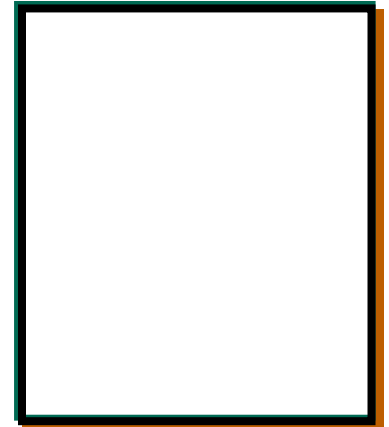


INTEGRATION OF PUBLIC ISSUES AND TECHNICAL ASSESSMENT IN ENVIRONMENTAL IMPACT ASSESSMENTS (EIAs) – NE’ER THE TWAIN SHALL MEET?

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ABSTRACT

The purpose of the paper is to explore, from a public participation practitioner’s viewpoint, some of the reasons why it is so difficult to achieve integration of public issues and technical assessment in an EIA, and to provide some practical suggestions for overcoming these constraints.

The main reasons for a lack of integration include technical specialists not understanding the purpose and value of public participation; a lack of a common purpose among EIA team members; specialists viewing their work in isolation from other specialists in the team; the value of local knowledge not being appreciated; no or little contact between public participation practitioners and specialists; practitioners not understanding their responsibility as members of the EIA team; and ingrained mindsets and comfort zones mainly as a product of our science education. Several practical constraints are also highlighted.

Practical steps for achieving integration of public issues and technical assessment are then presented, both prior to the commencement of the EIA, and during the EIA. The roles of each of the public participation and technical specialist teams towards achieving integration are then outlined.

1. INTRODUCTION

A difficulty experienced world-wide in environmental impact assessments (EIAs) is the proper integration of public¹ issues and technical assessment.

Project teams - technical specialists, public participation practitioners and the proponent - that cannot achieve integration of public issues and technical assessment fail to meet the core purpose of their task: providing decision-makers, the proponent and stakeholders with information to help them understand the consequences of their choices, and to understand remaining risks.

A lack of integration is the Achilles heel of many EIAs and the cause of much costly delay, social risk and conflict once the authority record of decision has been issued, or once the development proceeds. This is especially pertinent today where stakeholders have become empowered in regard to their environmental rights, have easy access to information, and have easy access to international pressure groups.

How, for example, is it possible that an EIA conducted by a world-class technical specialist team on the one hand, and a world-class public participation team on the other, could still suffer from a lack of integration? Could still present to decision-makers two virtually separate, albeit academically excellent products - a report detailing public issues, and a technical assessment which does not directly address the issues and concerns raised by the public? Or which does not add value to the proponent’s proposals - see Figure 1.

1 The term “the public” is used in this paper as a collective noun for what is variedly termed “stakeholders”, “interested and affected parties” or “roleplayers” (Creighton, 1998).

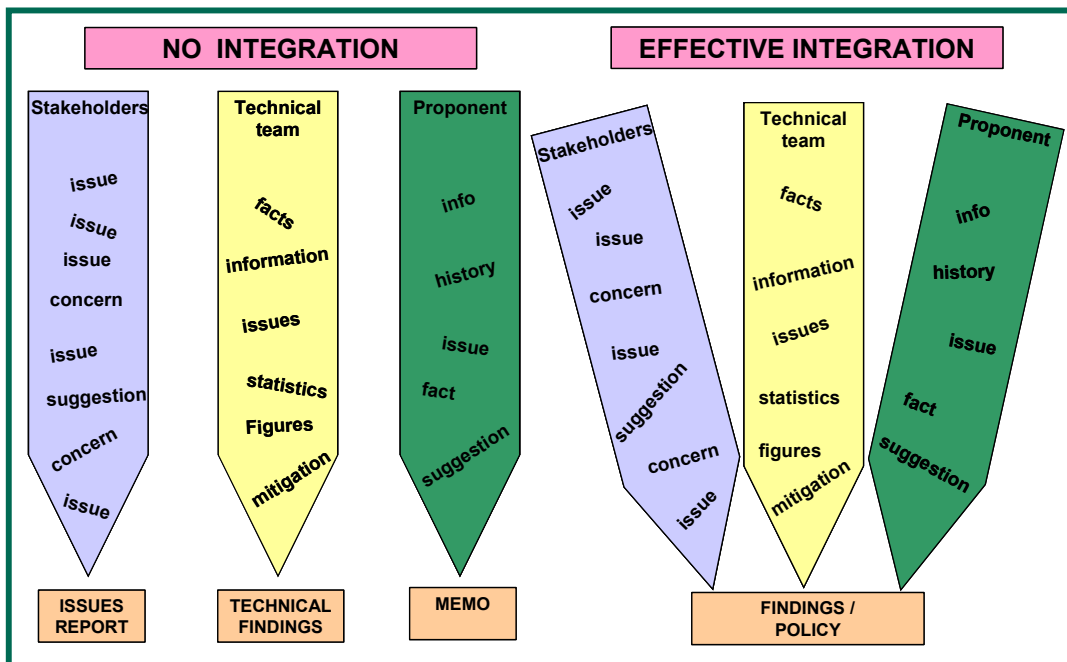


Figure 1. A lack of integration results in separate products, however excellent they may be.

2. FACTORS GIVING RISE TO A LACK OF INTEGRATION

Below are some of the factors that result in a lack of integration of public issues and technical assessment in EIAs. Often, they occur in combination.

2.1 NOT UNDERSTANDING THE PURPOSE AND VALUE OF PUBLIC PARTICIPATION

Unfortunately - and there are many valid and not-so-valid reasons for this - public participation is often viewed by developers and technical specialists alike as an irritating regulatory add-on to an EIA.

They do not view public participation as a process that can benefit the EIA through capitalizing on the collective wisdom of a range of people representing various perspectives of society. Neither do they view it as a process that can expand their own thinking, or a process that can assist to focus their terms of reference on local concerns, be these real or perceived. Often they view public participation as an “us and them” situation, or are fearful of contact with the public. They do not understand that public participation raises the issues or questions to which answers must be supplied. They do not understand that, should such issues actually be addressed and resolved, their findings could assist the developer to timeously address potential environmental and social risks, could assist the decision-maker in making informed decisions, and could allay undue fears and expectations among stakeholders.

The following definition of public participation, when appropriately conducted, may assist in fostering a better understanding (Greyling 1999):

It is a process leading to a joint effort by stakeholders, technical specialists, the authorities and the proponent, *who work together to produce better decisions than if they had acted independently.*

Thus for “public participation”, or “stakeholder contributions,” read: “The public can help us think.” Or: “The public can give us an up-front indication of environmental and social issues which may cause future risks and difficulties.” Or: “Stakeholders are free consultants.”

2.2 LACK OF A COMMON PURPOSE AMONG EIA TEAM MEMBERS

Weaver *et al* (1996), writing about team management of a large EIA, note: “EIA teams should be committed to a common, well-defined purpose, the expectations and approach to the EIA should be mutually understood, and all

members should be mutually accountable for their joint efforts.” Where the EIA team is not able to achieve this, or more commonly not even aware that this is what they should achieve, or - and the most difficult to overcome - *believe* that they are achieving this, but do not, a lack of integration follows.

A sure sign of an approach that illustrates a lack of a common purpose is the following. The participation practitioner is approached either by the proponent or by an environmental consultancy to submit a proposal to “do public participation.” The request comes, however, *without* insisting that the two teams meet to discuss a common purpose and a joint vision for the EIA. The specific milestones at which the technical team would require certain inputs from the public, are not provided. Or requests for details of such milestones are met with amazement – “Why do you want to know the steps in our technical assessment process? You just need to do the public participation.” Clearly, in these cases, there is no understanding of the mutual roles and accountabilities of the participation and technical teams in the EIA.

Another example is where the technical team has already conceptualised the steps and milestones in the technical process, without having allowed sufficient time for public participation to feed into these, and without having realised that they should budget substantial time for their own contributions to the public participation process. Often, they are not willing or able to change their process, schedule and budget since they have already made a commitment to the proponent.

Related to the above point is where the technical team accepts the proponent’s instruction that the budget does not make provision for appropriate public participation, and that “the proponent is willing to carry the risk should something go wrong”. The public participation practitioner is then asked to “do the minimum” to fit into the budget. This constitutes a whitewash, a serious risk to the proponent and potential lack of credibility to the EIA team as whole. Participation practitioners should rather walk away from these jobs. It will hurt their pocket, but will hurt their credibility and the practice more.

Another constraint to integration is where the public participation practitioner is viewed as a subcontractor subordinate to the technical team (not referring to administrative and financial arrangements where this may indeed be the case). Such an approach points to viewing public participation as a process discreet from the technical evaluation, rather than integral to all components of the EIA.

2.3 SPECIALISTS VIEWING THEIR WORK IN ISOLATION FROM OTHER SPECIALISTS IN THE TEAM

Although not the focus of this paper, a lack of integration within the technical dimension of the EIA also often occurs. This is mentioned here since the results may manifest at a public level. A recent example: Stakeholders raised numerous and repeated concerns related to groundwater in their area, since previous pollution had occurred. The findings of two of the specialist studies contradicted each other in terms of waste generation and disposal by the proposed expansion of an existing industry. The Environmental Impact Report (EIR) was put together “by stapling” a summary of the findings of the individual specialist studies together. Stakeholders noticed the discrepancy and vociferously raised it during a public meeting. Some expressed a loss of trust in the EIA as a whole.

The lesson in the above example is that specialist EIA team members should not view their specialist assessments in isolation, focussing only on their specialist areas and not seeing the bigger picture. They should not view themselves merely as independent experts, too independent to have contact with other specialists or the public, but rather as members of a larger team, all focussed on an outcome that would facilitate informed decision-making. They should interact with each other. EIA managers should actively promote this interaction.

2.4 NOT APPRECIATING THE VALUE OF LOCAL KNOWLEDGE

There are many examples across the country where stakeholders have for years raised concerns about the potential impacts of cumulative pollution by several existing industries in their area. Many of these stakeholders have over time learned a great deal about industrial pollution, and have used their own time and resources to gather data (in some cases having obtained information from local “spies” working for existing industries). Such data are often publicly contributed to the EIA.

In a number of EIAs, specialists have produced academically excellent assessments of cumulative pollution in the particular area, only to have their assessments publicly shot down in flames because the assessments did not

incorporate locally gathered data.

Of course, specialists do and should feel uncomfortable about summarily including unverified data in their assessments. However, data consistently gathered by stakeholders over a number of years, complete with borehole depths and exceedances of water quality variables by accredited laboratories, should at least raise a red flag for both practitioners and specialists, and warrant some further investigation before accepting in good faith data contributed for example only by industry. Experience shows that lay people and technical specialists are often equally surprised at the mutual benefits once they start working together, and sharing local and technical knowledge.

2.5 NO OR LITTLE CONTACT BETWEEN PUBLIC PARTICIPATION PRACTITIONERS AND SPECIALISTS

When there is no contact between the specialists and either the public participation practitioners or the public during the EIA, this often leads to technical evaluations that do not incorporate or directly consider public concerns or issues. This is because the technical specialists had designed and conducted their studies based on professional expertise alone.

2.6 PUBLIC PARTICIPATION PRACTITIONERS NOT UNDERSTANDING THEIR RESPONSIBILITY AS MEMBERS OF THE EIA TEAM

Public participation practitioners do not always understand that they are as accountable for the EIA process as any of the other team members, and probably more accountable than all but the EIA process driver². Practitioners need to understand their responsibilities as team members.

Firstly, they should be aware that members of the technical team, the proponent and sometimes also representatives of the authorities do not fully understand the purpose and value of public participation. Practitioners must make it their business to explain with empathy the value of public participation when conducted appropriately. A few recent, concrete examples go a long way.

Secondly, practitioners should *ensure* that specialists are aware of the issues, concerns and suggestions for mutual benefits contributed by stakeholders, especially where specialists are only appointed after scoping and thus would not have had contact with stakeholders. The challenge for the practitioner is to make sure that specialists understand the outcomes that are sought. This is an important integration issue. Issues raised by stakeholders are in essence questions that need to be answered by specialists. An emotional statement such as "What pollution will be spewing out from your stacks?" may in fact be the following question: "Will my children's health be affected?" One of the outcomes of the EIA would thus be an indication of whether human health risks would increase.

Practitioners thus need to assist stakeholders to identify the real issues behind the emotional statements, and need to feed these issues through to specialists to assist in directing the outcome of their studies. An efficient way of doing this is to compile an issues report categorised into groups of issues, e.g. groundwater supply, groundwater quality, human health concerns etc. This assists specialists to easily pinpoint the issues that are to be incorporated into their studies. Practitioners should then also cross-check the specialists' terms of reference to ensure that all relevant issues are incorporated. In this way, all these EIA team members start focussing on a mutual outcome.

Once the specialist findings are available in draft and before the EIR is compiled, practitioners should assist the EIA process driver to cross-check that answers are provided by the individual specialists to all issues raised, *before* going public with the findings. Providing specialists with an electronic copy of the issues report to fill out the responses themselves is probably the surest way to ensure that nothing slips through the cracks.

Thirdly, integration of public issues and technical assessment cannot take place if people cannot understand the outcome of the EIA. The practitioner should ensure that the findings can easily be understood by non-specialists, and thus in many cases needs to rephrase the findings into simpler language, or needs to provide definitions for

2 The term "EIA process driver" is used to describe the leader of the EIA team i.e. the person that must guide the outcome of the EIA to provide sufficient information for decision-making. This person may not necessarily be the EIA project manager.

technical words. Bear in mind that a person with a doctorate in law is not a wastewater specialist, and may never before have heard the word “brine,” not to mention previously disadvantaged people who have had little schooling and whose first language is not English. It is then, in turn, the responsibility of either the EIA process driver or the individual specialists to ensure that distortion of technical information did not take place in the process of summary and simplification.

Fourthly, the practitioner should assist specialist members of the team to communicate with non-specialists in non-technical language. It is essential in this regard to have a dry-run of team members before any public event, where specialists can be assisted to tailor their presentations to be comprehensible to a lay audience. Interestingly, a large local authority in Canada hires only specialists that can communicate effectively with lay people. During the tender process, specialists are asked to make a presentation to the agency, and a few stakeholders are asked to sit in on the presentations. Specialists’ tenders are evaluated on the basis of how effectively they communicate with lay people.

But practitioners need to understand that some technical specialists have chosen their careers so as *not* to have to work with people. Practitioners must have great empathy and take care not to place such specialists in difficult public situations. Practitioners should also “protect” specialists at public events by paraphrasing their statements if too difficult to comprehend, and by paraphrasing emotional statements or attacks by stakeholders into non-emotional language, focussing on the issue at hand, before asking the specialist to respond.

2.7 PRACTICAL CONSTRAINTS

At the practical level, a lack of integration, despite intentions otherwise, is often caused by either one or both of the public participation or technical process drivers being over-committed. These two senior team members need to have frequent contact to feed information to each other, and to strategise how to deal with new information.

Other practical constraints include a lack of joint, up-front as well as ongoing planning, a lack of day-to-day in-team communication, and not honouring deadlines of products to each other. If, for example, practitioners miss their deadline of coherently summarising all issues raised during the scoping phase, specialists’ terms of reference would be incomplete, and so would their findings. Or if the specialists miss their deadlines, there is little time to ensure that all public issues have been considered, and the findings would be made public with holes in them. There is little that upsets stakeholders as much as not seeing answers to their questions in the findings, even if these questions may have seemed silly to those with expert knowledge.

2.8 MINDSETS AND COMFORT ZONES

The “ticking” mentality (tick off on the checklist of things to do) gives rise to the Achilles heel of many EIAs. Both specialists and public participation practitioners suffer from this. Each has a checklist of things to do, and methodically proceed through their processes independent from each other. One stakeholder meeting after the other is held and ticked off on the list, but the practitioner does not make concerted efforts to brief specialists on the outcomes desired by stakeholders (including the authorities). Often, it is not sufficient to merely pass on the minutes of a meeting.

Or, an EIA project manager puts together the findings of the specialist studies by way of “cut and paste” in the Environmental Impact Report, ticking off the one study after the other, not integrating the findings of the specialist studies with each other, and not using the findings as parcels as information to give shape to the bigger picture upon which decisions can be based. When the EIA is being driven only by a project manager with a Gantt chart, proper integration will not take place. The EIA should be driven jointly by a technical process driver assisted by a senior public participation practitioner, both striving for a common outcome. Weaver *et al* (1996), drawing from Belbin’s (1981) preferred management roles, outlines how the roles of the different members of an EIA team should complement each other, and should pull in assistance to counter weaknesses in the team. A good project manager is essential to any EIA, but if that person is by preference a “finisher” (Belbin 1981) and not someone who finds it easy to integrate huge volumes of information (what Belbin (1981) terms a “monitor/evaluator”) then that person’s role must be complemented by another team member who does.

Another mindset that leads to a lack of integration in an EIA is that of scientists and specialists having been trained not to put pen to paper unless they have published data to prove what they want to say. A recent example: a specialist was drafting the description of the existing environment for the Scoping Report. Only two, fairly dated published references on the area were available. Despite having personally visited the area, having sat in

meetings with stakeholders and having taken pictures in the area, the specialist was unable to use any information that he had personally gathered and witnessed. “But I don’t have a reference for that,” he said.

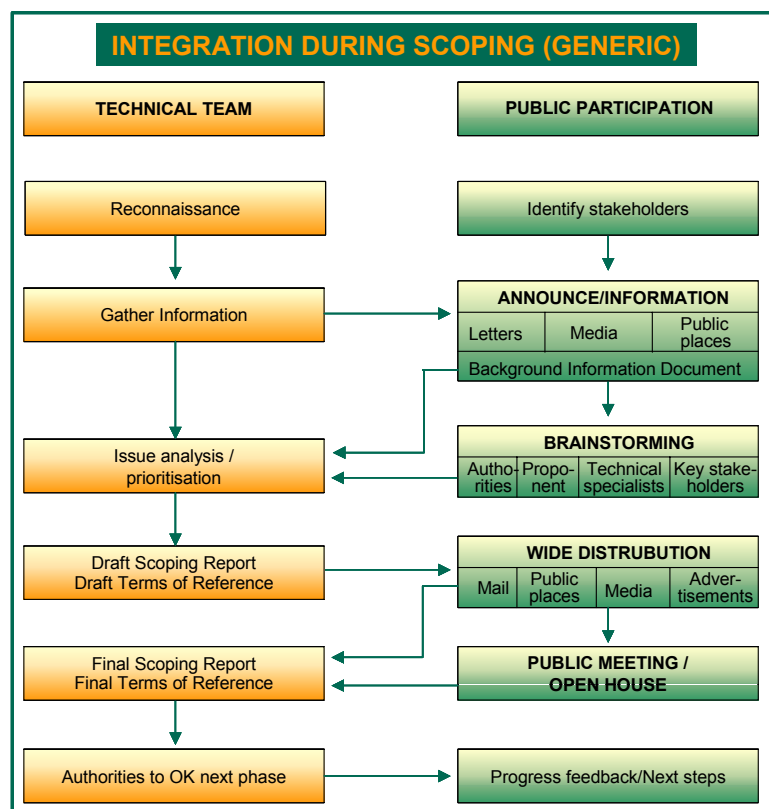
Moreover, our scientific education in many instances breed technical assessments that are not anchored in the real world. It is not the consequences to people’s lives or the environment that the specialist is assessing, it is a series of numbers that have to add up and correspond with previously published material. The specialists spend the bulk of their time in their comfort zones, focussing on inputs such as meteorology and dispersion modelling, and producing colourful maps and graphics, but fail to deliver the outcome, i.e. answering the “so what” questions that should arise from their findings. An international example: the impacts of a proposed development on semi-commercial marine fishing were being assessed. The specialist found that the marine fish population in that particular area would be reduced by 17 tons a year. The public participation practitioner did not ask the “so what” question and the findings were made public. Representatives of local, semi-commercial fishing companies were perplexed. Not until someone calculated that the finding would translate into about 46 kg of fish per day, divided by about 30 fishing vessels, was it understood that each vessel may in fact only suffer a very small reduction (1,5 kg per day) in their catches.

Conscious or subconscious scientific arrogance, perhaps as a result of mentoring by older colleagues, or as a result of a particular style of scientific education, further contributes to a lack of integration. Technical specialists sometimes assert that they should develop their terms of reference merely on the basis of their professional expertise, not taking either public or authority issues into account. Instead, public participation practitioners should assist specialists to understand that they are stakeholders in a multi-party process, and that this process must lead to informed decision-making based on a focussed and mutually desired outcome.

3. PRACTICAL STEPS FOR ACHIEVING INTEGRATION OF PUBLIC ISSUES AND TECHNICAL ASSESSMENT

The technical and public participation teams are jointly responsible for achieving integration, and must accept this joint responsibility. A few practical steps to achieve this are listed below, some summarised from the preceding text.

3.1 PRIOR TO COMMENCEMENT OF THE EIA



Integration between the two teams has to start well before the EIA commences, as follows:

- Concerted efforts by the public participation practitioner to illustrate the value of public participation by way of concrete, recent examples.
- Developing a joint vision for the EIA before submitting a tender (whether the two teams are part of the same firm or not, and whether they are tendering as one or two firms)
- Joint and up-front planning by the technical and public participation teams to focus the two processes on common milestones, with the outputs of the one serving as inputs into the other (see Figures 2 and 3 which illustrate conceptually how the technical and public participation processes must interact at crucial stages)
- Clear clarification of roles,

Figure 2. Example of how public issues are to be integrated with technical assessment during the scoping phase of an EIA.

responsibilities and products to be delivered by the one team to the other

- Commitment to communicate and interact, with regular contact formally scheduled into the EIA process.

3.2 DURING THE EIA

Once the EIA process commences, and especially during early activities, it is essential that all key members of the EIA team plan together to entrench a common vision and understanding. The following practical steps are relevant during the EIA process:

The technical team (at least the EIA process driver and project manager) has to:

- provide the public participation team with technical information of relevance that needs to be included in documents for public comment; a face-to-face briefing to supplement written technical material works best, and assists in portraying a joint vision in such documents
- understand that this material will be presented in a non-technical way, and take joint responsibility for its accuracy (i.e. all documents intended for public consumption must be cross-checked by a member of the technical team, preferably the EIA process driver)
- compile the more technical sections of the scoping report and EIR, passing the documents on to the public participation team that must edit for readability
- attend dry-runs with the public participation team to plan for public events and to ensure that technical presentations are presented in a manner that will be understood by non-technical people
- selected members of the technical team, and certainly the process driver, to co-attend with the public participation practitioner meetings with stakeholders in order to provide information, explain concepts and process, and hear stakeholder issues and concerns first-hand (the same applies to the proponent and key authorities)
- attend a briefing session for specialists after scoping in order to focus their terms of reference on relevant issues
- the issues report must play a key role in the drafting of the terms of reference for the specialist studies; every specialist must cross-check his or her study's terms of reference against the issues list as a reality check to ensure that the terms of reference have captured all the concerns that must be investigated
- honour deadlines for products that must serve as inputs into the public participation process
- attend regular meetings with public participation team members
- have empathy with those that are not technically trained and be willing to be assisted to explain complex information in simple language.

The public participation team has to:

- repackage technical material in a non-technical, yet accurate, fashion, and present this to the technical team for verification before going public
- coherently categorise and summarise stakeholder issues in an issues report for easy reference by the technical team, and attend a briefing session for specialists to portray the views of the public
- pass stakeholder issues, concerns and comments to the technical team on an ongoing basis (often, where deadlines are tight, this must

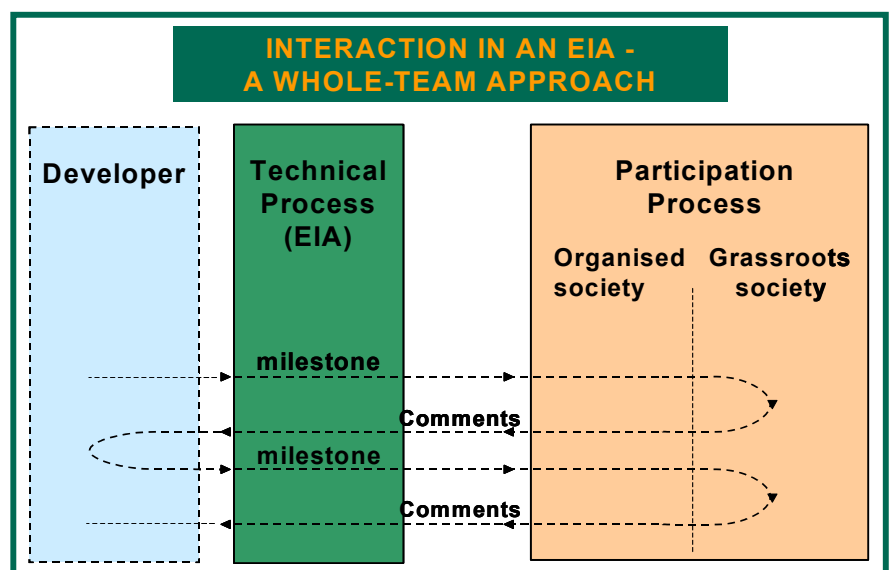


Figure 3. The technical and public participation processes must interact at crucial states, such that both processes build on the outputs from each other throughout the EIA.

- happen on a daily basis)
- cross-check that stakeholder issues have been incorporated into the terms of reference for specialist studies (the public participation practitioner is ultimately in the service of the process, and thus must ensure that public issues are carried through into the technical work; thus practitioners must have the ability to deal with technical material at a fairly high level)
- compile the less technical sections of the scoping report and EIR, passing the documents on to the technical team that must verify accuracy
- produce an “issues trail” at the end of the process, i.e. indicating to stakeholders and the authorities where public issues have been taken up in the EIA, and where they have not, assist the technical team to explain why not
- honour deadlines for products that must serve as inputs into the technical assessment process
- attend regular meetings with technical assessment team members
- ask embarrassing questions from time to time
- have empathy with those that are technically trained and protect them in public situations.

4. CONCLUSION

True integration can only be achieved when project teams are committed to a common, well-defined purpose. It must be mutually understood that the roles of technical assessment and public participation are equally important, and that these team members should be mutually accountable for their efforts (Weaver *et al* 1996). Considerable joint, up-front planning and ongoing interaction within the framework of a common purpose are required. The challenge is, of course, to manage this well.

Keeping this approach in mind at the start of the process reduces the risk of process failures and costly delays for the proponent, stakeholders and the authorities later on. At the end of the day, the issues that were raised either by the public, the technical specialists, the proponent or the authorities, need to be clearly reflected in the findings of the EIA. And then, need to also be taken up in the Environmental Management Plan for the development (see Figure 4). After all - why do we consult?

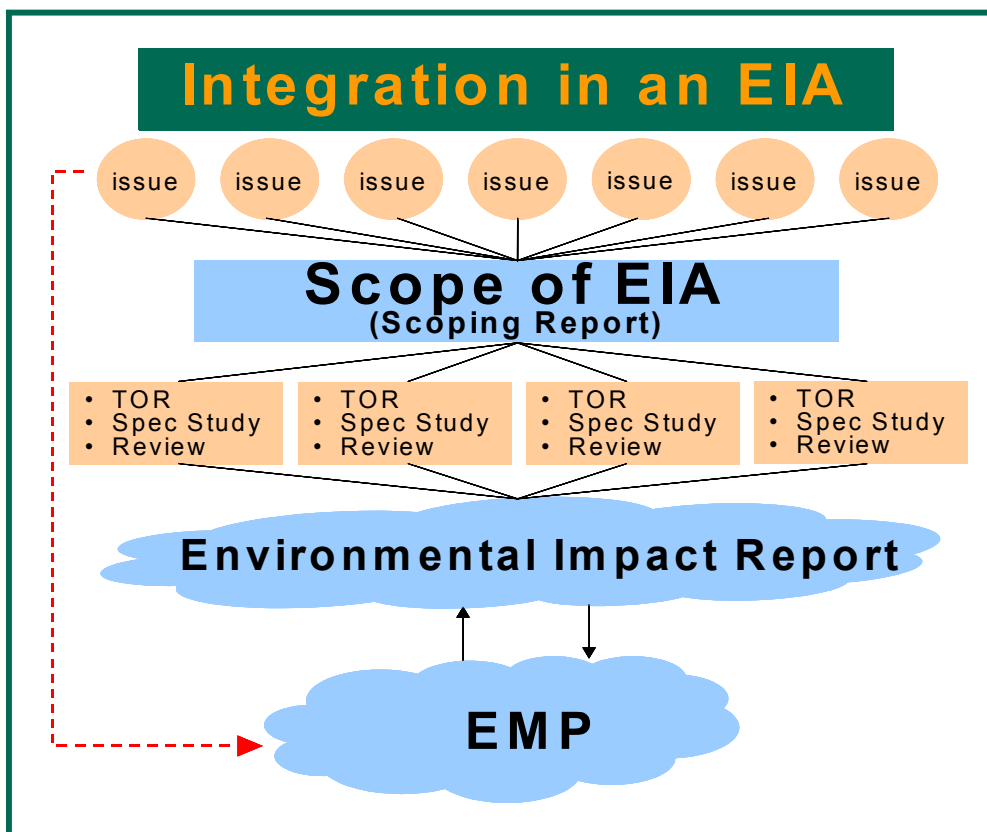


Figure 4. Public issues should be reflected in the findings of the EIA as well as subsequently in the environmental management plan.

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