

Data Links for the 5th Gen Air Force

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AIR FORCE





Air Force Strategy 2017-2027

The Royal Australian Air Force will become a fifth-generation Air Force.

*A fifth-generation Air Force is **a fully-networked force** that exploits the combat-multiplier effects of a **readily available, integrated and shared battlespace picture** to deliver lethal and non-lethal air power.*

*A fifth-generation Air Force will provide the joint and **networked effects** necessary to prevail against the increasingly complex and lethal threats of warfare in the **Information Age**.*

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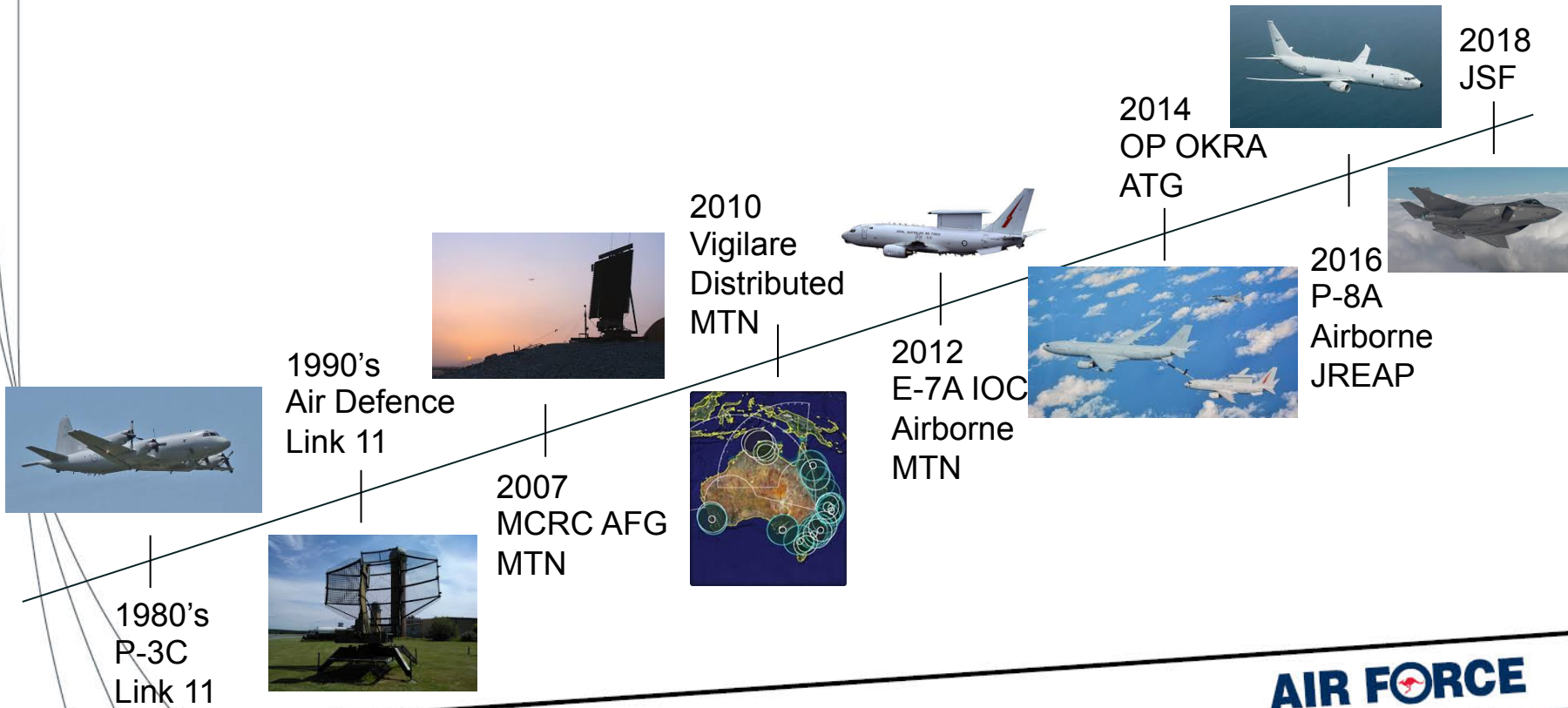


5th Generation Characteristics

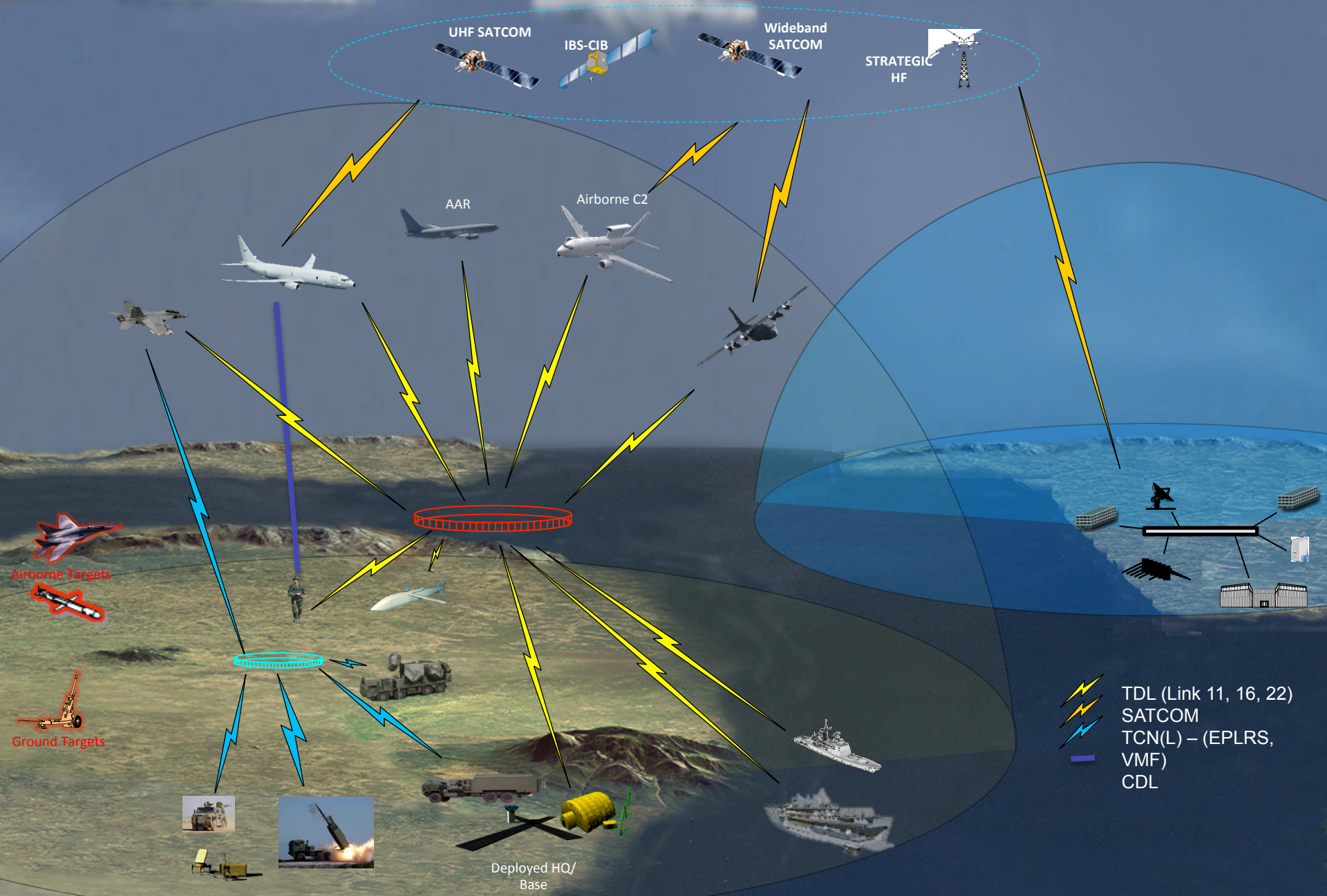
- 4/5 Generation bridged
- Networked and integrated
- Joint with ADF
- Interoperable with Allies
- Normalised innovation culture
- Maximises technological advantage



Air Force Data Links – A brief history



2019





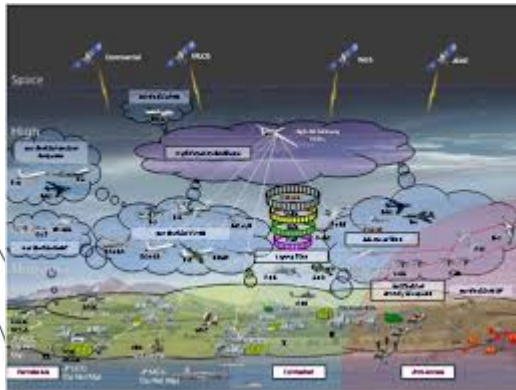
Battlespace Networking: Drivers

- Network complexity - Growing information need
- Decision tempo – increased autonomy and M2M information exchange
- Data processing capacity – Edge compute
- The threat
- Network/Spectrum congestion
- Security requirements - Higher than secret
- Expectations



Battlespace Networking: Constraints

- Monolithic Architectures
- Security
- Scale
- Prioritisation
- Bespoke Network Characteristics





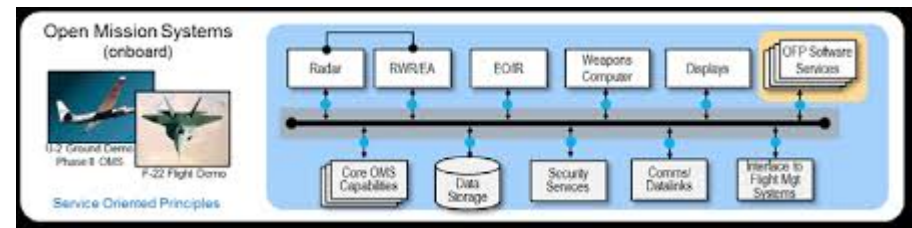
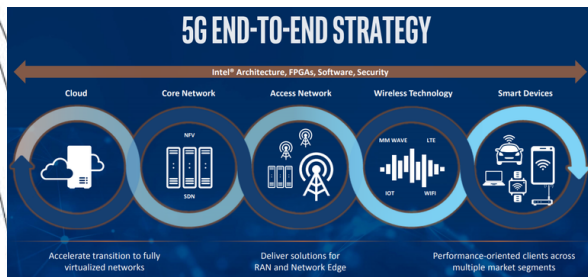
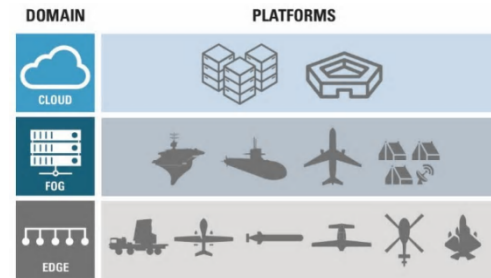
Battlespace Networking: Opportunities

Integration and interoperability

- Open standards / open systems architecture
- Leverage emerging technologies – military and commercial
- Security by design

Evolving

- Designed for continuous spiral development
- Investment in step change technologies – risk aware
- Converged Networks and Edge Computing

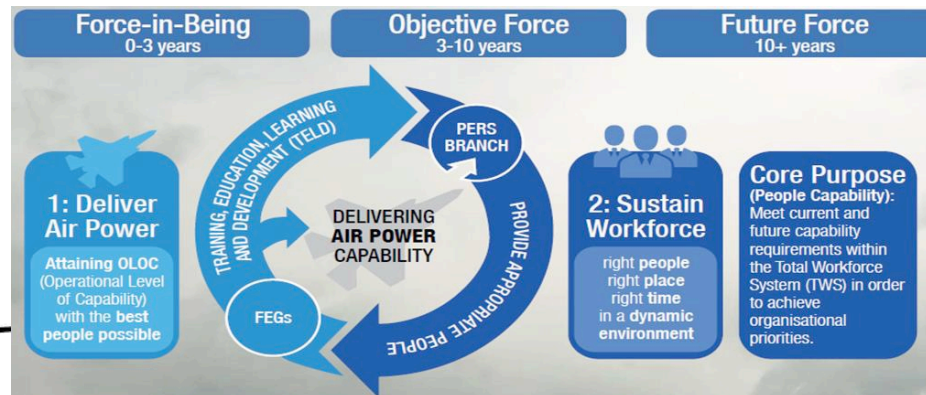
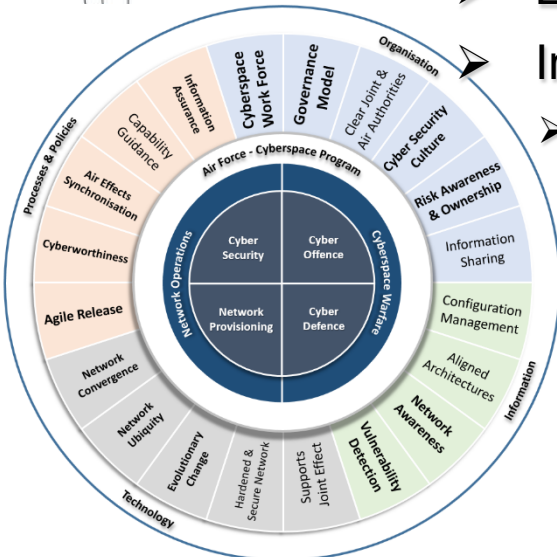
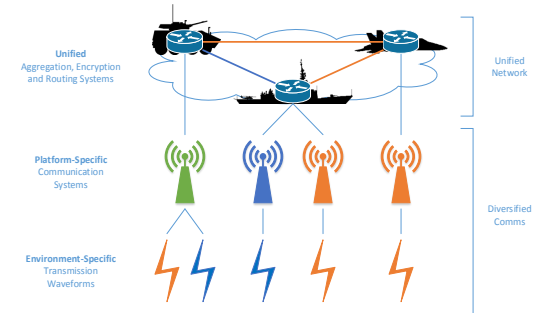


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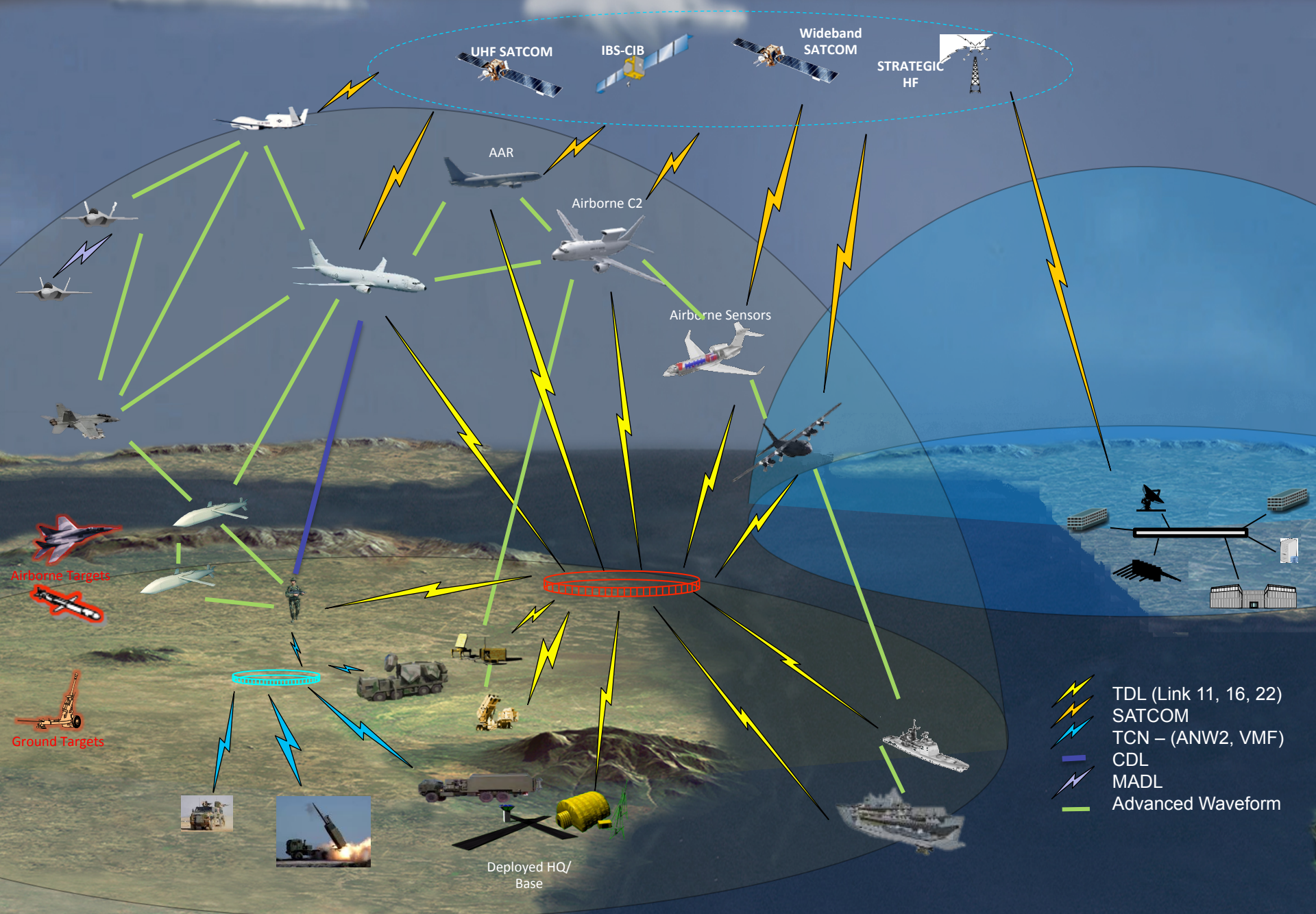


Response

- Modernised organisational structure
 - Programmatic approach to networking equities
- Modernised workforce
- Jericho activities to model/validate network dependencies
- Leverage Joint programs
- Innovation/Integration Capability
 - Established strategic partnerships with DSTG, Industry and Academia



2030+



Questions?

