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FORESIGHT

Strategic futures planning Suggestions for success

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Strategic Futures Planning Suggestions for Success

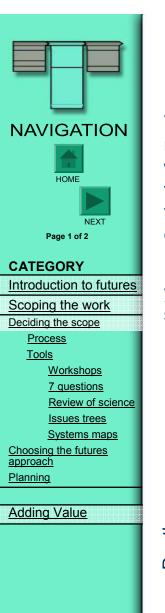
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Deciding the scope

You will need a process to decide the broad topic you will look at. For example, the DTI might select energy as a broad topic to start with. The approach used to pick the broad topic will reflect organisational priorities. In Foresight broad topics are selected on the basis that they are S&T driven, are significant for the UK, are more than 10 years out, are adding value (ie not repeating work) and have the support of key stakeholders. We use a wide consultation process to collect ideas and filter on the basis of those criteria

Having the topic is just the start of the scoping phase of the project. In addition to the topic you need to define the depth and breadth of the work, and the specific questions you are seeking to answer (the project's objectives)

Project's scope Example: Topic energy Project's objectives

| Depth | Technology roadmap for future fuel cells including details of all relevant science and future applications | Scenarios of use of technologies for production and supply of energy |
|-------|--|---|
| | Horizon scan of future fuel cell technologies Breadt | Horizon scan of all technology for production and supply of energy |
| | Diedu | |

What questions will your project consider.

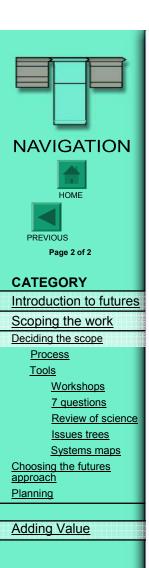
You could consider a range of issues, for example:

- The Foresight Cognitive Systems project asked whether there was value bringing together scientists studying intelligence in living systems together with those studying intelligence in artificial systems
- The Foresight Flooding project considered what the future flood risks might be and the costs and sustainability of management options to respond to those risks
- The Foresight project on Exploiting the Electromagnetic Spectrum considered commercial opportunities from emerging science in this field

SCOPING THE WORK

How to use

this guide





SCOPING THE WORK

Deciding the scope

Suggestions for success

- Define clearly the question you are seeking to answer. This is a good way to check that the project's outputs will be useful and will reduce the risk of project creep
- Defend your independence. One reason to run a project is to challenge 'group think', so you need to establish your independence at this stage and have the freedom to reject suggestions driven by personal agendas
- Do not be too ambitious. The amount you could explore is limitless. As you win people's support and encourage people to think beyond the immediate there is a risk you can try to do too much and raise unachievable expectations
- Agree with the stakeholders what policies or strategies this work will inform. It is
 essential to consider what you might influence so that your work answers the right
 questions and provides the right type of information to be useful to those taking
 decisions
- Be open to stopping the project at the end of this phase. The scoping phase should have power to shape the project as you collect evidence. But be willing to stop if: the evidence suggests this topic is already covered; you do not think you can add to existing understanding; or stakeholders reject the proposal
- Decide which areas of science are most relevant. If you are doing S&T futures, you need to consider which areas of science will affect developments in the area you are examining

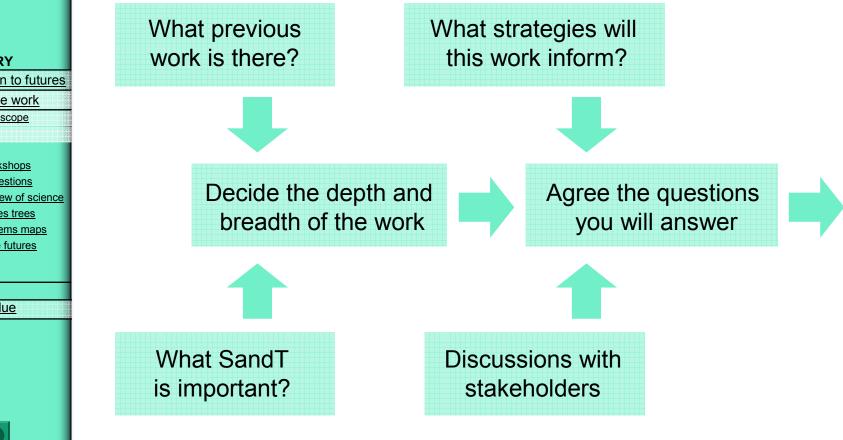


How to use this guide

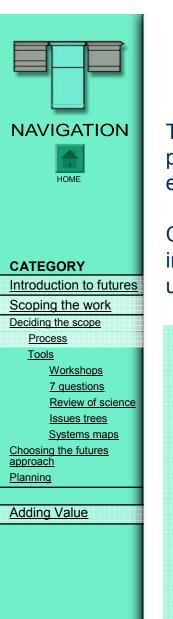
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Deciding the scope: the steps

This diagram sets out the major activities in the scoping phase and the flow of those activities:



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These are examples of the tools which you might use during the scoping phase. There are many others but these are approaches we have found effective in Foresight.

Click on the each of the approaches highlighted for two pages of further information including: a description of what the approach will deliver; how to use the approach and an example.

| Collecting the information | Analysing the information | Agreeing the project objectives |
|--------------------------------------|---------------------------|---------------------------------|
| Small workshops | Systems analysis | Meeting with |
| 7 questions | Issues tree | stakeholders to agree scope |
| High-level review of areas of scienc | | |

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The following slides provide further information on the aims and approach to use for a number of the tools you might use during the scoping phase of the project:

- Small workshops
 - 7 questions
- Science reviews
- Issues trees
- Systems maps

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Deciding the scope Process Tools Workshops 7 questions **Review of science** Issues trees Systems maps Choosing the futures approach Planning

Adding Value

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Deciding the scope: the tools

Small workshops

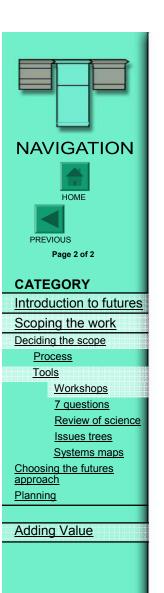
Aims

- areas of science
- To identify trends and drivers
- To assess which issues are of importance
- To engage the expert • community and stakeholders

Approach

- To explore and identify key Use normal best practice for brainstorming sessions
 - If unfamiliar, use a facilitator to help design the workshop
 - Use an experienced facilitator to support the workshop. If you do not have the expertise, buy it in
 - Include people from outside your organisation 'otherwise you will just confirm' group think

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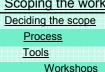
SCOPING THE WORK

Deciding the scope: the tools

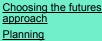
Small workshops, for example a workshop to identify drivers to feed into the development of a scenario

- Welcome. Depending on the size, these are good to get an idea of attendees, expectations from the workshops
- Introduction. Set out the aims for the meeting and sets the workshop in the context of the overall project so attendees understand their role in relation to the overall project
- Short talk of possible future of the issue being considered to encourage people to look beyond tomorrow (need to keep the pre-discussion activity short, and leave as much time as possible to collect ideas from the attendees)
- Split into small groups of 6–12 to brainstorm as many possible trends and drivers and then group the trends and drivers
- Over coffee there's an opportunity to see what other groups have produced, whether an oral report back or a chance to walk around and see what each group has written
- Give one group of trends to each small group to explore how the different trends might interact
- Lunch
- Assess key trends in a matrix assessing the level of impact and the uncertainty of the different trends and drivers
- Plenary group discussion of the most important trends and drivers the project should consider (in most instances it is not about achieving consensus, but providing a platform for debate to harvest the key issues that the project team should explore)









Adding Value



Deciding the scope: the tools

7 questions

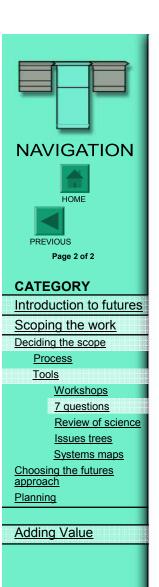
Aims

- To understand stakeholders' agendas and priorities
- To identify key issues to explore
- To secure their interest in the project

Approach

- This is a standard tool, for oneto-one meetings with senior stakeholders
- You should allow just 30 minutes
- This is not a discussion, just ask them the questions and listen. It is also useful if you have each of the questions written on paper to give to them one at a time
- You should produce a short note and send it back to the stakeholder for comment and then combine all of the stakeholder's comments into an anonymous overview

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7 questions

The questions are:

- 1. If you could speak to an Oracle about 2020 what would you ask?
- 2. What is your vision for success?
- 3. What are the dangers of not achieving your vision?
- 4. What needs to change if your vision is to be realised?
- 5. Looking back 10 years, what successes can we build on and what failures can we learn from?
- 6. What needs to be done now to ensure your vision becomes reality?
- 7. If you had absolute authority and could do anything, is there anything else you would do?



Adding Value

How to use this guide

Deciding the scope: the tools

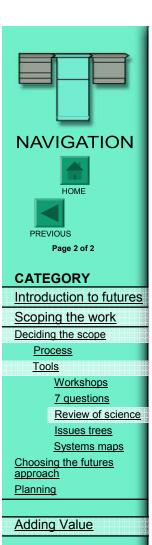
Review of areas of science

Aims

- To provide short accessible reviews of the areas of science which might be of potential interest
- To provide two-page reviews of all areas of science of interest
- To allow you to decide the key areas of science you will explore
- To...

Approach

- A workshop with a wide range of scientists is the best way to develop a list and identify people who could write your reviews
- Each review should include:
 - a short explanation of the area of science
 - an outline of areas of recent discovery or advance which are relevant to the project
 - a view of what the future capabilities might be



Below are the topics of the reviews of science from the Foresight project on brain science, addiction and drugs. This provides an idea of the types of areas that can be covered by state-of-the-science reviews:

- Neuroscience
- Genetics
- Experimental psychology
- Clinical psychology
- Pharmacology and treatment of addiction
- Economics
- Sociology
- Social policy

- Cognitive enhancement
- Drug testing
- Imaging
- History of addiction
- Life histories and narratives of addiction
- Behavioural addictions

SCOPING THE WORK



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| eciding the scope |
| Process |
| Tools |
| Workshops |
| 7 questions |
| Review of scie |
| Issues trees |
| Systems maps |
| Choosing the futures |
| lanning |
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Adding Value

How to use this guide

Deciding the scope: the tools

Issues trees

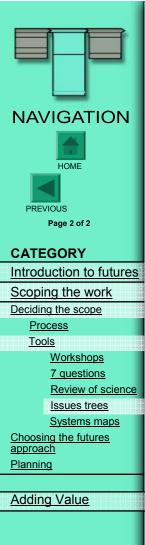
Aims

- To help you explore the key questions you should consider
- To identify the high level questions and the information you will need to provide a complete answer
 to your key question
- To,,,

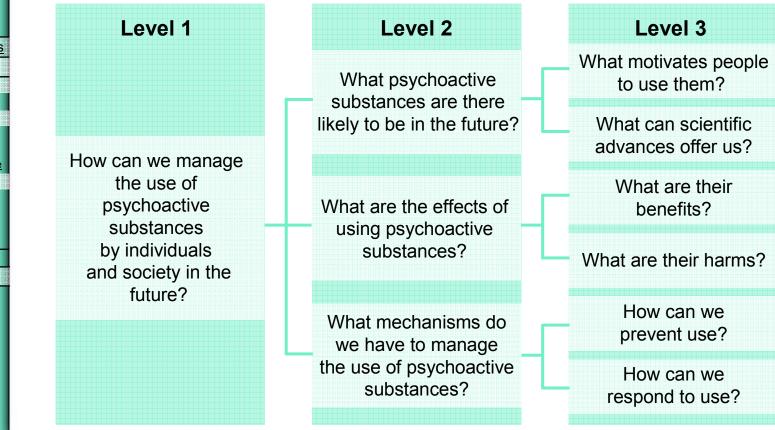
Approach

- There are often a number of ways to organise your issues. It is good to try several, the exercise will deepen your understanding of what is really important
- Involve experts and stakeholders in this process
- The final issues tree should be mutually exclusive and completely exhaustive

SCOPING THE WORK



Example of the top level of the issues tree for the Foresight project on brain science, addiction and drugs:



SCOPING THE WORK



Workshops 7 questions Review of science Issues trees Systems maps Choosing the futures approach Planning

Adding Value



Deciding the scope: the tools

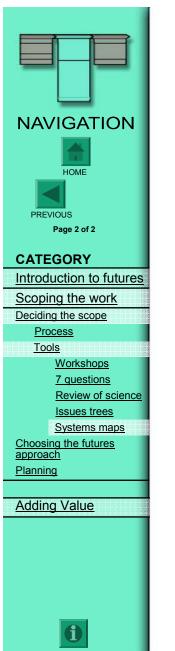
Systems maps

Aims

- To map out the key components of a system
- To explore the relationship and importance of the different factors
- To understand the range of factors that will influence the system you are interested in

Approach

- Identify what you want as the centre of the system. If you were doing a project on health, the central point might be the percentage of healthy individuals
- Brainstorm a list of all of the factors which could influence the centre of the system
- Map those onto a single picture highlighting the relationships and whether the factors will lead to an increase or decrease in the issue you are considering



Example systems map

