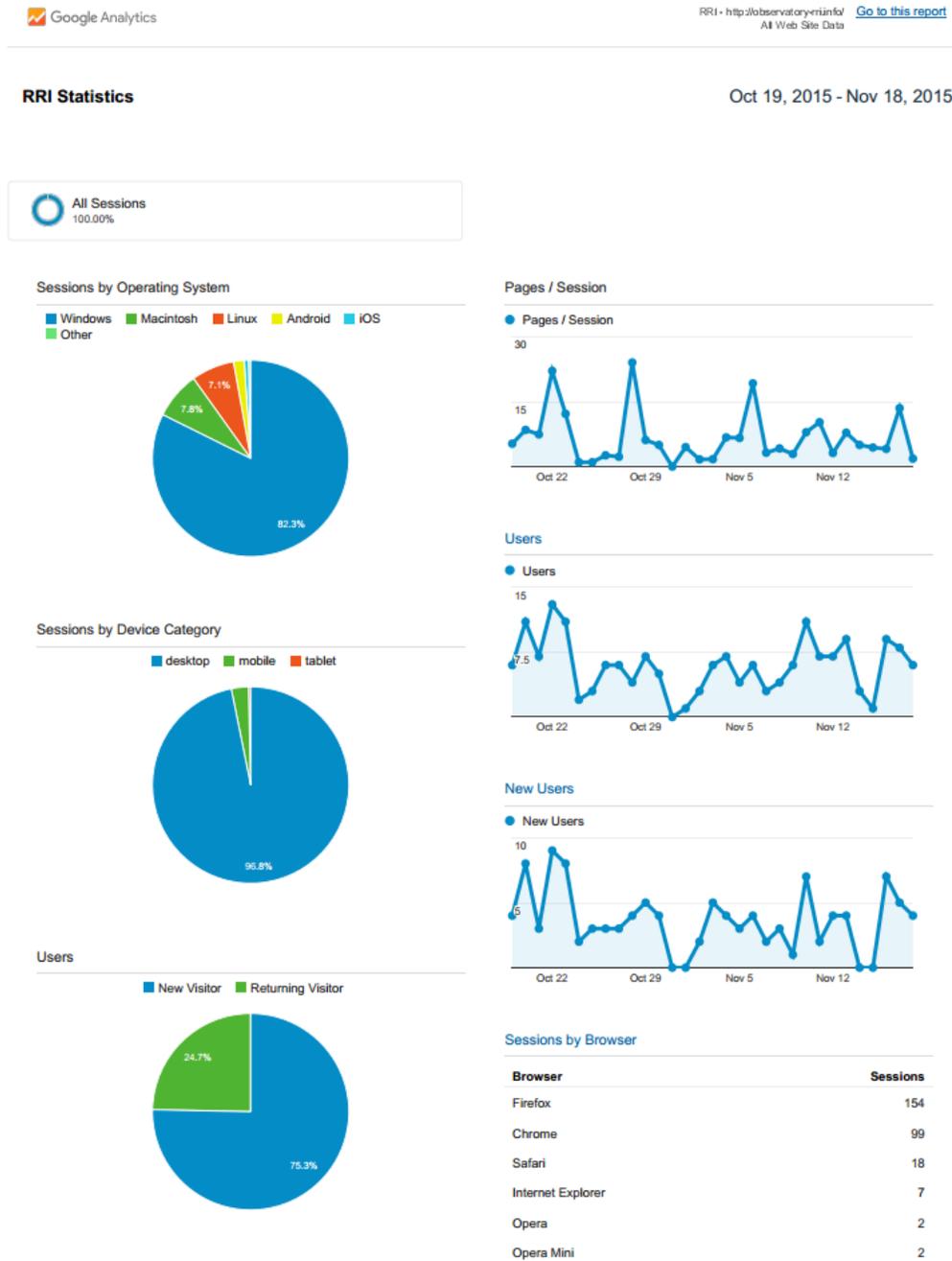
No	Names	Organization	Signature
1	COETZ Pierre	CEJ	
2	BONNETH Marie-Hélène	UIC	
3	PAULA KARPPINEN	HAPPYWISE	
4	Maisa Anttila	RAJA	
5	Mikko Torniainen	HAPPYWISE	
6	Veikko Ikonen	VTT	
7	Linna Kulju	VTT	
8	Sina Toivonen	VTT	
9	Panos MERTIS	AP-KATTA	
10	Andreas Kucchbaum-Zahn	AIT	
11	GOUSON VIRGINIE	UNAMUR	
12	Blagovesta Nicolova	UNAMUR	
13	Antoine CHAPELON	Thales	
14	PAPILLAUD Virginie	UIC	
15	HAVARNEAU Sabine	UIC	
16	LE GUELLEC Elise	Thales	
17	MEGARD CHRISTINE	CEA	
18	RUINI Fabio	Z&P	
19	ZANASI ALESSANDRO	Z&P	
20	ISLAS, Carolina	UBIUM	
21	VINNI, Mikko	UBIUM	


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## 6 Annex

The full RRI Statistics Report, which is sent automatically from Google Analytics to [responsibility.fp7@gmail.com](mailto:responsibility.fp7@gmail.com) on a weekly basis, is attached below:



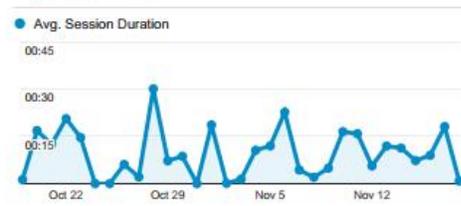
### Country

Country	Users	Pages / Session
Germany	35	13.92
United Kingdom	28	5.95
Italy	12	11.93
United States	7	1.00
Russia	5	1.00
Brazil	4	1.00
Canada	4	1.25
Austria	3	8.25
Belgium	3	2.33
India	3	1.67

### Sessions



### Avg. Session Duration



### Pageviews and Avg. Time on Page by Page Title

Page Title	Pageviews	Avg. Time on Page
Observatory Home   RRI	300	00:01:10
Observatory Contents   RRI	231	00:02:43
RRI	210	00:01:51
RESPONSIBILITY Forum   RRI	152	00:00:46
Nanotechnology   RRI	98	00:02:24
mohajami   RRI	79	00:01:13
Log in   RRI	74	00:00:15
Genetically Modified Mosquito   RRI	68	00:02:28
RRI Caucus Processes Overview   RRI	62	00:00:55
Internet of Things and Internet of Body   RRI	45	00:02:35

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