



Fashion to Future

F2F

IDEAS GENERATION EVENTS

METHODOLOGICAL GUIDELINES

FINAL VERSION

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I R M
INTEGRATED RESOURCES MANAGEMENT



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Introduction

The current situation in the European fashion industry is characterised by an ongoing deterioration of competitiveness along with increasing extra-EU imports of finished and semi-finished products. All the actors within the fashion industry are suffering from the overall impact of liberalisation and price competition. This impact is being felt across several areas ranging from textiles to clothing, from machineries to design, from business to products. Furthermore, a certain degree of stagnation has been observed in the uptake of new technological initiatives that could foster the revitalisation of the textile, clothing and leather sectors. Drives towards cross-fertilisation with other industrial sectors appear to be a rarity.

Bringing added value to the fashion industry is viewed as the only way to retain a significant part of production, while also new strategies are needed for developing or maintaining competitiveness. The fashion industry players, therefore, need instruments, methodologies, resources and trained facilitators to develop innovative and high-value added products, processes and management ideas. Stimulating creative and cross-technological collaboration is needed not only within the fashion industry itself, but – crucially - also with other industrial sectors.

With the above observations in mind, the Fashion to Future (F2F) Coordinated Action, is aimed at improving industrial competitiveness, sustainable growth and social development, in particular by demonstrating new ways of bringing innovation into the fashion sector. Another important goal is the promotion of transnational cooperation and networking among SMEs, both within the EU and with Europe's neighbours. To assist in achieving these aims, many of the new acceding countries, Eastern Europe and the Euro-Mediterranean area are all represented in the F2F Consortium.

Funded in part by the European Commission under the Sixth Framework Programme, F2F considers that one of the opportunities for the fashion sector to (re)gain competitiveness is to take advantage from an active participation in the RTD and innovation instruments offered by the Seventh Framework Programme (FP7). The FP7 instruments are designed specifically to pursue excellence through research, innovation, technology transfer and active collaboration both within the EU Member States and with Third Countries.

With 38 partners in 19 countries, F2F finds itself with a strong basis to disseminate its activities and research results to a widest spectrum of SMEs, while at the same time reaching its objective to improve cooperation among research centres, innovation providers and entrepreneurs, thus making the whole innovation process smoother.

A key target of the F2F Coordinated Action concerns the promotion of awareness among SMEs on the research funding opportunities offered by FP7, which will run until 2013. Well over 60 **Ideas Generation Events** are scheduled to take place in each of the partner countries during the period from December 2006 until March 2008. The present guidelines provide detailed information on the scope, design and expected outcome of these events, which together constitute the **F2F Future Project Forum**. Indeed, the purpose of the Ideas Generation Events is to come up with a critical mass of new project ideas. The most 'promising' of these ideas in terms of boosting creativity, innovation and technology transfer within the fashion industry will be analysed and further developed in the **F2F Project Outline Laboratory**, thus preparing in good timing SMEs groupings to tap the research funding opportunities offered by FP7.

The present guidelines were published following a training workshop organized in Malta by IRMCo as task leaders for the Ideas Generation Events. We hope these guidelines will facilitate the employment of a common approach across these events which have been scheduled all over Europe and beyond.

Josianne Vella, IRMCo, November 2006

Importance of Innovation to the Fashion Industry

The fashion supply chain (including textile/clothing, footwear, apparel, leather goods, accessories, etc.) has been suffering from fierce competition posed by extra-EU countries and from global market changes. The industry is facing huge shifts in its markets as well as substantial changes in its business structure. This increased rhythm has weighed down the industry and a considerable number of companies, especially SMEs are finding it difficult to raise their performance to the level required. Clearly, Fashion companies need to find alternative ways of improving their efficiency and effectiveness and find new ideas to compete. The only feasible way forward is to innovate!

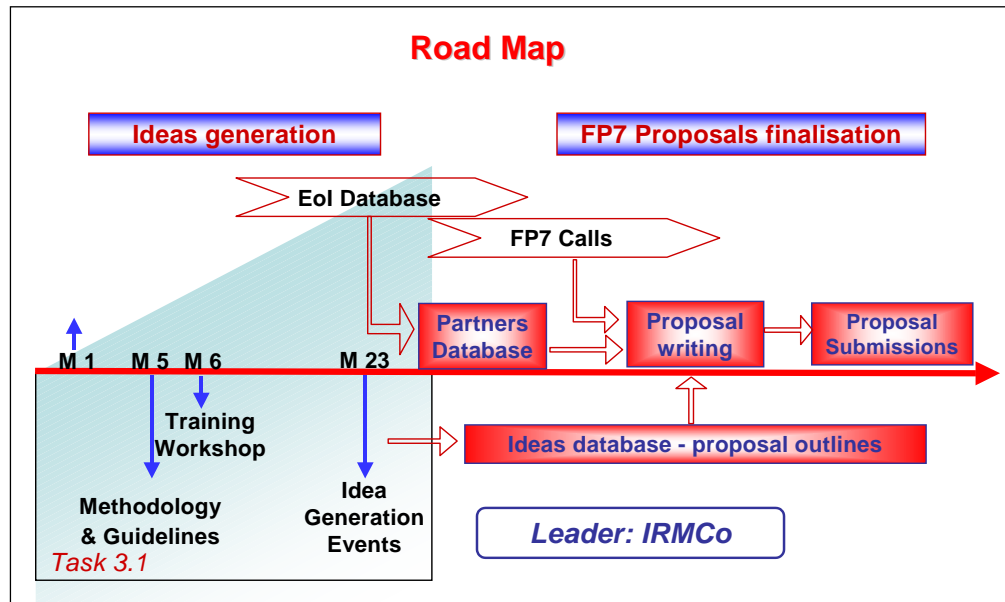
The engine that induces innovation is creativity. Creativity has become a required skill for modern day managers, especially in businesses that are being threatened by global market changes. The generation of new ideas and their implementation has become a vital activity on the agenda of ambitious and successful business organizations. So far, Fashion companies have tried to keep abreast with the current market developments by improving their performance using traditional managerial techniques. However, this market is developing at an ever faster pace and traditional practices and methods are no longer adequate to produce the results that are required. The industry needs a paradigm shift in its thinking on how to remain competitive. It needs to go out of the box and look at new and innovative ways of transforming itself.

Objectives of Ideas Generation Events

Within the overall aim of stimulating competitiveness in the fashion industry, F2F is keen to coach companies to better approach, cooperate and participate in future European research and innovation initiatives. Indeed, one of the main problems identified as an impeding factor in the success of the European Fashion Industry is the lack of new technological initiatives taken up by SMEs in the sector. There is an urgent need for new ideas and for a fashion R&D project lab.

The F2F Future Project Forum has been designed with the purpose of collecting a critical mass of novel ideas which will be analysed and developed further in the F2F Project Outline Laboratory, leading eventually to the submission of project proposals in the Seventh Framework Programme.

The Ideas Generation Events therefore represent the first step in the Roadmap shown below.



With more than 60 such events scheduled to take place across Europe, the present guidelines are intended to streamline the organization of these Ideas Generation Events so that a common Forum emerges among all the F2F Project Partners.

Key aspects to be adopted at each of the Ideas Generation Events are outlined in the present guidelines with respect to:

- **a common methodology** to stimulate ideas creation;
- **a common strategy** to actively involve SMEs and other potential partners; and
- **a common approach** to report on the outcome of the events.

Apart from the main task of creating a pool of ideas towards the eventual submission of project proposals, the Ideas Generation Events also aim to address the following aspects linked to the concept of innovation:

- to promote the concept of creative problem solving, discovery, product development and process improvement,
- to highlight the advantages of group diversity and interaction, and to optimise group dynamics,
- to establish a strategy for working in creativity and innovation,
- to present a number of creative thinking techniques used for problem solving,
- to encourage interdisciplinary sharing of ideas between the SMEs and experts from other fields of study.

In doing so, the F2F Project Forum will achieve its objectives with regard to the longer-term F2F Project Outline Laboratory, including:

- to create new contacts and facilitate networking as required to build research partnerships for project proposal submissions in FP7,
- to enable SMEs and fashion industry organizations to find the right partner for specific thematic areas of interest and/or technology applications.

Basic Principles of Creative Thinking

What is creativity?

Creativity is a complex field of study. There are numerous definitions in use for this concept, however, in a most generic way it could be defined as ***the ability to generate new ideas***. Creativity can be used to improve products, processes and services but it can also be used to create them. This translation of new ideas into new products, services or processes can be defined as innovation.

Creativity and innovation are often used interchangeably, yet there are some basic differences between the two concepts. Creativity is commonly seen as the initial step towards innovation. Creativity appears the input and innovation, the implementation of the idea, is seen as the output.

However, a study by the EU CREATE Project consortium suggests that this model of the relationship between creativity and innovation is not suitable for organizations stating:

'We could say that creativity is not the source of innovative processes, it is not a sort of input for innovation; but it is the milieu, the environment where innovative processes are most likely to take place. Creativity is the context where innovation might develop.'

Creative thinking, on the other hand is ***the process used to come up with these new ideas***. Although creativity can occur spontaneously, creative thinking can be greatly accelerated by sustaining a creative environment and by using specially developed creative thinking techniques. Given a non conducive environment, creativity can be blocked for several reasons, resulting in apathy, lack of motivation and boredom. These creativity barriers can be overcome. Providing an open and welcoming working environment where there is mutual respect and new ideas are appreciated is of utmost importance in building the creative milieu where innovation can flourish. Furthermore, using special creative thinking techniques, ideas are developed much more rapidly, which is obviously an advantage in such a competitive environment as is present in the fashion industry today.

Creativity Barriers

Competition in the present environment can hamper creative output. A cut throat business environment creates a stressful work force that is more concerned with deadlines and job advancement rather than job stability and job satisfaction. Also, employees tend to be more creative within a structure that is less hierarchical and more democratic and free flowing. The organisational climate plays an important role in producing or blocking ideas.

On the other hand most of the obstacles can be found within each one of us, but the most common barrier that hinders creativity is our belief that we are not creative.

The following are some of the factors that limit creative behaviour:
(source: <http://members.optusnet.com.au/~charles57/creative/>)

- **Stress.** Stress is not only a distraction which drains energy which could otherwise be used creatively, it is bad for one's health.
- **Routines.** Routines or set ways of performing tasks have their uses, but allowing them to become too entrenched in one's life causes one to limit the range of responses available and can lead to the development of the anathema of creativity, the "bureaucratic mind".
- **Beliefs.** Having a strong belief in something not only limits our response options, but causes us to limit the way in which we perceive and process information from the outside world. We may "filter out" information which contradicts our belief, and end up in our own "reality tunnel", in which we remain blissfully unaware of much that occurs in front of our very eyes.
- **Ego.** Having a strong ego identity with a particular belief exacerbates this situation and can lead to us aggressively defending it, to the detriment of ourselves, our creativity, and society. This is not to imply that one must have no beliefs, merely that one needs to be very aware of one's beliefs and consequent limitations.
- **Fear.** Fear of self expression and of the judgment of others can severely limit one's creativity.
- **Self criticism.** Negative thinking and self criticism are also limiting factors of an individual's creativity.

Numerous techniques and procedures are continuously being developed by creative thinking specialists to overcome these creativity barriers. Some of these can be found more explicitly in the present guidelines. Refer also to the section 'Recommendations on guiding Creating Thinking' on how to use these techniques to stimulate ideas and generate a creative environment in the context of the F2F Ideas Generation Events.

Creative process

In its most basic form, creative thought can be divided into two phases: divergent thinking and convergent thinking.

- *Divergent thinking*: the intellectual ability to think of many original, diverse, and elaborate ideas.
- *Convergent thinking*: the intellectual ability to logically evaluate, criticize and choose the best idea from a selection of ideas.

Both abilities are required for creative output. Divergent thinking is essential to the novelty of creative products whereas convergent thinking is fundamental to the appropriateness.

Creative thinking techniques usually address specific aspects of creative thinking. Robert W Olsen, in his book *The Art of Creative Thinking*, devised a simple structured process for creative thinking using the acronym DO IT. DO IT bundles creative techniques together, and introduces formal methods of problem definition and evaluation. Using DO IT ensures that the essential groundwork is carried out and helps you to get the most out of creativity tools.

DO IT is an acronym that stands for:

- D** - Define problem
- O** - Open mind and apply creative techniques
- I** - Identify best solution
- T** - Transform

Problem Definition: This step concentrates on analysing the problem to ensure that the correct question is being asked.

Open Mind: Once the problem is defined, the phase for generating possible solutions starts. At this stage of DO IT the ideas generated are not evaluated. Instead, it is important to try to generate as many different ideas as possible. Even bad ideas may be the seeds of good ones. Here you apply creativity techniques to generate as many answers as possible to the question you are asking.

Identify the best solution: At this stage the ideas generated are evaluated and the best solution selected. It may be that the best idea is obvious. Alternatively, it may be worth examining and developing a number of ideas in detail before you select one.

Transform: Having identified the problem and created a solution to it, the final stage is to implement this solution. Without implementation, creativity is sterile.

Criteria used for the selection of Creative Thinking Techniques

As already mentioned various thinking techniques have been developed to enhance and encourage creativity. Some are simple and straightforward and some not so. In order to achieve a common understanding across the F2F Consortium, which brings together partner organizations from many different countries, and also a variety of interests, the methodology used needs to be simple and straightforward. Since these events are organised with the aim of involving participants from small and medium sized businesses, one should also consider that the time duration for such an exercise needs to be strictly limited. Furthermore, these events are intended to involve experts from various fields of study, not in the least to bring about a cross-fertilisation of ideas across sectors and fields of expertise. In such heterogeneous groups, it must be expected that the participants will have different educational backgrounds and knowledge.

With these considerations in mind, a number of creative thinking tools and techniques developed by various well-known experts on creativity, were evaluated and reviewed using the following criteria:

- Easy to apply

- Generate ideas not solve specific problems
- Applicable to various scenarios
- The time required to train at least one representative of each of partners in the F2F consortium should not exceed one day

Those techniques and tools that appeared simple and effective were selected and integrated into a combined methodology that will be adopted by each of the F2F partners to carry out the events in their respective country.

The table below lists the techniques which have been selected and incorporated into 3 distinct phases of the Ideas Generation Methodology:

PHASE 1	PHASE 2	PHASE 3
Brainstorming Checklists Search & Reapply Role Play	Six Thinking Hats (variant)	Logical framework (limited part only)

Creative Thinking Techniques used in Ideas Generation Events

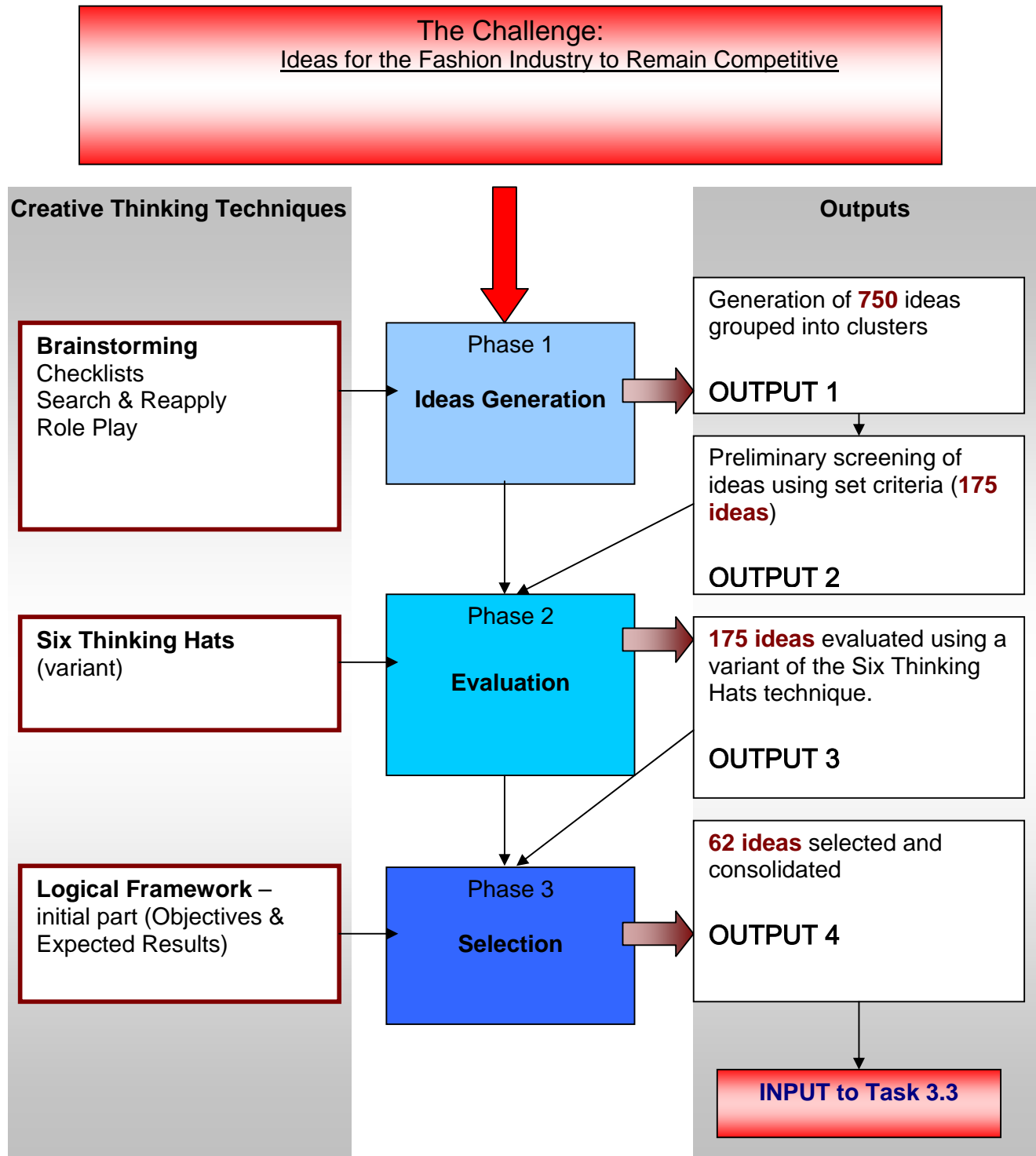
Methodology adopted in F2F

○ **Step-by-Step Approach to Generate FP7 Proposal Ideas**

As highlighted earlier, most creative thinking processes consist of two main phases: the divergent one and the convergent one. Similarly Phase 1 of the approach developed in F2F, aims at producing as many ideas and solutions as possible without any restrictions, while Phase 2 aims at evaluating those that have most potential.

The Ideas Generation Events have been designed to include these two phases. However, given the longer-term objective, i.e. of providing ideas to the F2F Project Outline Laboratory, an additional, follow-up phase has been added.

Phase 3 enables to screen the ideas against the Recommendations of the EU Technology Platforms and the topics addressed in FP7 Calls for Proposals. The ideas which are deemed to match closely with the RTD priorities, are then consolidated according to a format that makes it easier to eventually develop the proposal idea into an FP7 Project Proposal.



Schematic Presentation of Step by Step Approach adopted in F2F

Phase 1: Ideas Generation

This phase is devised to encourage the participants to leave their mind free to explore new ways, to invent new associations and to abandon old mental patterns without using any judgement or criticism. Various creative thinking techniques may be incorporated within this phase. However, the basic tool used in this phase will be **Brainstorming**. Additional techniques may be used, at the discretion of the Event Facilitator, within the brainstorming phase to enrich and encourage ideas generation. The basic rules of brainstorming and the use of additional techniques are outlined further in the section 'Recommendations on Guiding Creative Thinking'.

It is important to start this phase with a brief introduction that explains the overall approach being used, emphasizes the importance of suspended judgement and identifies the purpose of the exercise.

Participants will be invited to come up with ideas on the theme “**How do we remain competitive?**” which is particularly crucial in the Fashion sector. This could be demonstrated by making reference e.g. to the high percentage of companies that closed down in a relatively short period of time, as has been shown through the statistics gathered during the Bentex and ITE projects.

In the first part of Phase 1, participants will be invited to provide ideas in relation to one or more of the following clusters:

- New Product Development
- New Management Strategies
- New Markets
- New Technologies
- New Production Processes
- Environmentally friendly technologies or processes

These clusters reflect the EU Technology Platforms recommendations and demonstrate the wide-ranging possibilities to achieve 'innovation', whilst avoiding the need to elaborate on the complex concept of 'innovation'.

All ideas generated during the brainstorming session will be recorded in the respective template referred to as - **OUTPUT 1 - Reporting Template**. It is anticipated that during this phase, some 10 to 15 ideas should prove an achievable target in the allocated time span (up to 1 hour maximum).

Phase 1 ends with a preliminary screening that identifies which of the ideas generated are most likely to provide a sound basis for potential RTD project proposals. The criteria to be used for this preliminary screening are the following:

- a) Is the idea highly innovative?
- b) Does the idea reinforce competitiveness?
- c) Does the idea have a European wide application?
- d) Does the idea involve multidisciplinary cooperation?

It can be noted that these same criteria form part of the criteria used by the evaluators of RTD project proposals. The scores given during the preliminary screening are documented using the **OUTPUT 2 – Reporting Template**.

Phase 2: Evaluation

During this second phase, the group will be invited to examine in more detail those ideas which passed the preliminary screening in Phase 1. Its purpose is to collect a variety of insights into the idea, by having the idea examined from different viewpoints.

This phase will be addressed using a variant of the Six Thinking Hats technique. This tool was created by Edward de Bono in his book 'Six Thinking Hats' and is a proven technique that encourages co-operation, exploration and innovation.

One of the main advantages of this technique is that it encourages a way of problem solving by using the different approaches and viewpoints involved. It is used to look at decisions from a number of important perspectives (i.e. optimistic, pessimistic, analytical, creative, emotive, logical), symbolically represented by different coloured hats. This technique allows for the contribution of different perspectives and a complete and impartial analysis, whilst creating a better group environment.

The approach used in F2F does not attempt to replicate the full width and breadth of the original Six Thinking Hats as developed by Edward De Bono. As a starting point, it should be noted that the main purpose here is to collect and document the point of view of persons with a different 'background'. This explains why each of the Six Thinking Hats has been linked to the 'Group Set-up'.

To facilitate the discussions during this phase, we have furthermore linked each of the 'hats' to a well-defined set of questions, reflecting the perspectives incorporated by this technique. Thus questions associated with the 'Black Hat' are concerned with finding out 'what's wrong with the idea', whilst 'the 'positive aspects of the idea' are brought out using the 'Yellow Hat'. Each group member will be given a list of questions, depending on the assigned 'Hat'. He/she is now invited to use these questions to guide a discussion by the group under the 'Hat' he or she has been assigned.

The application of the Six Thinking Hats can lead to changes of the original idea. Consequently, for each idea that is discussed, a more precise title of the idea may emerge. Once agreed upon, the titles are filled in the template referred to as **OUTPUT 3 - Reporting Template**, together with a brief record of the viewpoints and insights that developed during this Phase. This Reporting Template should provide sufficient information as will be required for the additional screening process and consolidation of the most 'promising' ideas during Phase 3.

Phase 3: Selection

This phase is concerned with a final selection/elimination process as a follow-up to the Ideas Generation Events. In principle, the Event Facilitator will have the ultimate responsibility to decide which proposals are most promising to be further considered by the F2F Project Outline Laboratory. This decision should take into consideration the comments generated during Phase 2 as well as the facilitator's knowledge of the FP7 Call Priorities and of the Recommendations of the EU Technology Platforms (see Appendix). In the context of the Ideas Generation Events, where no a priori boundaries or limits whatsoever should be allowed, these criteria need not be explained to the participants!

Following this additional screening procedure, the Event Facilitator will record the selected ideas in the appropriate template referred to as **OUTPUT 4 – Reporting Template**. This template uses a limited part of the Logical Framework, namely, the Objectives and the Expected Results associated with the idea(s) that have been selected. The Logical Framework is at the basis of the Proposal Template provided by the European Commission and therefore, in principle, the Logical Framework could be employed to develop the entire proposal for any of the ideas that have been retained in Phase 3.

o Recommendations on guiding Creative Thinking

Recommendations for Phase 1 - Ideas Generation

Brainstorming

Brainstorming was first used by Alex Osborn, an advertising executive, who realised that the creation of new ideas was inhibited during formal business meetings. He designed some basic rules to help stimulate ideas and give people freedom to express and reveal new ideas. He defined brainstorming as "a conference technique by which a group attempts to find a solution for a specific problem by amassing all the ideas spontaneously by its members". The four basic rules suggested by Osborn are the following:

- No criticism of ideas
- Go for large quantities of ideas
- Build on each others ideas
- Encourage wild and exaggerated ideas

Brainstorming is now a proven process which has been successfully used for many years in the generation of new ideas. This technique guides a group in an interactive exchange of ideas, suspending judgement and creating an optimal state of mind for generating new ideas. It maximizes the ability to generate a maximum number of ideas in a short time span. This technique is particularly effective when participants feel "free" to offer their ideas without fear of criticism.

Brainstorming is used only for the **generation** of new ideas. It is not a method designed to be used for analysis or for decision making, but helps to generate new ideas which could lead to a solution for the challenge posed in F2F.

Procedure for Brainstorming Session

- Define the challenge to be brainstormed: ***Ideas for the Fashion Industry to Remain Competitive***. Make sure that every member has understood the scope of the session. Generating ideas is the objective of the session. The facilitator has to write down the objective on the flipchart/board/projector.
- Highlight the importance of the rules of the session and let every participant know them. Let them know that strange and exaggerated ideas are welcome and that criticism is not allowed. The brainstorming rules are:
 - 1) No criticism of ideas. Refrain from all kind of judgement
 - 2) Quantity is better than quality at this stage
 - 3) Build on the ideas developed by others
 - 4) Encourage wild and exaggerated ideas. No idea is wrong.
 - 5) Every person and every idea has equal worth.
- State the time limit.
- Invite participants to provide ideas in relation to one or more of the following clusters:
 - New Product Development
 - New Management Strategies
 - New Markets
 - New Technologies
 - New Production Processes
 - Environmentally friendly technologies or processes

- Members take turns calling out ideas. Tell people to write their ideas down on their own pads of paper if they think they will forget before they get a chance to shout it out. Remind people to use other people's ideas as a springboard for their own. Get them to read the current ideas and expand on them. They should shout out all of their ideas, not only the interesting ones. Encourage and reward all suggestions, radical or not.
- If the ideas start drying up use the other techniques listed below to keep the ideas flowing. You can also move back to the ideas already listed, pick an interesting one and put that to the group to expand on it. Otherwise call out a short coffee break. Breaks could be creative as well.
- Record each idea exactly as presented on a flipchart/board, visible to all group members. The ideas should be recorded under the heading of the cluster that it most closely represents.



- Develop an enthusiastic creative environment
- Encourage active participation of all group members
- Suspend all judgement and refrain from criticism
- Don't allow any discussion on the ideas given during this phase
- Stimulate thinking by integrating other creative techniques as suggested hereunder

Integrating other creative thinking techniques to stimulate ideas

Checklists

Checklists are a useful tool to encourage idea generation. There are different types of checklists, but Alex Osborn's checklist is the most common one. It is originally a series of about seventy questions designed to stimulate new ideas. Hereunder you can find some of the most important ones:

- Adapt?
- Modify?
- Substitute?
- Magnify/Maximise?
- Minimise/Eliminate?
- Rearrange?
- Reversal?
- Combine?

Michael Michalko, in his book 'Thinkertoys' describes the rearrangement of the above questions, (by Bob Eberle), into the mnemonic SCAMPER (Substitute, Combine Adapt, Modify, Put to other uses, Eliminate, Reverse). The SCAMPER technique assists in thinking of changes you can make to an existing product to create a new one. By answering a set of directed questions you are encouraged to think about the problem in ways that can lead you to come up with new ideas.

- S - **Substitute** - components, materials, people
- C - **Combine** - mix, combine with other assemblies or services, integrate
- A - **Adapt** - alter, change function, use part of another element
- M - **Modify** - increase or reduce in scale, change shape, modify
- P - **Put** to another use
- E - **Eliminate** - remove elements, simplify, reduce to core functionality
- R - **Reverse** - turn inside out or upside down.

Finally, the simplest set of questions comes from the following six basic questions known as the **Five Ws and H**:

- **Why** is it necessary?
- **Where** should it be done?
- **When** should it be done?
- **Who** should do it?
- **What** should be done?
- **How** should it be done?

Search and Reapply

SEARCH and REAPPLY is a technique which involves looking at other areas of expertise to find a possible solution for your problem. Look around you in similar areas and see how other people have succeeded in solving their challenges and then reapply the principle used for your own solution. Search and reapply the best ideas from anywhere. Questions you might ask when using this technique include:

- Which other area of expertise has gone through a similar situation?
- Is there anyone in this group who has had experience in similar situations?
- Who can be of help in finding a solution?
- What are other companies doing, locally and internationally?
- What other industries are facing or faced the same situation and what did they do about it?

Asking these questions can often help you come across best practices and tried and tested solutions which you can adapt for your specific situation.

Role Play

Looking at the situation from someone else's point of view encourages you to change your way of thinking. You can get the members of the group to role play a different person and see how they would approach the problem. An educator can look at the problem from a manager's point of view, a company director can role play a customer etc. Different people use different bits of information and knowledge to approach the same problem and it is extremely helpful to view a task from different angles.

When the members have been assigned their new personalities, ask them to look at the problem through their new viewpoint.

- *How would they think?*
- *What objects and items would they be using?*
- *Where would they be doing it?*
- *How would they see the problem?*
- *What action would they take?*
- *How would they explain the problem?*
- *How would they solve the problem?*

These are some creative techniques that can be used to help boost the brainstorming session used in Phase 1. The facilitator is free to decide whether to use these techniques or else to follow the traditional brainstorming procedure. However, if the session does not flow naturally, and people start feeling uncomfortable, these tools can provide an infinite number of prompts and stimuli that can help re-establish a productive creative environment.

Procedure for Preliminary Screening

At the end of the Brainstorming session, the group is invited to screen the ideas which have been generated against the following criteria:

- a) Is the idea highly innovative?
- b) Does the idea reinforce competitiveness?
- c) Does the idea have a European wide application?
- d) Does the idea involve multidisciplinary cooperation?

The purpose of the preliminary screening is to identify which of the ideas generated are most likely to provide a sound basis for potential RTD project proposals.

As shown in the example below, all ideas are screened using a LOW-MEDIUM-HIGH Scale. In principle, only ideas which score **HIGH on each of the above criteria** will be considered further during Phase 2. Consequently, it is anticipated that during this preliminary screening only one out of four/five of the original set of ideas will be retained. (Refer to **OUTPUT 2 - Reporting Template**).

	Is the idea highly innovative	Does the idea reinforce competitiveness	Does the idea have a European wide application	Does the idea involve multidisciplinary cooperation
Idea 1	M	H	L	L
Idea 2	H	H	H	H
Idea 3	H	L	M	H

Recording the scores L(ow) – M(edium) – H(igh) for each criteria

- It is recommended that the Event Facilitator explains – or rather illustrates – these criteria by highlighting those ideas which clearly fail to satisfy one or more of the criteria. As an example, he/she may draw attention to an idea that is region-specific (as opposed to having a European wide application).
- Invite the group to mark each idea with a score of H(High), M(Medium) or L(Low) for each of the four criteria. In principle only ideas which score High on all four criteria will be evaluated and expanded upon further in Phase 2.
- Keep a record of all ideas and their scores.



TIPS

- Screen each idea on its **potential** to satisfy the EU-RTD criteria

Recommendations for Phase 2 - Evaluation

Six Thinking Hats (variant)

This phase is performed using an adaptation of the Six Thinking Hats Technique, which was originally created by Edward De Bono in his book "Six Thinking Hats". The technique is used to look at decisions from a number of important perspectives. This forces one to move outside his/her habitual thinking style, and helps to get a more rounded view of a situation.

The Six Hats represent six modes of thinking and are directions to think rather than labels for thinking. That is, the hats are used proactively rather than reactively. The key theoretical reasons to use the Six Thinking Hats are to:

- encourage Parallel Thinking
- encourage full-spectrum thinking
- separate ego from performance

The technique promotes fuller input from more people and everyone is able to contribute to the exploration without denting egos as they are just using the hat which they have been assigned. People can contribute under any hat even though they initially support the opposite view.

Each 'Thinking Hat' is a different style of thinking as explained below:

White Hat: The White Hat focuses on the data available. Look at the information you have, and see what you can learn from it. Look for gaps in your knowledge, and either try to fill them or take account of them. This is where you analyze past trends, and try to extrapolate from historical and technical data.

Red Hat: 'Wearing' the Red Hat, you look at problems using intuition, feelings, and emotion. Also try to think how other people will react emotionally. Try to understand the responses of people who do not fully know your reasoning. The Red Hat allows the thinker to put forward an intuition without any need to justify it.

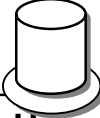
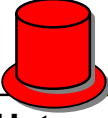




Black Hat: Using Black Hat thinking, you look at all the bad points of the idea. This is the hat of judgement and caution. You look at the idea cautiously and defensively and try to see why it might not work. This is a most important hat because it highlights the weak points in a plan. It allows you to eliminate them, alter them, or prepare contingency plans to counter them. Black Hat thinking helps to make your plans 'tougher' and more resilient. It can also help you to spot fatal flaws and risks before you embark on a course of action.

Yellow Hat: The Yellow Hat helps you to think positively. It is the optimistic viewpoint that helps you to see all the benefits of the decision and the value in it. Yellow Hat thinking helps you to keep going when everything looks gloomy and difficult.

Green Hat: The Green Hat stands for creativity, alternatives and proposals. This is where you can develop creative solutions to a problem. It is a freewheeling way of thinking, in which there is little criticism of ideas.

Blue Hat: This is the overview or process control hat. It does not look at the subject itself but at the 'thinking' of it. When the group is in difficulty because ideas are running dry, the session may be directed into Green Hat thinking. When contingency plans are needed, they will ask for Black Hat thinking, etc. This hat is worn by the Event facilitator.

The variant used in F2F links the six hats/viewpoints to the desired 'Group Set-up' as shown in the diagram below. This guarantees a truly heterogeneous group set-up with experts from various fields of study who will be able to give their input.

 White Hat	 Red Hat	 Black Hat	 Yellow Hat	 Green Hat	 Blue Hat
<i>All the analytical data</i>	<i>Emotions</i>	<i>What's wrong with it?</i>	<i>Positive aspects</i>	<i>New further ideas</i>	<i>Final Overview</i>
Research organisations Technical experts Scientific experts Financial advisors Legal advisors Suppliers	Customers	<u>Employees such as:</u> Production managers Administrators Technical engineers Sales representatives Auditors	SME owners Managing Directors Educators	Marketing consultants Designers Creative thinkers/artists Business consultants Children	Event Facilitator Assistant People with experience in EU RTD projects IRCs People in R&D & RTDI

Link between the 6 Thinking Hats and desired Group Set-up

To facilitate the discussions, a set of questions have been formulated under each Hat/Viewpoint as shown in the diagram below. The questions are intended to guide the discussions according to the 6 given 'mindsets', they are not intended to limit the opinion expressed by the group. Each of the participants should be allowed to express e.g. his/her reservations about the idea (Black Hat) as well as contribute with 'new further ideas' when the Green Hat point of view is being discussed.

Analytical data	Emotions	What's wrong with it?
<p>What data is linked to this idea?</p> <p>What technical data do we have?</p> <p>What technical data do we need?</p> <p>What has been done in the past?</p> <p>What research can be carried out?</p> <p>What are our available resources?</p> <p>What technology is available?</p> <p>What is the budget required?</p> <p>What are the patents and copyright regulations?</p>	<p>Do I like this idea? Does it inspire?</p> <p>What guarantee of success are we given?</p> <p>Will the product be easily available?</p> <p>Will it attract the attention of endusers/consumers?</p> <p>Will the product/service actually improve?</p> <p>Will it cause delays in the deliveries?</p> <p>How much are we willing to pay?</p>	<p>Will the idea work? No, because ...</p> <p>Will it increase the costs?</p> <p>Is the technology required available?</p> <p>How time consuming is it?</p> <p>Do employees need new skills?</p> <p>Will the employees accept training?</p> <p>Why are other competitors doing something different?</p> <p>Do we have to purchase new equipment?</p> <p>Do we need less/more employees?</p> <p>Will customers accept the new product/service?</p> <p>Do we have the required budget?</p>
Positive aspects	New further ideas	Final Overview
<p>Will the idea work? Yes, because ...</p> <p>Could it reduce our costs?</p> <p>Could we reach new markets?</p> <p>Would we have better or new products?</p> <p>Will it make us more efficient?</p> <p>Will it make us more competitive?</p> <p>Will it improve our company image?</p> <p>Will this make life easier for employees?</p> <p>Will it create more customer satisfaction?</p>	<p>How can we make the idea work?</p> <p>How can we improve the design?</p> <p>How can we improve or combine available technology?</p> <p>How can we make it more reliable?</p> <p>How can we make it cost effective?</p> <p>How can we market it?</p> <p>How can we make it easier to adopt?</p> <p>What would be the best structure for implementation?</p> <p>Could this innovation be used for something else?</p>	<p>Is the idea focused & well-formulated?</p> <p>Does this idea target FP7 call priorities?</p> <p>Does it follow EU Technology Platforms recommendations?</p> <p><i>(These questions are to be used by the Event Facilitator during the Selection process of Phase 3)</i></p>

Questions linked to each of the 6 Thinking Hats

Procedure for the Six Thinking Hats (variant)

- As Event Facilitator assign a 'Hat' to each of the participants according to their respective background (see diagram linking the 6 Thinking Hats Technique to the desired Group Set-up).
- Distribute the questions among the group according to their respective Hat (see also diagram linking a set of questions to each Hat). So, for example, a marketing consultant gets the Green Hat Sticker plus the Green Hat Questions, whilst an SME owner is given the Yellow Hat Sticker and the Yellow Hat Questions.
- The Event Facilitator will explain that he/she is wearing the Blue Hat, and that he/she will direct the discussion into the different 'Hats' as required. He/she gives a short presentation explaining the different viewpoints of the 6 Thinking Hats.
- State the time limit and inform the group members of the ideas to be evaluated, i.e. the ideas which were retained at the end of Phase 1.
- Write the title of the first idea on the flipchart/board, where it can be seen by everyone.
- Start the session. Initially, the Facilitator leads the session by going through the different thinking hats in sequence. As the session develops, he/she may direct the discussion into other thinking hats or go back as required.
 - Indicate which HAT (viewpoint) is going to be tackled by placing an A4 size Hat in a prominent place so that it can be seen by all the participants. This will remind everyone from which viewpoint (HAT) the idea is being discussed.
 - Ask those group members with the corresponding Hat Sticker and Hat Questions to open the discussion. These participants read out the questions they have been handed and the (entire!) group is invited to help in answering these questions.
 - Everybody has to think in the same mindset at the same time.
 - The assistant records all the comments given during the session under its corresponding Hat colour in the appropriate Reporting Template.
- Once all the ideas have been evaluated using this technique, the Facilitator invites the group to review the titles given for each idea. Options are discussed and the best title chosen.



TIPS

- During the evaluation phase do not criticise the person that is making the comment but the comment itself.
- The hats must never be used to categorize individuals.
- Encourage input from all participants.
- Make sure to display the corresponding A4 size Hat every time the discussion is moved into a different Hat. This keeps the group focused on the mindset to be used at that particular time.
- Make sure all comments are recorded.

o Recommendations on Group Set-up

The members participating in these **Ideas Generation Events** should be small groups of 8 to 10 people. They should include a limited and motivated number of SME/SMEs representatives as well as experts coming from different fields who are able to stimulate cross-fertilisation within this heterogeneous group. The presence of a type of consumer as well as employees of the SMEs targeted, would definitely be a valuable asset to the group.

It is important that invitations to participate in the Ideas Generation Events are sent to as many potentially interested parties as possible. This will ensure the formation of a truly heterogeneous group, which in turn allows for a flowing and creative discussion.

At least 2 representatives from each F2F partner conducting these Ideas Generation Events are to be present. One representative will be leading the creative team. The **Event Facilitator** will be in charge of the process control of the event. His/her responsibilities include defining the objectives, stimulating the discussion, and directing the activity into the appropriate stages within the foreseen duration of the event.

Role of the Event Facilitator

- o Be responsible for the overall co-ordination of the event
- o Have a good understanding of the methodology and guidelines
- o Transmit the objectives and scope of the Ideas Generation Event to the participants
- o Set up the rules of each session and get every participant to know them
- o Allow for a creative environment by encouraging participants to experiment with new and original ideas without the fear of being criticised or judged
- o Pose the problem/challenge of the event
- o Be able to facilitate ideas generation using the given techniques and recommendations
- o Direct the discussions and activities towards the scope of the exercise
- o Protect the participants from criticism
- o Respect the time limits
- o Ensure that a variety of insights into an idea are collected during Phase 2 in order to have sufficient material to judge on the appropriateness of an idea with respect to EU RTD priorities
- o Be aware of the FP7 Call priorities and of the Technology Platform recommendations

The second F2F representative will act as an **Assistant** and will be responsible to record all the ideas generated and to input these ideas, as well as the insights and comments voiced by the participants in the specific Reporting Templates that have been drawn up. It is important that the respective Reporting Templates are filled as the event progresses. Clearly, the person responsible for recording should avoid introducing any type of bias, and thus avoid including his/her own perceptions nor scores on any of the ideas. Recording stops at the same time that the event is concluded.

Role of the Assistant

- o Assist the Event Facilitator in all logistic matters
- o Record all ideas, insights and comments in the Reporting Templates provided
- o Keep an attendance record (refer to Attendance Sheet in Appendix)
- o Have a good understanding of the methodology and guidelines
- o Ensure that the phases are carried out within the time limits established

o Identifying the Outputs of each Phase

Every phase in the methodology is intended to produce outputs that feed into the next phase. All the outputs consist of ideas at different levels of development which in turn are refined with every phase of the process. The Reporting Templates are provided in Appendix and include:

Phase 1: Ideas Generation

- o **OUTPUT 1:** A number of ideas (***the overall target is set at 750 ideas***) are generated during the brainstorming session and recorded under the following clusters:
 - New Product Development
 - New Management Strategies
 - New Markets
 - New Technologies
 - New Production Processes
 - Environmentally friendly technologies or processes
 - Other
- o **OUTPUT 2:** The ideas recorded in OUTPUT 1 are filtered through a preliminary screening process using the following criteria:
 - Is the Idea highly innovative?
 - Does the idea reinforce competitiveness?
 - Does the idea have a European wide application?
 - Does the idea involve multidisciplinary cooperation?

In principle, only those ideas which score HIGH on each of the above criteria will be further considered during Phase 2 (***an estimated 175 ideas are retained after preliminary screening***).

Phase 2: Evaluation

- o **OUTPUT 3:** Using a variant of the Six Thinking Hats technique, the ideas retained at the end of Phase 1 are now evaluated in more detail. OUTPUT 3 is designed to collect a variety of insights into the idea, by having the idea examined from different viewpoints.

Phase 3: Selection

- o **OUTPUT 4:** The Event Facilitator, keeping in mind the EU RTD Priorities will have the ultimate responsibility to decide which ideas are most 'promising'. The earlier outputs from the Ideas Generation Events are used to consolidate these ideas into an outline description of their 'Objectives' and 'Expected Results'. OUTPUT 4 will therefore represent potential proposal ideas and will act as **INPUT** to the **F2F Project Outline Laboratory**.

Recommendations on Logistics

- Assign an Event Facilitator, most probably yourself, to lead the session and an Assistant to record all the ideas and comments generated during the Ideas Generation Event. The roles of both the Event Facilitator and the Assistant are listed in the section 'Recommendations on Group Set-up'.
- Send out invitations informing the selected group members of the time and place and how long the Ideas Generation Event will last. Specify a date by which they have to reply. Let them know the objective of the event and let them know how much you appreciate their assistance.
- Make sure you arrive some time earlier in order to set the room and prepare yourself mentally. Go through the guidelines of the Ideas Generation Event and memorize the main recommendations suggested.
- Choose a room which has enough space to move around. However, a meeting room that is too big will make the group members feel small and distant and does nothing to help the group come together.
- If possible use a well lit and airy room with windows, but do not allow distractions from outside to disrupt the meeting. Try and remove all distractions. Turn off any telephones in the room and ask everyone to switch off or silence their mobile phones.
- Set the room to have people seated in a circle, either around a central table(s) or by placing a set of tables in a circular or a broad U shape layout. Make sure everybody feels equal within the chosen layout.
- It is important that everyone can see the flipchart/board where the ideas are being written down. You may also want to use an overhead projector to display the objectives of the event and even some basic rules.
- Have all the required props at hand. Extra notepads, coloured pens and paper, white board pens and cleaner, the Six Thinking Hats questions and stickers, the reporting templates including the attendance sheet etc.
- Have refreshments available to be able to take short breaks whenever the group gets a drop in energy, but encourage the members to mix and chat during these short breaks.
- As the participants arrive, welcome them individually and ask them to sign the attendance sheet. Introduce them to the other members of the group. Offer them some refreshments and make them feel relaxed and comfortable within the group.
- When everyone has arrived, gather everyone together and settle them down around the working area. You are now ready to start the Ideas Generation Event.
- Encourage a relaxed, friendly and informal atmosphere.
- At the end of the event thank everyone for their contribution and make sure everyone has your contact details.

Proposed Schedule for Ideas Generation Events

This schedule is intended to give an indication of the duration of each phase, and can of course be altered to suit the respective F2F partners organizing the events. The timing being proposed is to allow partners to complete all phases within **one single day**. Other partners may opt to divide the phases over several days, provided that the individual phases are not broken up.

Phase 1 – Ideas Generation	Introduction & Purpose – 15 min Brainstorming – 60 min Preliminary Screening – 30 min
Phase 2 – Evaluation	Six Thinking Hats (variant) – 120 min
Phase 3 – Selection	Logical Framework – 90 min

Recording the Outputs of each Phase

A series of Reporting Templates (see Appendix) have been specifically designed to be able to record all the ideas generated during an Ideas Generation Event as well as their developments. **All inputs during Phase 1 and Phase 2 should be recorded immediately during the event.** The third and final phase, should be completed by the respective F2F partner as soon as possible after the event, so that the discussions during the event can still be recalled easily by the facilitator and assistant of the event.

F2F Quality Plan

According to the F2F Quality Plan issued by IPI, an Ideas Generation Event is considered as a **Public Event**. For each Ideas Generation Event, the responsible F2F partner is kindly reminded to compile the documents listed below (1 original + 1 copy):

- **Agenda:** Programme of the Ideas Generation Event, including F2F and EC logos.
- **Attendance register:** Please use the template provided in these Guidelines and available on the F2F website.
- **PPT presentation:** A standard presentation template is available on the F2F website.
- **Evaluation sheet:** Standard template provided in F2F Quality Plan.
- **Evaluation outcome report:** Standard template provided in F2F Quality Plan.
- **Reporting templates:** Outputs 1, 2, 3 and 4 (EOI – Idea) provided in these Guidelines and available on the F2F website.

The above documentation should be sent to WP3 leader, Ms. Valentina Milazzo at:

Institute for Industrial Promotion
Viale Maresciallo Pilsudski, 124
00197 Rome, Italy
milazzo@ipi.it

References

INSME '*Handbook on Innovative Thinking*', July 2005, IPI.

Zimmer, G., & Hagemann, M., Practical Help to Innovators, '*European Innovation*', May 2006, European Commission.

Internet sites:

<http://www.innovationtools.com>

<http://www.innosupport.net/>

<http://www.mindtools.com>

<http://www.createproject.net/>

<http://www.brainstorming.co.uk>

<http://www.mycoted.com>

<http://members.optusnet.com.au/~charles57/creative>

<http://www.edwdebono.com>

<http://www.creativitypool.com>

<http://www.expertson.com>

<http://geocreate.com>

<http://www.infinn.com>

<http://www.cocd.org>

<http://www.careerjournal.com>

<http://www.virtualsalt.com>

Appendices

- **Reporting Templates**

- **European Technology Platform –
Key issues and recommendations**

- **FP7 Call Priorities**



List of Participants
 WP3 - Future Project Forum
Ideas Generation Events



Partner: _____

Phase: 1 2

Date: _____ Venue: _____

Name	Company/Organisation	Background	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Event Facilitator

Signature



Phase 1 - Brainstorming
 WP3 - Future Project Forum
Task 3.1 - Ideas Generation Events



Partner: _____

Duration: _____

Date: _____ Venue: _____

Cluster	Ideas Generated	Idea No.
New Product Development		
New Management Strategies		
New Markets		
New Technologies		
New Production Processes		
Environmental-friendly Technologies & Processes		
Other		



Phase 2 - Six Thinking Hats (variant)
 WP3 - Future Project Forum
 Task 3.1 - Ideas Generation Events



Partner: _____ Duration: _____

Date: _____ Venue: _____

Idea No.: _____ Idea Title: _____

	Focus	Insights
White Hat <i>All the analytical data</i>	Available Data Past Trends Gaps in the Data	
Red Hat <i>Emotions</i>	Intuition Gut reaction Emotion	
Black Hat <i>What's wrong with it?</i>	Pessimistic viewpoint Why it might not work?	
Yellow Hat <i>Positive Aspects</i>	Optimistic viewpoint	
Green Hat <i>New further ideas</i>	Creativity Other ways of doing things	
Blue Hat <i>Final Overview</i>	Process control	

Six Thinking Hats was developed by Edward De Bono in his book 'Six Thinking Hats', originally published in 1985 by Little, Brown Company.



EOI - Enter Your Idea
 WP3 - Future Project Forum
Fashion to Future
F2F



Organisation: _____

Date: _____

Contact Person: _____

Idea Title: _____

Main Objectives	
Expected Results	

Keywords: Textile Clothing Leather Footwear
 Innovative products & processes Smart textiles & clothing
 Technical applications Mass customisation
 Concepts & technologies Other (please specify):

Idea Promoter(s) Details:

Promoter	Potential Role within the Proposal	
[Name of Organisation]		
[Contact Person]		
[e-mail address]		
[Tel. No.]		
[org. Typology]	University <input type="checkbox"/>	Research Centre <input type="checkbox"/> SME <input type="checkbox"/>
	Large enterprise <input type="checkbox"/>	Industrial Association <input type="checkbox"/> Individual expert <input type="checkbox"/>
Partners already involved (org. name, org. typology, country)	1	
	2	
	3	
	4	
	...	
profile of partner sought (role, country/region, expertise required)		

Add additional pages as required

Did this idea result from an F2F Ideas Generation Event? Yes No

I agree with the publication of the information here provided on the F2F website : Yes No

European Technology Platform – Key Issues & Recommendations

The **key documents** of the *European Technology Platform for the Future of Textiles and Clothing* can be downloaded from the website: <http://www.textile-platform.org/keydocuments.php>

From this link it is possible to download, among other, an electronic copy of the ETP **Strategic Research Agenda**, which '*describes major innovation and growth areas for the European textile and clothing industry, strategic research priorities to overcome technological bottlenecks to unlock future innovation and growth potential and briefly outlines resources and procedures for implementation of the Strategic Research Agenda*'.

With respect to the selection of ideas, and in particular the choice of 'Keywords' (see OUTPUT 4 – EOI - Enter Your Idea), the ETP **Thematic Research Agendas** provide a very interesting starting point. These include:

- 1 - **New speciality fibres and fibre-composites for innovative textile products**
- 2 - **Functionalisation of textile materials** and related processes
- 3 - **Bio-based materials, biotechnologies and environmentally friendly** textile processing
- 4 - New textile products for **improved human performance**
- 5 - New textile products for **innovative technical applications**
- 6 - **Smart textiles and smart clothing**
- 7 - **Mass customisation**
- 8 - **New design, new product development** concepts and **new technologies**
- 9 - **Integrated quality management and integrated life cycle management** concepts

FP7 Call Priorities

Within the context of the F2F Ideas Generation Events, the selection of ideas should pay particular attention to the Seventh Framework Programme (FP7) Calls for Proposals. Respective Calls should be carefully examined to identify the precise objectives, priorities targeted, instruments available etc. as these become available. While a formal launch of FP7 is being awaited, the website <http://cordis.europa.eu/fp7/home.html>, already provides a very substantial amount of information as 'Your Gateway to the preparation of the Seventh Framework Programme'.