The series constitute ‘ideas in progress,’ after the notion described by I.J. Good in ‘The Scientist Speculates.’ Good also describes ideas about ideas as ‘partly baked ideas’ believing that “... it is often better to be stimulating and wrong than boring and right.” While the papers do not take this tenet as an excuse for licence at the expense of rigour, they are exploratory and the ideas may change as a theme is developed over time - this note is based on a poster session at an ITPS Conference held in Seville from the 13-14 May 2004.
The issues now faced by politicians, policy makers and the general public are more complex comparatively speaking than those faced in earlier eras, a situation that is unlikely to simplify in the future. Often these issues are urgent, as in the case of BSE (bovine spongiform ecephalomyelitis), genetically modified organisms, stem cell therapy, some forms of nano-artefacts and other future science and technological applications. Indeed, in a seminal paper in 1963 Sir Geoffrey Vickers contended that “...most problems that humans try to solve are set by their own appreciative judgements ....” a notion that Weinberg later described (in 1972) as trans-science, an issue that has been recognised again more recently by Funtowicz and Ravetz (1993). We have extended the notion of trans-science to its more general counterpart found in the problems of living, an idea adapted from Maxwell’s 1984 discussion of wisdom versus knowledge. Politicians have turned to ‘expert communities,’ notably the science community for advice, but acceptable advice has not been forthcoming either because the science is not understood or because, in its public context, the science is contestable and open to ambiguity. The problems of living are characterised by an apparent initial simplicity that rapidly spirals seemingly out of control through the multiplicity and breadth of the interrelated forces at work accompanying a very large increase in the quantity of information involved. The issues involve ‘soft’ living systems as opposed to their ‘hard’ counterpart familiar in engineering and elsewhere, but may include them. Appreciation may then seek action, but there is no certainty that it will occur whereas regulative action, typified by law, will invoke action in a binary go-no go fashion; there will not be any doubt. The problems of living are ‘soft’ systems that are concerned with situations that can be ‘improved’ but for which no ‘solutions’ exist. Systems of this kind have become pervasive. By contrast, approaches to specified problems capable of solution, may be addressed by traditional committees or ‘working groups,’ using technology foresight, forecasting or assessment or similar methods, purporting to use the ‘methods of science.’ While these procedures are not well adapted to the needs of politicians, policy makers and society in general or to these pervasive issues, they make specific but limited contributions to both systems thinking and law. Lastly, law sets the current frameworks for living through both explicit and implicit codes. It is concerned with the morals, ethics and exploitation of ideas that may emerge from foresightful activity, but will do so in a systemic way since it is related to the deeply philosophical matter of setting boundaries in systems thinking. Law enforces current explicit regulation and also shapes, in an anticipatory way, future expectations, even when these are built on the flimsiest evidence. In the latter function, law attempts to cope with the difficult task of anticipating future codes of behaviour, which at the time are both implicit and highly uncertain. These then are the reasons for linking, in a highly interrelated way, systems, foresight and law.

As systems, the problems of living are characterized by perceptions of what the system is, not what it does, and what it may become and depend on sensing (or perceiving) an elusive and undefinable mismatch between what is and what might be. The word ‘problem’ itself is a difficulty since it is mostly interpreted as posing a concern for which there is a ‘solution’; this is not so for ‘soft’ systems that, in this instance, are unstructured and non-repetitive situations amenable to ‘improvement,’ which is itself a matter of judgement. Unstructured and non-repetitive situations face politicians, science, companies and the polity with increasing frequency (they may have become pervasive) and impose a need for massive doses of learning intermittently between intervals fraught with change. Systems learning related to these unstructured situations then assumes paramount importance in the way the problems of living are thought about. Soft systems thinking and learning involves fuzzy boundaries within which linguistically described sub-systems exist in sets, none of which is unique. The lack of uniqueness offers alternative ways in which a situation in the problems of living may be improved or ameliorated, but not solved. Soft systems are inherently complex with emergent properties; they are not amenable to the methods of science (reduction) as they destroy the problem being thought about. So systems thinking is not a method or a technique, but is a set of principles to create systemic concepts that are usable in the real world; are not vague but are not precise; and can adapt to advances in systems science as they occur. In a nutshell, ‘Methods pass the problem by,’ (Wittgenstein) whereas systems thinking does not.

Earlier a link was made between foresightful activity, systems thinking and law through the identification of ideas and events as a contribution to the first, at a sub-system level, and to the second, as warnings of ideas that might need some form of control in the future. As practised, institutional Foresight creates public information in contrast to its non-institutional counterpart. All foresightful activity creates information by sampling an undefined state space. The problems of living are not its concern nor are interrelationships; it is not problem oriented nor is it systemic though because it is strongly procedural and method bound it may claim to be systematic. The methods and procedures used are designed to identify specific ideas and events that are later to be prioritised during a policy making process that itself may well suffer from Wittgenstein’s contention, because it is itself procedural and method bound. Rarely does institutional Foresight recognise the autonomy of events and ideas.

The role of law is to create implicit and explicit frameworks of control to enable a harmonious society. Law is intimately bound up with the problems of living. Indeed, they are the reason for its existence, where the concerns are for the problems of living as they are and as they may become. Consequently, law absorbs from soft systems thinking what the system is and what it may become in terms of the fuzziness, unstructuredness and uncertainties of its current and possible future organisation and structure. From foresight of all kinds, law absorbs events and ideas so far most often concerned with science and technology, but increasingly with broader fields of society, relating to human rights, ethics and morals; codes of behaviour; international relations and law; international trade; and intellectual property. Within established frameworks, law has the second function of enforcement and the settlement of disputes within the three permissible categories of guilty, not guilty and acquittal due to insufficient or unclear evidence.

The diagram illustrates the above points via a Venn diagram where the intersections are shown clearly. The most complex intersection is that between systems, foresight and law which we believe to be where attention needs to be focused. It could be argued that law and foresight, particularly the latter, are subsystems of systems thinking. However, that is not our current perception of what the system is.
Law creates frameworks for living, either value based and implicit or enforceable controls, that regulate current behaviour in society. Law also sets anticipatory regulations in an attempt to shape or promote anticipated desirable forms of behaviour.

Institutional Foresight creates public information anticipating possible change in any aspect of society but is most often associated with science and technology.