

### **SATORI Evaluation and Reflection Strategy**

Mark Coeckelbergh (De Montfort University) Kutoma Wakunuma (De Montfort University) Tilimbe Jiya (De Montfort University)

### SATORI Deliverable D12.3

### **June 2015**

### Contact details for corresponding author:

Prof Mark Coeckelbergh, Centre for Computing and Social Responsibility De Montfort University, The Gateway, Leicester, LE1 9BH United Kingdom mark.coeckelbergh@dmu.ac.uk

This publication and the work described in it are part of the project

Stakeholders Acting Together on the Ethical Impact Assessment of Research and Innovation –

SATORI which received funding from the European Community's Seventh Framework Programme

(FP7/2007-2013) under grant agreement n° 612231

### http://satoriproject.eu/



### **Table of Contents**

Abstract	4
Executive Summary	5
1 Introduction	7
2 Developing the Evaluation Strategy	8
3 Evaluation Template	8
3.1 Evaluation Template Components	8
3.1.1 About Task	
3.1.2 Objective	
3.1.3 Intended Outcome	9
3.1.4 Indicator(s) of Success	
3.1.5 Potential Impact towards the overall aim of the Project	
3.1.6 Risk Assessment	
3.1.7 Contingency Plans	
3.1.9 Conflict Resolution Procedures	
3.1.10 Partner Responsible	
3.1.11 Information in Shared Space	
3.1.12 Deadline	
3.1.13 Application of Evaluation Principle and Criteria	
3.1.14 Scoring Rubric	
3.1.15 Feedback and Recommendations	
4 Complementary Evaluation Tools	12
4.1 Questionnaires	
4.2 Observations	
4.3 Interviews	
5 Linking the Evaluation Strategy with SATORI	15
6 Conclusion	16
7 Annexes	17
7.1 Annex A: An Overview of Evaluation	
7.1.1 What is Evaluation?	
7.1.2 Evaluation and Performance Measurement	
7.1.3 Why Evaluate?	
7.2 Annex B: Pre-evaluation Questionnaire	
7.2.1 Methodology	
7.2.2 <i>Results</i>	
7.2.3 Discussion and Conclusion	24
7.3 Annex C: Consortium Meeting Observation from Rome	26

# SATORI

7.3.1 Observations from Rome meeting and discussion of problems in the Pa	roject 26
7.3.2 Conclusion	27
7.4 Annex D: Summative and Formative Evaluation Summary Table	28
7.5 Annex E: Evaluating Impact	29
7.5.1 When to do an impact evaluation	29
7.5.2 Impact evaluation using secondary data	
7.5.3 Measuring qualitative impacts	29
7.6 Annex F: Evaluation Methods	30
7.6.1 Qualitative Methods	30
7.6.2 Quantitative Methods	30
7.6.3 Combining Quantitative and Qualitative Methods to Evaluate Impact.	31
7.6.4 Data Collection	31
7.6.5 Data Analysis	
7.6.6 Confidentiality/ Data Protection	32
7.7 Annex G: Questionnaire for SATORI Partners	33
7.8 Annex H: Questionnaire for SATORI Stakeholders	38
8 References	44



#### **ABSTRACT**

Following previous deliverables, which have offered an analysis of good practice and evaluation and a set of principles of evaluation, this deliverable is more practical and outlines the specific strategy for the evaluation of the SATORI project. The evaluation strategy is thus directly tailored to SATORI and focuses on the methodology for evaluating the outcomes and impact of the project. Our evaluation will include looking at the implementation of project events and activities such as training sessions and workshops with a view to evaluating these in terms of engagement, (mutual) learning and feedback of the participants and impact. The evaluation will also take into consideration work that has been undertaken in the different work packages to assess mutual learning and stakeholder engagement. We will use qualitative and quantitative methodologies, including various evaluation tools such as surveys and interviews, but also observations during meetings. Central to the evaluation strategy will be the use of an evaluation template which will cover principles and criteria for evaluation, aspects related to objectives of individual tasks, intended outcomes, indicators of success, potential impact of individual tasks, risk assessment and associated contingency measures, conflicts within tasks and resolution procedures, as well as information sharing. The evaluation strategy will be flexible in order to guarantee that it can cover the dynamic developments of the project. It will also be subject to peer review by the project partners to ensure fairness and openness as well as to guarantee buy-in by all consortium partners. Once agreed, the strategy will be implemented but will also be revised when necessary in order to ensure it remains current and relevant.



Evaluation is important not only to provide evidence about the value and quality of a project, but also to improve performance and outcomes in the future. The previous deliverables 12.1 and 12.2 have provided an analysis of good practice in evaluation and reflection as well as described principles of evaluation respectively. This deliverable is more practical and describes the specific strategy for the evaluation of the SATORI project. Evaluation then means the systematic collection of information about activities, effects, influence, and impacts of SATORI and initiatives to facilitate mutual learning, decision making, and action within and beyond the project. The aim is to help assess the extent to which the outcomes of the SATORI project are likely to be sustained over time.

For this purpose, the SATORI project uses a number of approaches for evaluation which include looking at the implementation of project events and evaluate these in terms of engagement, (mutual) learning and feedback of the participants and the impact of the event. It will also consider the feedback of, and impact on, experts and look at the media coverage which will involve looking at dissemination, the feedback, and the dialogue. Above all, the evaluation takes into consideration work that has been undertaken in the different work packages to assess mutual learning and stakeholder engagement. This is done while taking into account the fact that the work packages are in different stages of their life cycles and as such evaluation will take this into account and evaluate alongside other aspects such as project events as mentioned previously.

As evaluators we will assess the quality of the outcomes and impact of work packages towards the overall aim of the project. We will use process and outcome indicators: progress will be examined by looking at the quality of the WPs or project tasks (process indicators) and by looking at the quality of the outcomes or impact of the WPs (outcome indicators). We will assess progress against objectives of specific tasks of work packages which will allow for a better understanding of the impact, success, and outcomes of the project. It is important not to leave evaluation based on objectives to the end of the project; it is better to do this per task, that is, after the completion of each task. This is important since it may help to avoid delays in the project and give project partners the opportunity to improve their work. Moreover, when evaluating impact, we want to know why and how the project works towards achieving its goal, not just if it does. Impact will be assessed by means of a survey but also by means of interviews and observations conducted throughout the life cycle of the project. We will do this at project events such as workshops and meetings.

We will use qualitative and quantitative methods. The latter will be used not to fit in with the dominant quantitative paradigm but to open up a space for discussing other impacts and linking the discussion to a broader debate that incorporates issues such as engagement, empowerment, and social inclusion. The main qualitative method used in evaluating SATORI will be a questionnaire including open questions, and with specific questions on impact, engagement and mutual learning. We also consider one-to-one interviews and discussions which will allow respondents to talk about their thoughts, opinions and feelings in their own words. This will assist in gaining further and in-depth insight. Impact will mainly be assessed by means of qualitative methods but we will also measure change through the quantitative method of a survey that measures stakeholder involvement. Overall, data collection methods used will include reading SATORI documentation, attending workshop meetings and project meetings, and conducting interviews and questionnaires (the evaluation tools are discussed in sections 3 and 4). The analysis will look at the objectives of the tasks and work with indicators of success. The analysis takes place within the evaluation template which covers



other aspects such as objectives, intended outcomes, indicators of success, potential impact and further includes a rubric for evaluation criteria.

Having identified general principles and criteria of evaluation in Task 12.2, this deliverable is more practical and aims to develop an evaluation strategy. The evaluation strategy is directly tailored to SATORI and focuses on the methodology for evaluating the outcomes and impact of the project. However, the evaluation strategy will be flexible in order to guarantee that it can cover the dynamic developments of the project. It will also be subject to peer review by the project partners to ensure fairness and openness as well as to guarantee buy-in by all consortium partners. Once agreed, the strategy will be implemented but will also be revised when necessary in order to ensure it remains current and relevant.



This document proposed SATORI's evaluation strategy. There is no set way of evaluating a project because evaluation will differ from one project to the next depending on the activities and/or the intended outcomes of a project. The term evaluation has many meanings depending on context and purpose of the evaluation; however, all the definitions have elements of credibility (Stufflebeam and Shinkfield, 2007). Evaluation involves learning new knowledge through gathering information, making credible conclusions or judgements that can be used in decision making and communicating the findings to an audience (Bennett, 2003) in a different light (see Annex A for a further discussion about evaluation). Evaluation is paramount because it acts as a control mechanism (Song et al., 2012) that ensures that strategic benefits of an undertaking are realised (Serafeimidis and Smithson, 1999). In terms of participatory projects such as SATORI, there are two key aspects of evaluation:

- Making judgements, based on proof or evidence about the value and quality of the project (proving) and impact of the project to the society.
- The process of learning from a project, to improve performance or outcomes in the future (improving).

In this deliverable, the kind of evaluation that is ideal for the SATORI is developed further, building upon the findings of D12.1 and D12.2. The evaluation strategy developed in this deliverable is specific to SATORI and it builds on the good practice in evaluation, reflection and civil society engagement in D12.1 and SATORI evaluation and reflection principles and criteria in D12.2. In addition, it also builds on and is partly informed by a series of preliminary evaluation activities which were undertaken prior to the selection of the principles and evaluation criteria intended to contribute to the development of the evaluation and reflection strategy in this deliverable. These activities include a 'Pre-Evaluation Questionnaire' (see Annex B for detailed analysis and discussion), consortium meeting observations (especially carried out at the meeting in Rome) (see Annex C), and understanding 'Indicators of Success' from the point of view of task/WP leaders which will be applied in the 6 monthly reports commencing in month 24.

The analysis of the questionnaire reveals that i) the consortium expects significant feedback from the evaluators, ii) early identification of obstacles to completing tasks according to schedule and iii) an assessment of the quality and potential impact of outputs. As indicated above, please see Annex B for a detailed discussion of the results. Looking at the three, the evaluation strategy therefore centres on the following aspects, those of giving feedback to the consortium, identification of obstacles assessment of individual tasks and evaluating impact of the tasks towards the overall project. With regards to the Rome observations and discussions, it is evident that the evaluation should include aspects related to document interpretation, addressing issues related to delays in work completion and communication and peer review of work carried out within the respective WPs (see Annex C for more details).

Evaluation strategy will therefore consider giving feedback related to:

- stakeholder involvement as well as engagement by taking into consideration whether mutual learning has occurred
- stakeholder representativeness, e.g. who are the stakeholders' representative and what role do they play
- assess quality of collaboration related to such issues as communication as well as conflicts and conflict resolution
- assess partner self-evaluation and reflection
- challenges with regards to risk planning within individual tasks and contingency measures



• impact with regards to individual tasks towards overall project

### 2 DEVELOPING THE EVALUATION STRATEGY

In order to develop the evaluation strategy, this task adopts and subsequently applies the evaluation criteria identified in Task 12.2. The criteria identified in Task 12.2 are developed into practical evaluation methodology for the project. The practical evaluation methodology will include both a formative and summative evaluation approach. Evaluation carried out in earlier stages is referred to as formative evaluation [See D12.1 Section 5 and 6] as well as Annex D for a summary table, and may be based on views gathered from a range of audiences such as those affected by the results like stakeholders and the project partners themselves. This includes evaluating the SATORI project as it is being carried out through workshops, completed tasks/deliverables, interviewing partners, stakeholders and WP/task leaders. This is part of what WP12.3 is undertaking as evidenced in the two preliminary evaluation activities that have been outlined in the introduction section. In addition, it is important that during the evaluation process, partners should ask themselves how they will know whether the project has been successful (in terms of meeting their objectives, or creating a particular impact). This focus on assessing outcomes or impacts at the end of a project or activity is referred to as summative evaluation. A succinct discussion on summative evaluation can be read in D12.1 [section 5 and 6] and Annex D for a summary table. To aid the evaluation, the strategy will employ the use of an evaluation template which encompasses both formative and summative aspects of the SATORI project. The template will be complemented by additional other tools to include questionnaires, observations and interviews (see section 4 for a detailed discussion). Within SATORI's 12 WPs are specific tasks with a set of objectives that the project is aiming to achieve. Following this strategy, the evaluation will use varied tools at various stages of the project in order to have a holistic understanding of the progress of the project. For instance, from month 18 to month 24, the evaluation will consist of putting into practice the 8 principles and criteria for evaluation that were selected in Deliverable 12.2. The selected 8 principles and criteria for evaluation cover stakeholder engagement and involvement; recruitment; interviews and case studies; recommendations; impact; administration and project 'internal' activities. The 8 principles will be applied to data collected from the said complementary tools in the form of questionnaires, observations and interviews as well as applied in the evaluation template.

### 3 EVALUATION TEMPLATE

The strategy will consist of a task focussed evaluation approach in the form of an evaluation template which will be used for the remainder of the evaluation process from month 24 to the end of the project. The template not only covers principles and criteria for evaluation, but it also covers aspects related to objective(s) of the task, information sharing, task outcomes, indicators of success, impact of the task towards overall project, risk assessment and associated contingency measures as well as conflicts and related conflict resolution plans.

### 3.1 EVALUATION TEMPLATE COMPONENTS

### 3.1.1 About Task

This section gives a description of an individual task under evaluation. The task with regards to the project is the activity that a WP will provide in order to bring about the intended outcomes. WPs offer all sorts of different tasks to address their desired outcomes. For the most part, WP tasks can be classified as any type of direct work done by a partner as part of their duty within SATORI. In WP12.2 we stipulated that the evaluation will be task focussed,



meaning that SATORI will be evaluated task by task looking at the activities that are taking place within each task. In light of this, a task focused evaluation analysis will be conducted on the progress of individual WP tasks thus far.

### 3.1.2 Objective

This section gives an outline of the objective(s) of the task. The evaluation will identify a range of objectives for the task that were set at the start and measure success at the end of the WP task by the degree to which the WP met the original objectives. Depending on what the objective is; progress could be fairly straightforward to measure. For instance, if the objective of a WP task is to run 5 well attended training seminars for stakeholders, the success of such an objective could be easily measured and quantified in numbers of attendees. However, if the objective is to establish whether mutual learning has occurred or whether it is for purposes of measuring impact, this could require a more qualitative way of measuring success such as interviewing partners and stakeholders. Note that evaluation focused on objectives usually takes place right at the end of the project. However, this end-of-project approach may discourage project partners from critically assessing the objectives themselves. Therefore to avoid this, the objectives will be assessed at different levels of the project i.e. at task level, WP level and project level. In addition, evaluation by objectives at the end of the project can sometimes create a level of rigidity that is unhelpful to the project therefore we deem it ideal for SATORI that we evaluate the objectives as per task i.e. as it is being carried out and at the completion of a task.

### 3.1.3 Intended Outcome

This section will cover intended outcomes of the task in question. Under intended outcomes, the evaluation will try to understand what partners are able to achieve at the end of the task in relation to the objectives of the task and aims of the project. For example, an intended outcome for a task could be to increase the number of stakeholder participation in a workshop or training session through establishment of new networks. During the summative evaluation, when it is established that the task did not achieve an increase in the anticipated number of stakeholders, the task would be deemed to have fallen short of its expectations which would potentially have an impact on the overall outcomes of the project.

### 3.1.4 Indicator(s) of Success

This section gives an indication of success from looking at whether the outcomes have been achieved or not. In addition, indicators of success will be assessed from the view point of the members of the task who evaluators would have spoken to e.g. WP leaders. Indicators act as the benchmark of whether, and to what degree, the task or project is making progress. Ideally the progress will be examined in two distinct ways:

- The quality of the task (commonly referred to as process indicators). An example of a process indicator would be levels of communication, contingency planning, and risk assessment.
- The quality of the outcomes or impact of task as related to its WP(s) or project (commonly referred to as outcome indicators). An example of outcome indicators would be the final results of a task e.g. such as outcomes in the form of submission of deliverables.

Therefore, indicators will be established to measure the progress of the task in relation to the overall project progress. *Process indicators* will be used to help track the progress that the task or project is making as partners work toward achieving the desired outcomes. Process indicators will often provide important feedback to those responsible for tasks long before they can expect to see evidence that outcomes are being achieved. *Outcome indicators* will



provide the most compelling evidence that the task or project is having an impact on for example stakeholders and society.

### 3.1.5 Potential Impact towards the overall aim of the Project

This section covers potential impact from the point of view of leader(s) of the concerned task who the evaluators will talk to. Impact evaluation is an assessment of how the activities being evaluated affect intended outcomes of the project and has the potential to establish whether or not the project has an effect on stakeholders and society at large. For a further discussion on impact, please see Annex E on Evaluating Impact.

### 3.1.6 Risk Assessment

The section highlights risks associated with the task in question. As each task has potential risk(s), WP leaders will be asked about the risks related to each task. Once risks have been identified, they must then be assessed in relation to their potential impact on the outcomes of the task. Understandably risks may be difficult to assess or to know for sure, however, it is imperative for task/WP leaders to make at the very least an educated assessment, however abstract. This is important because it helps partners involved in the task to constantly think of unintended consequences which may have an impact on the outcomes and by so doing helps partners implement the risk management and contingency plans as related to their task. As such, during evaluation (formative), partners will be encouraged to identify risks and associated mitigating contingency measures. During the summative evaluation, potential risks that were identified in the DoW in relation to the overall project will also be looked at in order to see whether they materialised or not and if they did, how they were mitigated against either by the contingency measures identified in the DoW or by other measures.

### 3.1.7 Contingency Plans

This section is related to 3.1.6 in that it looks at measures that have been put in place to mitigate possible risks related to individual tasks. As such partners should be able to come up with contingency measures that need to be applied to the identified risks.

### 3.1.8 Conflicts

This section looks at any conflicts, disagreements or arguments that may have arisen between members within a particular task. Conflicts occur between parties whose tasks are interdependent, who are angry with each other, who perceive the other party as being at fault, and whose actions cause a problem towards achieving a particular objective. Therefore, it is important for a task leader (or WP leader) to understand the dynamics of any conflict relating to their task before being able to resolve it. During evaluation task/WP leaders will be encouraged to identify as well as disclose any conflicts and associated resolution procedures within the tasks. With regards to the overall project as a whole conflict resolution procedures will have to be in tandem with those identified in the DoW, should these be unsatisfactory, the evaluation team would suggest that any resolution should have the involvement of the Project Officer.

### 3.1.9 Conflict Resolution Procedures

This section is related to 3.1.8 and it looks at procedures that have been put in place to resolve conflicts within a task by the task/WP leaders.

### 3.1.10 Partner Responsible

This refers to the consortium partner responsible for the particular task.



### 3.1.11 Information in Shared Space

This is in reference to any information that has been shared in the consortium chosen internal platform of communication. It is expected that each WP leader uploads all relevant information related to tasks and overall WP in order to facilitate effective collaboration and communication with regards to progress of work being undertaken amongst partners. This is necessary because completion of some of the work is dependent on completion of other work which can and should usually be sourced via the shared space.

#### 3.1.12 Deadline

Due date of a particular task (e.g. month 30).

### 3.1.13 Application of Evaluation Principle and Criteria

This section applies the selected 8 principles drawn in D12.2. It has to be noted that not all principles will be applicable to all tasks. Different tasks may call for different principles. Therefore, when applying the selected principles, the evaluation will be looking at criteria that apply to an individual task which will be subsequently scored according to the rubric provided in 3.1.14. The result (average score) for a particular task will be calculated by dividing the sum of individual scores with number of instances (the applicable criteria). To give an example, when Task X is being evaluated and is found to have principles (i) and (iii) applicable to it as illustrated in the table below, the average score would be 2.2. This would have been calculated by adding (3+1+2+1+4) and then dividing the sum by 5. This would have given us 2.2 which would then be rounded to the nearest integer of 2. Now referring to our rubric in 3.1.14; as a result of the average score of 2; this tells us that the task has been assessed as 'Good' which means that 'The task partially satisfies the relevant criteria principles. However, it fails to take into consideration some aspects as suggested in the feedback and recommendation section'.

No.	Evaluation Principle	Criteria	Score
i)		Representativeness	3
		Transparency <sup>1</sup>	1
		Accessibility	-
	Principle for evaluating stakeholder engagement/involvement	Task Definition	-
	nivoivement	Fair Deliberation	-
		Criticalness	2
		Participant Satisfaction	1
ii)		Representativeness	
	Principle for evaluating recruitment	Accessibility	
		Criticalness	
iii)		Methodological Rigour	
	Principle for evaluating surveys, interviews and case studies	Credibility	4
	case studies	Transparency	
iv)	Principle for evaluating recommendations/ tools	Transparency	
	1 fine pie foi evaluating recommendations/ tools	Relevance	

-

<sup>&</sup>lt;sup>1</sup> This depends on stakeholders involved. It may not always apply to all SATORI stakeholders because most of them are one off.



v)		Quantity		
	Principle for evaluating dissemination/impact	Behaviour Adjustment		
		Network Expansion		
vi)	Principle for evaluating evaluation	Restrictiveness		
vii)	Principle for evaluating administration	Quality of Collaboration		
viii)	Principle for evaluating 'internal' estivities	Stakeholder engagement		
	Principle for evaluating 'internal' activities	Reflectiveness		
	Result (Average score) 2			

### 3.1.14 Scoring Rubric

Scoring will be applied according to the following criteria:

1 Poor	Inadequate. Fails to satisfy the criterion principle and aspects as suggested	
1 1 001	in the feedback and recommendation section	
	The task partially satisfies the relevant criteria principles. However, it fails	
2 Good	to take into consideration some aspects as suggested in the feedback and	
	recommendation section	
	The task satisfies the relevant evaluation principles. However, it fails to	
3 Very Good	3 Very Good take into consideration some aspects as suggested in the feedback as	
	recommendation section	
4 E II4	The task completely satisfies the relevant evaluation principle and criteria	
4 Excellent		

#### 3.1.15 Feedback and Recommendations

This section covers comments, responses and feedback from results of the evaluation to interested members of a particular task. In addition, it includes a suggested timeline for specific action(s) in relation to the feedback provided.

### 4 COMPLEMENTARY EVALUATION TOOLS

As discussed in section 2, additional other tools in the form of questionnaires, observations and interviews will be employed as complementary tools to the evaluation template. These complementary evaluation tools are both qualitative and quantitative in nature, therefore allowing a holistic evaluation approach (see Annex F for a detailed discussion of evaluation methods). For instance where the evaluation template aides in gauging the progress of tasks towards the overall aim of the project through assessing components such as task objectives, intended outcomes, indicators of success, impact and risk among others, tools like questionnaires, interviews and observations bring added value in that data is collected from both stakeholders and consortium members to gauge mutual learning, extent of stakeholder engagement and involvement as well as reflection on different aspects of the project. For instance, the DMU team will for the first time conduct an evaluation exercise specifically aimed at stakeholders at a Paris Workshop in June 2015. The aim is to gauge stakeholder role, participation and inclusion in the SATORI project. As it might be the first ever involvement in SATORI for some of the stakeholders, it will be important to cultivate an understanding of their perceptions of the usefulness of the Workshop and what they possibly learnt from there. This will aid the evaluators to have an understanding of whether such workshops are viewed



as important for stakeholders and how they can be improved from the stakeholder's point of view. The other important elements that the evaluators intend to learn from the stakeholders concern the stakeholders' involvement in such a project and whether the stakeholders feel it can be beneficial in any way. The aim is to develop a deeper understanding of how mutual learning may occur between the stakeholders and the SATORI partners. This part of stakeholder evaluation will be completed with a stakeholder questionnaire which will seek to understand the stakeholder's role, stakeholder's contribution to SATORI, understanding of ethical assessment and how best stakeholders think SATORI can move forward. We will continue to apply this method whenever stakeholders are present at SATORI events. In their absence, stakeholders will continue to be evaluated via questionnaires and interviews via Skype or telephone. The intention is to grasp the continued and full extent of the process of mutual learning between SATORI partners and stakeholders.

### 4.1 QUESTIONNAIRES

Preliminary evaluation of SATORI started with a pre-evaluation questionnaire distributed to all individuals currently working on the project via an online survey (see D12.1 and Annex B for detailed results of the pre-evaluation questionnaire). The decision to use the questionnaire was based on recommendations provided by evaluators for other MMLs encountered in the empirical study described in Deliverable 12.1. As the evaluation for SATORI is ongoing, we as evaluators will continue using questionnaires as one of our evaluation tools. The questionnaires will among other things evaluate each partner's interpretation of their role in the project. It will also evaluate stakeholder expectations of the project. Furthermore, the questionnaires will evaluate a variety of project outputs and impacts on an individual and organisational level. This will be along with early indications of how the success of particular activities can be measured.

The samples will be purposefully broad, including all partners (not only WP leaders) together with stakeholders, to gather as many perspectives as possible. The questionnaires will aim at encouraging partner participation in the evaluation in order to establish a long-lasting and honest collaboration with consortium partners. Partners and stakeholders will be identified via an up-to-date contact list. Partners will be invited to participate via e-mail, which is the primary communication tool for the consortium meaning invitations can reasonably be expected to reach partners.

Specific sets of questions will be used for partners and stakeholders, each focusing on different elements of the project's aim. In this regard, questions for partners will aim to understand their experiences and interpretations on their respective roles within their work packages and ultimately the project as a whole. The questionnaire will help us understand partners' perceptions on their allocated roles and tasks. It will also be used to determine partners' perceived progress towards the aims of the SATORI. In addition, using the questionnaires, we will understand partners' expectations and experiences with regards to engagement and (mutual) learning. On the other hand, the questionnaire for stakeholders will help us understand their perception and expectations of their respective involvement and roles in relation to SATORI. With regard to stakeholder involvement, the questionnaire will enable us understand the level of their participation and contribution in the project. The questionnaire will also focus on establishing whether mutual learning has occurred during the stakeholders' involvement in the SATORI project. Lastly, questionnaires will facilitate a feedback mechanism from which SATORI as whole will gain valuable insights in areas that need maintaining or improving.



### 4.2 **OBSERVATIONS**

The evaluation strategy also involves observations and note-taking at SATORI consortium meetings. Thus far, 3 workshop observations have been conducted as follows; October, 2014 in Rome (see Annex C for results), February 2015 in Brussels and June 2015 in Paris respectively of which results will be covered in the first 6 monthly report of December 2015. In general, consortium meetings and SATORI events will be observed and evaluated by DMU wherever practically feasible. The scope and purpose of these observations involves basic reflection on the success and progress of the project and its events as well as reaction to presentations by DMU regarding results of the ongoing evaluation of the SATORI.

### 4.3 Interviews

The last tool that is used as part of the evaluation strategy is interviews. The interviews that are being conducted and will continue being conducted throughout the project's life cycle consists of a set of broad topics and questions informed by the feedback and results of the evaluation process so far. The interviews will be carried out iteratively throughout the evaluation. The interviews used as part of the evaluation strategy are semi-structured and will consist of a list of potential interview topics and questions rather than a pre-defined list of questions to be asked in the same order. The focus of the interview questions will be on understanding experiences and interpretations on respective roles within work packages and ultimately the project as a whole. The interviews will give us an in-depth understanding of partners' and stakeholders' perceptions on their allocated roles and tasks including aspects related to risk assessment and contingency measures. They will be used to determine perceived progress towards the aims of the SATORI. In addition, interviews will be used to explore expectations and experiences as well as judgements of both stakeholders and partners with regards to engagement and (mutual) learning. As is the case with questionnaires, interviews will facilitate a feedback mechanism from which the SATORI as whole will gain valuable insights on areas that need maintaining or improving. For instance, in evaluating a task/WP or the project, there are external and internal aspects to consider. Internally, there is the individual or team's judgement about an event in terms of how satisfied they are with their efforts, how well the internal processes worked, and whether the event or project did what everyone hoped it would do. Taking into account these judgments, we will conduct interviews to evaluate the SATORI project internally. Externally, most tasks/WPs or projects will use formal or informal feedback from different stakeholder groups to judge success and such questions will be asked in order to evaluate immediate impact. These aspects may include feedback from:

- i. the participants
  - a. Did enough people come/did it sell out? Engagement
  - b. Did the participant audience understand the WP or task? *Mutual Learning/Capacity building*
  - c. Did they enjoy/appreciate the event? Feedback
  - d. Did the event create the desired cognitive/emotional effects? Impact
- ii. expert group
  - a. What was the reaction from respected sources? Feedback/Impact
  - b. Was this seen as a good WP/project or event? Feedback /Impact
- iii. media coverage and review
  - a. Was the event covered in relevant press and publication? *Dissemination*
  - b. Was it reviewed favourably? Feedback
  - c. Did people hear about it? Communication/dialogue



### LINKING THE EVALUATION STRATEGY WITH SATORI

As the project aims to develop a common framework of ethical principles and practical approaches to strengthen a shared understanding among actors involved in the design and implementation of research ethics, the project will involve an intense process of research and dialogue among private and public stakeholders from Europe and beyond. Ultimately, through such research and dialogue, the project seeks to establish a permanent platform around the framework to secure ongoing learning and attunement among stakeholders in ethical assessment. Therefore, to understand the process and progress of securing the ongoing learning and attunement among stakeholders in developing the said ethical assessment framework, it becomes imperative to evaluate the processes and progress that is being made in the SATORI project. These processes and progress being made can only be evaluated by applying the strategy discussed above. The chosen strategy is ideal because it ensures that there is a varied understanding of the different processes happening in SATORI through the application of the suggested evaluation template and complementary tools.

The evaluation template helps us understand important elements like impacts, risks, outcomes among others which then help us see whether objectives are being met or not. For example, when we look at a few of SATORI's WPs such as WP1 which aims to develop a systematised inventory of current practices and principles in ethics assessment, we see that we can evaluate this through evaluation principle (iii) which is about evaluating surveys, interviews and case studies in the production of quality deliverables. As WP1 conducted interviews and case studies, this principle is the most applicable one particularly when it comes to looking at methodological rigor, which is a criterion that applies under the principle. As an additional example, in assessing WP2 whose aims is a review of existing projects and an identification of stakeholders, it becomes necessary to apply principles (i) and (ii) in addition to questionnaires and interviews as complementary tools. This is because the two principles allow us to assess stakeholder engagement and recruitment on the part of the SATORI partners as well as allow us to look at the aspect of representativeness while questionnaires and interviews allow us to gain insight not only from the view point of the partners but of the stakeholders themselves on the perceived roles and level of engagement. It also allows us to understand stakeholders' expectation with regards to the project, be it in terms of mutual learning or otherwise. Further, observations as part of the evaluation strategy become useful when we look at WP3 for example which aims at investigating the impact of globalisation and the extent to which research is conducted outside Europe. As WP3 conducted a stakeholders globalisation workshop in Paris, it becomes ideal to observe how stakeholders and SATORI participants interact as well as share knowledge. Alongside this tool, principles such as (i), (ii), (iii) and (iv) are applicable in evaluating stakeholder representativeness, stakeholder recruitment, methodological rigor as cases studies were used as well as relevance of recommendations that resulted during the workshop.

Through the examples given, we see that there is a link that has been established and that makes the chosen evaluation strategy for the SATORI project. This link is seen in the different principles that can be applied across the different tasks/WPs of the overall project alongside the chosen complementary tools of questionnaires, interviews and observations. By applying this strategy, we ensure that we have an opportunity to assess the different processes at work within the project as well as look at the progress that the project is making. The evaluation strategy is going to be applied in earnest in the coming 6 monthly reports that follow.



This deliverable has outlined a strategy for the evaluation of the SATORI project. We will monitor the implementation of project events and evaluate these in terms of engagement, (mutual) learning and feedback of the participants and impact. The evaluation will also look at specific individual tasks to assess mutual learning and stakeholder engagement. We have presented various evaluation tools which include an evaluation template and complementary tools such as questionnaires, observations and interviews. We will analyse the views and interpretations of partners and stakeholders with regard to the assessment of stakeholder involvement and mutual learning. Such views and interpretations are best captured by talking to the partners involved (interviews) as well as observations (at SATORI events) where evaluators can gauge and observe interactions between the different partners and stakeholders.

The evaluation strategy will be flexible in order to follow the dynamic developments of the project. It will also be peer-reviewed by the project partners to ensure fairness and openness as well as to guarantee agreement by all consortium partners. Once agreed, the strategy will be implemented, but will also be revised when necessary in order to ensure it remains current and relevant. Furthermore, although this deliverable is specifically intended as a document that should guide the evaluation of SATORI, we hope that our discussion of the evaluation strategy may also be helpful to other project evaluations, in particular evaluations of European projects aimed at mutual learning and stakeholder involvement.

We have started to test our evaluation tools through observations in Paris in June 2015 (results to be given in first 6 monthly report in Deliverable 12.4) and questionnaires distributed to SATORI partners and stakeholders prior to the Paris workshop (see Annex G and Annex H respectively). The questionnaire for partners will help us to understand the partners' perceptions on their allocated roles and tasks, their progress towards the aims of SATORI, and their expectations with regards to engagement and mutual learning. The questionnaire for stakeholders will help us understand their perception and expectations of their respective involvement and roles in relation to SATORI and their level of their participation and contribution in the project. It will also give us an indication about the occurrence of mutual learning during their involvement in the project. Both questionnaires will also function as a general feedback mechanism.

In this document, we have covered the development of the evaluation strategy. This strategy encompasses both formative and summative evaluation. As part of the strategy, an evaluation template will be applied during the process of evaluation. Components of the template covers principles and criteria for evaluation, aspects related to objectives of individual tasks, intended outcomes, indicators of success, potential impact of individual tasks, risk assessment and associated contingency measures, conflicts within tasks and resolution procedures, as well as information sharing. In addition, the evaluation template also has a scoring rubric which will be applied to different aspects of individual tasks as a way of assessing whether the task conforms to chosen SATORI evaluation principles. Furthermore, this document has also looked at tools that complement the evaluation template which include questionnaires, interviews and observations. The document has gone on to link the chosen strategy to the SATORI project in order to show its relevance to the project. In our next reports, we will apply the developed strategy and present evaluation activities in our 6 monthly reports covering ongoing SATORI activities and ongoing task related work up till the end of the project.



### 7.1 ANNEX A: AN OVERVIEW OF EVALUATION

### 7.1.1 What is Evaluation?

Evaluation has been well described and defined in deliverable D12.1 [see sections 5.1.4 and 5.1.5] therefore this particular deliverable (D12.3) will not dwell on the description of evaluation but rather will focus on the practical aspects of evaluation and to be more specific the evaluation strategy for the SATORI project.

However, before we go any further, it is imperative that we point out the difference between performance measurement and evaluation since the two can easily be mistaken or used in place of the other. It is important to note that Task 12.3 and Task 12.4 is more an evaluation than the performance measurement, therefore the two should be clearly understood and distinguished.

### 7.1.2 Evaluation and Performance Measurement

Performance measurement is the ongoing monitoring and reporting of initiative accomplishments and progress toward pre-established outcomes (Cooke-Davies, 2002). The process of measuring performance typically involves gathering data on the specific activities of the projects (known as inputs) and the direct results of those activities (known as outputs). For example, in the case of SATORI this could involve tracking inputs such as training or capacity building programs offered to stakeholders, as well as outputs, such as the number of stakeholders or society members who participated in each capacity building event.

On the other hand, evaluation, for the purposes of this deliverable, is defined as the systematic collection of information about the activities (tasks), effects, influence, and impacts of SATORI or initiatives to facilitate (mutual) learning, decision making, and action within and beyond the project. This could mean for example looking at deliverable tasks of SATORI, reports from the project and assessing what impact these have had on mutual learning, on decision making processes for the project and beyond. The findings from evaluation will help improve the SATORI partners' confidence in making decisions and taking action towards the overall objective of the SATORI project.

However, although the two are different, performance measurement and evaluation are complementary activities:

- i. Data collected through performance measurement can contribute to a variety of evaluation efforts. For example, data from the performance measurement can complement qualitative data collected from interviews, focus groups, and surveys.
- ii. Data from performance measurement may influence the design of an impact evaluation by leading partners to focus on certain questions or outcomes. For example, if partners observe minimal progress on an important indicator, they may choose to explore and question about the relevant strategy as part of their evaluation.
- iii. Data generated by both performance measurement and evaluation activities could lead to insights and learning, and therefore boost SATORI partners' ability to make informed judgments as the project is implemented.

### 7.1.3 Why Evaluate?

Having made the distinction between evaluation and performance measurement but shown their complimentary roles in an evaluation strategy, we briefly highlight why we need to



evaluate the SATORI project. Evaluation is useful both for the partners, and other audiences or stakeholders involved for the project, for at least three reasons:

- Evaluation promotes learning from past work which helps people (partners, stakeholders and funders) to develop more effective projects in the future;
- Evaluation of projects provides evidence that the project has achieved a certain end or did what it was supposed to do;
- In the area of public engagement with ethical impact of technology, the ability to look at the project critically can contribute to the development of the field in general.

In a nutshell, evaluation can help assess the extent to which the outcomes of SATORI (including the implementation process) are likely to be sustained over time. SATORI partners can use the evaluation to understand the ripple effects of their work on other stakeholders and the society at large.



### 7.2 ANNEX B: PRE-EVALUATION QUESTIONNAIRE

The questionnaire aimed to encourage partner participation in the evaluation before it has officially begun, as several evaluators in the 12.1 study reported difficulties with establishing a long-lasting and honest collaboration with consortium partners. In the words of the aforementioned evaluator who inspired the questionnaire, it is intended to get evaluation "on their radar" without requiring significant effort from the partners due to its brevity. Additionally, the questionnaire provides an initial indication of each partner's expectations concerning their role in the project and the role of the evaluators, along with early indications of how the success of particular activities can be measured. Each of these potential contributions of the questionnaire will assist in the creation of an evaluation/reflection strategy (Task 12.3) that matches the expectations and needs of the consortium as far as possible.

### 7.2.1 Methodology

An online questionnaire was constructed on surveymonkey.com and distributed to all 61 partners currently listed as working on SATORI (the DMU team not included). Partners were identified via an up-to-date consortium contact list provided by Trilateral. Partners were invited to participate via e-mail, which is the primary communication tool for the consortium meaning invitations can reasonably be expected to reach partners. Three invitations were sent, with the latter two as 'reminder e-mails' requesting partners to complete the survey. Invitations were sent over a period of 6 weeks.

The questionnaire consisted of four open-ended questions and one ranking exercise. Questions were initially based on the pre-evaluation questionnaire encountered in D12.1. Revisions were made by the DMU team in lieu of piloting, given the questionnaire's relative simplicity and brevity. One open-ended question was solely descriptive, asking respondents to indicate the work packages and tasks for which they are responsible. The other three open-ended questions were interpretive and descriptive, asking respondents to describe their interpretation of their role in the project, their expectations of the evaluators, and any other comments relevant to evaluating their (organisation's) role in the project. The ranking exercise posed 9 types of outputs and impacts and asked the respond to rank them in order of importance. An 'Other' option was included to allow the respondent to input outputs/impacts not present.

Analysis was a mix of qualitative interpretive and quantitative analysis. Responses from the three open-ended prescriptive questions were subjected to thematic analysis; words and phrases with similar meanings were grouped together into themes and presented narratively below<sup>2</sup>. The ranking exercise was analysed quantitatively to discover their relative important according to respondents, with average rankings for each type of output being calculated by adding together the total rankings numerically and dividing by 21 (the number of responses).

### **7.2.2 Results**

Of the 61 partners invited to participate in the survey, 21 responded. Questions 1-4 were completed by all respondents, except for one respondent who failed to answer Question 2. Solely for the sake of simplicity all respondents are referred to as 'her' in the discussion of results, although this should not be taken as an accurate representation of the respondent's gender, which was not seen as a necessary aspect for analysis of responses.

<sup>&</sup>lt;sup>2</sup> Miles and Huberman, An Expanded Source Book: Qualitative Data Analysis.



# 7.2.2.1 Question 1: Which SATORI Tasks are you currently working on, or will work on in the future?

Responses to this question were used solely for interpreting answers to the other questions. The question was posed to allow for analysis of responses based on the respondent's 'objective' role in the project, as opposed to their interpretation of their role as provided in response to Question 2. The responses to Question 1 will therefore not be analysed separately.

### 7.2.2.2 Question 2: How do you interpret your role in SATORI?

Responses to this question varied considerably, which was expected given the broad range of tasks and disciplines found across the project and consortium. Many of the responses merely mirrored the task descriptions found in the DoW, and thus were an 'objective' representation of the partner's role following on from Question 1, as opposed to an 'interpretation' wherein partners described their work in terms of normative responsibilities or desired outcomes beyond what is described in the DoW. The discussion here focuses on 'interpretive' responses rather than that merely describing what is written in the DoW.

Some respondents emphasised their role in recruiting specific stakeholder groups; for example, one partner emphasised a responsibility for "engaging different stakeholders in Serbia." Others identified with particular 'perspectives' to 'represent' in the project, for example in representing "the industry point of view...[and to] help to understand the valuable contribution of ethical and societal assessment of industry policy on R&I." Others saw themselves as providing "advice from a consumer/NGO point of view," from "legal and human rights perspectives," or "providing general guidance on EU-related issues."

One respondent emphasised the important of different aspects of her role as the project progresses, "being responsible for project logo and web design is a vital part of the project start up...press releases and feature stories will grow in important throughout the project."

One respondent seemed to suggest that her value to the project is as an "ethical expert, involved in the practice of ethical vetting of research." Another identified herself as a "roadmapping expert, [providing] insights into how socio-technical changes evolve and manifest." Another saw her role as "communicating with the public via traditional and social media [as] an important aspect of SATORI."

Interestingly, one respondent flagged up a potential early problem with her involvement in the project, saying that while she is only responsible for doing interviews, she sometimes feels "uncomfortable with the instruments of social sciences," suggesting a gap between the work required in the DoW and the partner's skillset. She added that she can "only help on practical tasks, because at the moment none of my professional competences are required."

# 7.2.2.3 Question 3: Practically speaking, what support do you hope to receive from us (the evaluators)?

From the perspective of planning an evaluation and reflection strategy, this question is perhaps the most important in terms of gauging the consortium's expectations of DMU. Several themes were found in the responses.

Perhaps the most commonly requested form of support was feedback, albeit on a variety of topics. Numerous respondents hope to receive feedback regarding the "suitability of reports" and "tasks" in terms of fit with "project objectives," "the content and quality of plans,"



adherence to "standards of the project...and the required level for the EC," and how individual teams fulfil their tasks, including problems encountered. The emphasis in these responses is on the evaluators providing a 'critical' view of consortium activities and outputs, suggesting that the "evaluation process [should] be organised in such a way that we can gain from it during our tasks" by identifying problems or weaknesses and feeding these back to individual partners to "improve on [their] inputs and deliverables" and "better focus [their] actions." One partner described this as "objective feedback on the different activities," although the degree to which such feedback could possibly be feasible is questionable given variation in indicators of quality and work procedures across the various tasks and disciplines represented within the SATORI.

Feedback need not, however, come entirely from the evaluators as indicated by the peerreview of deliverables. In supporting feedback between consortium partners, one partner suggested that the evaluators can provide "feedback and practical tips on how to improve cooperation between different partners, how to implement their suggestions/approaches," suggesting evaluators take up a role as 'mediators' in the channels between individual partner organisations through which feedback and review are provided.

This aspect of feedback hints at another theme in the data which focuses on monitoring the quality of communication within the consortium and to external stakeholders. This need may stem from the size of the consortium and complexity of the project: "since it is a large project continuous communication on tasks and evaluations performed are needed...also to ensure that all relevant knowledge is shared throughout the project." The latter concern was shared by another partner, who requested "support regarding how the project is proceeding internally," for example by reporting on work and progress made by other partners (especially within other work packages). One aspect of such support is in pre-emptively identifying barriers to cooperation, so that partners will "receive as early as possible help in identifying potential obstacles that may hinder further cooperation with partners or achieving the project's goals." Doing so was seen to "optimise the links between the work packages by providing constructive suggestions on challenges and possible improvements."

As seen in the emphasis on feedback, a third theme concerns improving the quality of outputs, or "insights into the usefulness and practicality of our results." An explicit link was highlighted between outputs and "the added value of the project in comparison to other activities in the field of RRI" (responsible research & innovation)<sup>3</sup>, and the "sustainability and impact" of the project. This theme was further operationalized in Question 4 in which outputs (and thus, sources of impact) were ranked in terms of importance.

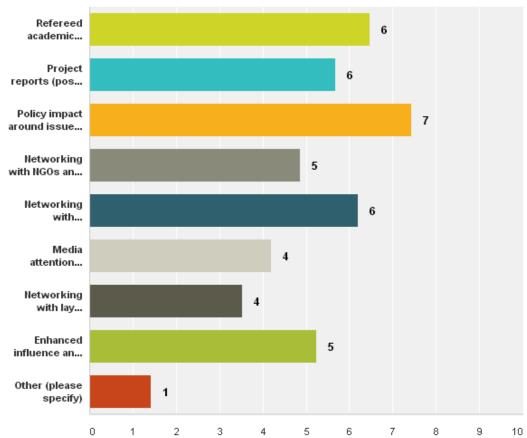
# 7.2.2.4 Question 4: Please rank the following outputs in terms of importance to your organisation and its participation in SATORI

Tables 1 and 2 show the average ranking and ranking breakdown for each output type across the entire sample of responses. Given the diversity of respondents in the consortium, further analysis on the basis of 'interpreted roles' or work packages was not possible. Furthermore, this aspect was not seen as relevant to defining DMU's role as evaluator as we have an equal responsibility towards all partners, meaning emphasising the importance of impacts as ranked by a particular sub-set of the consortium would be inappropriate.

-

<sup>&</sup>lt;sup>3</sup> cf. Stahl, "Responsible Research and Innovation".





**Table 1 – Average Ranking of Outputs** 



	*	1 +	2 🕶	3 +	4 +	5 🕶	6 +	7 🕶	8 🕶	9 🕶	Total ▼	Average Ranking
*	Refereed academic journal articles/conference proceedings	<b>28.57%</b> 6	<b>14.29%</b> 3	<b>9.52</b> % 2	<b>9.52</b> % 2	<b>14.29%</b> 3	<b>9.52</b> % 2	<b>14.29%</b> 3	<b>0.00%</b> 0	<b>0.00%</b> 0	21	6.48
*	Project reports (posted on the internet)	<b>4.76%</b> 1	<b>23.81%</b> 5	<b>14.29%</b> 3	<b>4.76%</b> 1	<b>23.81%</b> 5	<b>9.52%</b> 2	<b>9.52%</b> 2	<b>9.52%</b> 2	0.00% O	21	5.67
*	Policy impact around issues of importance to your organisation	<b>38.10%</b> 8	<b>9.52%</b> 2	19.05% 4	<b>28.57%</b> 6	<b>0.00%</b> 0	<b>4.76%</b> 1	<b>0.00%</b> 0	<b>0.00%</b> 0	<b>0.00%</b> 0	21	7.43
*	Networking with NGOs and civil society organisations (CSO)	<b>4.76%</b> 1	<b>4.76%</b> 1	<b>9.52</b> % 2	19.05% 4	<b>23.81%</b> 5	9.52% 2	<b>14.29%</b> 3	<b>9.52</b> % 2	<b>4.76%</b> 1	21	4.86
*	Networking with governmental bodies/policy- makers	<b>4.76%</b> 1	<b>14.29%</b> 3	<b>38.10%</b> 8	<b>4.76%</b> 1	<b>14.29%</b> 3	<b>23.81%</b> 5	<b>0.00%</b> 0	<b>0.00%</b> 0	<b>0.00%</b> 0	21	6.19
*	Media attention (print, web, etc.)	0.00% 0	<b>9.52%</b> 2	0.00% 0	19.05% 4	9.52% 2	19.05% 4	<b>23.81%</b> 5	<b>14.29%</b> 3	4.76% 1	21	4.19
*	Networking with lay members of the public (non- media)	0.00%	<b>4.76%</b> 1	0.00%	<b>4.76%</b> 1	<b>14.29%</b> 3	19.05% 4	<b>23.81%</b> 5	33.33% 7	<b>0.00%</b> 0	21	3.52
*	Enhanced influence and decision- making impact for your organisation	<b>14.29</b> % 3	19.05% 4	<b>9.52</b> % 2	<b>9.52</b> % 2	<b>0.00%</b> 0	<b>4.76%</b> 1	<b>14.29%</b> 3	<b>28.57%</b> 6	<b>0.00%</b> 0	21	5.24
*	Other (please specify)	4.76% 1	<b>0.00%</b> O	0.00% O	<b>0.00%</b> 0	0.00% 0	0.00% O	0.00% 0	<b>4.76%</b> 1	<b>90.48%</b> 19	21	1.43

Table 2 – Ranking Breakdown of Output Types

Four respondents identified a further type of output as 'Other': standards, learning about ethics and ethics assessment, (influence on) research ethics committees on the EU-level, and defining a new role for science journalism in the ethical debate about RRI. The last of these was ranked as most important by the respondent suggesting it, while interesting the others were ranked least or second to least important. This latter aspect, along with the lack of responses to the 'Other' category, suggests (but does not prove) that the outputs identified in the table were all seen as relevant to the project, and sufficient to cover the interests of the consortium in terms of impact. This finding was further discussed at the consortium meeting in Rome (see following Annex).

As shown in the tables policy impacts were identified as the most important impact, followed by refereed academic journal articles/conference proceedings, and networking with governmental bodies/policy-makers. While policy impacts was clearly the most important impact, being ranked first in importance by 8 of 21 respondents, it is interesting to note that four of the nine outputs achieved an average rank of 5+, suggesting that numerous outputs are seen as highly important across the consortium rather than a single type. Recognising the size and discipline-diversity of the consortium, this distribution should perhaps have been expected; however, it confirms that evaluating the impact of the project along one or two variables will not be sufficient. In preparing the evaluation and reflection strategy it may therefore be necessary to give equal attention to the outputs deemed important by all partners, regardless of their relevant importance on the table above.

Another interesting finding is the emphasis on networking and influence; following policy impacts and academic outputs, networking/influence with policy-makers was ranked highly. This suggests that partners hope to achieve greater influence on the policy-making process



through participation in SATORI. Tracking this type of influence as a third party may be difficult given that 'influence' can be intangible and informal, occurring for example through a clandestine conversation or project output finding its way onto the desk of a relevant policymaker. In evaluating this type of impact going forward it may therefore be necessary to rely on self-reporting on impact by partners, or drawing correlations between other activities and likely future impact, as mentioned in D12.1 (Section 5.1.5 on quality of processes and impact).

# 7.2.2.5 Question 5: Please comment on any other aspects of your/your organisation's participation in SATORI that you think are important for evaluating the project

Of the 21 respondents, 8 chose to answer this optional question. Answers tended to be specific to understanding the role of particular organisations and thus will become relevant when evaluation is actually undertaken of particular partners and tasks at a later stage of the project. The answers will therefore not be discussed here, as their relevance and application to tasks undertaken in the project is as-of-yet unclear until work has begun and reported upon for relevant tasks, in deliverables, discussion at consortium meetings, and communication between partners.

### 7.2.3 Discussion and Conclusion

The responses of partners provide significant valuable input for the evaluation and reflection strategy which will be developed in Task 12.3. Briefly, the consortium expects significant critical feedback from the evaluator (although how welcome 'honest feedback' will be once given is questionable if it is negative) and consortium, early identification of obstacles to completing tasks according to schedule, assistance in communicating and keeping up-to-date with the progress of other partners, and assessment of the quality and potential impact of outputs. Some of these activities may be fulfilled by other partners; for instance, feedback can be provided not only by the evaluators but partners peer-reviewing each other's work, as well as the project coordinator and EC project officer, the latter of which can also 'verify' delivery against deadlines and agreed upon objectives. It will therefore be important in developing the strategy in Task 12.3 to clearly distinguish between the responsibilities of DMU as evaluators and those of the partner organisations, project coordinator and EC project officer.

One role not mentioned here that would be appear to be a relevant aspect of evaluation according to the results of D12.1 is the evaluator assessing the quality of project outputs and activities in terms of 'responsibility' to the stakeholders engaged (and potentially, the EC). In particular, DMU as evaluators may need to provide intervention when 'stakeholder engagement activities' fail in some way when the quality of outputs is sufficient lacking in terms of potential future impact, although the latter will be subject to a significant degree of interpretation given the unpredictability of future impact.

In terms of relevance to principles and criteria for evaluation and reflection as described in this deliverable, the questionnaire seems to have less to say. However, insight can be gained from analysis of the output ranking exercise—the range of outputs seen as important suggests that impact criteria will need to be applicable to a broad range of types of impact. Beyond this, the emphasis on communication and 'work updates' between partners suggests that criteria will be required for evaluating the quality of project consortium meetings, perhaps in terms of 'mutual learning' opportunities and the quality of discussion. Criteria are also



needed concerning the uptake of feedback by partners; as mentioned in the DoW, this does not mean that partners will be expected to make all adjustments and revisions suggested by evaluators (and peer-review partners), but rather that a description of the adjustments made and the reasoning for accepting and rejecting certain feedback will be required following evaluation reports—in other words, criteria for evaluating the quality of dialogue between the evaluators and partners will be required.



### 7.3 ANNEX C: CONSORTIUM MEETING OBSERVATION FROM ROME

The second preliminary evaluation activity involved observation and note-taking at the SATORI consortium meeting on October 13, 2014 in Rome. Generally speaking, consortium meetings and SATORI events will be observed and evaluated by DMU wherever practically feasible. The scope and purpose of these observations involved basic reflection on the success of the meeting by the observer as well as reaction to the brief presentation by DMU regarding results of the pre-evaluation questionnaire. One key issue reported on in these observations is potential conflicts or discrepancies between our role as evaluators found in the pre-evaluation questionnaire versus the opinions shared at the meeting.

### 7.3.1 Observations from Rome meeting and discussion of problems in the Project

During the Rome meeting DMU made a number of observations regarding problems in the project. Based on these observations and DMU's presentation, DMU triggered and facilitated a discussion about the following issues:

### 7.3.1.1 Concerns with interpreting legal documents

The meeting raised the issue of interpreting legal documents and sought guidelines in terms of how this could be resolved. Specifically, the issue was that interpretation of legal documents varies from country to country and that documents may be in different languages. To deal with this issue, it was suggested that country reports should only briefly summarize the legal framework for ethical assessment discussion with the help of translators or legal experts. In addition, it was further agreed that the European legal system could be used as a point of departure.

### 7.3.1.2 Delays in completing work and/or not doing work at all

Concerns were raised about delays in completion of work by some partners. It was felt that some partners were not taking the completion of work or doing assigned work seriously, which was then left to other partners to pick up. Some of the issues around this might have to do with a lack of understanding of what an EU funded project entails in terms of completion of work and meeting deadlines which has a close correlation with different cultures of work. The fact that some partners are new to EU funded projects and in addition, do not come from a research orientated environment, may have an impact on delays in meeting required tasks. This does not make it easier for those partners who are focussed on meeting deadlines, completing work as well as undertaking their assigned work.

There was a suggestion that in order to avoid impacting the project negatively, the consortium could vote against erring partners. It was however emphasised that this was a last resort and had to be avoided at all costs. It was recommended that as a first step the task leaders and, if necessary, the coordinator, should intervene when deadlines are not met and/or work is not done.

## 7.3.1.3 Concerns with budget especially travel in order to complete for example interviews

Budgetary issues remained a concern with most partners concerned about how they would be able to travel, particularly with regards to conducting interviews. One contribution to a solution is that different partners share the same invited stakeholders, but it remains to be seen if this will work. A problem with this potential solution is that shared stakeholders would give similar answers.



### 7.3.1.4 Communication and peer review

The problem of feedback on WPs was raised as a concern particularly as most partners failed to communication in a timely fashion with regards to feedback or failed to review assigned tasks completely. The meeting learnt that a partner normally sent out their work for peer review to all partners with the expectation that they would all give feedback. This was seen as problematic, because some partners were never going to review any work without being explicitly assigned that task. It was suggested that WP leaders should specify who are to be peer reviewers, preferably members expertise in the area and those outside the WP as this would ensure that members did not peer review their own work. Furthermore, the number of reviewers should be reduced to about 4 or 5 partners, rather than the whole consortium. In addition, it would be ideal for there to be a deadline in order to ensure a timely turnaround for reviews. With regards to other consortium documents, it was agreed that all partners were to endeavour to engage with the documents and give feedback. This would help to keep abreast with developments of the SATORI project.

### 7.3.1.5 The question of DMU's role

In light of the concerns raised above, primarily with regards to delays in completion of tasks and undertaking the required work as well as the issue of peer review, DMU was asked what its role might be in this respect. There was a tacit implication that DMU's role would require ensuring that partners completed their work and undertook the required peer review. However, DMU reminded the partners at the meeting and the coordinator that DMU's role could not be that of a coordinator but merely as an evaluator which could signal SATORI problems with the aim of ensuring that the quality of the work in the project was upheld. To this end, DMU encouraged partners to contact the evaluators if they are having problems with undertaking or completing their work. DMU would subsequently try to broker solutions for differences or misunderstandings between partners. In addition, DMU was of the view that in order to complete work and give relevant reviews, partners ought to have the necessary expertise, capacity and personnel to be able to carry out the required work.

DMU was also asked how it will evaluate SATORI and how to measure MMLs and their impact. As evaluator, DMU informed the meeting that the chosen evaluation criteria for SATORI will be outlined in WP12.2. This will be done after analysing WP12.1 which covered several aspects of conducting evaluation and measuring MMLs. The choice of evaluation will also take into account questionnaire answers provided by partners.

#### 7.3.2 Conclusion

DMU used the Rome meeting to presents its results to the partners and to facilitate discussion about ongoing concerns in the project. The meeting was also used to get feedback on DMU's role. DMU encouraged partners to approach DMU with their concerns but also indicated that it will not take over the task of the coordinator and the task leaders. DMU also proposed criteria for evaluation and offered the partners a chance to indicate how they wanted to be evaluated. In the next workshop in Brussels (February 2015), the criteria specific to SATORI will be presented and feedback will be asked on our suggestions for DMU's evaluation strategy.



### 7.4 ANNEX D: SUMMATIVE AND FORMATIVE EVALUATION SUMMARY TABLE

	<b>Summative Evaluation</b>	Formative Evaluation
Stage of Project	Project is stable and well established	Project is evolving and being refined
What is happening?	<ul> <li>The project's activities are well established and are not changing.</li> <li>Partners have significant experience in their WPs and are certain about what works.</li> <li>Project is ready for a determination of impact (value or significance)</li> </ul>	<ul> <li>The projects key elements are in place and partners are implementing agreed upon strategies and activities.</li> <li>Outcomes are being more predictable and the project context is becoming well known.</li> </ul>
Key Strategic Question	What difference did it make?	How well is it working?

Table 1: Evaluation approaches (adapted from <a href="http://www.fsg.org">http://www.fsg.org</a>)



#### 7.5 ANNEX E: EVALUATING IMPACT

Impact evaluation serves both objectives of evaluation: lesson-learning and accountability<sup>4</sup>. A properly designed impact evaluation can answer the question of whether the program is working or not, and hence assist in decisions about improving it. This is only possible during formative impact evaluation i.e. as the project is in progress. However, care must be taken about generalizing from a specific context. A well-designed impact evaluation can also answer questions about project design: which bits work and which bits do not, and so provide relevant information for redesign and the design of future activities. DMU as an evaluator of the SATORI project wants to know why and how the project works towards achieving its overall goal, not just if it does. Therefore, impact evaluation is ideal in serving the accountability function among partners within SATORI and the project holistically.

### 7.5.1 When to do an impact evaluation

It is not feasible to conduct impact evaluations for all tasks within the SATORI project because of the nature of specific WPs and tasks, which are merely supportive such as standardization or data collection. However, it is possible to conduct an impact evaluation of the SATORI project as a whole. For this purpose it is important to have a guiding design that ensures a successful impact evaluation. This is encompassed in the evaluation template shown in section 3.

### 7.5.2 Impact evaluation using secondary data

During the evaluation of SATORI, secondary data will continue being used to carry out the whole evaluation<sup>5</sup> as is the case of task evaluative analysis. The secondary data will be used to reinforce other data from interviews, observations and surveys conducted throughout the life cycle of the SATORI project.

### 7.5.3 Measuring qualitative impacts

As one of our methods, we quantified qualitative impacts in order to measure change (e.g. in stakeholder behaviours, attitudes etc.) and progress of the SATORI project as a whole towards achieving its goal. However, this does not mean that our evaluation is restricted to the 'dominant' quantitative paradigm. On the contrary, the use of quantification will be very effective in opening up a space for discussing other impacts and linking this discussion to a broader debate that incorporates process issues, engagement, empowerment (capacity building), social inclusion (fairness and representativeness) and so on. For example, we might consider quantification of qualitative impacts of the SATORI project that involves the development and application of indicators or indexes that measure changes in these impacts, such as perception scoring data and observable changes in behaviour. These indicators would allow for measurement and aggregation of non-material and often complex multi-dimensional impacts. This will be tested in T12.4 when the strategy is operationalised. Another ideal way of measuring impact would be to use a balanced score card as depicted in Figure 1 below which will potentially need to be developed further and this could also be used in T12.4 when the evaluation strategy is being put into practice.

\_

<sup>&</sup>lt;sup>4</sup> See the DAC Evaluation Network report, Evaluation Feedback for Effective Learning and Accountability Report No 5, OECD Evaluation and Effectiveness Series, OECD (2001) for a fuller discussion of these functions of evaluation.



Name of stakeholder :	
Work package :	
Task :	
Indicator of impact	Stakeholder Score (scale 1= Very poor, 2=Poor, 3=Average 4=good 5=Very good)
Level of engagement	
Level of fairness	
Level of representativeness	
Level of mutual learning	
Level of access to information	
Level of communication	

Table 2: Balanced Score card for measuring impact

### **7.6** ANNEX F: EVALUATION METHODS

In this section we introduce our operational definitions of the terms 'quantitative' and 'qualitative', and explain where the two fit in with the evaluation of SATORI. We also discuss different methods and tools that combine quantitative and qualitative approaches that add value to impact evaluation.

### 7.6.1 Qualitative Methods

Qualitative methods will enable us understand the 'why' rather than the 'how many' of a phenomenon. As such, they are invaluable for understanding a complex situation or developing an initial understanding of an area prior to developing a structured questionnaire (Fitzpatrick et al., 2010; Garbarino et al., 2009). In qualitative methods, the data tend to fall into two categories of information: quantity and quality. Typically, quantity measures are numerical descriptions of project tasks and achievements, while quality measures often portray project tasks and achievements through narrative descriptions. Qualitative methods, being open-ended, also have the value of making the audience feel involved and consulted. It can sometimes be frustrating for both researchers and participants to have to ask participants to complete a questionnaire that does not give them the opportunity to give an unscripted response.

The most commonly used qualitative method employed in evaluating SATORI will be openended questionnaire which allows respondents to talk about their thoughts, opinions and feelings in their own words e.g. what did they enjoy about the event e.g. workshop or training? These are simple to use and often extremely helpful. In addition to this, we considered more extended qualitative approaches such as one-to-one interviews or discussion groups at evaluation workshops (Rome and Brussels). We expect that such approaches will particularly give us an in-depth or exploratory assessment of SATORI thus far.

### 7.6.2 Quantitative Methods

On the other hand, quantitative methods are concerned with measuring 'how many' or 'to what extent', and rely on statistical theory to judge significance of results or generalise findings to a broader population (Fitzpatrick et al., 2010; Garbarino et al., 2009). For instance, we will use quantitative methods in measuring change in behaviour as a result of a particular



WP task through conducting a baseline survey, and repeating it later in order to have a comparative analysis of the change. Quantitative data could be used to evaluate both process and outcome indicators. They could be used to examine how many people are involved and how often (process) – it could also be used to examine change in rates of engagement, such as attendee numbers and task completion (outcome). With this in mind, the WP analysis suggested earlier could put this into practice depending on the nature of task and its objective.

As previously said, one of the items to find out in SATORI is its impact. Measuring impact will typically be achieved using qualitative questions. Assessing the strengths and weaknesses of a task involves gathering open-ended, more qualitative information using interviews and questionnaires. However, as said earlier combining the two methods will give us more insight into the project henceforth success in the evaluation process. Using both quantitative and qualitative methods will ensure dependable feedback, a good depth of understanding of particular WPs, a holistic perspective and enhance the validity, reliability and usefulness of our findings.

### 7.6.3 Combining Quantitative and Qualitative Methods to Evaluate Impact

When considering ways to combine quantitative and qualitative methods and data, it is important to be aware of their comparative advantages (Appleton and Booth, 2005). In short, while quantitative methods produce data that can be aggregated and analysed to describe and predict relationships, qualitative evaluation can help to probe and explain those relationships and to explain contextual differences in the quality of those relationships.

Qualitative evaluation is able to use social analytical frameworks to interpret observed patterns and trends including analysis of socially differentiated outcomes and to analyse impact as a dynamic process rather than a static outcome. Without these analytical insights into the complex 'missing middle' between interventions and impacts, the consortium including DMU as evaluators could make 'interpretive leaps' of analysis based on what is measured. The danger here is that what is not quantifiable becomes unimportant while 'what is measurable and measured then becomes what is real and what matters'. This was part of the discussion in a workshop that was conducted in Brussels (February, 2015) about measuring impact and how to quantify it.

Conversely, if qualitative evaluation inductively throws up interesting, often surprising and sometimes counterintuitive relationships and patterns, quantitative evaluation is then able to ask 'how much?' and establish how confident we can be in these 'working hypotheses'. This iterative relationship between describing and explaining provides the key to effective combination of methods and data. This combination permits the asking of some of the 'why?' and 'how?' questions that distinguish evaluation from mere monitoring.

Therefore considering the above discussion as part of the evaluation strategy, DMU will consider combining the two but with a heavy inclination towards qualitative.

### 7.6.4 Data Collection

On evaluating SATORI we will use a number of data collection methods. Most of the methods employed will be of a qualitative nature merely because both the quality and quantity of information that we are interested in carrying out in the evaluation will have fewer restrictions than if we had to gather it quantitatively. One of the issues that was taken into consideration in coming up with this stance was how the former could elicit both intended and unintended results compared to the latter.



As part of the data collection exercise, DMU as evaluators will also use documentation to gain an understanding of the multiple levels of the SATORI project. This will be advantageous to the ongoing evaluation of SATORI because it simplifies the delineation of the many aspects of the project and will save considerable and valuable evaluator time (Stufflebeam and Shinkfield, 2007, p. 309) thereby enabling us to meet our deadlines for other tasks.

Another data collection method that will be used is attending workshops and project meetings. This method has already been in use, for example we have had project meetings conducted either physically *in situ* or virtually through periodic SATORI PMC Skype meetings. This will continually involve a thorough planning of what kind of information we need for the evaluation coupled with a keen observation and recording of the deliberations. As mentioned, observation *per se* was used as another data collection method at the Rome and Brussels meetings and this will continue to be used as the project progresses. These observations, among other things, aim at the extent to which participants are influencing or being influenced by the evolving outcomes of SATORI.

In addition, we will continue data collection through interviews. The interviews are semi structured and partners and participant/stakeholders are interviewed through face to face and telephone interviews. The emphasis is on stakeholder concerns and insights about the SATORI project and their knowledge of the project.

Lastly, questionnaires will be used to collect insights and perspectives from both the partners and stakeholders on how SATORI is progressing and highlight the strong and weak areas. These have already been used and we shall continue using them as part of the strategy. These will be used as part of the holistic evaluation of the SATORI and the results will be analysed together with the data collected from the other methods employed.

### 7.6.5 Data Analysis

Data analysis will be a mix of qualitative interpretive and quantitative analysis. Responses from open-ended prescriptive questions will be subjected to a thematic data analysis where words and phrases with similar meanings will be grouped together into themes and presented narratively in D12.4.

### 7.6.6 Confidentiality/ Data Protection

As part of the evaluation strategy steps to ensure that the respondents are not adversely affected by taking part in evaluation will be taken. This will include respondents' identities and respondents identifiable data being kept confidential unless express permission is given. In addition, only evaluators and the coordinator of the project if he so requires will have access to the full respondent details. Further, respondents will always be advised of how their data will be used which is mainly for purposes of ensuring mutual learning via feedback that is given.



6)

7) If Yes to (6), in what way have they been successful?

### 7.7 ANNEX G: QUESTIONNAIRE FOR SATORI PARTNERS

## **Evaluation Questionnaire - Project Partners**

### **June 2015**

1)	What is your role in the project?
2)	Are you part of a work package or a specific task?
	a. Work package
	b. Specific task
3)	If you are, which work package or what tasks are you involved with?
4)	Have you been involved in other EU projects before?
	a) Yes
	b) No
5)	If Yes to (4), which project(s) and was it a Mobilisation for Mutual Learning (MML) type of project?
Do s	you think your associated work package/tasks have been successful?
_	a) Yes
	b) No

SATORI
8) If No to (6), why do you think they have not been successful? Please give examples of the challenges you have encountered which had made it difficult for the work package/tasks to be a success.
9) Despite what your expressed feelings are in (8), what progress do you think your associated work package or tasks have made towards the overall desired outcomes of the SATORI project?
10) What do you think could be done to improve your associated work package or tasks in the future?

- 11) Have you yourself done or suggested something to solve the identified challenges?
  - a) Yes, Please elaborate in the box below



b) No, Flease elaborate in the box below
12) Has your role involved working with and/or engaging with stakeholders?
a) Yes
b) No
13) If Yes to (12), how many stakeholders have you worked and/or engaged with? (Please tick)  1 - 5 6-10 11-15 16-20 21+  14) On a scale of 1 to 5, 1 being the least degree of engagement and 5 being the highest degree of engagement, to what extent did you engage with the stakeholders?
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5  15) Please elaborate on your level of engagement identified in (14)?

16) If Yes to (12) why did you involve the stakeholders?



17) What was your expectation of the stakeholders?
18) Did the stakeholders meet your expectations?
a) Yes
b) No
19) Do you feel you learnt something from the stakeholders?
a) Yes
b) No
20) If Yes to (19), what did you learn?
21) Do you feel the stakeholders learnt something from you?
a) Yes
b) No
22) If Yes to (21), what do think they learnt?



23) With regards to the SATORI project as a whole, do you think the project is progressing as it should or are there areas that need to be improved?
a) It is progressing well
b) There are areas that need improving
24) If there are areas that need improving, can you identify these areas, indicating why they need to be improved?
25) Any additional comments?



### **Evaluation Questionnaire – SATORI Stakeholders**

### **June 2015**

1)	What is your expertise?			
2)	Which organisation are you representing?			
3)	In which country is your organisation based?			
4)	What is your role with regards to the SATORI project?			
5)	Are you happy with your role within the project?  a) Yes			
	b) No			
6)	If No to (5), please indicate why you are not happy with your role?			
7)	What role would you like to see stakeholders play in SATORI?			
8)	Why the outlined role in (7)?			

9) Have you been involved as a stakeholder in any other EU project(s)?



a) Yes

1 \	* T
h١	NIC
$\upsilon$	TAG

0) If Yes to (9), what was your role?	
1) How did you find yourself being involved in SATORI as a stakeholder?	
2) For how long have you been involved in the SATORI project?	
3) Do you know the aims of the SATORI project?	
a) Yes	
b) No	
4) If Yes to (13), what are the aims of the SATORI project?	

15) SATORI intends to develop a common European framework for ethical assessment, what is your understanding of ethical assessment?



16) Do <u>y</u>	you feel you have contributed to the project?
	a) Yes
	b) No
17) If Y	es to (16), what has been your contribution?
18) If N	o to (16), why not?
19) Wha	at form did your contribution take?
	a) Assigned role in a Work package
	b) Assigned specific task
	c) Workshop participant
	d) Advisory role
	e) Other
	a stakeholder, do you think you have learnt something as a result of your participation in the I project?
	a) Yes
	b) No



22) If Yes to	25), what do you think you have learnt?
23) If No to	25), why do you think you have not learnt anything?
24) Do you t	ink the main SATORI partners learnt something from your participation in the project?
a)	Yes
b)	No
	28), what do you think they learnt?
23) 11 103 10	20), what do you think they learnt:
26) If No to	(8), why do you think they have not learnt anything?



27) Assuming you have gained something from the SATORI project, how do you anticipate usi knowledge gained in future? Please describe.		
to what extent do you fee	eing least level of involvement and 5 being highest level of involvement, el you have been involved or engaged in the project?	
$\begin{array}{cc} \square & 1 \\ \square & 2 \end{array}$		
□ 3 □ 4		
□ 5		
29) Can you please elaborate	your choice in (32)?	
30) Do you think the SATOR	RI project is generally inclusive of stakeholders?	
b) No		
31) If No to (34), how might	the project improve its involvement of stakeholder participation?	

32) What is your evaluation of the SATORI project as a whole?

SATORI				
3) What suggestions do you have for improving the SATORI project in the future?				
34) Is there anything else that you would like to add as a conclusion to this questionnaire?				



### **8 REFERENCES**

- Appleton, S., Booth, D., 2005. Strong fences make good neighbours: survey and participatory appraisal methods in poverty evaluation and poverty reduction strategy monitoring, in: Holland, J., Campbell, J. (Eds.), Methods in Development Research: Combining Qualitative and Quantitative Approaches. ITDG Publications, London.
- Baker, J., 2000. Outline of Principles of Impact Evaluation (OECD Report).
- Bennett, J., 2003. Evaluation Methods in Research. Bloomsbury Publishing.
- Cooke-Davies, T., 2002. The "real" success factors on projects. Int. J. Proj. Manag. 20, 185–190.
- Developmental\_Evaluation\_Brennan.pdf, n.d.
- Fitzpatrick, J., Sanders, J.R., Worthen, B.R., 2010. Program Evaluation: Alternative Approaches and Practical Guidelines., 4th ed. Allyn and Bacon, San Francisco.
- Garbarino, S., Holland, J., University of Birmingham, Governance and Social Development Resource Centre, 2009. Quantitative and qualitative methods in impact evaluation and measuring results. GSDRC, [Birmingham?].
- Mittelstadt, B., Stahl, B.C., Wakunuma, K., 2014. SATORI Deliverable D12.1 Good Practice in Evaluation, Reflection and Civil Society Engagement, SATORI. De Montfort University, Leicester.
- OECD, 2001. Evaluation Feedback for Effective Learning and Accountability (No. 5), OECD Evaluation and Effectiveness Series. Organization for Economic Co-operation and Development.
- Patton, M.Q., 2002. Qualitative research and evaluation methods, 3rd ed. Thousand Oaks, CA.
- Preskill, H., Parkhurst, M., Splansky Juster, J., n.d. Guide to Evaluating Collective Impact [WWW Document]. www.fsg.org. URL http://www.fsg.org/Portals/0/Uploads/Documents/PDF/Guide\_to\_Evaluating\_Collective\_Impact\_01.pdf (accessed 3.23.15).
- Serafeimidis, V., Smithson, S., 1999. Rethinking the approaches to information systems investment evaluation. Logist. Inf. Manag. 12, 94–107. doi:10.1108/09576059910256303
- Song, X., Letch, N., Xu, L., Huang, K., 2012. The utilisation of IS evaluation a HIS case study, in: Information Technology in Medicine and Education (ITME), 2012 International Symposium on. IEEE, pp. 960–964.
- Stufflebeam, D.L., Shinkfield, A.J., 2007. Evaluation Theory, Models, and Applications. Jossey-Bass, San Francisco.