

## SOFT SYSTEMS APPROACH TO MANAGEMENT PROBLEM SOLVING

12<sup>TH</sup> TO 15<sup>TH</sup> MAY 2008

CRICKLADE HOTEL & COUNTRY CLUB

### OBJECTIVES OF THE COURSE

#### Introduction

Soft Systems Methodology (SSM) is, in essence, the application of systems ideas to situations which can be regarded as “soft”. This applies to all organisation-based situations and, because the applications are “methodology” led, the degree of variety in the concepts available, together with their modes of application, achieve the degrees of variety required for all types of organisation-based analysis.

In the 3<sup>(1)</sup> days available, members of the Koios Group, who themselves all have significant experience in developing and applying the techniques of SSM in complex real-world analyses, will:

- Provide a comprehensive overview of the concepts and approaches available.
- Illustrate the range of SSM’s applicability through reference to diverse previous uses in complex projects.
- Provide ample opportunity to practice techniques through a series of tutored practical applications.

Professor Brian Wilson (whose biography is attached) will lead delivery of the course on behalf of the Koios Group. Brian was a member of the group at Lancaster University which originally developed SSM and he has been driven by the desire to apply the sort of rigorous thinking of the ‘traditional’ engineering paradigm to less predictable “Human Activity Systems.”. He has used SSM to address a wide range of complex organisational problems and copies of the 2 books he has written along the way will be given to delegates as part of course materials.

#### Workshop Objectives

Given the nature of SSM as described above, and in the time available, those attending will gain an understanding of how to exploit the approach and should also develop a degree of practitioner capability. Whilst the latter may vary between students’ individual capabilities, it is intended to achieve the following in relation to each participant:

- Knowledge of the basic concepts available to tackle complex problems.
- Knowledge of more advanced concepts related to an “Enterprise” view of organisations.
- Illustration of the application of the range of ideas and approaches through discussion of recent consulting activity.
- Illustration of the specific use of SSM for information requirements specification in complex situations.
- Practical involvement in the derivation and use of the basic concepts.
- Sufficient appreciation of the range of ideas and their application to provide the starting point for further development.

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<sup>1</sup> Note: 3 days contact time is Mon afternoon through Thu lunchtime

**SOFT SYSTEMS APPROACH TO MANAGEMENT PROBLEM SOLVING**  
**COURSE STRUCTURE**

The overall structure of the course is based upon the need for three kinds of session. These are necessary to:

- (a.) Provide an understanding of systems language.
- (b.) Illustrate the variety of methodologies.
- (c.) Provide practice in the use of the (a) and (b) above.

Both the understanding in (a) and the illustration in (b) are related to practice. A minimum of theory is presented though some is necessary if the context in which the ideas are applied is to be properly appreciated and if the meaning of the ideas is to be fully understood.

Learning to use soft systems ideas is rather like learning to swim. In both cases the concepts are quite easy to describe but it is necessary to get into the water to develop the ability to use them.

For this reason the course is highly participative (hence the numbers attending are ***strictly limited***) and students' abilities are developed by using a structured set of involvements which build upon each other to assemble an overall appreciation by the end of the course.

The individual sessions are as given below

***DAY 1- (MONDAY)***

**2.00 p.m.**

Introduction and Course Overview

- Problem Solving in Organisations
- Organisations
- The learning Process/Process of Inquiry
- Historical Perspective
- Basic Systems Ideas

System as a Transformation Process

Hard/Soft Distinction

Human Activity Systems

Participative Exercise - Root Definitions  
- Conceptual Models

Exercise Review

Pitfalls in Model Building

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***DAY 2 – (TUESDAY)***

**9.00 a.m.**            Problem Content/Problem Solving  
Methodology/Project Case Study  
Primary Task/Issue-Based Analysis

**L U N C H**

**2.00 p.m.**            Participative Exercise - Picture Building  
                              - Problem Solving  
  
Exercise Review

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***DAY 3 – (WEDNESDAY)***

**9.00 a.m.**            Information – Oriented Analysis

**L U N C H**

**2.00 p.m.**            Participative Exercise  
  
Exercise Review

**6.00 p.m.**            Introduction to System Dynamics & Course Social/Dinner

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***DAY 4 – (THURSDAY)***

**9.00 a.m.**            S.S.M. - Advanced Concepts  
  
Software tools to support advanced exploitation.  
  
Plenary session

**L U N C H**

**2.00 p.m.**            **Disperse**

N.B.    Because of the participative nature of the course the length of any session is variable, thus only the start times are given. Breaks will be taken for coffee and tea as appropriate.

## Professor Brian Wilson

In 1966 Brian Wilson left the world of nuclear power engineering and control system design, to become a founder member of the Department of Systems Engineering at the University of Lancaster. During his time at the University he was involved in the development of a particular form of business analysis known as Soft Systems Methodology (SSM) This development was driven by the Action Research programme carried out in that Department, in which his particular interest, was the application of SSM to information and organisation-based analysis. The work appeared in the book, "Systems: Concepts, methodologies and Applications", (editions 1&2), published by John Wiley.



He left the University in 1992 to found his own consultancy company; Brian Wilson & Associates, where he continued to develop and apply his particular brand of SSM, leading to the uses of SSM in "Enterprise" model building.

He has 40 years of experience of tackling organisation-based problems of various kinds and, he has undertaken projects in the Pharmaceutical industry, The Met. Office, The Office of Government Commerce, (OGC), The M.O.D., the Police, the N.H.S. and a variety of other organisations in both the private and public sector.

In July, 2001, he published a further book which aimed to capture previous lessons and new developments related to SSM-related business model building. This was also produced by J.H.Wiley and is called:

"Soft Systems Methodology—Conceptual model building and its contribution".

Recent work has been concerned with the development of SSM-based models to bring about the integration of children's services within Tameside; to contribute to the M.O.D.'s "Carrier Strike" programme and to explore the organisation of the detection and containment of illegal importation and use of nuclear and radiological materials as part of the anti-terrorist programme, "Cyclamen". Also a contribution was made to the development of an "Enterprise" architecture for Information Assurance in the public sector and to the development of new information support across a number of publishing companies within Hachette Livre.

He has had an association with Cardiff University for a number of years, in a variety of roles, and has recently been conferred as an honorary Professor of Applied Systems Thinking in the Department of Computer Science.

Brian is currently "practice" lead on SSM within the Koios Group.