

# Apollo 13 – an ITSM case Experience and ITIL V3

By Paul Wilkinson and Jan Schildt, GamingWorks

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The new ITIL V3 Core publications comprise of 5 publications. Each provides the guidance necessary for an integrated approach as required by the ISO/IEC 20000 standard specification:

The ITIL V3 Core publications are:

- Service Strategy
- Service Design
- Service Transition
- Service Operation
- Continual Service Improvement

Apollo 13 – An ITSM case experience already addresses the key learning issues encompassed in ITIL V3. Apollo 13 was developed to address the Life Cycle of the Mission control services of Apollo 13. The current mapping (high level) of ITIL V3 and Apollo 13 is described in the table below.

**The text marked in bold identifies the ITIL V3 concepts and terminology.**

ITIL V3	Apollo 13
Service Strategy	The Mission Director and Crew roles represent the business and give their <b>Business Value</b> requirements to the team. A Balanced scorecard represent the ' <b>Business outcomes</b> ' and value to be realized, and can be related to Utility (increase in gains) and Warrenty (decrease in possible losses). These are specified as: -Crew safety (User satisfaction) -Process throughput (efficiency) -Resolution times (effectiveness ) -Innovation goals achieved (Business process value). The team must <b>engage with the business</b> throughout the mission and discuss risk and cost management and the value to be realized.
Service Design	In Round 1 and the start of Round 2 the team must design the Rocket and supporting infrastructure as well as the <b>processes, people, Products</b> (technology) and <b>Partnerships</b> (supplier services and agreements) required to manage costs, risks and realize business objectives, as defined in the <b>Service Level requirements</b> .
Service Transition	At the Start of Round 2 the designed ' <b>Service delivery pack</b> ' representing the <b>Service, Service Level agreements, service management capabilities</b> (Management, Organization, knowledge, People as embedded in <b>People, Process, Products</b> and <b>Partners</b> ) as well as the <b>Service solution</b> (Apollo 13 Rocket) must be transitioned to the Mission Operations Control team ( <b>Service Operation</b> ) for live operation. In Round 3 the team must evaluate, authorize, prioritize, plan, implement and review a major change.
Service Operation	In Round 2, team must manage and control the Apollo 13 mission using their <b>Service Operation</b> capabilities. Using the <b>processes</b> designed (Service desk, Incident management, Problem management, Event management) the <b>People</b> design (Tasks, roles, responsibilities and accountabilities), the <b>Products</b> (supporting systems (real time events) and workflow management tools (CMDB and Service Knowledge Management System ) as well as the <b>Partner</b>

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(Agreements, Skills, services, Knowledge) to manage incidents, requests and events coming from the mission.

In Round 3 the team must also manage **Capacity, Availability** and **Continuity** demands of the business, as well as implement a major **Change** to the spacecraft course.

In Round 4 the team must manage increase **demand** from the business and ensure their **Service level requirements** are achieved, **risks** mitigated, **costs** controlled. Demonstrating **distinctive performance**.

There is an increased demand for critical service:

- Another Course change
- Manage capacity growth as CO2 levels become life threatening
- Manage capacity demand and availability of critical systems for a spacecraft power up.

Service Operations must schedule and prioritize the workload demand and agree priorities with the business.

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Continual Service Improvement

Between each round the team must apply **Continual improvement** practices. They must **measure** and provide **reports** on performance levels achieved, **identify business risks** owing to **poor service management capabilities** in terms of **People, Process, Produces, Partners**, as well as identify wasted **costs**. The team can use **ISO20000 quality checklists** to identify **non compliant** processes and identify improvement needs. The team must make a **business case** for improvements and justify these to the Mission director to **identify, select and prioritize** initiatives aimed at **removing risks, controlling costs** and realizing **business value**.

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*The four rounds follow the cycle of Plan, Do, Check and Act*

For further information on Apollo 13 – an ITSM case experience and ITIL V3, please contact Mats Berger, Service & Support Forum: Tel. (+45) 45 88 12 16.