Interfaces and the Somebody Else's Problem Field

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Abstract.

Nobody working on a project wants to be tasked with resolving interfaces. It generally happens too late and is seen to be a root cause of project failures. These are sweeping generalisations, yet there is a grain of truth. It becomes a vicious circle of blame waiting for the next project to do the same. In effect, interfaces are often subject to the 'Somebody Else's Problem' field, described in 'Hitchikers' Guide to the Galaxy'.

Every Interface is an opportunity to lose information, time, control and money through contention between stakeholders at either end. Interface management is perceived as a critical skill in the engineering of successful systems, but finding useful material proves elusive. It is not that there is a gap in the collective Body of Knowledge (BoK) – but there is definitely a gap in the documented BoK. This presentation explores characteristics of this gap, and strings together key concepts in best practice. Differences between best practice for interfaces and best perceived practice for architecting systems are noted with recommendations for changes in approach.

The talk is based partly on the INCOSE Systems Engineering Handbook and partly on the INCOSE UK 'Don't Panic!' guide to managing interfaces, written by the.

Biography

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Paul Davies is semi-retired, and was previously the Discipline Manager for Systems Engineering at Network Rail Infrastructure Projects. In that role he was responsible for promoting improvements in process and in practitioner competence in all aspects of systems engineering. Prior to this, he worked for Thales UK, with nearly thirty years' experience in SE research, innovations management, SE functional leadership, and project engineering management. Over a succession of challenging projects with challenging customers, Paul learned many empirical lessons on interfaces, internal and external to systems, and they are distilled here.

Paul is a Chartered Engineer, a Certified Systems Engineering Professional, a Past President of the UK Chapter of INCOSE, and has been a popular presenter and tutorial lead at many INCOSE events.