Redefining connectivity

KCOM's early adoption of One Touch Switch, powered by Planit

KCOM

planit
an NRI company

Key outcomes

- KCOM successfully delivered their working OTS solution ahead of industry timelines, setting them apart as a leader in regulatory compliance.
- Reusable JSON API payloads were developed, covering the full OTS order lifecycle, facilitating easy adoption of future technical changes.
- Compliance with Ofcom's One Touch Switch regulatory change was achieved, with early integration approval secured.
- Time-to-market was improved for future technical changes, with reusable API payloads providing a robust regression pack.
- KCOM staff engagement and capability were enhanced through hands-on training, empowering teams to manage UAT and technical support independently.

Technologies

- Insomnia API
- Postman API
- REST API
- Azure Data Studio
- JIRA
- PractiTest
- Fiddler
- Salesforce
- Web Integration

Delivered

- API and system integration testing across front and back-office systems.
- Hands-on training for KCOM business and UAT teams.
- Technical support throughout the testing and deployment phases.

The challenge

KCOM, a leading telecom provider in the United Kingdom, was tasked with implementing the One Touch Switch (OTS) regulatory change mandated by the Office of Communications (Ofcom). This initiative, aimed at enabling customers to switch broadband and phone service providers with ease, required significant technical and system integrations across the telecom sector. Given the complexity of the task and the tight timelines, KCOM turned to Planit for support in navigating this industry shift.

Our expertise in API and system integration testing proved invaluable, helping KCOM meet their regulatory commitments by delivering their working OTS solution ahead of industry timelines—an impressive feat that set the company apart in the telecom sector.

Navigating industry and technical complexities to build a seamless customer experience

The implementation of the OTS was challenging due to the need for seamless coordination across a fragmented telecom landscape, where different providers operated on varying systems and standards. KCOM needed to ensure that their systems could integrate smoothly with those of other providers, including Vodafone, Hyperoptic, and Sonalake. The complexity lay not only in aligning multiple providers but also in ensuring that each API interaction was flawless, especially under the pressure of industry-wide regulatory deadlines.

The early API testing phase was critical to achieving this, as it involved establishing, proving, and conducting API connectivity and message exchange between the central messaging hub for One Touch Switch (TOTSCo—The One Touch Switching Company) and other connected communication partners. This phase aimed to test and validate that KCOM's technical design and build adhered to TOTSCo's stringent technical specifications.

This two-month phase was a mandatory entry gate for progressing to full integration of KCOM's front-office systems (Salesforce) and customer-facing web systems with the TOTSCo hub. Without meeting the TOTSCo integration test exit criteria during this phase, the next phase—linking actual front and back-office systems—would not have been permitted. Failure to advance would have jeopardised KCOM's ability to meet regulatory mandates, potentially resulting in significant reputational and financial consequences.

Essentially, even a small error in API interactions could have caused service disruptions for customers. This made thorough testing essential to ensure seamless service switching. The regulatory framework further heightened the stakes, as any delays or failures in compliance could have serious ramifications for KCOM.

Planit: A strategic partner for high-stakes telecom integration

Given the high stakes, KCOM required a partner that could handle the intricacies of multi-party integrations and deliver a robust testing strategy to ensure compliance. They needed an expert who could ensure every aspect of the system was tested for scalability, accuracy, and real-world performance to avoid any glitches during the go-live phase.

KCOM's decision to partner with Planit was rooted in the need for a team with deep technical knowledge and proven experience in regulatory projects. Our track record of delivering high-quality results in the telecom industry, coupled with their ability to offer hands-on, tailored support, made them the ideal choice. With Planit, KCOM had access to a full suite of services that not only helped them meet compliance deadlines but also empowered their internal teams for future success.

Laying the foundation: Early API integration for regulatory compliance

Our approach to the OTS regulatory project was focused on ensuring seamless integration across multiple systems while preparing KCOM for industry-wide compliance. The initial phase involved Planit working closely with KCOM's technical team and key third-party providers, to establish early API integration. This was a critical step in proving that KCOM's underlying systems and transport mechanisms were ready to support the new regulatory requirements.

Our strategy began with a detailed analysis of the pre-set entry and exit criteria mandated by the regulators. These criteria served as benchmarks to determine whether KCOM's systems could connect to the UK OTS Hub network. Our team also carefully reviewed the TOTSCo technical design documents, designing API tests and payloads to validate adherence to the specifications. This phase was not just about proving KCOM's compliance but also about proactively addressing potential challenges by incorporating complex end-to-end scenarios to stress-test messaging systems.

Early API testing focused on establishing connectivity and validating message exchanges between KCOM and TOTSCo, as well as other communication partners. This foundational testing phase ensured that KCOM's systems could send and receive API messages flawlessly. Planit facilitated integration tests with key third-party providers, enabling smooth collaboration across these disparate teams.

Planit employed both white-box testing, focusing on KCOM's systems, and black-box testing, where interactions with other communication providers' systems were validated without direct visibility into their architectures. API testing was only one part of a broader testing approach. After proving adherence to TOTSCo's message interchange/API requirements, the next step involved integrating these APIs with KCOM's front and back-office systems. This required creating tests that were portable, transferable, and configurable to ensure their adaptability for long-term commercial and customer-facing solutions, especially given the involvement of multiple third parties operating from disparate locations.

From integration to transformation: Elevating KCOM's systems for seamless customer experience

Once API integration was successfully established, Planit shifted its focus to augmenting system functionality. This involved ensuring full integration between KCOM's front-office customer-facing systems and its back-office Salesforce system. This step was critical in enabling a seamless customer experience during service switches, empowering KCOM's customer service agents to access real-time information and respond to customer needs more effectively.

Our testing strategy leveraged advanced tools and technologies such as Insomnia API, Postman API, REST API, Azure Data Studio, Salesforce, and Fiddler. These tools were selected for their ability to provide precise validation, robust defect tracking, and reliable integration testing across systems. Our use of configurable JSON API payloads further streamlined the testing process, ensuring that testing efforts could be efficiently reused for future updates.

Over the next few months, Planit continued rigorous testing to ensure that KCOM's systems were not only operational but performing at a level that would allow for immediate deployment into production environments. Our ongoing technical support was vital in pre-emptively identifying and addressing any potential issues. This ensured smooth integration and testing phases.

Key achievements: Driving early compliance and operational excellence

With Planit's tailored testing approach, KCOM not only met but exceeded the stringent regulatory requirements of the OTS project, positioning themselves ahead of industry timelines. Planit's strategic and proactive methods were instrumental in addressing the immediate challenges while simultaneously setting KCOM up for long-term success, ensuring scalability and adaptability in an evolving telecom landscape.

A standout achievement was the creation of reusable JSON API payloads, designed to streamline future updates and enhance KCOM's operational agility. These payloads covered the full OTS order lifecycle, enabling KCOM to handle future technical changes with remarkable efficiency, reducing the time-to-market for these updates. This deliverable was crucial in cementing KCOM's ability to respond dynamically to industry demands.

Planit also provided comprehensive test collateral, delivering in-depth results, metrics, and analysis. This ensured complete visibility into system performance, empowering KCOM to meet

regulatory benchmarks with confidence. By leveraging these insights, KCOM achieved early regulatory compliance—a key differentiator that positioned them months ahead of many competitors still grappling with similar requirements.

Moreover, our services delivered a significant reduction in time-to-market for future technical changes. With reusable API payloads and a highly efficient regression testing pack in place, KCOM is now equipped to implement updates swiftly, giving them a competitive edge in a rapidly evolving regulatory environment.

Additionally, the hands-on training delivered by Planit was also pivotal in empowering KCOM's internal teams to independently manage user acceptance testing (UAT) and technical troubleshooting. This investment in human capital meant that post-launch, KCOM had the expertise in-house to oversee system maintenance and future updates autonomously, reducing their reliance on external resources. KCOM's internal

teams are now fully equipped to handle future UAT phases and system updates independently. This empowerment marks a lasting impact on the company's operational resilience and adaptability.

Essentially, our team delivered seamless customer switching between broadband and phone service providers, achieved through the integration of KCOM's front-office and back-office systems. This integration empowered customer service agents to access critical information instantly, resulting in a superior customer experience and reinforcing KCOM's commitment to service excellence.

In every aspect, Planit's partnership with KCOM exemplified a commitment to delivering impact and driving excellence. KCOM not only met its regulatory obligations but also set a new industry standard, emerging as a leader in telecom innovation and compliance.

About Planit

At Planit, we are experts in quality engineering and assurance. With strong retail domain experience, our specialist consultants can help you deliver a seamless omni-channel experience and support the successful implementation and integration of your complex range of backend platforms.

Ask us how we can help you delight your customers and unlock more value from your systems!

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