

# Deliberative Monetary Valuation Tool Review

## Valuation Tools

TABLES Project 2012: Mini reviews	
<b>Guidance</b>	<i>Using your experience and expertise, consider the following tasks in relation to the tool. It may not be possible to complete all tasks for each tool due to a lack of available information, the task not applying to the tool, etc. <b>Please note where this is the case by writing in the reason in the space provided.</b> Please use a maximum of 6 pages of A4 (excluding diagrams and appendices). <b>Your responses are required in the white spaces.</b></i>
<b>Task 1: Basic information</b>	
<b>Name of the tool</b>	Deliberative Monetary Valuation (DMV)
<b>Type of tool (list all that apply)</b> <i>Learning and skills (pedagogic); participatory; regulatory; collaborative; mapping; valuation; modelling; decision; futures; financial; ecosystem services</i>	Participatory; valuation; decision; learning
<b>Group members</b> <i>(minimum size 3 members, must include a BCU rep)</i>	1. Jasper Kenter
	2.
	3.
	4.
	5.

**Please provide a brief synopsis of the tool**

*This may include: background context, development (and ownership if appropriate), current use and applications etc.*

*Please also note any desired outcomes of the tool so that you can make reference back to these in Task 7: SWOT analysis*

Deliberative Monetary Valuation (DMV) of the environment encapsulates a wide range of approaches incorporating participatory, deliberative, political and/or social-learning processes, to establish a monetary value for the benefits of environmental goods. In DMV, small groups of participants explore the values that should guide their group decisions through a process of reasoned discourse (Howarth & Wilson 2006). DMV has developed as a response to critique of more established valuation methods, particularly contingent valuation: that these methods are not able to properly capture assessments of risk and uncertainty in the face of social-ecological complexity, that they are not able to capture the intricacies of human values, that preference utilitarian assumptions are not always empirically or ethically justified, and that values cannot be assumed to be pre-formed (Sagoff 1986; McCauley 2006; Spash 2007; 2008; Norgaard 2010; Kenter *et al.* 2011). In addition, it has been argued that deliberative approaches to valuation can enhance the effectiveness and perceived legitimacy of policy making, as a result of enhanced public participation (Howarth & Wilson 2006). DMV may refer to either additions to or improvements on contingent valuation or choice experiment approaches, or to more political approaches where an altogether different process is used to establish a shared monetary value, such as a citizen jury or other structured democratic process. A third avenue is where deliberative valuation is implemented as an action-research method, where valuation is used as an instrument for learning and for establishing local stakeholder needs and actions (Kenter *et al.* 2011). The objective of the deliberation can thus be to share information and knowledge (e.g. Lienhoop & MacMillan 2007), or to bring out deeper held and ethical values and politicise the issue at stake rather than posing it as a problem of preference satisfaction, so called ‘preference moralisation’. While most studies to date focus on one or the other, in practice group deliberation always brings about both of these effects to a greater or lesser extent (Lo & Spash 2012). These authors propose that both these effects can be part of a democratic discourse-based approach as a means of capturing the plural (hedonic *and* moral) values of participants. The outcomes of DVM depend on whether values are provided by individuals in a group setting, or by the group as shared expressions of value, and whether individual amounts are established that are akin to individual willingness-to-pay, or whether participants establish a pre-aggregated amount, i.e. what they believe is the total value to society (see table).

While DMV shows considerable potential as a ‘hybrid’ valuation method that can incorporate stakeholder perspectives and as a means of delivering shared values of ecosystems, to date there have been only a handful of studies that have applied a DMV approach. Hence considerable methodological development is yet to be expected, for each of its political, more conventional economic, and its action research strands.

Value provider	Terms in which value is specified	
	Individual (Disaggregated value)	Social (Aggregated value)
Individual in a group setting	Informed exchange price or charitable contribution	Expressed social WTP/WTA

Group	Fair price	Arbitrated social WTP/WTA
<i>Adapted from Spash (Spash 2007)</i>		

### References

Howarth, R.B. & Wilson, M.A. (2006) A theoretical approach to deliberative valuation: Aggregation by mutual consent. *Land Economics*, **82**, 1-16.

Kenter, J.O., Hyde, T., Christie, M. & Fazey, I. (2011) The importance of deliberation in valuing ecosystem services in developing countries—Evidence from the Solomon Islands. *Global Environmental Change*, **21**, 505-521.

Lienhoop, N. & MacMillan, D. (2007) Valuing wilderness in Iceland: Estimation of WTA and WTP using the market stall approach to contingent valuation. *Land Use Policy*, **24**, 289-295.

Lo, A.Y. & Spash, C.L. (2012) Deliberative monetary valuation: in search of a democratic and value plural approach to environmental policy. *Journal of Economic Surveys*.

McCauley, D.J. (2006) Selling out on nature. *Nature*, **443**, 27-28.

Norgaard, R.B. (2010) Ecosystem services: From eye-opening metaphor to complexity blinder. *Ecological Economics*, **69**, 1219-1227.

Sagoff, M. (1986) Values and Preferences. *Ethics*, **96**, 301-316.

Spash, C.L. (2007) Deliberative monetary valuation (DMV): Issues in combining economic and political processes to value environmental change. *Ecological Economics*, **63**, 690-699.

Spash, C.L. (2008) Deliberative monetary valuation and the evidence for a new value theory. *Land Economics*, **84**, 469-488.

## Task 2: Use of the tool

<b>Position / Use</b> <i>If you can, please indicate which <b>stage(s)</b> of the decision / policy making process your tool is / could be used in (these stages were identified in the specification document)</i>	Stage	Currently used	Could be used
	Ideas	Use as an action learning tool for capacity building	
	Survey		
	Assess	Used to better inform valuation participants as part of contingent valuation assessments to establish non-market benefits of ecosystems for project appraisal.	Could be used to assess shared values in appraisal contexts, and to work with stakeholders to establish values for non-market benefits of ecosystems for project and policy appraisal.
	Policy / decision		DMV could be integrated as part of broader consultation processes
	Implement		DMV could be integrated as part of adaptive management
	Evaluate	Use as an action learning tool for evaluating impacts and trends	Could be used to work with stakeholders to establish ex-post values for non-market benefits of ecosystems.

Please add any further comments here:

## Task 3: Existing literature about the tool

<b>Are you aware of any KEY policy and / or academic literature evaluating your tool?</b> <i>(e.g. reports, journal articles, books)</i>	Author & Date	Title Vol pages	Web link (if available)
	Spash, C.L., 2007	Deliberative monetary valuation (DMV): Issues in combining economic and political processes to value environmental change. <i>Ecological Economics</i> , 63(4), pp.690-699.	
	Lo, A.Y. & Spash, C.L., 2012	Deliberative monetary valuation: in search of a democratic and value plural approach to environmental policy. <i>Journal of Economic Surveys</i> 2012.	
	Fish, R. et al., 2011.	Participatory and	<a href="http://randd.defra.gov.uk/">http://randd.defra.gov.uk/</a>

Please add any further comments here:

		Deliberative Techniques to Embed an Ecosystems Approach into Decision Making: Full Technical Report, London: DEFRA.	Document.aspx?Document=NR0124_10262_FRP.pdf
	Howarth, R.B. & Wilson, M.A., 2006	. A theoretical approach to deliberative valuation: Aggregation by mutual consent. Land Economics, 82(1), pp.1-16.	

#### Task 4: Your experience of working on the tool

**Have you done any research/consultancy work on this tool in terms of its development, testing and/or evaluation?**

*If so, please provide an outline.*

The NEA Follow on phase includes two case studies of the use of DMV, where it was used to assess shared values of community councils for a landscape scale conservation and management realignment project appraisal in the Inner Forth, and for a study of the values of divers and sea anglers for UK marine protected areas, to feed into consultation proceedings.

**Guidance**

For Tasks 5-7, please also try to consider the **future** development and application of this tool in the TABLES project in your answers.

#### Task 5: Incorporating the ecosystem approach (EA) and ecosystem services (ES)

*\*\*Please refer to the summary text about ES for concept clarification at the end of this template (appendix)\*\**

**Using examples (from practice, research or consultancy), explain how EA and/or ES are currently incorporated in/by the tool**

*If neither approach is currently incorporated, please move to the next question*

In the Inner Forth case study, DVM was used to assess a range of ecosystem service benefits of ecosystem services that were expected to improve as a result of the proposed projects, which would enhance and restore both habitats and cultural landscape features. A stakeholder workshop was used to assess which ecosystem services and benefits were most relevant to the project context, after which deliberative choice experiments were used to assess their value. A key element of the deliberative process was a conceptual systems modelling exercise which allowed participants to discuss the dynamics of the Inner Forth social-ecological system, allowing them to better value its environmental components.

In the MPA case study, the ecosystem service framework was used to assess how participants benefited from the areas that would potentially be protected. In accordance with the typology established by the NEA, sites were considered as environmental settings with a range of biophysical features that were thought to influence their value. A range of non-monetary indicators of cultural benefits: reflection, sense of wholeness, identity and continuity with past, health benefits, knowledge, social capital, aesthetics, inspiration, freedom and participation, were used to guide deliberation between participants. In addition, existence and bequest values were considered. By deliberating and sharing experiences in relation to these benefits, participants developed a shared sense of value

which was expressed through establishment of a fair price for protection of benefits of marine sites.

**How could the ecosystem approach and/or ecosystem services be (further) incorporated within the existing tool?**

There are assumptions in the ecosystems framework that trade-offs need to be made between different ecosystem services. Ranges of evidence can be presented to and debated by participants, which can help to inform trade-offs and provide material for moral and political debates, e.g. around the distribution of benefits and costs.

**Task 6: Situating the tool within priority questions/criteria arising from the scoping interviews**

**Explain how the tool can be situated within the priority questions/criteria that arose in the scoping interviews**

*Complete as many boxes as required*

Priority question/criteria	Does your tool address/implement this question/criteria? Or does it have the potential if it was better integrated with an EA/ES approach? <i>Please explain how.</i>
<b>Language and communication</b>	
1. Contribution to aiding the development of shared vocabulary within which principles of EA and ES can be shared with multiple stakeholders across built and/or natural environment	Deliberation sessions allow for the construction of shared vocabulary and conceptualisations.
2. Capacity of the tool to develop shared understandings of the many identities and values of places from the perspectives of multiple visitors, residents and businesses	Deliberation sessions allow for the construction of shared vocabulary and conceptualisations.
3. Capacity of the tool to improve or enable engagement across different publics so avoiding the usual suspect problem	N/A
<b>Learning from experience/pedagogy</b>	
4. Capacity of the tool to help reveal and value 'hidden' assets that are not recognised by communities or publics that use them	There is some evidence that well designed deliberative valuation processes are more able to capture subtle benefits of the environment, such as a sense of identity, than conventional individual survey methods for monetary valuation, and DMV appears to be more suitable for bringing out shared meanings and values of participants.
5. Extent to which tool is building on other tools or EA/ES progress	DMV can build on either existing economic stated preference tools, or on existing political methods for assessing evidence, such as citizens jury.
6. Extent to which tool is locally derived or grounded or can be	Through deliberative and participatory processes, local views can be encapsulated to a greater extent

adjusted to closely reflect 'local' context. Is the tool suitable for an open source approach?	than through individual survey methods.
7. Extent to which the tool is open to interpretation and application in a variety of forms (that reflect 'cultural' differences)	As qualitative evidence is gathered on the content of deliberation, a high degree of detail is available to interpret monetary outcomes.
<b>Developing and selecting tools</b>	
8. Is the tool dependent on a specific funding source? How onerous is the application procedure? What are the chances of success?	No
9. Does skills development (essential or optional?) and support exist for the tool or is there a body to ensure the optimal and correct use of it?	No
10. Extent to which current statutory hooks can be exploited by the tool or will benefit the quality or application of the tool (e.g. NNPF's duty to cooperate, SUDS, ecol. networks)	N/A
<b>Informing resultant policies effectively</b>	
11. Extent to which the tool informs or improves policies/decisions. What does the tool cover? (full range of positive and negative economic, social and environment impacts / tradeoffs?)	Contingent valuation based DMV can be used to assess non-market benefits of ecosystem services which can be fed into cost-benefit analysis. Political-process based DMV can provide monetary value estimates of benefits that may not be compatible with the preference utilitarian assumptions of CBA.
12. How does the tool link into the planning system (applications and processes). At what cost / extra burden?	N/A
<b>Delivering management objectives</b>	
13. Suitability or capacity of the tool to assist with managing visitor needs and pressures within protected areas / the considered area? How?	N/A
<b>Local ownership/new governance</b>	
14. To what extent can the tool assist in developing statutory plans (local and management plans) and improve ownership and use by publics?	DMV has the potential to enhance a sense of ownership over valuation results, when these are used to implement an ecosystems approach to determine management. DMV could be integrated in adaptive management to re-evaluate values with

		groups of stakeholders or members of the public.
15. To what extent does/could the tool contribute to a new form of community governance in management of the environment?		DMV has the potential to enhance a sense of ownership over valuation results, when these are used to implement an ecosystems approach to determine management. DMV could be integrated in adaptive management to re-evaluate values with groups of stakeholders or members of the public.
<b>Improved tools: understanding flows, interconnections and spatial issues</b>		
16. Capacity to improve spatial understandings of the flows and interactions of various ecosystem services between sectors and at different scales		N/A
17. Capacity of the tool to reconcile assessments of options and benefits across different scales (and sectors)		Trade-offs at different scales could be taken into account into the deliberative processes as part of DMV assessments.
18. Extent to which the tools is capable or can be manipulated to work across sectoral and administrative boundaries		As with any other form of environmental valuation, who has 'standing' either from an accounting, or ethical stance, may need to be included. GIS approaches to aggregation of monetary valuation can potentially be linked to DMV to more accurately estimate use and non-use values.
19. Extent to which the tool can handle data shortages and gaps (or is effectiveness considerably compromised?)		Deliberative processes can include considerations of uncertainty and gaps in understanding.
20. To what extent has/could the tool put landscape/nature conservation and designated species/sites on the radar (positively or resulting in resentment?)		DMV has the potential for social learning around environmental values, although there is no current empirical evidence for this.

Please add any further comments here:

#### Task 7: A SWOT analysis of the tool

Referring back to the relevant policy and academic literature (listed in Task 3), plus your own expertise (listed in Task 4) and the way in which the tool is situated within the priority questions/criteria (listed in Task 6),

##### Strengths (of the tool in delivering intended outcomes)

- The quality of valuation evidence can be improved through DMV, by:
  - Decisions can become better informed through structured deliberation as a learning process
  - Previously hidden values can be made explicit
  - Participants can consider and debate their deeper held ethical and moral considerations, which allows them to consider their preferences more carefully.
- As qualitative evidence is gathered on the content of deliberation, a high degree of detail is available to interpret outcomes.
- As a result of increased participation, outcomes may be more acceptable in the views of stakeholders, the public and/or decision-makers.



**please complete a summary SWOT analysis ensuring that each point is well justified**

*Where possible, this analysis should reflect the tool's past and current application, as well as its effectiveness in policy and decision making processes*

**Weaknesses** *(factors that detract from the tool's ability to deliver intended outcomes)*

- Yet little empirical evidence on the precise impacts of deliberation on values
- Methods are underdeveloped, and there is a lack of best-practice guidelines
- Complexity and required resources may be increased compared to survey based contingent valuation, particularly for large-scale assessments.
- Outcomes are inevitably influenced by how issues and questions are framed (as is also the case with non-deliberative approaches to valuation).
- Group processes need to be skilfully facilitated to avoid or manage more general issues and risks associated with participatory methods.
- Although DMV has the potential to capture more elements of value than non-deliberative modes of valuation, it may still not be possible to monetise all possible benefits and costs.
- For types of DMV that tread outside of preference utilitarian assumptions, outcomes may not be suitable for cost-benefit analysis.

**Opportunities** *(consider opportunities for application of the ecosystem approach and services)*

- DMV can be integrated as part of broader consultation processes
- DMV can be integrated as part of adaptive management

**Threats** *(factors which negatively affect the tool and its outcomes)*

*Classify these by their "seriousness" and "probability of occurrence" in the table below, and pay particular attention to the threats associated with potential use of ecosystem approach/ecosystem services.*

Threat	Seriousness (high, medium, low)	Probability of occurrence (high, medium, low)
Poorly designed deliberative processes	High	medium
Inadequate facilitation	High	medium
Lack of proper stakeholder analysis – sample does not represent all valid interests.	High	medium

Please add further comments here:

**Guidance**

*Please now use the remainder of the document (box below) to make any general comments, observations or analyses of the tool*

**Further comments**

The added value of a deliberative approach to valuation will depend on required outcomes, but also on the types of ecosystem services and values that need to be assessed. It is likely that added value is greatest when considering cultural services, existence and bequest values, and in situations where values need to be assigned on the basis of limited evidence, or where there is mixed evidence or high uncertainty about benefits.