

OMEGA CENTRE

Centre for Mega Projects in Transport and Development

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SOME INITIAL THOUGHTS ON THE COMPARATIVE ANALYSIS AND SYNTHESIS OF CASE STUDY FINDINGS AND QUESTIONNAIRE RETURNS

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Introduction

We are about to embark upon the analysis of the case study material we have collected for our pilot UK project (The CTRL) here at the OMEGA Centre at UCL in London. As you are well aware this has thus far comprised of:

- **Secondary data collected from a variety of public domain sources** including literature reviews of relevant documentation that has been input into:
 - The case study template,
 - The case study timeline document, and
 - The overall case study document/Project Profile.

Phil Wright and John Ward have been in contact with Partners re: developments here.

- **Primary data collected as a result of conducting Pre-hypothesis (PH) interviews.** These are conducted in accordance with a cross-country generic questionnaire. While the CTRL case study entailed the interview of 28 persons employing this methodology, we are looking to Partners conducting between 10-15 PH interviews *per case study*. It should be noted that the choice of stakeholders should be as diverse as possible, drawn from a variety of given stakeholder categories so as to represent a broad spectrum of parties. (A stakeholder categorisation employed for the CTRL has been formulated which can be communicated to Partners and commented on). All interviews are to be transcribed and indexed and then analysed with the assistance of Cognitive Edge software which has been recently updated to ensure it is 'fit for purpose'. This has caused some significant delays for which we apologise on behalf of Cognitive Edge. In addition to transcriptions of returns to the standard PH interviews, in some instances, we have also adopted what we have called 'Hybrid PH Interviews' where stakeholders requested the right to provide a narrative free of the standard PH questionnaire format. Here a tape recorder was placed in front of the interviewee with the interviewer invited to provide a narrative of his own choice regarding the case study only interrupted by the interviewee for points of clarification. The transcripts of these interviews are analysed in a similar manner to those of other PH interviewees with the assistance of the same Cognitive Edge software. Phil Wright and John Ward are again in contact with Partners re: developments here.
- **Primary data collected as a result of conducting Hypothesis-led (HL) interviews.** Questionnaires for HL interviews are comprised of three parts:
 - **Part One** – which is the generic part containing questions which we have referred to as 'overarching questions' to be posed in all countries;

- **Part Two** – which is the case study-specific part posing questions regarding hypotheses/questions drawn from the literature review of the case study under investigation; and
- **Part Three** – which poses four concluding questions that invite responses intended to highlight generic lessons that the case study investigated offer. Here, the interviewee is invited to respond to questions of their own choosing.

While the CTRL case study entailed the interview of 20 persons employing HL questionnaires, our expectation is that Partners will confine their HL interviews to 10 persons. It should be again emphasised that it is important that the choice of stakeholders be as diverse as possible, so as to represent a broad spectrum of parties. All HL interviews are to be fully transcribed and indexed and then analysed with the assistance of *NvivoV8* software (to be explained in a subsequent note from John Ward). Harry Dimitriou and Phil Wright are in contact with Partners re: developments regarding HL questionnaires.

Sense-making responses to overarching questions

In our efforts to be clear and consistent regarding the approach we employ to analyse (and later synthesise) the case study data collected across the ten countries, it is important to make transparent what dimensions we are seeking to compare and contrast *from the outset*. This is as opposed to identifying what dimensions *emerge* from the data and responses we collect (which is equally important) that are later incorporated into the analysis and synthesis.

To facilitate the above and provide the foundations of what is in effect a ‘post-project evaluation exercise’ of 32 case studies as a basis for arriving at generic and context-specific conclusions, we propose to introduce four tests that are outlined below and illustrated in Figure 1, designed to help inform the sense-making of the responses to the questions posed in the questionnaires and the information incorporated within the case study project templates and profiles.

The overarching question of the research programme, namely, **‘what constitutes a successful MUTP in the 21st Century?’** is posed very explicitly as the first question in the HL questionnaire in Part One – both as a generic question *and* in terms of the case study under investigation. Findings and conclusions regarding this question are to be derived from an analysis of the transcripts of all responses from the HL questionnaires (with the assistance of *NvivoV8* software), as well as from all responses to the PH questionnaires (this time with the assistance of *Cognitive Edge* software).

The over-arching question regarding the **adequacy of traditional project assessment criteria employed in MUTP planning and appraisal exercises for the 21st Century** in light of greater concerns for sustainable development is the heart of the second overarching question posed as a generic and project-specific question in Part One of the HL questionnaire. Findings and conclusions regarding this question can be derived from an analysis of the transcripts of all responses to Question 2 (with the assistance of *NvivoV8* software) and from the indexing to the PH questionnaires (with the assistance of the *Cognitive Edge* software).

The overarching question regarding **the role of sustainability considerations and the use/value of emerging sustainable development frameworks in MUTP planning, delivery and appraisal** is the third question of the HL questionnaire. Findings and conclusions to this question are to be derived from an analysis of the transcripts of all responses to Question 3 (again with the assistance of *NvivoV8* software) and from indexing to the PH questionnaires (with the assistance of the *Cognitive Edge* software).

The overarching question seeking to **identify the most important factors and actors that determine the outcomes of the MUTP decision-making process** is the fourth question of the HL questionnaire. Findings and conclusions to this question are to be derived from an analysis of the transcripts of all responses to Question 4 (with the assistance, as before, of *NvivoV8* software) together with the indexing of the PH questionnaires (with the assistance of the *Cognitive Edge* software).

The overarching question which attempts to **identify the sources of risk, uncertainty and complexity in the planning and appraisal of MUTPs, and how well it has been dealt with** is the fifth question of the HL questionnaire. Findings and conclusions to this question are to be derived from an analysis of the transcripts of all responses to Question 5 (with the assistance of NvivoV8 software) together with the indexing of the PH questionnaires (with the assistance of the Cognitive Edge software).

The overarching question which seeks to **identify the scale of influence of the context of a project (in all its senses) in the planning, appraisal and delivery of MUTPs** is the sixth question of the HL questionnaire. Findings and conclusions to this question are to be derived from an analysis of the transcripts of all responses to Question 6 (with the assistance of NvivoV8 software) together with the indexing of the PH questionnaires (with the assistance of the Cognitive Edge software).

Guidance regarding the possible quantification of responses in any compare/contrast analysis that might be offered for the five set of overarching questions will be provided by John Ward in the New Year.

Sense-making responses to concluding questions and indexes

The four overarching questions posed at the conclusion to the HL questionnaire exercise are designed to **extract from the case studies under investigations lessons considered to be of generic value for other/future MUTPs**. Once again, findings and conclusions to these questions are to be derived from an analysis of the transcripts of all responses (with the assistance of NvivoV8 software) together with the indexing of the PH questionnaires (with the assistance of the Cognitive Edge software).

The returns to the questions contained in the Index to the HL questionnaire provides information about respondents which should further assist both the sense-making of responses to individual questions and the quantification of returns in the compare/contrast analysis. Guidance regarding this will be offered by John Ward in the New Year.

The four tests

The four tests and their component sub-tasks that inform the sense-making of the responses to the above questions are illustrated in Figure 1. They are made up of the following:

- **Test 1: Analysis of achievements of project against objectives set**

This test needs to be undertaken in two stages along a declared timeline in terms of:

- **Test 1a:** Analysis of achievements of project against objectives initially set/accepted at the time of its political approval and its first assigned approved budget.
- **Test 1b:** Analysis of achievements of project against subsequently adopted new/emergent objectives, against a timeline accompanied by supporting notes of the reasons for the adoption of these new objectives, a critique of how they sit with other existing objectives, and how they relate to objectives that may have since been dropped.

Test 1 typically incorporates straightforward criteria addressing issues including: was the project completed on time, within budget, according to agreed specifications/forecasts etc. It lends itself to a more quantitative scoring of findings which John Ward is currently working on and will report on in the New Year and at the Lund OMEGA Workshop. Many such dimensions can also be extracted from the project template and profiles.

Other assessments, however, are more complex and lend themselves less comfortably to quantification. They may, for example, reflect more past, current and/or emerging contextual characteristics and/or institutional arrangements and will, therefore, need to be examined in a qualitative sense with appropriate justification provided for conclusions that are reached in respect

of the case study's assessment, cross referenced to changing contexts (see note below in test 3 re: treatment of contexts).

- **Test 2: Analysis of achievements of project against identified visions, challenges and issues of sustainable development**

This test comprises the examination of achievements of projects against:

- **Test 2a:** A synthesis of the key sustainable development visions/challenges/issues investigated in Working Papers Series #2
- **Test 2b:** Other emerging contributions in line with the four dimensional features of sustainable development highlighted in the project's VREF proposal (i.e. economic, environmental, social and institutional dimensions of sustainability).

- **Test 3: Analysis of achievements of project against successful treatment of risk, uncertainty, complexity and context in decision-making**

This test is comprised of three elements:

- **Test 3a:** Examination of the treatment of **risk** in stakeholder decision-making for MUTP planning, pre-project appraisal and post project evaluation (with the emphasis on the former two).
- **Test 3b:** Examination of the treatment of **uncertainty** in stakeholder decision-making for MUTP planning, pre-project appraisal and post project evaluation (with the emphasis on the former two).
- **Test 3c:** Examination of the treatment of **complexity** in stakeholder decision-making for MUTP planning, pre-project appraisal and post project evaluation (with the emphasis on the former two).

Each of the above three concepts, and their relationships with each other, are greatly influenced by a fourth element, namely, 'context'. Context determines the character, nature and severity of risk, uncertainty and complexity in decision-making. The test that assesses the treatment of risk, uncertainty and complexity in decision-making, must then seek to place the decision-making in question into some kind of contextual framework in order to judge/understand whether lessons learned are generic or context-specific.

There are several categorisations of context against which to assess the treatment of risk, uncertainty and complexity in decision-making in planning and appraisal, many of which need to be typically addressed *simultaneously*. These include: spatial, temporal, institutional, ideological, governmental, economic and managerial contexts, to name but a few, and provide the basis for test 3d below.

- **Test 3d:** It could be argued that those projects which treat risk, uncertainty and complexity best, and which are simultaneously the context-sensitive, are by far 'the most successful'. This is especially the case if they lead to sustainable and robust outcomes that deliver desired goals - not only over the short run but also in the medium term *as well as* the long run. This premise (about the power of context) calls for a typological framework of contexts against which 'success' may or may not be declared. Additional research (perhaps a position paper) on the power of context in comparative studies could well be useful here, as will inputs from Working Paper #1 Series.

- **Test 4: Synthesis of findings of analysis of tests 1-3 above**

This last test seeks to extract decision-making lessons and guidelines for the planning and appraisal of future MUTPs against a framework (yet to be developed) which ultimately differentiates generic from context-specific lessons and guidelines for different types of projects. This framework is to be employed to produce lessons and guidelines for future projects and lessons and guidelines for retrofitting existing MUTPs that need to be adapted to better fulfil the needs of the 21st Century and the tests outlined in tests 1- 3 above.

The framework(s) against which Test 4 is to be undertaken will draw from, and become a product of, the findings of numerous sources including:

- The synthesis of Working Paper #4 of the VREF Smaller Project on the relationship between risk, uncertainty, complexity and context (assigned to Harry Dimitriou and Dr. John Ward).
- A commissioned Working Paper on comparative studies, including comparative planning, public policy and typologies of MUTPs (provisionally assigned to Dr. Andrew Harris of Geography Department, UCL – a new Centre Associate).
- A commissioned Working Paper on comparative decision-making contexts for planning and appraisal in public administration and corporate environments also taking into account political influences (provisionally assigned to Dr. Jamil Khan of Lund University (TBC)).
- A commissioned Working Paper on comparative appraisal and evaluation methodologies drawn from the Centre's ICE/RAMP Study (assigned to Reg Harman – a new OMEGA Centre Senior Research Fellow due to take up his post in January 2009).
- A commissioned Working Paper on cultural dimensions of decision-making (assigned provisionally to a member of staff from the Bartlett Graduate School, UCL (TBC)).
- The synthesis of Working Paper Series #1 which seeks to identify typologies of policy, planning and funding frameworks for MUTPs in the case study countries (assigned to Phil Wright and Harry Dimitriou).
- The synthesis of Working Paper Series #2 which seeks to arrive at a sustainable development framework that incorporates the MUTP sustainable development challenges cited in this Working Paper series (Dr. Kallia Pedititi and Harry Dimitriou).

In addition to the above, the papers prepared for the PH and HPL questionnaires - in the form of the very useful paper prepared by our Australian Partners on comparative analysis and the OMEGA Centre's response to these - plus the work of Friend and Hickling (2005) will also be used to aid preparatory work on this aspects of the study for presentation/discussion at the next OMEGA Workshop in Lund.

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FIGURE 1

