Appendix B. Catalogue of eEngagement Models

An alphabetically-arranged list of general models of eEngagement.

Contestable Policy Analysis

Interactivity:	Low
Timeliness:	Variable
Outcomes:	Variable
Decision-making:	Government
Complexity:	Low
Description:	The notion of contestable policy analysis is a broad one and tends to be less programmatic, or project based, than other forms of eEngagement (such as consultative models). This notion comes from broader policy discussions regarding contestability in government service delivery and is an extension of new public management concepts of competition across all facets for government. Contestable policy analysis is a deliberate attempt to ensure that aspects of policy analysis are open for participation by non-government organisations and individuals, be they private sector firms (through contracting), academic organisations, or partisan groups. The essential requirement for contestable policy analysis is to ensure that information relevant to the assessment of policy options is released to the public. In the past, these have generally taken the form of comprehensive policy discussion papers, where public sector understanding of the issue and research is summarised for public consideration. However, with the advent of ICTs, the cost of delivering greater amounts of information and the capacity for external groups and individuals to analysis large amounts of data, has increased significantly. Thus, while discussion papers generally included statistical evidence, it seldom included complete data sets. The analysis of policy in a contestable manner requires external actors access to the same amount and form of data as internal analysts.
Advantages:	• transparency and oversight by members of the public (can introduce new evaluations of data quality or assumptions employed by the public sector that are not known to executive and elected officials) • stimulation of competing perspectives and analysis (can be of higher quality than internal analysis) • generation of alternative policy ideas, based on sound analysis • non-directive – capacity for new ideas to be generated • cheap – digital release of information is very low cost
Limitations:	• loss of control over data. If data has value (is employed commercially) care must be taken to establish an appropriate licensing system (such as the Creative Commons approach, see: http://creativecommons.org/) to preserve public ownership but allow contestability • issues of privacy. Some data may identify (or be able to be used to infer) individuals. The assessment, cleaning, or aggregation of these data sets can incur a cost • no guarantee of external expertise, or that expertise will be applied (uncertain outcomes) • political sensitivity to the release of data (as opposed to the release of carefully prepared documents, as is commonly the norm) can be at odds with trends towards greater government control over information release and presentation • concept misuse – selective data release ('good news data' only) will lead to distorted analysis (garbage out, garbage in)

Co-production (eGovernance)[1]

Interactivity:	High
Timeliness:	Ongoing
Outcomes:	Specific
Decision-making:	Shared
Complexity:	High
Description:	Co-production models of engagement focus on shared policy-making and management between government and the community or relevant non-government organisations. Whereas partnership and outsourcing models tend to focus on relationships that are either based on principal-agent models (such as contractual relationships) or devolution and autonomy (self-government), co-production entails equal participation by both parties and recognises this through shared decision-making functions. The use of ICTs in this area can include: • developing online joint management boards or structures that use ICTs to overcome distance issues, or problems of participation out-of-hours (either through virtual meetings or the provision of briefing and performance data electronically to reduce time commitments in physical meetings) • integration of management systems (such as performance and reporting systems) across organisations, where policy implementation is a joint undertaking (data sharing and aggregation) • creation of 'virtual organisations' with staff and budgets allocations drawn from a range of organisations (public value creation networks) • development of performance data exchange systems between purchaser-provider organisations (vertically), across separate geographic delivery areas (horizontally), or to form performance markets (comparative and competitive environments to determine true and contingent cost per performance evaluations)
Advantages:	• co-production is aimed at achieving inter-organisational collaboration and action. Thus, can represent an expression of 'joined-up' government. The use of ICTs can allow existing structures (hierarchical bureaucratic departments) to be 'overlaid' with co-production networks to achieve this, without radical restructuring • capacity to achieve better policy outcomes (e.g. matching resources with expertise, expertise with local implementation) – magnification effect • focuses on information exchange, joint development of programmatic responses and shared management (true partnerships) • democratic and participative – can overcome significant barriers to implementation • coalition building in character (can overcome entrenched interest problem)
Limitations:	• accountability issues • complexity (especially in data exchange systems development) and therefore cost implications • need to establish flexible systems to accommodate change can widen scope of initial network development at a cost (e.g. need to develop extensible data exchange and collaboration protocols and applications) • often difficult to achieve where large differences in resources exist between partners (elephant and mouse problem) • need to recognise value of non-economic (financial) resources to develop meaningful partnership models • 'drift' between outcomes of self-managing networks and top-down (executive) policy making can be problematic

[1] Often referred to within a 'partnership' framework. However, it is asserted here that the misuse of the term partnership – particularly for public financing arrangements, which represent a form of monopoly licensing; in areas of Australian indigenous governance and; as a misnomer for consultation – has undermined the value of this term in an engagement context.

Online Citizen Juries

Interactivity:	High
Timeliness:	Short to modest
Outcomes:	Specific
Decision-making:	Public
Complexity:	Modest to High
Description:	Citizen juries are small groups of citizens (normally 10 to 15 members) who are brought together to hear evidence related to a policy issue, deliberate amongst themselves and pass a resolution. The approach differs significantly from a focus group, in that the length of time undertaken is longer as the jury is presented with evidence from experts on the subject prior to their deliberations. The outcome of the citizens jury is either a binding resolution or a recommendation which, if not implemented, must be responded to. The use of ICTs to facilitate this form of decision-making approach can allow for participation asynchronously (expanding the number of people who can participate who would normally be restricted by work or carer commitments), present evidence from a wider range of experts who may be based internationally and provide evidence in a range of forms (multimedia, written)
Advantages:	• as a form of direct decision-making this approach has been heralded as having democratic value, in that decisions are seen to be taken by 'ordinary' people • appropriate use of sampling for jury selection can gather a broad cross-section of the community, or reflect a specific community composition which may be distinctly different to that of the public sector or elected representatives • the ability to provide expert evidence and place this within the public arena can improve overall understanding of the complexity of decision-making • can often be a useful approach to break through a policy area where decision-making has been dominated by an entrenched interest
Limitations:	• can be expensive and sometimes cynically utilised to provide a veneer of legitimacy • the selection of experts can highly shape outcomes • the small number of participants can be used to question the legitimacy of the outcome, particularly where the decision reached is widely divergent from popular opinion • failure to implement jury decisions can breed disenchantment and scepticism over the honesty of the commitment to engagement • often unsuited to highly technical areas of policy-making

Online Deliberative Conferencing

Interactivity:	High
Timeliness:	Modest
Outcomes:	Specific
Decision-making:	Public
Complexity:	High
Description:	A variation of online citizens' juries, deliberative conferencing dramatically increases the scope and scale of the undertaking and can include as many as several thousand participants divided into small groups that come together for plenary sessions and to hear evidence. Online deliberative conferencing draws its claim to strength from the large number of participants and the capacity to sample a broad cross-section of the community. The large number of participants does require meticulous planning and a significant investment in the systems that allow the views of each of the small groups to be incorporated into a final share outcome. This is often undertaken through the use of a series of surveys or polls undertaken throughout the course of the event. • a non-deliberative form of this approach is sometimes referred to as 'community visioning'. In this type of approach final outcomes are often highly qualitative, rather than passing specific resolutions or endorsing particular final conference policy documents
Advantages:	• largely identical to the online jury, with the advantage of broader participation • useful in large-scale 'visioning' exercises and can be useful in developing significant public commitments to a substantial change of direction in public policy • the large investment of time required to develop materials serves as a significant resource in educating the public about a policy issue
Limitations:	• extremely expensive, particularly in the development of technology, the recruitment of participants and the recruitment and training of staff. Often volunteers are employed to lower these costs • like citizen juries, questions are often raised about the practical utility of undertaking these activities. While deliberative conferences have shown that the opinion of a broad cross-section of the community can be shifted given a rigorous and complete briefing and discussion of highly charged policy issues, this does not mean that the wider community will endorse these views having been largely outside of the process • again, like citizen juries, the selection of people to provide expert evidence can be highly contested and attract the accusation of manipulation through bias in the selection of these experts

Electronic Delegate Committees

Interactivity:	Modest to high
Timeliness:	Ongoing
Outcomes:	Specific
Decision-making:	Shared
Complexity:	Modest
Description:	Electronic delegate committees have similarities to citizen juries in that they are comprised of small numbers of citizens who have some claim to represent a segment of the community. In this model, this claim is based on the election from specific groups, rather than the 'market research' sampling approach of the citizen jury or deliberative conference. Delegate committees meet to discuss policy issues, exchange information about the perspectives of their respective groups or communities and can have a specific deliberative all decision-making function (devolution of decision-making).
Advantages:	• by using elected delegates from specific target communities all organisations can overcome some of the criticisms of the sampling approach utilised in citizen juries and deliberative conferencing, as delegates are directly elected • delegates can act as an information conduit between their community or representative body, multiplying the information transfer effect at modest cost • appropriate briefing or training for delegates can assist in improving the quality of deliberation, provided delegates caucus or survey their constituents • effective use of elections can provide significant legitimacy to outcomes
Limitations:	• difficulties in establishing specific communities or bodies to be represented can lead to problems in establishing an effective electoral system, undermining legitimacy of process • elected nature of delegates can create tension with conventional political processes where delegates claim political legitimacy above formal elected representatives • recruitment process can be time-consuming and expensive to establish and administer to prevent electoral fraud

Electronic Discussion Lists

Interactivity:	High
Timeliness:	Ongoing
Outcomes:	Specific or diffused
Decision-making:	Variable (may contain voting engine for direct or deliberative decision-making)
Complexity:	Low to modest
Description:	Often based on relatively simple technical systems (such as bulletin board systems or email list servers) they are relatively simple to develop. Depending on the purpose of the discussion list the process can be discreet (e.g. subject specific) or ongoing, canvassing a wide range of topics for discussion (the 'reference group' model). Electronic discussion lists can be strictly controlled through moderation or limits to the number of contributions from participants in a given period of time, or can be open and unregulated. Some electronic discussion lists have employed 'chat' software (such as Internet Relay Chat) to host real-time discussions. • a variation of this approach is the use of these technologies to undertake online focus groups (closed lists) as an asynchronous substitute for conventional face-to-face approaches
Advantages:	• flexible format can be empowering to participants, allowing members of the public to define the subject under discussion and engaging conversation between themselves • relatively simple technology employed can be useful as a low barrier to entry and participation (particularly where email is the delivery channel) • collect large amounts of data, with a high degree of interactivity allowing for follow-up discussion over unclear aspects of the conversation • can be used as part of an online citizens jury model, with the use of voting or polling at key points
Limitations:	• often requires a considerable time commitment from participants, which can be a barrier to participation • sometimes difficult to recruit participants, particularly where the issue is considered dry • where moderation is not undertaken, can result in domination by a small number of participants or external disruption, such as flooding with 'spam' messages • can be over moderated, restricting discussion, often due to a fear of 'hijacking' by partisans • data collected can be highly unstructured and, without specific voting mechanisms, analysis can be difficult • moderation can be expensive

Electronic Voting

Interactivity:	Low
Timeliness:	Short (periodic)
Outcomes:	Specific, quantifiable
Reach:	Broad
Decision-making:	Public
Complexity:	Very High
Description:	Electronic voting systems have been introduced in a number of countries, particularly the United States, Canada, United Kingdom and India, with mixed success. The primary motivation for the introduction of these systems is generally as a means to combat declining levels of participation in noncompulsory electoral systems and a range of technologies has been employed, from standalone or locally networked personal computers, mobile telephones, internet-based systems, to specifically built voting devices. Additional benefits attributed to the introduction of these systems emphasise their capacity to deliver verbal instructions in a variety of languages and allow voting remotely
Advantages:	• builds upon existing participatory paradigms well understood by means of the public • fast tabulation of election outcomes, particularly in complex electoral systems • multilingual and vision impaired assistance • remote participation
Limitations:	• highly expensive • high risk environment, particularly for internet-based voting systems • low public trust in technical system • limited public demand in Australasia

Online Dispute Resolution

Interactivity:	High
Timeliness:	Short (issue specific)
Outcomes:	Specific, focused on resolving disputation
Decision-making:	Public
Complexity:	Medium to High
Description:	Online dispute resolution is an emerging area of practice that stems from conflict resolution studies and has attracted strong interest from some aspects of the legal and judicial community. While it is commonly employed to resolve personal or commercial disputes (and thus is an ideal complement to electronic commerce), this approach can be employed to resolve local area disputations in an environment that can be divorced from the intensity of face-to-face interaction. This can be particularly valuable where one or both of the parties feels intimidated.
Advantages:	• has proven to be an effective way of resolving disputation, particularly where parties have had a breakdown of relationships which makes face-to-face interaction counterproductive • asynchronous nature of communication affords benefits where parties are in different timeframes, or have incompatible working commitments (e.g. where a citizen-based group is in conflict with a commercial organisation) • can employ decision support technology to model minimum agreements conditions • electronic nature of communication can be used to document agreements reached during activity
Limitations:	• relatively new and emerging area of practice, may face resistance from entrenched stakeholders • can move political disputation into a closed arena and away from public scrutiny • potential resistance from existing dispute resolution professionals

Electronic Surveys and Polling

Interactivity:	Low
Timeliness:	Short, but can be used on an ongoing basis as part of a reference group
Outcomes:	Specific, but can be used as a precursor for less structured consultation and participation processes
Decision-making:	Government
Complexity:	Low
Description:	The use of ICTs to deliver surveys to the community has been well developed over the last decade and the proliferation of low-cost, easy-to-use online publication tools makes the development and implementation of these engagement processes relatively simple to deliver
Advantages:	• low-cost to develop and deliver, elimination of data entry costs and transcription errors • ease of delivery and completion can increase response rates • 'smart' surveys can include error checking and dynamic presentation of complex surveys that reduce the prevalence of accidental submission of incomplete surveys • easy importation of collected data into analysis packages • easy collection of contact information for follow-up research
Limitations:	• generalised difficulties determining identity • impersonal nature of approach • can be overly rigid • tendency to emphasise quantitative results over qualitative ones (particularly in large samples) • 'polling' approaches sometimes lead to trivialisation through over focusing on either/or questions where the issue is complex

Simulations and Games

Interactivity:	High
Timeliness:	Short
Outcomes:	Specific
Decision-making:	Government
Complexity:	High to Very High
Description:	The use of planning simulations and other types of policy-oriented games have had application in public consultative processes for over 50 years. Often, the intention of these approaches is educative: either pitched towards younger citizens (such as children as part of civics education) or adults. The advantages of these approaches are their high level of interactivity, engaging nature and capacity to illustrate a range of policy alternatives (good simulations have far more combinations of policy response than their designers could envisage). With the development of ICTs and their popular use in gaming, these games can be: • highly complex and sophisticated – giving good insights into the trade-off outcomes of a range of policy alternatives (high-end simulations) • graphically impressive • delivered remotely • allow for large-scale competitive or collaborate play (network gaming) • delivered across a range of platforms (stand alone programs, web-interfaces, interactive television, etc.) Simulations and games can be developed at a range of levels, from corporate-grade decision support simulation, to modifications of existing game engines used for popular play,[a] to simpler implementations based on text or web-based animation tools (such as Flash).
Advantages:	• compelling, engaging content • can make participation 'fun' • educative – can show immediate and long term impact and outcomes of policy decisions (projections) to participants (for example, the Australian Stock Exchange share market simulation game: http://www.asx.com.au/investor/education/games/index.htm) • can allow for solo and network (collaborative play) • simulation decisions can be stored and 'submitted' as preferred plans (e.g. a simulation allowing citizens to develop an optimal arrangement for inner city land use can allow different preference maps to be stored, published and voted upon) • high levels of information literacy in these online environments, particularly amongst the sub 35-year old age group • once established, can be 'self managing', can create communities of interest around the game
Limitations:	• often high costs of design, often requires long lead time • issue needs to be well understood for appropriate and accurate simulation development (a *contestable* simulation makes the underpinning assumptions of the model clear and able to be changed by end users to see outcomes under alternative interpretations of the issue or problem) • rarely used outside of planning purposes – may be difficult to secure stake holder commitment • can be seen as trivialisation of a serious issue (see, for example, the United Nations 'Food-Force' game: http://www.food-force.com/) • real-time games are unsuitable for people with low levels of experience in gaming, or who have limited dexterity

[a] The United States armed forces, for example, licensed the popular game engine for Quake to develop a recruitment-oriented combat game (http://www.americasarmy.com/). In addition, there are a range of open source simulation engines (http://sourceforge.net/softwaremap/trove_list.php?form_cat=85).