

Value-Driven Design - A methodology to Link Expectations to Technical Requirements in the Extended Enterprise

Ola Isaksson (GKN Aerospace Engine Systems) - Ola.Isaksson@gknaerospace.com

Mario Kossmann (Airbus) - Mario.Kossmann@airbus.com

Marco Bertoni (Blekinge Institute of Technology & Luleå) - Marco.Bertoni@ltu.se

Hakki Eres (University of Southampton) - Hakki.Eres@soton.ac.uk

Anne Monceaux (EADS Innovation Works) - Anne.Monceaux@eads.net

Alessandro Bertoni (Luleå) - Alessandro.Bertoni@ltu.se

Steve Wiseall (Rolls-Royce) - Steve.Wiseall@rolls-royce.com

Xinwei Zhang (Université) - xwzhang@etud.insa-toulouse.fr

Copyright © 2013 by Isaksson, Kossmann, Bertoni, Eres, Monceaux, Bertoni, Wiseall, Zhang. Published and used by INCOSE with permission

Abstract. Current systems engineering (SE) standards do not address _Value_ in much detail. Yet, understanding what drives the generation of stakeholder value in a given business context, is fundamental to promoting a common and clear vision throughout the extended enterprise, of what should be the focus of their early, conceptual work at all levels of development. This paper presents a Value-Driven Design (VDD) methodology designed to strengthen the value and requirements maturation process within an extended enterprise setting. The work presented is the result of a three and a half year European program (CRESCENDO) within aeronautics. The VDD methodology is introduced and explained in an industrial aircraft development context and a selection of enabling methods and tools associated to the VDD methodology is presented.