

Qualification Profile

Achieving excellence in Systems Engineering requires professional expertise.
Take advantage of my proven SE knowledge for the benefit of your organization.

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| Knowledge | Systems engineering Business process management Coach and Trainer System safety and reliability processes and analysis Requirements engineering and requirements management Project management Change management Configuration management Interface management Supplier selection and monitoring |
| Achievements | INCOSE Deputy Technical Director (2017–2019) Certified Systems Engineer (GfSE) ® Level A INCOSE CSEP PMI PMP |
| Industries | Aviation Marine Renewable Energies Automotive Air Traffic Management |

Projects (1) – Trainer Systems Engineering

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| Goal | Knowledge increase in systems engineering processes and methods |
| Tasks | Definition of learning objectives (e.g. INCOSE ASEP/CSEP exam preparation, SE-Zert) Establish training program Compilation of training material Maintaining training material |
| Methods | Systems engineering Training |
| Trainings in | Germany (automotive, aerospace, medical, maritime, renewable energies) Switzerland (passenger transportation, medical) France (aerospace) USA (aerospace) India (renewable energies) UAE (defense) |
| Duration | 8 years (ongoing) |

Projects (2) – Consultant Systems Engineering

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| Goal | Definition and implementation of systems engineering processes |
| Tasks | Review of existing processes Assessment of as-is situation Definition of systems engineering processes compliant with ISO 15288:2015 Implementation of systems engineering processes Training of systems engineering processes and methods |
| Methods | Interviews Process Modeling Training |
| Standards | ISO/IEC 15288:2015 Systems and software engineering – System life cycle processes ISO/IEC 26702 / IEEE 1220 Systems engineering – Application and management of the systems engineering process ANSI/EIA-632-1998 Processes for Engineering a System INCOSE Systems Engineering Handbook v4 |
| Duration | 3 years |
| Industry | Marine |

Projects (3) – Project Lead for Translation of INCOSE SE Handbook v4

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| Goal | Translation of INCOSE Systems Engineering Handbook v4 into German |
| Tasks | Establish glossary to ensure consistent translation of technical terms Coordinate issues related to intellectual property Translate text and figures into German Review translation with team members (4 team members in total) |
| Methods | Translation Reviews |
| Standards | ISO/IEC 15288:2015 Systems and software engineering – System life cycle processes INCOSE Systems Engineering Handbook v4 |
| Duration | 1 year |
| Industry | General |

Projects (4) – Requirements Engineering Coach

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| Goals | Coaching RE processes Support integration of system safety assessments in development process |
| Tasks | Identify needs and overcome barriers Agree aims and plan coaching activities Coach step-by-step Embed coached activities Facilitate management support Measure and publish progress |
| Methods | Requirements management Coaching Systems thinking |
| Duration | 1 year |
| Industry | Automotive |

Projects (5) – RAMS and Certification Specialist

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| Goal | Aircraft cabin reconfiguration |
| Tasks | Compilation of customer specification compliance matrix Compilation of safety deliverables (FHA, PSSA, SSA, FTA) required by customer or authorities Subject matter expert for safety and reliability Review of certification baseline |
| Methods | Requirements management Safety assessment |
| Standards | MIL–STD 882C and E System Safety Program Requirements SAE ARP 4754A Guidelines for Development of Civil Aircraft and Systems SAE ARP 4761 Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment RTCA DO–160 Environmental Conditions and Test Procedures for Airborne Equipment |
| Duration | 1,5 years |
| Industry | Maintenance Repair Overhaul (MRO) Organization |

Projects (6) – Safety and Certification Support

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| Goals | Establish certification baseline Establish safety documentation |
| Tasks | Prepare permit to fly application Define certification baseline Compilation of Functional Hazard Assessment (FHA) Compilation of Preliminary System Safety Assessment (PSSA) |
| Methods | Requirements management System safety (FHA, PSSA, SSA, FTA) |
| Standards | SAE ARP 4754A Guidelines for Development of Civil Aircraft and Systems SAE ARP 4761 Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment SAE AIR 6464 Aircraft Fuel Cell Safety Guidelines |
| Duration | 1 year |
| Industry | Aircraft System Supplier |

Projects (7) – Lead Systems Engineer

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| Goal | Support for different OEM programs |
| Tasks | Negotiation of OEM specification and Statement of Work Compilation of deliverables required by OEM Subject matter expert for safety / reliability |
| Methods | Requirements management System safety (FHA, PSSA, SSA, FTA) |
| Standards | MIL–STD 882C and E System Safety Program Requirements SAE ARP 4754A Guidelines for Development of Civil Aircraft and Systems SAE ARP 4761 Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment MIL–STD 785B Reliability Program for Systems and Equipment Development and Production MIL–STD 1629A Procedures for Performing a Failure Mode, Effects and Criticality Analysis SAE ARP 5580 Recommended Failure Modes and Effects Analysis (FMEA) for Non–Automobile Applications MIL–STD 470B Maintainability Program for Systems and Equipment MIL–HDBK 472 Maintainability Prediction |
| Duration | 3,5 years |
| Industry | Aircraft System Supplier |

Projects (8) – Consultant Update of Product Development Processes

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| Goal | Definition of product development processes after merging of two companies |
| Tasks | Review of existing development processes at both sites of the organization Identification of best-practices and compatibility of development processes Lead integrated team to define common product development processes |
| Methods | Interviews Process Modeling Leading intercultural teams |
| Standards | ISO/IEC 15288:2008 Systems and software engineering – System life cycle processes |
| Duration | 9 months |
| Industry | Aircraft System Supplier |

Projects (9) – Consultant Engineering Development Processes

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| Goal | Definition and implementation of Engineering Development Process |
| Tasks | Review of existing development processes Identification of gaps to achieve a to-be process landscape for engineering development processes Design of new engineering development processes (including system and lower levels) |
| Methods | Interviews Process Modeling |
| Standards | ISO/IEC 15288:2008 Systems and software engineering – System life cycle processes IEEE 1220 Systems and software engineering – System life cycle processes ANSI/EIA-632-1998 Processes for Engineering a System |
| Duration | 18 months |
| Industry | Renewable Energies |

Projects (10) – Consultant System Safety

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| Goal | Establish documentation for system safety assessment for VIP completion program |
| Tasks | Compilation of Functional Hazard Analysis (FHA) Compilation of Preliminary System Safety Assessment (PSSA) Compilation of System Safety Assessment (SSA) |
| Methods | Functional analysis Hazard analysis Fault Tree Analysis (FTA) |
| Standards | SAE ARP 4754A Guidelines for Development of Civil Aircraft and Systems SAE ARP 4761 Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment |
| Duration | 4 months |
| Industry | Maintenance Repair Overhaul (MRO) Organization |

Projects (11) – ITIL Process Consultant

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| Goal | Definition and implementation of ITIL Processes |
| Tasks | Review of existing processes Identification of gaps to achieve a to-be process landscape Design of new processes compliant to ITIL |
| Methods | Interviews Process Modeling |
| Standards | ITIL V3 |
| Duration | 4 months |
| Industry | Information Technology |

Projects (12) – Safety Specialist Development of Air Traffic Management System

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| Goal | Definition and validation of system safety assessment process |
| Tasks | System safety process definition for the development of three air traffic management systems Definition of purchaser's system safety strategy Input for purchaser's certification strategy Identification of applicable safety and certification standards |
| Standards | IEC 61508 Functional Safety of Electric/Electronic/Programmable Electronic Safety-Related Systems MIL–STD 882C System Safety Program Requirements DEF–STAN 00–56 Safety Management Requirements for Defence Systems ESARR 4 Risk Assessment and Mitigation in ATM |
| Duration | 9 months |
| Industry | Air Traffic Management |

Projects (13) – Consultant Quality Assurance, Configuration Management and SE

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| Goal | Introduction of WLAN/GSM in long-range aircraft |
| Tasks | Engineering lead for system integration team, configuration management and quality assurance (8 team members) Responsibility for systems engineering team budget, schedule and deliverables |
| Methods | Systems engineering Project management Risk management Configuration Management Recruitment |
| Standards | ISO/IEC 15288:2008 Systems and software engineering – System life cycle processes IEEE 1220 Systems and software engineering – System life cycle processes MIL-STD 973 Configuration Management MIL-HDBK 61B Configuration Management |
| Duration | 8 months |
| Industry | Aircraft System Supplier |

Projects (14) – Technical Project Coordinator Cabin Reconfiguration

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| Goal | Long range aircraft (McDonnell Douglas DC-10) conversion program – cabin systems on pallets |
| Tasks | Responsible for technical design deliverables Coordination of interfaces between engineering work packages Interface to certification authority |
| Methods | Requirements engineering and management Change management Configuration management Interface management Supplier selection Supplier monitoring |
| Duration | 14 months |
| Industry | Maintenance Repair Overhaul (MRO) Organization |

Projects (15) – Consultant Systems Engineering

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| Goal | Design and layout of military aircraft emergency oxygen system |
| Tasks | System layout taking into account military requirements Control of development and serial equipment Technical coordination of development team |
| Methods | Systems engineering according to airframe manufacturer processes (ABD0100 and ABD0200) System layout taking into account military requirements Safety and reliability analysis System integration Requirements management Configuration management Supplier selection Supplier monitoring according to airframe manufacturer processes (GRESS – General Requirements for Equipment and System Suppliers) |
| Duration | 4,5 years |
| Industry | Airframe Manufacturer |

Projects (16) – Consultant Definition of Requirements Management Processes

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| Goal | Implementation of Telelogic DOORS at all sites of airframe manufacturer |
| Tasks | Definition of requirements engineering processes and methods as a member of Lead Implementation Team Distribution of information and decisions in system development teams Communication and alignment of system development teams' requirements end expectations |
| Methods | Requirements management Change management |
| Duration | 6 months |
| Industry | Airframe Manufacturer |