

SAFERA final report template for projects

Background information

Call name and year (choose):	2 = 2014: Innovating in safety and safe innovations
Date of reporting:	03/01/2017
Person reporting: (project coordinator)	Fabrizio Bracco Disfor, University of Genova, Italy
Project title:	"Promoting safety through resilient organization managers"
Project period (start-end):	01/01/2015 – 30/09/2016
Project website URL:	---
Project coordinator and country:	Disfor, University of Genova, Italy
Project partners and countries:	ICSI, France
SAFERA funding: Project funding organization/s (national) and funding amount/s:	INAIL EUR: 36.000 Percentage of total budget: 60% FonCSI EUR:76.000 Percentage of total budget: 48,7%
Other outside funding (outside SAFERA and project partners' own organizations):	GDF Suez, EDF EUR: 58.000 Percentage of total budget: 37%
Project total budget (all outside funding and own input together; i.e. final realized spending):	EUR: 216.000

Project progress and results

1. Summary of the project progress

<p>1.1a What was intended to be achieved during the project (list briefly with bullet points)? How well these milestones have been met? Were there any significant changes to the project work plan or objectives? Note if changes, why and did these have impact on the planned final objectives?</p>	
<ol style="list-style-type: none"> 1. Definition of project objectives and achievement indicators; e.g specify the Non-Technical Knowledge and Skills (NTKS) expected for resilient managers. 2. Key messages for training. A training specification for enhancing previously defined NTKS is established. 3. Implementation of the training tool kit. 4. Experience feedbacks and improvement of the training tool kit. 5. Development of trainers' tool kit. <p>We completely achieved points 1-3, point 4 was partly achieved (testing was made with Emergency Room department, Firemen Department, and with Electrical workers in Italy). Point 5 is only partly achieved. Industrial partners in France had reduced availability and this had an impact on the project, since we did not test the training models on Ultra-safe systems (e.g., nuclear power plants). In Italy, we tested the model on and electric distribution company, in order to have a different sample than emergency units.</p>	
<p>1.1b Did the project progress as planned and are the outcomes as expected, evaluate on 1-5 scale (1= poor– 5 = excellent)</p>	<p>1 = Poor 2 = Fair 3 = Good ← 4 = Very Good 5 = Excellent</p>
<p>1.2a How will the outcomes of the project be used? Who will benefit from the project outcomes?</p>	
<p>The outcomes are based on a training method centered on the theoretical model of resilience and the NTKS useful to implement it. Middle management of Ultra resilient systems (e.g. emergency units), HRO (e.g. production plants), Ultra safe systems (E.g, power plants) is the main target of this training model.</p> <ul style="list-style-type: none"> - Operational Objective # 1: should be resilient, being able to manage weak signals to increase safety and efficiency (myself) - Operational Objective # 2: should enable resilience in their teams (downwards) (team) - create and maintain conditions - promote non technical skills - promote motivation/commitment/attitude - stimulate the reporting culture - Operational Objective # 3: should promote and stimulate resilience of the organization (upwards) (organization) - stimulate a learning culture - negotiate, ask for resources and try to fulfill their team's needs - defend the condition to be resilient in your team - ask for a top management commitment in safety/resilience - translation of information in two ways (top-down and bottom-up) – privatization 	
<p>1.2b Were there changes in project partners or key personnel? How well did the project partners co-operate towards the project implementation? Could this partnership work successfully together in future projects as well? Will the co-operation of the partners continue after this project?</p>	
<p>No changes in partners or key personnel occurred during the project. ICSI and Disfor productively</p>	

cooperated in merging the respective theoretical approaches and setting the stage for a common model of NTKS for resilient managers. This partnership could continue in the future, since our approaches to safety are very well matching. At the moment, any further joint project between Disfor and ICSI has been developed, but we take this experience as a valuable link between the two research groups and we will seriously consider future cooperation.

What is the added value and impact of your project?

2.1 What were the practical outcomes of your project? Are the outcomes of the project ready for use, or do they still need further development?

2.1a Did the project result in a pre-product, commercial product, method/process, etc.? What was the concrete outcome of your project?

The concrete outcome of our project was a training toolkit to provide the managers with the capacity to foster resilience in their organizations. This toolkit may become the ground for training proposals to be offered to companies willing to increase their resilience.

Training Objectives are:

- 1: learn and understand the NTKS (i.e., Mindfulness, Sharing, Coping, Implementing, Anchoring) in order to develop them in the resilience process
- 2: learn and understand what are the conditions to enable NTKS, to enable attitudes, to be able to develop the process in his own team, to try to apply the process in his own team
- 3: learn and understand organizational condition for resilience, how to negotiate (compromise and also negotiate the autonomy), how to transfer information in two ways

2.1b Were standards (e.g. ISO, CEN) impacted by the project? If yes, specifically how and when? Or if not directly now, do you estimate that the results of your project could influence standardization later - how?

0 = no impact on standards; 1 = yes some impact, described below.

0 = no impact on standards

2.1c Number of patents obtained, applied for or being planned?

0 = no patents foreseen

1 = 1 patent being planned or applied

2 = more than 1 patent being planned or applied for

3 = patent/s obtained, provide name of the patent/s:

2.2 Project's impact for industrial safety in EU?

2.2a Describe briefly how the project outcomes can be applicable to other organizations/countries/ regions in EU, or to scientific disciplines or areas of industry.

We will publish scientific papers about the model presenting each specific NTKS and how to train it in managers. The scientific domain of the journal will be safety science, human factors, resilience engineering.

2.2b Did the project provide new information

1 = yes

<p>on the topic to the intended target group? What was the new information discovered?</p>	<p>What was the new information? The managers were trained about resilience and were provided a method to enhance safety in their organization</p>
<p>2.3 Has the project improved co-operation with actors in the industrial safety field (companies, researchers, decision makers, etc.)? Describe briefly how the project partners have networked with actors in the industrial safety field during the project – through what type of activities. Estimate if the project made it easier to contact actors and if there has been more contacts compared, if the project had not been implemented. Has the project brought about new opportunities to make contacts with actors in the industrial safety field?</p>	
<p>The project improved the cooperation with the Emergency Room Department of the major hospital in Genoa, the Fire Department of Genoa, the Deval spa company (power production and distribution). Disfor made cooperation agreements with each of them, thanks to the Saf€ra project, and Enel spa (the major energy production and distribution in Italy) was interested in the project and agreed on participating with Disfor to the 2016 Saf€ra call with a joint project (which has been recently approved and will receive the grant in 2017). The cooperation with these partners was based on focus groups with managers and workers, and participation to training sessions in order to test the training toolkit.</p>	
<p>2.2 What was the visibility of the project and its results?</p>	
<p>2.2a Briefly describe the project activities in different media, e.g. websites and social media (Twitter, LinkedIn, Facebook, YouTube, etc.), newsletters, magazines, conferences, fairs, tv/radio etc. What type of activities and how often in general? What activities you consider have been most effective for your project?</p>	
<p>The project has not been disseminated yet, since we have just finished the training evaluation. Disfor will publish an essay on INAIL safety notebooks in the first trimester of 2017.</p>	
<p>2.2b Scientific articles (based on the project work) published or being submitted or planned?</p>	<p>We are planning to write a scientific paper with the model of NTKS for resilience</p>

2. Do you and the project partners feel that the SAF€RA context provided added value (i.e. something additional to what would not have been available otherwise) to your project work and outcomes?

<p>1 = yes</p>	
<p>3.1b Describe briefly what was the added value of SAF€RA type collaboration. New partners, new types of activities and outcomes, wider impact of outcomes, etc.</p>	
<p>The Saf€ra collaboration gave us the opportunity to cooperate and exchange ideas about safety, helping us in developing a more comprehensive model that may be suitable for every kind of company (from ultra-resilient to ultra-safe). The project created a productive networking and enabled us to actively benefit from the cooperation with INAIL. Saf€ra conferences were opportunities to share knowledge and for networking. Collaboration between Disfor and ICSI was very productive; it was possible thanks to Saf€ra network which matched the two independent projects.</p>	

3. Any other comments to SAF€RA consortium and/or call organizers? Comments on the call process and the contractual process, or any other aspects of SAF€RA processes, etc.?



We appreciated the flexibility of procedures, the rapidity of those we asked for information and the availability of INAIL and FonCsi to adjust the project to the developing industrial situation.