Using foresight techniques in the implementation of innovation policies

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Ah, the old questions, the old answers, there's nothing like them!

Samuel Beckett - *Endgame*

Why foresight in innovation policy?

- We are facing some new challenges

- habitual ways of responding might not work

- Foresight is a mechanism for identifying new issues

- challenging presuppositions, formulating questions

- and setting out to find some answers

Route map

- Who am I?

- What is foresight?

- Who is doing it?

- Why would innovation policy people want to do it?

- What would they be likely to get out of it?

- How can you do it?

- An example, what might work!

A common definition of foresight

- "the process involved in systematically

- attempting to look into the longer-term future

- of science, technology, the economy and society

- with the aim of identifying the areas of strategic research

- and the emerging generic technologies likely

- to yield the greatest economic and social benefits"

Ben Martin, SPRU, 1995

If it sounds like....

- Planning – it is not, although closely related

- Neither is it forecasting, although uses same tools

- It *is*
  - exploration of different possible futures
  - giving them life enough to evaluate options
  - and make 'reasoned' choices between them
  - and inform today's decision making
  - to take us where we want/need to go

So, similar to RIS

- The objectives of which are:

1. To improve the capacity to develop policies

2. Provide framework to optimise future investments in R&D&I

In fact, they are complementary

- Inclusive, 'bottom up', 'culture change' projects

- Depend on right sponsors and participants

- Must be part of policy cycle, aiming to 'embed'

- Rigorous and systematic

- Must be good 'projects' – perhaps this is the key!

- In fact, perhaps, 75% of *labour* is common

- Would be an excellent 'follow-on' or refocusing

But foresight *is* a bit different

- Because it tries to listen/look 'over the horizon'

- for the unforeseen, the new, the currently marginal

- shifting from incremental policy development

- (and consequent incremental view of innovation)

- to detecting breakthroughs, anticipating discontinuity

- to try to make us ready for things we don't know

Everybody's doing it, regions too

- National, sub-national, even European level

- But why should regions be interested in general?

- Key 'meso level' to mediate global trends

- and implement national and EU policy

- where knowledge makes money or social impact

- where detailed problems can be tackled

& innovation people in particular?

- Are some new policy challenges in regions

    – scarce resources – must prioritise, but are best choices?

    – we can't do everything – must specialise, but where?

    – more players in the game – where we going to be competitive?

    – choices about S&T and innovation very complex now

    – national level perhaps less effective in responding

    – accepted that regional clusters are key economic drivers

    – regions need innovation management skills to optimise

Policy processes changing too

- Some new features in policy making environment

  - regions are demanding more 'competencies'

  - right to set own agendas, they need to know how

  - some social demands for inclusive policy making processes

  - demand for accountability – why do this and not that?

  - demand for direct link to problem solving, value for money

- Foresight is a way of responding to these pressures

- has a role in implementing innovation policy

What are people getting out of it?

- Longer term policy benefits
    - Long term visions and strategic priority setting
    - Create a 'culture of foresight'

- Policy/competitiveness benefits medium term
    - Identify problems with innovation support system
    - Guide innovation support policies, justify initiatives

- System benefits 'wiring up innovation brain'
    - Develop & strengthen links in innovation system
    - Making system more responsive and accurate

- Detailed outputs business including SMEs
    - 'competitive intelligence' about future technology issues

But what you get from it depends on

- Needs, which must reflect what you can *use*

- Remember, you'll never get/need/use them all

- Advanced, highly integrated innovation systems
  - may need shocks, challenges, break consensus
  - so new strategic priorities, long term visions

- Less advanced systems
  - new approaches for implementing programmes
  - ensuring continuity, correcting system failures

- Developing systems might focus on
  - building and improving innovation networks
  - building capacity, 'trust and reciprocity'

So we need to handle with care

- And get a gridwork, a *framework* in place first

- Never let it be a 'solution looking for a problem'

- it won't solve all *problems*, but perhaps a few

- but we need to know what they are before we start

- Is a specialised, targetted, modest tool

- adds very particular value which is difficult to get at

- to help policy extend horizons/change mode

In fact, implementation needs...

- A **very** strong foundation – detailed 'scoping' phase
    - policy fit, support, embedding strategy, cycles
    - assumptions, high-level objectives
    - 'champions', awareness raising
    - focused project objectives, clear expected results
    - professional management structures
    - knowledge managment, dissemination, take-up
    - external experts
- These are like any other complex projects
- Chaos waiting to happen

But, having said all that....

- Now is a great time to do it, never better

- plenty of now well-organised expertise to draw on

- nationally and at EU level

- plenty of excellent printed material e.g. The Guide

- lots of other people are trying it too

How do you do it, then?

- Expert knowledge based methods

  - Delphi method

  - Expert panels

  - Brainstorming

  - Mindmapping

  - Scenarios

- Quantitative methods

  - Bibliometrics, patent analysis, text mining

  - Trend extrapolation

  - Simulation modelling

  - Cross impact analysis

  - System dynamics

But how do you choose them?

This is complicated - an example might be helpful here

FOur MOtors FOresight

FOMOFO was...

- The 'Four Motors Foresight Initiative'

- an EC project in the STRATA programme

- closely related to FOREN

- a partnership of 4 teams

- working on the Motors platform

- between April 2001 and end-March 2002

our overall objectives were

- To help make foresight more common & effective

- to stimulate further activities or full-scale projects

- Pilot 'light', practical, flexible foresight methods

can we characterise the approaches?

- method and context

- formal method foreground or background

- expertise and creativity

- formal product or learning process orientation

from our 'sample' we concluded

- Practical, innovation focused projects should be:

  - 'hands-on', 'with' rather than 'for'

  - inclusive

  - flexible, customised – find the right 'dialect'

  - more 'art' than 'science'

  - formal method/outputs supporting process

  - creative for participants

  - catalysing/facilitating

  - qualitative emphasis

And I think you'll add real value

- By linking foresight much more clearly

- with external professional **evaluations** of

- sector capacity *and* policy making systems

- basing longer-term thinking

- on clear, common understandings of where we are

- then we can build bridges between present

- and the future you desire