



## **SUE-MoT: Sustainable Urban Environment – Metrics, Models and Toolkits**

### **Summary Report of the Workshop on Urban Sustainability Assessment**

**(Held on 23rd October 2007 at Loughborough University)**

**November 2007**

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## 1. INTRODUCTION

This report provides an overview of the Workshop on Urban Sustainability Assessment organised by the SUE-MoT project (Sustainable Urban Environment – Metrics, Models and Toolkits) which was held on the 23<sup>rd</sup> of October 2007 at Loughborough University. The aim of the workshop was to inform built environment practitioners of our research findings to date and to obtain their feedback. The workshop participants represented a diverse range of stakeholders with varying levels of experience and differing interests in addressing urban sustainability assessment.

At the workshop the researchers provided an overview of our research on three of the key themes within the SUE-MoT project: 1) Developing an Integrated Sustainability Assessment Toolkit; 2) Environmental Equity Assessment; and 3) Stakeholder Engagement. The third session also included three presentations from practitioners. The report gives a summary of the key issues discussed at the Workshop and how these will inform our research. Copies of the slides presented at the Workshop will be provided separately.

The workshop provided much useful feedback on these three important themes of our research. The researchers will now build on the feedback received from the practitioners at the workshop (as outlined in this report).

The future plans for the SUE-MoT project include further interaction with practitioners including case studies, focus groups, interviews and further workshops. We look forward to your continued involvement in these.

*For further information about our project including future events please visit our website:*  
[www.sue-mot.org](http://www.sue-mot.org)

## 2. THE WORKSHOP PROGRAMME

<b>9:15am - 9:45am</b>	<b>Registration and Tea/Coffee</b>
<b>FIRST SESSION</b>	
9:45am - 9:50am	Welcome – Professor Andrew Price, Loughborough University
9:50am – 11:15am	Presentation and discussion on ‘Developing an Integrated Sustainability Assessment Toolkit’ – Dr. Mohamed El-Haram, Dundee University and Dr. Craig Thomson, Glasgow Caledonian University
<b>11:15am – 11:30am</b>	<b>Tea/Coffee Break</b>
<b>SECOND SESSION</b>	
11:30am - 11:50am	Presentation on Environmental Equity and its Assessment – Dr. Jonathan Walton, Glasgow Caledonian University
11:50am – 12:30pm	Discussion session
<b>12:30 pm – 1:15 pm</b>	<b>Lunch</b>
<b>AFTERNOON SESSION</b>	
1:15pm – 1:20pm	Overview of the session – Vivek Mathur, Loughborough University
1:20pm – 1:40pm	Presentation on ‘Value in Design’ - Grant Mills, Loughborough University
1:40pm – 1:50pm	Questions and answers
1:50pm – 2:10pm	Presentation on ‘Planning for Real’ - Paul Higgitt, Neighbourhood Initiatives Foundation
2:10pm – 2:20pm	Questions and answers
2:20pm – 2:40pm	Presentation on ‘Experience of stakeholder engagement in Masterplanning’ - Geraldine O’Riordan, Avanti Architects
2:40pm – 2:50pm	Questions and answers
<b>2:50pm – 3:00pm</b>	<b>Tea/Coffee Break</b>
3:00pm – 3:15pm	Presentation on ‘Stakeholder Engagement in Sustainability Assessment’ – Vivek Mathur, Loughborough University
3:15pm – 4:15pm	Parallel activity sessions – Facilitated by Prof. Andrew Price, Loughborough University and Vivek Mathur, Loughborough University
4:15pm – 4:50pm	Plenary discussion and summarising - Prof. Andrew Price, Loughborough University
<b>4:45 pm</b>	<b>Close</b>

### 3. LIST OF WORKSHOP PARTICIPANTS

<b>Name</b>	<b>Organisation</b>
Ali M. Al-Yami	Loughborough University
Michael Carnuccio	Southwark Borough Council, London - Planning Policy and Research Team
Mohamed El-Haram	Dundee University
Alexandros Gasparatos	Dundee University
Alexander Heath	Barton Willmore Planning Partnership
Paul Higgitt	Neighbourhood Initiatives Foundation
Mariane Jang	ARUP - Sustainable Business Management team
Vivek Mathur	Loughborough University
Grant Mills	Loughborough University
Ronan O'Connor	London Borough of Hammersmith and Fulham
Geraldine O' Riordan	Avanti Architects
Andrew Price	Loughborough University
Richard Riley	Leicester City Council – Urban Design Group
Paul Statham	Leicester City Council – Planning Policy and Design
Craig Thomson	Glasgow Caledonian University
Jonathan Walton	Glasgow Caledonian University
Jonathan Weekes	Landmark Planning Limited
Peter Wilkinson	Landmark Planning Limited
Simon Witts	White Young Green Sustainability Bureau
Gordon Woods	
Yangang Xing	Dundee University
Grace Zhang	Currie & Brown/Loughborough University

## **4. SUMMARY OF THE FIRST SESSION: DEVELOPING AN INTEGRATED SUSTAINABILITY ASSESMENT TOOLKIT (ISAT) AND ASSOCIATED KNOWLEDGE MANAGEMENT SYSTEM**

### **Key issues raised/discussed in the session**

#### ***Overall considerations***

- The need for an integrated assessment of environmental, economic and social dimensions in a holistic manner was agreed. The assessment of social issues is still hard to quantify and hence to integrate with the economic and environmental which can both be quantified and integrated together with less difficulty.
- The tools which are currently being used by the workshop participants are mainly in-house tools (Aurp –SpeAR, Leicester City Council-LATIS “Leicester Appraisal Toolkit for Integrated Sustainability” and WYG- hard-engineering focused tools).
- The outputs of the identified tools are: list of indicators, visual representation of sustainability indicators, reports.
- Environmental and economic issues are still more prominent than social issues in sustainability assessment although the latter are considered to a greater extent at larger spatial scales (i.e. master plan level rather than building level).
- The need for better alignment of the process of project/development life cycle and the process of sustainability is required.
- Assessments are traditionally considered to demonstrate added value to the development project, and therefore are not viewed with cynicism.
- Simplify the ISAT where we can and develop a model demo.

#### ***Assessment context and issues identification and prioritisation***

- There was some confusion as to what the context module would do, with some delegates thinking that it required the involvement of stakeholders to determine all project issues.
- Most assessments take place at the pre-planning stage, i.e. very early and so tools have to be flexible.
- ARUPS use their tools following the development of a sustainability vision for the project and from this an assessment plan.
- Government want to see that all sustainability issues have been considered in an assessment.
- It was felt the list of sustainability issues/impacts may be too removed from the language of built environment practitioners.
- Legislation is the key driver in prioritising the sustainability issues that are considered. From a local government’s perspective, for example, selection/prioritisation of issues is not a relevant stage in Sustainability Assessment because for them, the issues are already identified (in terms of their overall policy, commitments etc.). They do not identify issues for a particular project.

- Regarding selection/prioritisation of issues – environmental and economic issues will have more emphasis at a building level, whereas social issues can be expected to get more emphasis at the Masterplanning level

#### ***Tools identification and selection***

- Tool database appears to be a ‘library’ of tools.
- People often select the same tools over time as there exists a “better the devil you know mentality”.
- Practitioners argued that the selection of the tools was based around the requirements of the client, policy/legal requirement, reliability (for example, certification by the Govt.), suitability to the particular context, knowledge, experience and capability within the organisation.
- In the early stages of a development, a range of assessments are considered and implemented, but later in the process single assessments are used.
- Regarding prioritisation of tools – this stage is very difficult and it is hard to justify. Isn’t this done through policy/legislation rather than for each project?

#### ***Integration of assessment outputs***

- It was felt that there would be a lack of trust in an ISAT output that was built from individual assessments taken from component parts of tools (e.g. just the energy section of BREEAM). Concern was expressed by some at the legitimacy of potentially tampering with outputs of individual tools and the implications this may have for the quality of the assessment.
- The preference for displaying the outputs within the system was for a range of indicators that can help discussion. It was suggested that by potentially bringing together the outputs somehow to allow a snapshot demonstrating performance would provide value E.g. the “one, two, three, planet development”. A requirement to reflect the abilities of those considering the outputs was stressed. The potential of supplying a detailed output to practitioners, and a simple version to the client and wider stakeholders was suggested.
- Regarding the preferred options for integration of outputs, an overall score (like one planet living) is useful when used along with individual factors/indicators.

#### ***Knowledge management considerations***

- Attendees observed that a key issue existed in managing the variability in the quality and quantity of data generated across different projects.
- The attendees warned the team to ensure that ‘out of date’ data are viewed within the context of current practice and policy.
- Discussion outlined that the primary source of knowledge considered in practice was drawn from personal experience and from others within an organisation.
- A suggestion was made to consider the KMS as an integral part of the ISAT operation, and to present it as one system.
- In practice, previous experience is used to identify stakeholders who support the process.

## **How these will inform our research**

- The research team share the concern over the difficulty of quantifying social issues. Our research team at Loughborough University is looking at finding ways of assessing some of social issues (e.g. social capital). The findings of this work will be incorporated into the ISAT.
- The research team will learn more about the tools which were mentioned by the workshop participants and if necessary include them in the tools database.
- An outcome of the research programme is a web application toolkit from which a model demo will be produced.
- Clarification of the assessment context and what it consists of will become clear once the team finishes the tool evaluation exercises which we are currently carrying out.
- It is intended that the completed system will adopt the language of built environment practitioners in term of the sustainability issues/impacts.
- The team will identify and test the key drivers in prioritising the sustainability issues/impacts and implement them within the system.
- The team will identify and test the key criteria for the selection of sustainability tools. The team will also be informed by work which we are carrying on the barriers and incentives associated with using sustainability assessments tools.
- The team will consider how best the individual assessment outcome can be integrated.
- A key factor in the development of the knowledge capture mechanisms is to ensure that they are focused, easy to use, and perceived as relevant by the user of the system. Interviews are to be conducted with practitioners to identify user preferences.
- Concern for the problems caused by 'out of date' data is shared by the team, but it is hoped that the system will encourage data to be viewed in the context that it was generated by encouraging the personal reflection of the user.
- The team acknowledge the need to view the ISAT and KMS as one system, and are currently developing the software within an integrated platform.



## 5. SUMMARY OF THE SECOND SESSION: ENVIRONMENTAL EQUITY ASSESSMENT

The session outlined theory and existing policy in relation to environmental equity assessment and in light of these presented a proposed EIA based assessment framework for urban development in the UK. Subsequent issues raised reflected five main themes as summarised below.

### **Key issues raised/discussed in the session**

#### ***Terminology***

- It was agreed that the term Environmental Equity Assessment is preferred to Environmental Justice Assessment as the former was less controversial and emotive. It was recommended that the name of the proposed framework should reflect this.
- The team was cautioned on using value-loaded language when describing the framework (this was raised in the context of the use of terms such as Environmental Benefits and Burdens).

#### ***Current related practice in the UK***

- Attendees reported that to their knowledge no project-based environmental equity assessment is currently practiced in the UK.
- A procedure called Equity Impact Assessment has been used in practice to assess policy although there are considerations to develop similar procedures for the project level.

#### ***Assessment boundaries***

- It was noted that the boundaries set for particular assessments could possibly influence the assessment results and this issue should be considered during the development of the framework.
- It was noted that equity impacts associated with altered traffic patterns can extend far from the project.

#### ***Particular urban environmental equity issues***

- Regarding equity issues in relation to exposure to flood risk the team were encouraged to examine Strategic Flood Risk Assessment for possible measures.
- The importance of “community severance” as an environmental equity issue was noted. Community Severance can affect psychological health. Projects can also lead to reduced severance.

#### ***Barriers and incentives in relation to the adoption of the proposed framework by practice***

- Particular barriers to the adoption of the proposed framework were identified as:
  - Robustness of the process and trust in the results
  - Having no current supporting policy-base or legal requirement
  - Resources to run the framework

- Data availability and quality (possible existing data-sources were identified: Census data, Index of Multiple Deprivation, Carkey, Bi-spoke local authority surveys)
- Particular incentives for the adoption of the proposed framework were identified as:
  - Ensure that the level framework is not too complex so that it can allow for quick assessments.
  - Provide a practical demonstration of the framework (and it would be especially useful if this involved GIS).

### **How these will inform our research.**

- The team share the concern over the title of the framework and agree that “environmental equity assessment” will be adopted
- It is intended that the completed framework will adopt the language of environmental equity issues rather than environmental benefits and burdens.
- Equity Impact Assessment has been reviewed as part of the research and the team has requested further information on the proposal for its development for projects.
- The team share the concerns over the influence assessment boundaries may have on assessment results and are examining literature on how this issue can be addressed.
- The team will consider how issues of community severance are addressed through the framework and will review the Strategic Flood Risk Assessment technique.
- The team have approached GIS experts on the possibility of conducting a case-study for the practical demonstration of the framework.

## 6. SUMMARY OF THE THIRD SESSION: STAKEHOLDER ENGAGEMENT

This session included three presentations from built environment professionals to explain examples of their experiences in engaging with diverse stakeholders. The second part of this session explained the key activities associated with the use of the proposed Integrated Sustainability Assessment Toolkit (ISAT) being developed by SUE-MoT project and the participants provided their inputs on the forms provided regarding the likely appropriate stakeholder engagement corresponding to these activities.

### **Key issues raised/discussed in the session**

#### ***General considerations***

- There is a need to combine structured and un-structured methods for stakeholder engagement.
- There is a need for joining-up the consultation carried out for various purposes/projects by different agencies in order to avoid participation fatigue, or simply loss of interest.
- Visual and practical methods for engagement (such as model-making) help overcome some of the limitations of conventional consultation events/public meetings and encourage wider participation.
- It was emphasised that there was not one best engagement tool and that the most appropriate method depends on the project type and stage.
- The main aim of stakeholder engagement is not to produce a wish list and a promise that communities will get all things but to bridge the 'us and them' gap and to facilitate the process for taking all views into account. It also provides valuable information to decision makers which can affect the success of the project.
- Some of the most important criteria for successful stakeholder engagement are – presence of a champion for the cause and continuity of key people through the process.
- That there should be balance between learning and consultation in stakeholder engagement.
- The link between community engagement and community development should be recognised so that the engagement can be framed within the context of local development.

#### ***Barriers to effective stakeholder engagement***

- A lack of interest on part of some stakeholders.
- Getting people to understand the concept of sustainability and the specific issues.
- The client's desire (or lack of desire) to engage with stakeholders.
- The difference in language used by practitioners and that understood by local people.
- Decisions having been made prior to engagement. Or lack of clarity regarding which decisions have already been made and which decisions can get affected by the consultation.
- Poor or limited outreach.
- Raising expectations.
- Getting wider stakeholders to get involved by properly 'marketing' the process.
- Understanding some of the underlying community issues – the role of community development.

### ***Stakeholder engagement in context of the ISAT stages***

- Different stakeholders need to be engaged in the process for different reasons (i.e. community engagement, knowledge holders (e.g. experts, decision- makers).
- Different stakeholders are relevant to different stages associated with the use of ISAT. Tool selection might be a stage where only expert stakeholders are consulted. Selection/prioritisation of issues and later consideration of outputs might be the stages where wider stakeholders would have an important role.
- It was felt that if the context module was just about entering the correct information into the system then there was a limited role for wider stakeholders. However, it was felt that wider stakeholders should be involved before that stage in scoping out the context for the project and assessment.
- Past experience and knowledge within the project team or the Local Authority is most often used to identify stakeholders in a particular project. Snowballing technique and stakeholder mapping are also used by some practitioners.

### ***Feedback from the forms completed by the participants***

- Relevant stakeholders for the different activities associated with the use of ISAT:
  - Defining context: Almost an equal number of respondents have recommended engagement of wider stakeholders as those who have recommended limited stakeholders to participate in this activity.
  - Most respondents (89%) agree that selection of issues should include all the stakeholders / as many as possible including general public.
  - 55% of the respondents have recommended the a more focused group of stakeholders (experts/core team) to be involved in prioritisation of issues whereas 45% feel that all the stakeholders should be involved in this activity as well.
  - Most respondents (72%) agree that the ‘selection of tools’ activity should involve limited stakeholders (experts/core team) whereas others believe that wider stakeholders may have a role in this activity as well.
  - 72% of the respondents also recommend the involvement of wide range of stakeholders in the consideration of assessment outputs. Several respondents have emphasised the need for involvement of those “affected” by the project.
- Relevant engagement techniques for the different activities associated with the use of ISAT:
  - Defining context: Workshops, key stakeholder interviews, consensus conference, briefings, meetings, questionnaires.
  - Selecting issues: large scale consultation, workshops, Planning for real etc.
  - Prioritising issues: large scale consultation, workshops, Planning for real etc.
  - Selecting tools: Focus groups, key stakeholder interviews, Meetings + discussions.
  - Considering the integrated output: Meetings + discussions, websites, polls, consensus conference, workshops + presentations.
- Key barriers/challenges: Some of the potential challenges to effective engagement as recorded by the respondents in relation to ISAT activities include - expertise (lack of) in project team, lack of continuity of key people, lack of understanding, too many stakeholders, cost, time, lack of interest / apathy, political agendas, conflicts of opinions, complexity, consensus (hard to find), transparency (lack of) and choice of inappropriate tools/media for engagement.

## **How these will inform our research**

- Wherever possible, the research will propose to combine the stakeholder engagement for assessment to that being carried out for other aspects of the project planning and design in order to avoid duplication.
- Instead of merely attempting to identify the specific stakeholders and engagement techniques, the research will attempt to suggest approaches for conducting these in a way that the context and unique circumstances of each project can be reflected. Hence, the suggested stakeholders and engagement techniques are expected to be used as guidance instead of being prescriptive.
- The suggested stakeholders, engagement techniques and approaches will reflect the policy imperatives, ethical concerns and other reasons in addition to identifying those stakeholders who bring valuable 'knowledge' to the process.
- The specific inputs collected from the forms completed by the participants form an important data and this will be incorporated into the proposed stakeholders and engagement techniques.

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**THANKS AGAIN TO ALL WHO PARTICIPATED**