Des Flanagan

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 Des Flanagan   des.flanagan@io-ict.co.uk   www.io-ict.co.uk

Professional profile

o   High achieving and results driven Programme Manager with a proven track record in the inception, governance and delivery of large complex technical programmes, with values and operational budgets exceeding €500 million.

o   Diverse and successful background in B2B, ICT, transformation, virtualisation, systems & software development, security, consultancy and government across international and FTSE-250 corporate sectors.

o   Collaborative approach to successful programme leadership, with exceptional interpersonal skills, able to engage with and manage stakeholders across all levels from Board level to end user.

o   Able to translate business requirements into tangible, realistic programme deliverables and solutions, complemented by an extensive technical expertise across major technology sectors.

o   Passionate about delivering "Business Value" through programme governance and able to drive multi-vendor programmes at strategic, tactical and contractual levels.

o   Experience of driving change management, risk, service transition, complex programme delivery, PMO, client engagement, sub-contract engagement, partnerships / JVs, programme recovery & benefit realisation.

o   Creating work cultures that are proactive, results oriented, empowering, supportive and build trust enabling high-performance teams that exceed targets.

Key skills & business capabilities

– Programme Governance, Controls & Reporting	– Stakeholder Management and Engagement
– Financial Management & Control (Opex & Revenue)	– Vendor & Supplier Management; On & Off Shoring
– Change and Risk Management	– IT, Technology and Business Alignment
– Business Cases and Benefits Realisation	– Technology Evaluation, Review & Selection
– Business Process Re-engineering & Delivery	– Contract Changes and Driving Add-On Sales
– Business Development and Bid Management	– Infrastructure Transformation Design & Build
– Team Leadership and Team Management	– Data and Operational Control Centres
– Cultural Dynamics & Embedding Cultural Change	– Software and Systems Development
– Matrix Organisations of 300+ Personnel	– Managing Development Teams of 150+ Personnel

Professional accreditation & memberships

MSP Practitioner	BSI Member	IoRM Member
PRINCE2 Practitioner		

Technical Expertise

– Business Architecture, Solutions and Platforms	– Software & Systems Development
– Systems Infrastructure; Specification and Build	– Virtualisation; SDDC, Networks, Cloud Solutions
– Networks; Data, Voice and Security Domains	– Systems Delivery, Integration & Migration
– Systems Security; Specification and Compliance	– Satellite Communications & Management Systems

Career Summary

August 2016 – Present	**Programme & Project Management – Io (ICT) Consultancy (Freelance)**

Freelance contractor providing Programme & Project Management services
- Technical programme & project management, strategy, governance, inception and delivery
- Programme & project auditing, identifying and developing corrective recovery strategies

Nov 2013 – Jul 2016	**Programme Manager – Airbus DS**

Programme Manager for the GCS (Galileo Control Segment) programme a €200M infrastructure and systems development contract to provide prime operation and data centres in Germany and Italy with full geographical redundancy and 6 remote TT&C sites deployed across the world in European territories connected over a secure network with portals in European manufacturing and test facilities.

> *Galileo is the global navigation satellite system (GNSS)currently being developed by the European Union (EU) and European Space Agency (ESA) to provide European indigenous independent high-precision global positioning system (GPS)*

- Engaged to recover a challenged Programme, reporting to the UK National Director, with the remit to develop and implement a programme recover strategy enabling transition back to normal corporate portfolio management.
- The contract was restructured and the programme strategy redefined providing an achievable outcome and restoring the programme objectives.
- Contract changes in the form of add-on sales were negotiated and secured increasing the overall contract value by 100%.
- With 12 project teams, a dedicated PMO and an overall programme organisation of 95 personnel
- During recovery phase, direct responsibility for all Technical Programme Management and baselines including Systems Delivery
- Vendor contract management; on-shore & off-shore for Systems Software development & hardware procurement; CGI, HP, GMV, SciSys, Vega & Indra with contract values ranging from €5M - €40M

Accountability & Responsibility

- ➤ Programme Governance, Controls & Reporting, including all aspects of Change & Risk Management
- ➤ Accountable for the programme financial management including; margin recovery and preservation, restoration of a viable working capital profile
- ➤ Stakeholder Management and Engagement, including conflict management; commercial & technical

- ➤ Development & implementation of Programme Strategy including delivery management and phase technical baseline alignment
- ➤ Vendor sub-contract management; negotiation & compliance
- ➤ Business growth

Key Achievements

- o Restructured the programme and project organisations and implemented a dedicated PMO to insure full monitoring and support to programme governance
- o Negotiated a restructure of the programme with the customer and suppliers enabling a viable and achievable outcome, with an acceptable working capital profile
- o Increased the add-on business, via change requests increasing the contract value by 100%
- o Successfully transitioned the programme back to normal corporate portfolio management

Delivery Baseline (Technical, Infrastructure & Services)

Delivery & Deployment Management

- Systems delivery governed by overall Programme Strategy, which defined the phased deployments, construction and acceptance, including all dependencies
- Global; Pan European, South America, South Pacifica, Indian Ocean and strategic asset and resource management
- Construction contracts to build remote sites in South America, South Pacific & Indian Ocean, commissioning and integration completed by networks & systems delivery teams
- In country (Germany & Italy) Systems Delivery team of 20+ personnel, responsible for all aspects of infrastructure build, systems deployment, integration
- Systems Delivery were responsible for Quality Assurance of all deliveries and installations, including applicable regulatory compliance

Systems & Software Development

- The GCS systems comprise of Spacecraft Constellation Control and Planning with Flight Dynamics and Key Management Facility sub-systems all integrated with a Monitoring Management Control system to monitor all systems, software and spacecraft
- The system design provides full fault tolerance at a sub-system/software level with fully synchronised ground stations providing geographical redundancy for operational or contingency fail-over between Germany & Italy
- The Systems Design & Specification was undertaken by in-house Systems Engineering team and development outsourced to on-shore & off-shore sub-contractors.

Security

- System & Software security requirement derivation and architecture design
- Systems & Software AEL Common Criteria compliance including applicable protection profiles
- ISO/IEC 27001, 27002 & 27017
- EC Member States Security & Accreditation compliance
- Systems & software attack surface and vector analysis with acceptability compliance
- Threat Scenario analysis compliance & acceptability against requirements

Networks

- Design, development and implementation of a fault tolerant infrastructure network supporting security data classification, isolation and segregation
- Design, development and implementation of a global secure network supporting multi-level secure domain isolation with multi path redundancy
- All networks supported multi-level data segregation with QoS and traffic prioritisation enabling full traffic flow management
- Global networked integrated into BT global MPLS with VSAT tails for remote sites
- **Network Stack:**- Alcatel, Sophos, Stonegate & Barracuda platforms

Infrastructure

- Multiple security domain isolated data centres 400^{2}m within each primary control centre in Italy & Germany
- Virtualised Data Centre in Italy, follow on phase to virtualise Germany full P-V synchronisation & redundancy
- System infrastructure installations for NoC and Mission Control centres
- Global installation & commissioning of all network access nodes and infrastructure
- Global installation & commissioning of GCS Systems & Software
- All installation conforming to regulatory standards; BS 7671, LDV etc, including issuance of DoC's for all installations and a CoC for the overall system

Virtualisation

- Design and build of multiple large virtualised data centres providing private cloud service framework, supporting 24/7 business critical operations
- Phased P2V migration, supporting parallel P/V distributed systems, ensuring continuous business operations
- Virtualised Desktop deployment with thin and thick hardware clients
- VDC (Virtualised Data Centre) and private cloud framework implemented using VMWare product suite
- IaaS solution provided system scalability, hardware obsolescence independence with fault tolerance
- PaaS solution provided system scalability, OS obsolescence independence with high availability

Support & Training Services

- Support & Maintenance services for all sites with resident teams embedded in operational sites
- Developed & produced all system documentation & manuals; including: maintenance & support level 1 - 3
- Developed & produced all training courses and material for operations & maintenance
- Provided all training courses for all users & maintenance personnel

Jan 2007 – Jul 2009	Technical Programme Manager – Airbus (Astrium)

Technical Programme Manager for the YahSat programme a $1.8 billion joint venture between Astrium & Thales (Astrium Prime Contractor) to deliver an end-end commercial & government secure satellite communication solution, including; satellites, ground stations, flight & payload control systems, communication networks & services, management systems and 63 Land & Maritime terminals.

> *Al Yah Satellite Communications (YaSat), is a satellite communications company wholly owned subsidiary of Mubadala Development Company, the Abu Dhabi Government's strategic investment company.*

- Technical Programme Manager for the overall contract, with the exception of the satellites
- Prime contract breakdown distributed across Astrium & Thales under joint venture workshare agreements
- As prime contractor, Astrium were responsible and accountable for all systems delivery, integration, verification including acceptance & contract compliance
- Complex portfolio of large supporting programmes & projects distributed across the partners

- Development and implementation of TOM, including; organisation, resource matrix and applicable resource profiles
- Astrium in-house Management System software development project with 150+ developers and a development budget of £50M using Agile & DevOps methodology
- Design & build of £10 million Systems Test Facility (STF) in UK
- Global vendor contract management with integrated supply chains between both external suppliers and partners. Extensive import/export regulatory compliance management; EC 428/2009, 2009/944, ITAR & EAR etc
- Add-on £20+M sales with 3rd parties for the provision of additional Land & Airborne terminals

Accountability & Responsibility

Overall Programme

- ➢ Technical Programme Governance, Controls & Reporting, including all aspects of Change & Risk Management
- ➢ Development & implementation of Programme Strategy including delivery management and phase technical baseline alignment
- ➢ System Design Authority; Systems Design & Engineering
- ➢ Stakeholder Management and Engagement across partnership & customer
- ➢ Contract fulfilment, compliance and acceptance

Astrium Programme

- ➢ Programme Strategy, Governance, Controls & Reporting, including all aspects of Change & Risk Management
- ➢ Accountable for the programme financial management including; margin preservation, working capital profile, EAC & CTC compliance with an operational budget of €500+M
- ➢ Portfolio of 8 programmes & projects, with a dedicated PMO and a matrix organisation of 300 personnel, including manufacturing facility
- ➢ Vendor sub-contract management; negotiation & compliance

Key Achievements

- o Successfully defined the programme strategy and managed a European joint venture partnership between two competitors
- o On appointment initiated and managed the review of the Management System development project due to its challenged performance, following which it achieved its targets on time to cost
- o Successful acceptance and contract closure from the customer with full instantiation of operational commercial and military services

Delivery Baseline (Technical, Infrastructure & Services)

Delivery & Deployment Management

- Systems delivery governed by overall Programme Strategy, which defined the phased deployments, construction and acceptance, including all dependencies
- Global; Pan European, Middle East & US logistical and strategic asset and resource management
- In country (Middle East) Systems Delivery team of 30+ personnel, responsible for all aspects of infrastructure build, systems deployment, integration and verification, including delivered terminals and operational services
- In country teams comprised primarily of international assignments augmented with local technical resources through service contracts.
- Systems Delivery were responsible for Quality Assurance of all deliveries and installations, applicable regulatory compliance including European & UAE Health & Safety
- Complex European, UAE & US employment and wealth care regulations and compliance

Systems & Software Development

- Systems Engineering team of 30 personnel, responsible for the overall system design and specification, including; System Requirement Specification and generation of derived detailed development requirement specifications flowed across partners and suppliers
- Adherence to SDLC with full integration of Agile & DevOps methodologies used by development and deployment teams
- The system design provides full fault tolerance and high availability at sub-system, software & service layers with fully synchronised ground stations providing geographical redundancy for operational and contingency fail-over
- Major software developments included the overall integrated Network Management System (NMS - Astrium) and the Radio Frequency Planning (RFP – Thales) system for payload configuration
- The NMS was a £50M development with 150+ developers using Agile & DevOps methodologies, a fully

integrated service planning, provisioning and monitoring system, including element managers for baseband, modem & transmission segments, supporting full automated provisioning and monitoring at ground stations & terminals

- A distributed federation Active Directory architecture design implemented to provide IAM security layer across ground stations and extended to terminals integrated into AAA system for infrastructure IAM
- System design also included the RF sub-systems (Ground station & Terminals), including Antenna Farms for C, Ku & KA and space craft control (SCC) systems, using C-Band with Ka as fall-back
- Security model implementation of multilevel security domain architecture was also applied to the physical infrastructure builds with zoned and isolated data centres, SoC & NoC's

Networks

- Designed, developed and implemented a Data, VoIP and Multi-Media communications network (Baseband) enabling end-end provisioned communication services over satellite channels
- Network architecture design provided fault tolerant, high-availability with full load balancing at sub-system and geographical across ground stations
- Integrated mobile UMTS base stations installed in land terminals, with backhaul links provisioned through the global network
- Security design, implemented a multilevel security domain architecture supporting data classification & isolation, using high grade IP Crypto and certificate secured VPN tunnels for channel isolation and segregation
- Ground station & terminal baseband hardware architecture; used Cisco & Juniper core routers, switches & access gateways, and for VoIP Cisco CUCM
- VoIP architecture based on CUCM was a complete fault tolerant, high availability across the ground stations, including deployment of CUCM in ground terminals to support strategic deployments
- VoIP solution provided a dynamic global VoIP mesh network with full integration into terrestrial services either from the ground stations or at points of access in deployed CUCM nodes
- All network elements (Ground Station & Terminals) configured and monitored by a Baseband Element Manager using provisioning plans generated by the Management System

Infrastructure

- Design and build of multiple isolated security domain data centres 400^2m within each ground station including dedicated SoC's, including supporting infrastructure installation; Timing & Frequency, Power and Cabling
- Antenna farms; dual C, Ku & Ka band at primary ground station, including all ancillary RF sub-systems and support infrastructure installation; Timing & Frequency, Power and Cabling
- Design and build of Operational & Mission Control centres including all furniture's, systems and infrastructure cabling
- Installation & commissioning of all systems hardware & software
- All installation conforming to regulatory standards; BS 7671, LDV etc, including issuance of DoC's for all installations and a CoC for the overall system with a Systems Design Certificate

Virtualisation

- Hybrid VDC (Virtualised Data Centre) implementation for operational critical systems providing fault tolerance and high availability at sub-system and across data centres
- All federated Active Directory and control & monitoring systems virtualised
- VDC (Virtualised Data Centre) implemented using VMWare product suite

Integration & Verification

- Integration & verification strategy was based on phased deployments and capability using DevOps methodology
- Verification Cross Reference developed against SRS and element level derived development and production requirements
- Design & built a £10 million Systems Test Facility (STF) in UK with complete multi-channel satellite simulator, terminal systems & replica dual site architecture; used for integration, verification and support
- System validation & verification against system level requirements derived from and mapped to contractual requirements was distributed across the in-house test facility and in country in UAT scenario based verification & inspection compliance as applicable.
- In country UAT & OAT comprised of complex deployment scenarios and service combinations using physical terminals.

ILS & Training Services

- Extensive Integrated Logistics organisation providing global shipment, import/export, sparing, support & maintenance services
- In country teams provided on-site 24/7 support and maintenance (level 1 -3) services during contract phase, including operational support
- Developed & produced all system documentation, manuals & training material; including: maintenance & support level 1 - 3
- Provided all training courses for all users & maintenance personnel (Commercial & Government)

Terminals

- Design and manufacture of land, mobile and maritime terminals
- Land based terminals ranged from multi terrain to high bandwidth large truck terminals for strategic deployments, with a mixture of on the move capability
- Mobile terminals included man-pack tactical and rapid deployment strategic terminals
- All terminals supported automated provisioning over the air and secure high bandwidth communications
- Maritime terminals designed for frigate class and above, communication systems integrated into tactical and strategic systems

Satellites

- Two satellites were designed & manufactured (Y1A & Y1B), the spacecraft buses were built by Astrium & the payloads by Thales with C, Ku & Ka Band transponders
- Y1A:- C & Ku band transponders are commercial payload & Ka Band Transponder Government payload
- Y1B: - Ka Band commercial payload & Ka Band Government payload

Jan 2007 – Jul 2009	Technical Programme Manager – Airbus (Paradigm)

Skynet 5 is a £3.6 billion PFI contract awarded to Paradigm, a subsidiary of Airbus. Under the contract Paradigm provides managed secure military communications services; including data, voice & multi-media with full integration into terrestrial and non-terrestrial government communication systems.

Technical Programme Manager for the Skynet 5 programme responsible for the overall programme strategy and delivery of the Skynet 5 ground systems; Anchor Stations, Data/Voice Communications Systems and all Management Systems including; full service assurance, contract compliance and final acceptance.

Paradigm as the Service Operator and prime contractor, sub-contracted the system design and development to a sub-contractor prime (Astrium).

- Service assurance and operational readiness, including; communication service provisioning, billing & deployment, strategic & tactical availability & support services from service desk to operational deployment support.
- Development and implementation of TOM, including; organisation, resource matrix and applicable resource profiles
- Business transformation and migration from an in-house operational unit to an outsourced service management operator
- All assets including satellites, ground stations, mobile terminals and maritime owned by Paradigm and were applicable leased to UK Government for deployment
- Complex service structure and management agreement with exceptional SLA for communication services, support services and deployments

Accountability & Responsibility

- ➢ Technical Programme Strategy, Governance, Controls & Reporting, including all aspects of Change & Risk Management
- ➢ Sub-contract Prime technical management, including; system design compliance to contract
- ➢ Vendor management and compliance to contract baselines
- ➢ Stakeholder Management and Engagement, including conflict management; commercial & technical

- ➢ ILS & TLS
- ➢ Systems delivery management, including deployment & integration
- ➢ VV&T and customer acceptance, including full assurance of communication services and business services
- ➢ Contract Assurance & Compliance
- ➢ Operational service instantiation & operational support services

Key Achievements

o   Successful corporate contract management of prime contract and sub-contract prime vendor compliance
o   Successful service & operational assurance with full operational instantiation enabling commencement of revenue stream

Sep 1991 – Jan 2007	Systems Consultant

Consultant for ICT & Infrastructure transformations, working across diverse market sectors

A freelance Systems Consultant with a portfolio of blue chip corporates across diverse market sectors, providing programme and project management, ICT & Infrastructure transformation, systems design & development and business transformation expertise.

A Selection of the Portfolio

Airbus – Aerospace

- Systems Design Authority for Skynet Network Management Systems
- Technical Design Authority for the high-grade secure campus and metropolitan networks

Prudential Corporation – Financial Services & Investment Fund Management

- Business Technology & ICT Transformation consultancy
- Design & implementation of a global corporate messaging backbone using IBM S-Message, integrating all corporate messaging systems; main frame, Microsoft, Lotus Notes and legacy systems
- Project management of 5 floor office building infrastructure transformation, providing multi path fibre optic back bones and distributed structure cabling with 5000 access ports
- Design and project management of a network infrastructure upgrade from legacy Gandalf to a Cisco infrastructure platform using distribute Catalyst 6000 with full fault tolerance design
- Design and project management of a wide area network using a mixture of ISDN and X25 access circuits
- Implementation of Novell SFT III and then the migration to Microsoft Server platform and implementation of AD architecture
- ITT management for the out sourcing of Support Services, eventually awarded to HP
- Design & Project Management of Data Centre refurbishment, requiring maintenance of 24/7 operations
- Review and proposal of business continuity strategy including secondary managed serviced systems infrastructure and office facilities in the case of business disaster scenarios

Apex Venture Capital – Venture Capital Fund Management

- Business Technology & ICT consultancy to support fund management acquisitions
- Development of Fund Management System
- Design & Project Management of Data Centre refurbishment
- Design & implementation of Active Directory federated services
- Review and proposal of business continuity strategy including secondary managed serviced systems infrastructure

Gouldens (Jones Day) – Legal

- Business Technology & ICT Transformation consultancy
- Review, specification and implementation of business technology transformation from standalone office systems to a fully integrated office system using a combination of Novell & Microsoft technologies
- Development & implementation of an electronic forms application and matter database, supporting all legal, company and financial sectors.
- Design & development of a "wysiwyg" integrated computer fax system, before standard functionality was available.
- Implementation of a document imaging database with integrated OCR to support litigation matter searches

Knight Frank – Real Estate

- Design & implementation of a national wide area network connecting all remote and central London offices; using ISDN tail circuits
- Project management and implementation of Microsoft corporate e-mail system across all central and remote offices.

Inmarsat – Telecommunications

- Design and production of integration & verification specification including test design and script authoring for Began UMTS network design service verification.

UK Government

- Business Technology & ICT Transformation consultancy
- Major document data conversion programme of work for central government and MoD, including the development of be-spoke conversion software
- Cost benefits analysis for DCSA with respect to the implementation of a replacement integrated network work management and incident management system call E2E
- Support for legacy CPT Systems and consultancy on technology replacement transformation

Bank of New York

- Egress firewall installation & configuration to secure international links into London offices

Mar 1989 – Sep 1991   Director of IT - CPT (UK)

Responsible for all aspects of IT product delivery, office automation & imaging solutions

- Appointed as to key role as Director of IT, overseeing technology, training and engineering divisions
- Full remit for managing the IT function, annual budget of around £4m and leading a team of 50+
- Spearheaded the provision of business-critical IT services, aligned to core business requirements

Education & qualifications

Essex University	BSc (Hons) in Mathematics

Personal details

UK Citizen Flexible on location	**Excellent references** available upon request
Interests include: Scuba Diving, Technical Diving, Moto Endurance and Travelling	**Security Clearance:** UK SC

Technical Skill Matrix			
Ⓔ Expert	Ⓥ Very Good		Ⓖ Good
Applications			
Ⓔ Microsoft Project Manager	Ⓔ Microsoft Excel	Ⓔ Microsoft Word	Ⓔ Microsoft Power Point
Ⓔ Microsoft Visio	Ⓥ Microsoft Access	Ⓥ Primavera Pertmaster	Ⓥ Primavera 6
OS & Sub Systems			
Ⓔ Windows 7 Windows Server *Build & Configuration*	Ⓥ Active Directory *Design & Implementation*	Ⓖ Exchange	Ⓖ IIS
Ⓔ Linux *Build & Configuration*	Ⓥ Postfix & Dovecot	Ⓥ Apache HTTP Server	Ⓥ MySQL Server
Ⓔ DNS – Linux & Windows	Ⓔ rSyslog	Ⓖ Nagios	Ⓖ LDAP
Networks (Data & VoIP)			
Ⓔ Design & Implementation *Data, VoIP, Security, MPLS*	Ⓔ Layer 2 & Layer 3 Switching	Ⓥ Routing Protocols: OSPF, BGP, RIP	Ⓥ Traffic Flow Management QoS,RSVP, IPFIX, Netflow
Ⓔ Cisco – General	Ⓥ Brocade	Ⓥ Asterisk	Ⓖ CUCM
Security			
Ⓔ Systems Security *Design & Implementation*	Ⓥ IAM Systems *Radius,AAA,AD,LDAP*	Ⓥ Data Transmission *Authentication & Encryption*	Ⓥ Certificate Authority *OpenSSL*
Ⓥ Firewalls/Access Gateways *Sophos,Cisco,Stonegate*	Ⓥ ISO 27000/1/2		
Virtualisation & Cloud			
Ⓥ IaaS & PaaS Design & Implementation	Ⓥ VMWare Architecture Design	Ⓥ VMWare (ESXi 5.# & 6.#) Build and VM Deployment	Ⓥ VMWare (ESXi 5.# & 6.#) Build and VM Deployment
Ⓥ VMWare - vCentre	Ⓖ Hypervisor		
Software & WEB Development Languages			
Ⓥ C/C++	Ⓖ Visual Basic	Ⓥ Microsoft Access	Ⓥ HTML/CSS
Ⓖ Java Scipt	Ⓖ PHP		
Satellite Communications & Management			
Ⓖ RF Transmission Systems X,C & Ka Band	Ⓖ Modems:FDMA,DVB & Hopping (IP & Sync)	Ⓖ Spacecraft: SCC, FDS & Monitoring Systems	Ⓥ Payload: Provisioning & Monitoring Systems
Ⓥ Terminals; Land, Maritime, Airbourne & Mobile			