Identifying solutions

During step 3, debated issues, strong points of agreements and disagreements have been identified by consultants.

Step 4 is the occasion for a new meeting between 'project manager' and 'consultant'. This time, they are discussing the different options offered to improve project acceptance, and prepare together step 5 'stakeholder's workshop' meeting.

Before the face to face starts, the 'consultant' sends to the 'project manager' a number of documents from step 3. This includes the 'key issues table', the 'Issue ranking table' as well as the 'Strategic issues graph' (see 3.1, 3.2 and 3.3). The project manager can then discover, in a summarized form, the result of the confrontation between his vision and the stakeholder's ones. Project managers comments and possible revisions should be noticed by the consultant.

Once this validation task is cleared, the two players focus on finding out solutions that might address the major issues raised, starting with the highly ranked ones. The idea here is to generate options. Although not mandatory, we recommend to rank and evaluate the solutions. As a working condition for this session, we also strongly advise that consultants phrase issues as much as possible in terms of product/equipment features.

This focus will make full sense in step 4, as one major way to resolve issues will be to reengineer some aspects of the equipment design and features that stakeholders would like to change, or the impact of which they disapprove (in a wider sense, including the qualities of the equipment, and their performance).

The purpose of this exercise is to get a clear view on the project manager strategy, and the concessions he/she is ready to concede in order to increase the project's chances of success before these options are actually submitted to concerned stakeholders in step 5.

Issues/solution table

In terms of tools, this process is facilitated by the use of the 'issues/solutions table'. This table will help systematically address the major issues raised in step 3 by articulating a list of issues (validated during the first part of the meeting) together with a list of solutions (that the project manager will imagine as a response to these issues).

In order to focus and ease this creative thinking, we suggest that solutions to each issue should be guided along three major categories of solutions depending on the nature of the issue/problem raised:

- a) Hardware type equipment design/environment adaptation,
- b) Knowledge gap type uncertainty reduction/expert assessment of impact,
- c) *economic prejudice type* financial incentive.

Further explanation of what these different categories relate to are provided in the following.

a) In case of a well identified physical impacts of the technology, solutions can be search by focusing on changing/re –designing some parts of the equipment and the hardware characteristics. What part of the equipment is actually concerned by the issue? Is there a way that this part should be re-designed in order to comply with stakeholders will?

For example, neighbours to a wind turbine might complain about the noise. In this case, implanting the turbine with a clearance zone of 500m away from housing should considerably reduce this problem.

b) In case the future impact of the technology is not clear or uncertain, or submitted to controversies, solutions can be search by trying to first filling the knowledge gap and reduce uncertainty. Is there any expertise already available, as well as proved calculation methods that could be trustfully called upon? If not, is there a possibility for an option/ to delay some aspects of the project/ decisions, until more experiments/knowledge is gained through R&D?

One example has been provided by the Asbestos case. There were doubts and opposition to the use of this metal fibres. On the other hand, its property made it very attractive for use in plants and many other applications. As long as a clear and widely accepted toxicological study established that it was a cause for very bad cancers, this material has been widely used in plants.

c) In case of important economic prejudice/damage is made to the neighbourhood in an irreversible way and it can not be satisfactorily solved with a hardware solution, solution might rather be searched by focussing on financial compensations (when satisfying). Is there a well established way of calculating irreversible economic prejudice? Is there a way of associating stakeholders in changing their attitude towards the economic benefits?

The recent trial of the ERIKA oil slick in France is interesting in this respect. First, the judgement has established the responsibility of TOTAL as a company, although the ship was of course outsourced to non accountable third party. For the first time in France, the prejudice has covered the price of irreversible damage caused to neighbours and the environment (for instance killed birds were billed).

The table below will potentially support 'project manager' both to identify the nature of the problem/issue, and focus solutions on consistent dimensions. Consultant should carefully explain the different dimensions to project manager before they start the creative thinking.

Key issues	Envisaged solution			
	Equipment/environ	Knowledge gap	Financial incentive	Other
	ment	reduction		
	improved			
	adaptation			
Noise of wind turbine	Find better siting	Define the scientific	Finance double glazing	
		laws of noise diffusion		

ISSUES/SOLUTIONS TABLE SCHEME