

Systems as Foundations for MBSE

Claude Feliot

ALSTOM Transport

Abstract. System engineering has been able to cope, in the last decade, with its definition in terms of processes for the analysis of products, services and organisations in view of their design. Thus, system engineering has been more defined by its intend and program then by its purpose that Systems are. However, through the underlying assumption of MBSE (Model-Based Systems Engineering) which is that : insofar as we think through models, engineering is also a matter of modelling thinkings. This leads to the requirement that the other side of the definition of System engineering been addressed answering to "What are Systems?". In this communication, we will draw out some mainlines and orientations toward the formal definition of the concept of systems which are the foundations that MBSE is looking for.