



L3HARRIS®

FAST. FORWARD.

CATAPAN CONSULTANCY **AND SERVICES**

SECURE KEY MANAGEMENT. DELIVERED AS A SERVICE.

Managing cryptographic keys is becoming more complex, resource-intensive and risk-prone.

L3Harris enables UK Government and Defence organisations to transition from physical keying to a fully managed, over-the-network approach, delivering faster, more secure and more resilient operations.

Built on proven CATAPAN expertise, our Symmetric Key Transfer (SKT) capability removes the need for physical key media, reducing risk, cost and operational burden.

NEXT GENERATION CRYPT-KEY SOLUTION FOR INCREASED OPERATIONAL EFFECTIVENESS

WHY L3HARRIS

- > Design authority for CATAPAN and SKM
- > 20+ years supporting UK HMG
- > 16,000+ devices deployed
- > Proven delivery in high-assurance environments

Technology for managing sensitive data is transitioning from the need for physical key material, which involves the manual creation, delivery, storage and management of keys along with associated cost, time, resource and security risks.

Symmetric Key Transfer (SKT) technology is revolutionising key delivery and management, providing responsive, Over-the-Network Keying (OTNK) seamlessly and automatically, thereby increasing mission agility, effectiveness and outcomes. A decentralised, High Grade OTNK solution, SKT removes the need to generate physical key media entirely, eliminating the requirement for the transportation, storage, accommodation, accounting and auditing, destruction and administration of physical keys.

ELIMINATING PHYSICAL KEY MEDIA WILL:

Improve operational tempo by ensuring the deployment of keys is quick and effective:



- > Enabling organisations to work to their own priorities
- > Allowing significantly faster, more agile and effective generation of key media
- > Reducing time from generation to key load in a matter of seconds
- > Provides the autonomy to generate and distribute keys without reliance on centralised production agencies

Increase security by eliminating the risks associated with physical key media:



- > Eliminating the need for transportation, minimising loss or theft
- > Eliminating issues with storage, administration and destruction
- > Providing offline and online backup capabilities

Enable substantial cost and resource savings by eradicating physical keying:



- > Removing physical asset requirements for media, transport and storage
- > Reducing energy requirements for manufacturing by eliminating physical media
- > Minimising the carbon footprint with a highly sustainable solution

SYMMETRIC KEY MANAGER (SKM)

The Symmetric Key Manager (SKM) works with a Key Agent (KA) to manage keys at the cryptographic layer over the network. New features improve the end-user experience, including:

- > Ability to remotely create communities of interest
- > Re-role to suit mission requirements without the need to visit remote devices
- > Ability to manage networks at the cryptographic layer
- > Network deployment flexibility (change the topology with no dependence on the Key Production Agency)
- > Securely distribute multiple keys across multiple KA devices to support an increasing deployment
- > Annual key changes and updates are generated automatically without user input

As new devices are deployed into operational networks, there is a need to develop plans to migrate a large percentage of the UK HMG network infrastructure comprising High Grade IP End Cryptographic Units (ECU) to the SKM system.

MIGRATION CHALLENGES

Managing the transition to new ECUs and the latest SKM technology requires government and defence users as well as current third-party Managed Service Providers (MSPs) to navigate through a complex landscape of interrelated dependencies and information. Programme managers need to consider various factors in developing a low-risk migration plan, including:

- > Use of legacy Cryptographic Modes
- > Local key generation availability
- > ECU device and support obsolescence
- > ECU provisioning requirements for near- and far-term Quantum Resilient (QR) traffic protection and key distribution cryptographic interoperability standards
- > Evolution of network-specific infrastructure requirements, such as increases in bandwidth, scalability and performance

Successful transition and ongoing management of the new, improved service requires the knowledge and experience of Crypt-Key specialists to minimise the impact of change, ensuring that end users receive the maximum benefits of the new technology as illustrated in *Figure 1* below.

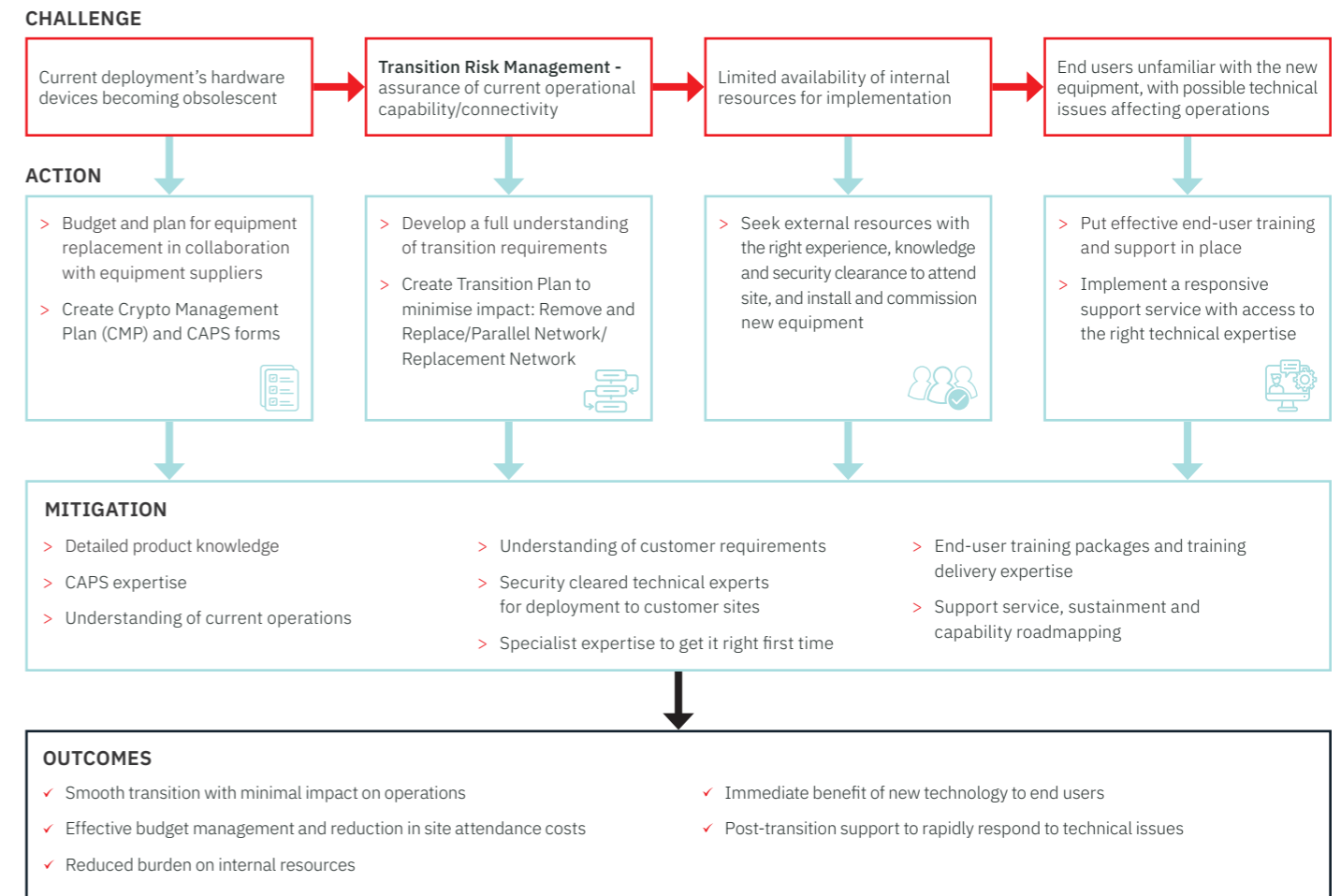


Figure 1: A smooth migration can be achieved through effective planning, supported by resources with the right experience, knowledge and understanding of the challenges

SUPPORTING SUCCESSFUL MIGRATION

PROVIDING SPECIALIST EXPERTISE TO FACILITATE A SMOOTH MIGRATION

L3Harris has more than 20 years of experience in High Grade (NCSC CAPS evaluated to TOP SECRET codeword) Crypt-Key. We have delivered over 16,000 CATAPAN Internet Protocol (IP) network encryption devices into UK HMG operational communities.

Our in-house cryptography experts understand CK requirements and the CONOPS of the user community. With our knowledge and experience in high-grade ECU provision, we work closely with UK HMG programme teams to design, integrate and manage high assurance sensitive networks.

Our teams of technical experts are uniquely placed to embed with customer network teams in the planning and delivery of the new SKM technology.

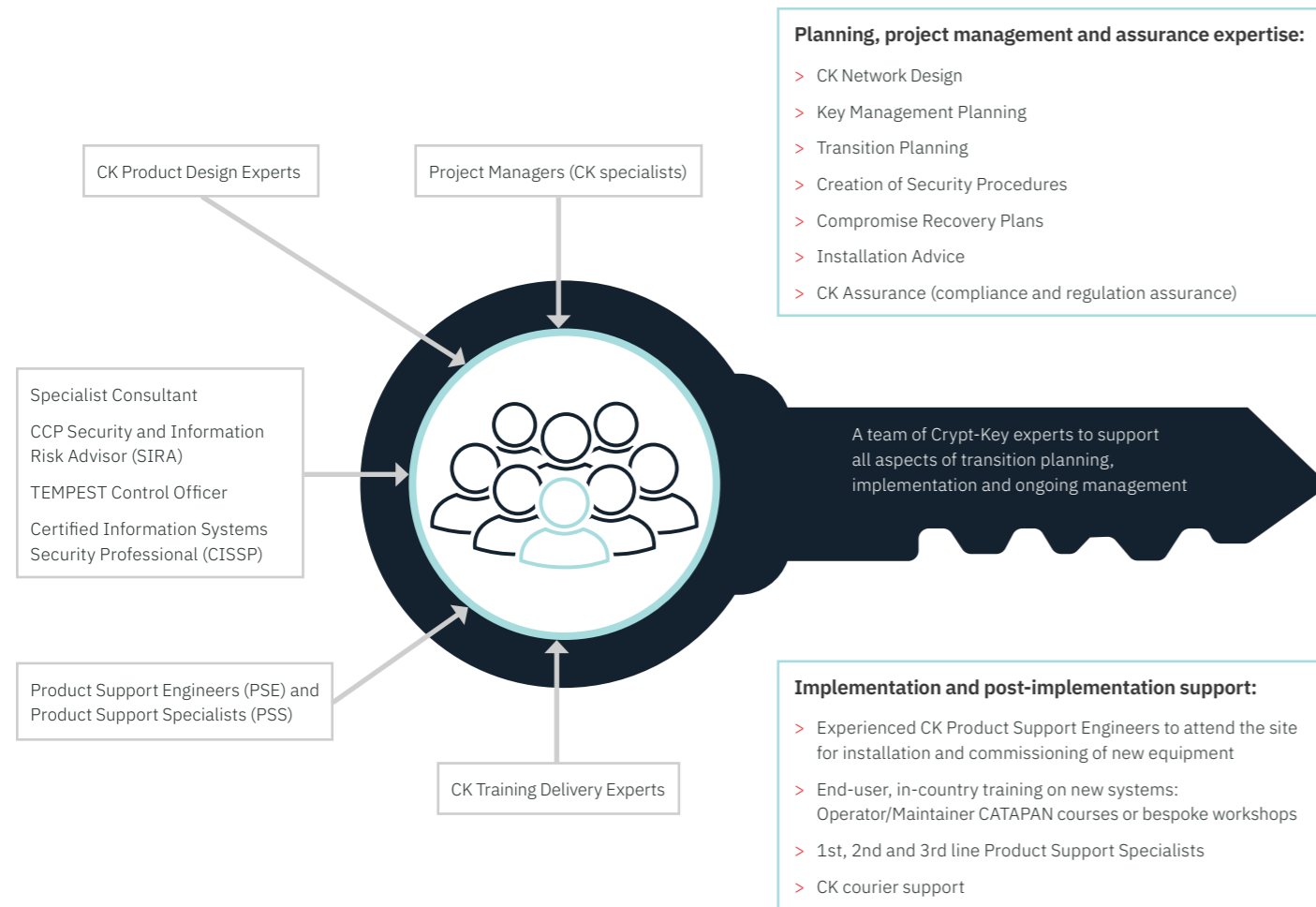


Figure 2: L3Harris has the specialist expertise needed to support the successful transition to the latest Crypt-Key technology

A PHASED APPROACH FOR SUCCESSFUL MIGRATION

As the original developers for the CATAPAN products and the design authority for the Symmetric Key Management technology, L3Harris is ideally placed to offer a fully managed service for Crypt-Key, either incorporating or following on from the migration.

Our capabilities and experience span all areas of the product life cycle, enabling us to provide a complete managed service for Crypt-Key from design to through-life sustainment and enhancement. Service packages can be tailored to meet specific customer requirements, incorporating elements of consultancy from across our multi-disciplinary teams as needed.

We have specialist teams available to help you plan and execute your migration projects.

We have grouped the migration support activities across three phased work packages as shown in Figure 3 below. These phases can be delivered in their entirety or as discrete activities, depending on specific customer requirements:

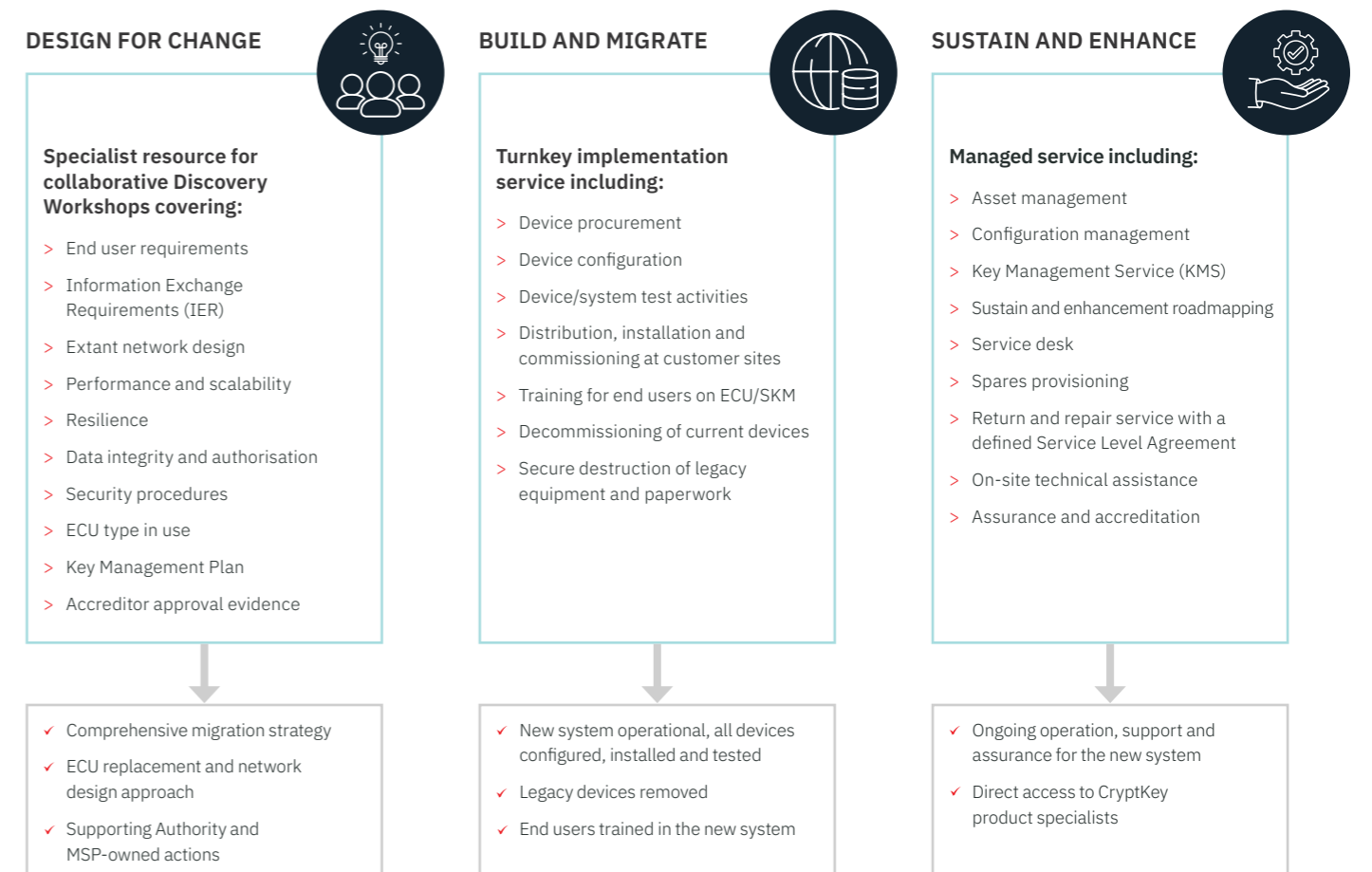


Figure 3: Risk of transition can be minimised with CATAPAN product experts at L3Harris supporting transition planning and execution through three-phased work packages



A SMOOTH, LOW-RISK MIGRATION TO THE LATEST CRYPT-KEY TECHNOLOGY

The rollout of the latest in key generation technology presents government and military end users with a complex migration programme as legacy equipment is replaced. A smooth transition to the new equipment and key management system will require specialist resources and expertise, with robust planning and delivery so that the impact on current operations is minimised.

With a team of L3Harris Crypt-Key experts to support the migration process, including technical teams with the required security clearances to provide in-country installation and training services, you can seamlessly introduce the latest Crypt-Key technology into your operational environments.

ONGOING CRYPT-KEY SUPPORT AND ASSURANCE WITH A FULLY MANAGED SERVICE

As the original designers and manufacturers of the CATAPAN portfolio of products spanning the past 20 years, as well as current providers of CATAPAN technical support via managed service providers, L3Harris has the unique expertise and experience required to deliver ongoing operational assurance for Crypt-Key services.

Direct access to L3Harris CATAPAN product experts as part of a fully managed Crypt-Key service will enhance customer operational effectiveness, with shorter repair turnaround times and rapid resolution of technical issues on-site.

Customers benefit from a reduced Crypt-Key management burden, with all aspects of the ongoing operation covered by the L3Harris managed service, and underpinned by Service Level Agreements to enable performance monitoring and continuous improvement.

Our specialists will provide the expert knowledge required to deliver an assured, effective Crypt-Key capability that incorporates the latest technology and evolves to meet the changing needs of end users.

GLOSSARY OF TERMS AND ABBREVIATIONS THAT APPEAR IN THIS DOCUMENT:

CAPS	Certified Assisted Products	KMS	Key Management Service
CK	Crypt-Key	KPI	Key Performance Indicator
CONOPS	Concept of Operations	MSP	Managed Service Provider
ECU	End Cryptographic Unit	OTNK	Over-the-Network Keying
IER	Information Exchange Requirements	QR	Quantum Resilient
IKD	Interim Key Delivery	SA	Security Association
IP	Internet Protocol	SKM	Symmetric Key Manager
KA	Key Agent	SKT	Symmetric Key Transfer
KMP	Key Management Plan	UK HMG	UK His Majesty's Government

FURTHER INFORMATION:

Want to learn more about cryptography?
Get in touch with one of our experts:

t +44 (0) 1684 278700
IRTeam@UK.L3Harris.com
L3Harris.com

FAST. FORWARD.

Catapan Consultancy and Services Brochure

© 2026 L3Harris Technologies, Inc. | 04/2026 | L32507 | A4

NON-EXPORT CONTROLLED: THIS DOCUMENT CONSISTS OF INFORMATION THAT IS NOT DEFINED AS CONTROLLED TECHNICAL DATA UNDER ITAR PART 120.33 OR TECHNOLOGY UNDER EAR PART 772.

L3Harris is the Trusted Disruptor in defense tech. With customers' mission-critical needs always in mind, our employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains in the interest of national security. Visit [L3Harris.com](https://www.L3Harris.com) for more information.



5500 Shannon Way, Tewkesbury,
Glos, GL20 8GB, United Kingdom

[L3Harris.com](https://www.L3Harris.com)