

THE CONNECTED AIRLINE

OUR OFFERINGS FOR AN INCREASINGLY
CONNECTED WORLD

STRATEGIC BUSINESS UNITS

Formed to meet customer needs and represent the best in innovation, technology and expertise.

Aerostructures



Avionics



Interiors



Mechanical Systems



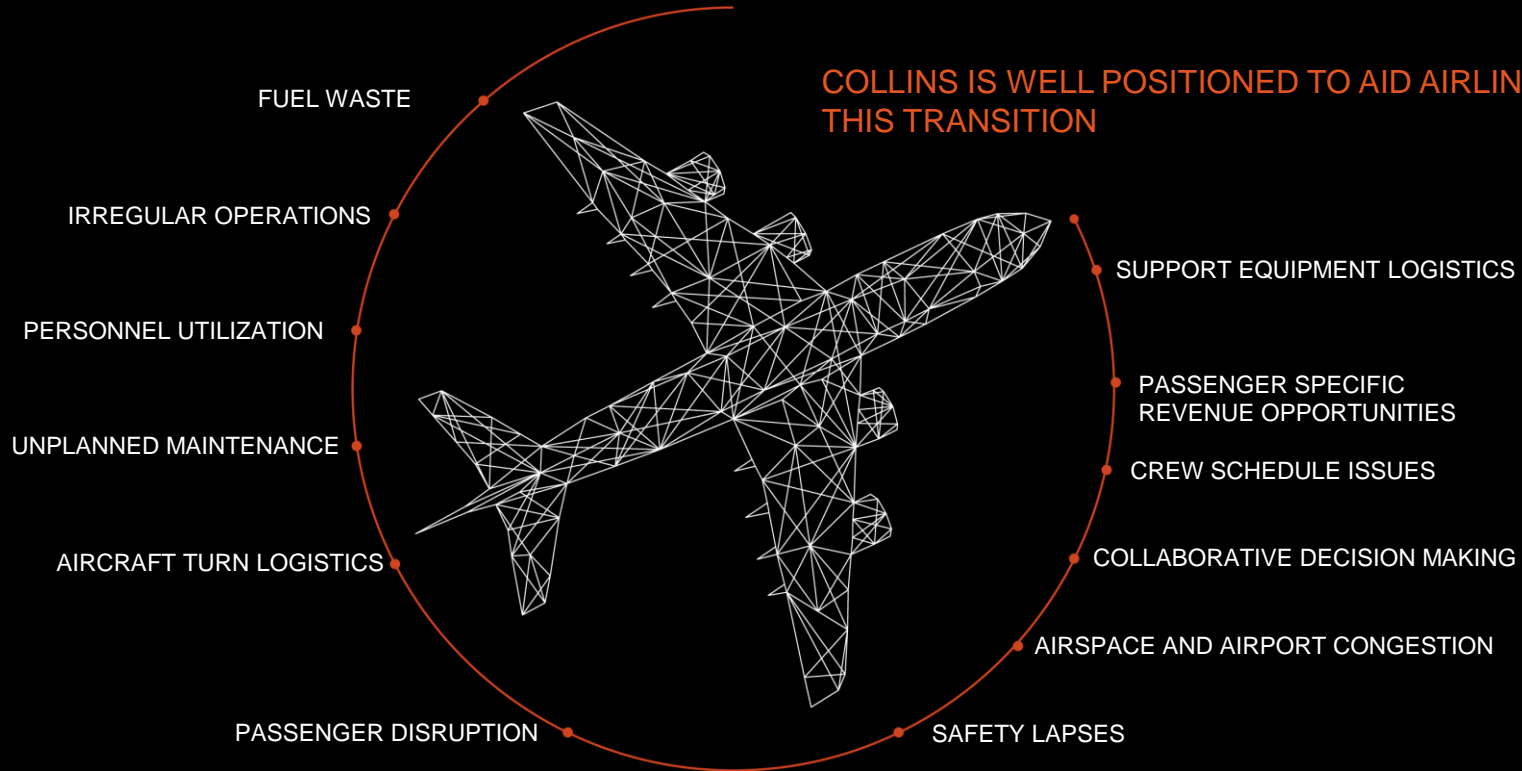
Mission Systems



Power & Controls



CONNECTED AIRCRAFT ARE CHANGING HOW AIRLINES OPERATE

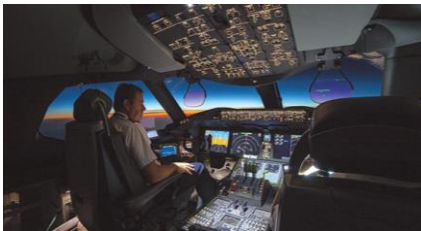


ACHIEVING THE CONNECTED AIRLINE

COLLINS ENABLES AIRLINES TO MEET THEIR CONNECTED OBJECTIVE

A.C.D.

Aircraft Control
Domain



A.I.S.D.

Aircraft Information
System Domain



P.I.E.S.D.

Passenger Information
and Entertainment
System Domain



P.O.D.D.

Passenger Owned
Devices Domain



- Connecting the aircraft is only part of the story
- An airline needs to also securely and efficiently connect the ***different domains & applications*** on the aircraft, ***across multiple airframes, platforms and protocols***, and easily integrate these into their Airline Operations

MANAGING THE HIGH DIVERSITY OF DATALINK PROTOCOLS



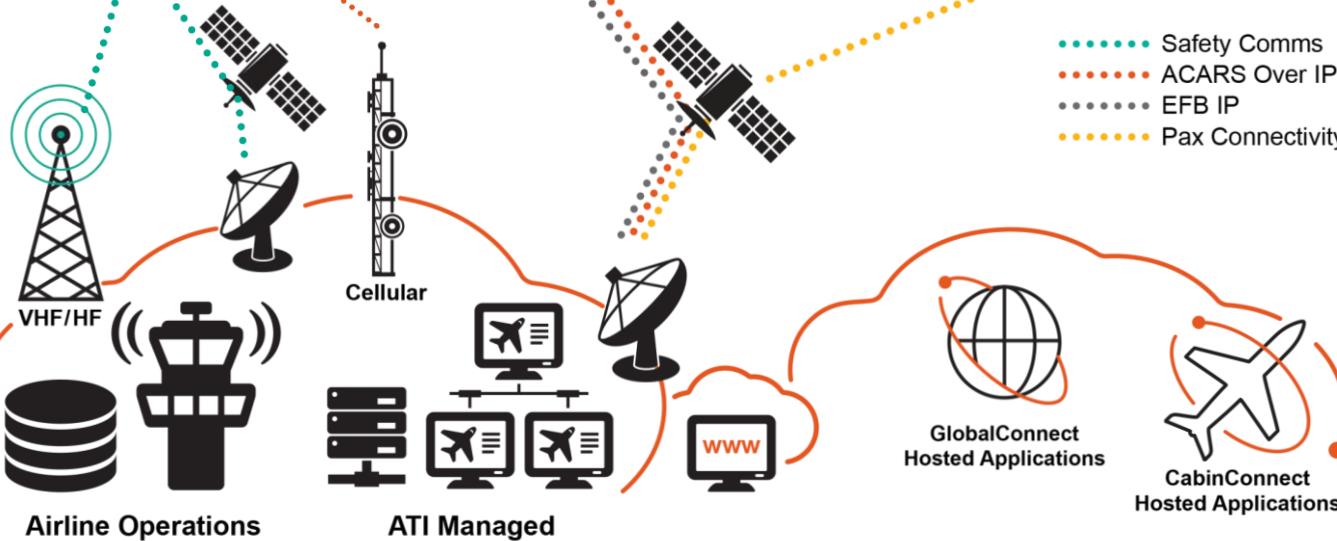
- Manage Multiple Protocols: from legacy ACARS to IPv6
- Manage Multiple Aircraft Domains: Cockpit, Cabin, Safety Services, AOC, IP
- Smart Routing between Data links
- Manage new type of Traffic: EFBs, ACARS over IP, pure IP, VPNs and Mobility...

- Safety Comms
- ACARS Over IP
- EFB IP
- Pax Connectivity

AIRBORNE

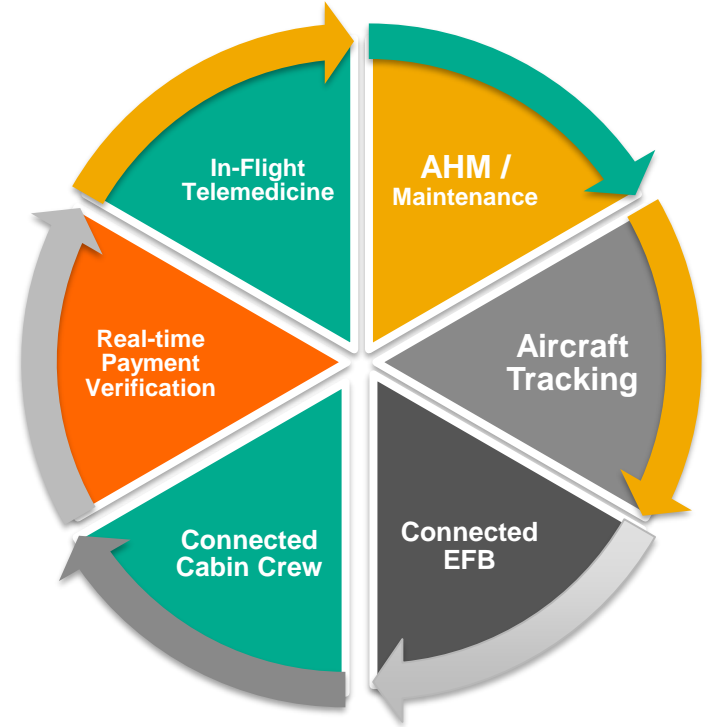
AIRCRAFT LINK

GROUND SYSTEMS



CONNECTED APPLICATIONS

AIRLINE PAIN POINTS THAT WILL BENEFIT MOST FROM CONNECTED APPLICATIONS*

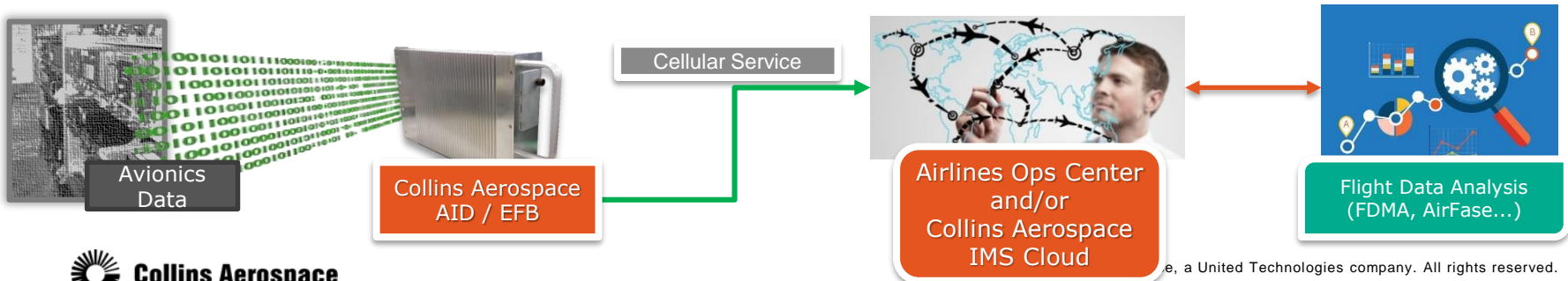


* Valour Consultancy : The Connected Aircraft Survey 2019

EXAMPLE USE CASE: WIRELESS TRANSFER OF FLIGHT DATA

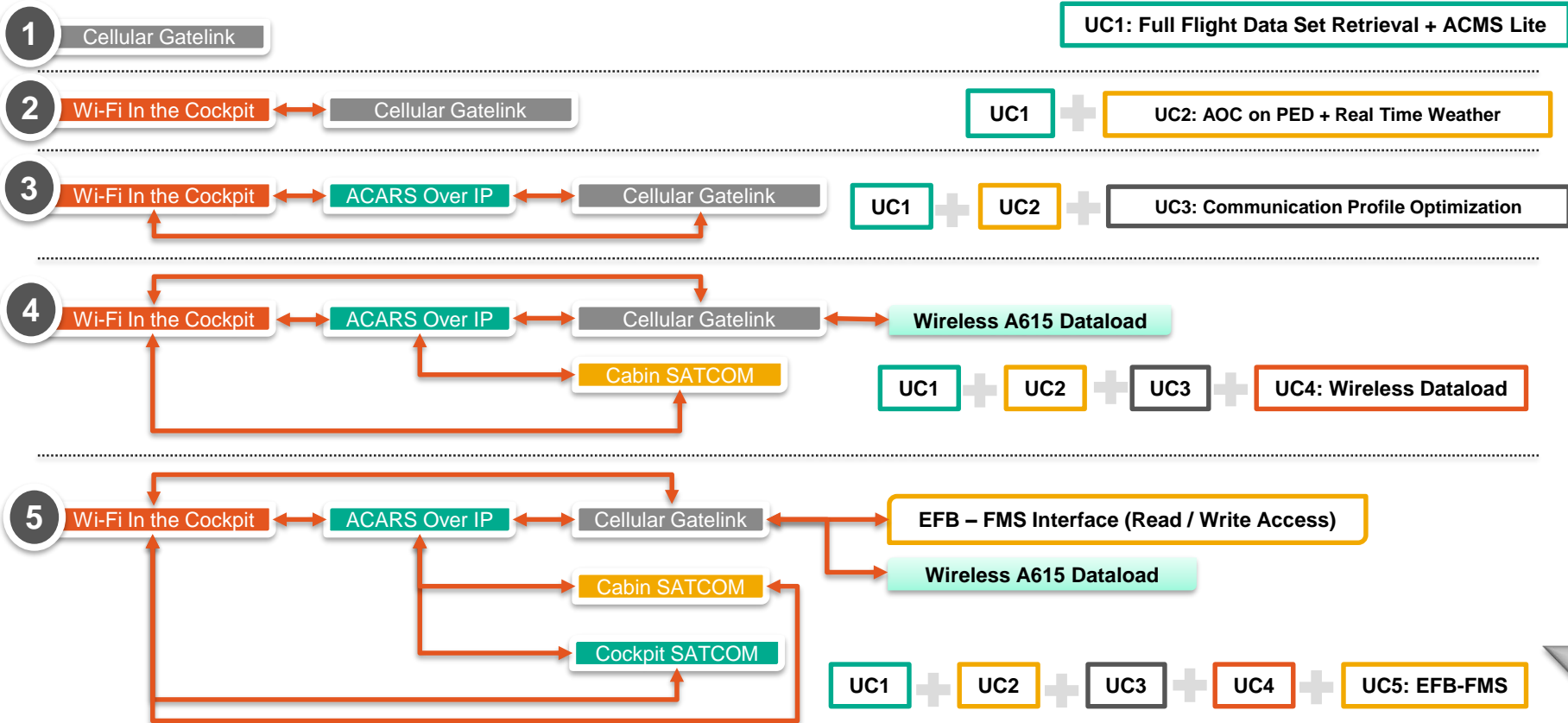
IMPLEMENT A FULLY AUTOMATIC PROCESS TO TRANSFER THE FLIGHT DATA (QAR / DAR / SAR / ACMS)

- Use Case: Implement a fully automatic process to download the Flight Data set:
 - DAR, QAR, ACMS, SAR
 - Leverage the AID and the Communication Routing capabilities to implement an “open world” ACMS Lite Function
- Airlines have benefitted from the following efficiencies:
 - Saves between 70 and 90 Hours / Year / Aircraft to manually gather Aircraft Data
 - Removes the logistics and procurement of the removable medias (Optical Discs, PCMCIA cards...)
 - No more issues triggered by the poor reliability of removable medias (e.g. QAR / DATA Files corruptions on PCMCIA Cards)



THE FUTURE STATE

ADVANCED FUNCTIONS ARE NOW ACTIVATED: READ FROM / WRITE TO FMS ; WIRELESS DATALOAD...



Incremental Approach

COLLINS CONNECTED AIRLINE OFFERINGS

LINE-FIT + RETROFIT



AFTERMARKET

AIRBUS



FOMAX

InteliSight™ TIM and AID



Flight Operations and Maintenance eXchanger

Tablet Interface Module and Aircraft Interface Device

Robust suite of airborne and ground applications available from both solutions
(Connected Wx, AOC on PED, Flight Profile Optimization, Electronic Flight Folder, vQAR, etc)

+

GlobalConnect managed services supporting FOMAX and InteliSight

One operational environment...fully managed and simply connected

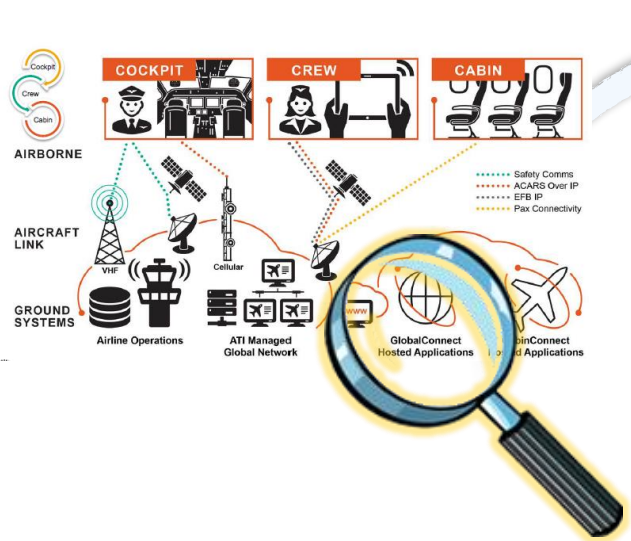
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CabinConnect™ Broadband connectivity services for Airbus and Boeing

Modular and flexible cabin connectivity solutions

GLOBALCONNECT : SAAS FOR THE AVIATION INDUSTRY

COLLINS AEROSPACE GOES BEYOND THE “LEGACY” DSP / TELCO SERVICES...



SaaS (Software as a Service)	PaaS (Platform as a Service)	IaaS (Infrastructure as a Service)	On-Premises
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
O/S	O/S	O/S	O/S
Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking

- GlobalConnect is a secure SaaS service to host and run ground components e.g.:
 - A320 / A330 Ground FOMAX (VPN Management, AoIP Processing, White Listing, Certificates...)
 - Ground A350 XWB FlySmart (MIAM, IMACS, Interfacing of the external stakeholders: engines manufacturer, OEM...)
 - Boeing - BEGGS support
- Additional services are included: Traffic Monitoring, software updates, cybersecurity monitoring, Support...

Collins Airline

GLOBALCONNECT IS A SAAS FOR TO THE AVIATION INDUSTRY

ADDITIONAL SERVICES ARE INCLUDED IN THE COLLINS AEROSPACE GLOBALCONNECT SERVICE



Global Hosting of Ground Messaging Software



Global Managed Ground Network Solution



Optimized Messaging and Data Delivery Service across multiple airborne platforms



24x7 Operational Support & Cyber Security Monitoring



Seamless integration of additional AID/MIAM/FOMAX options



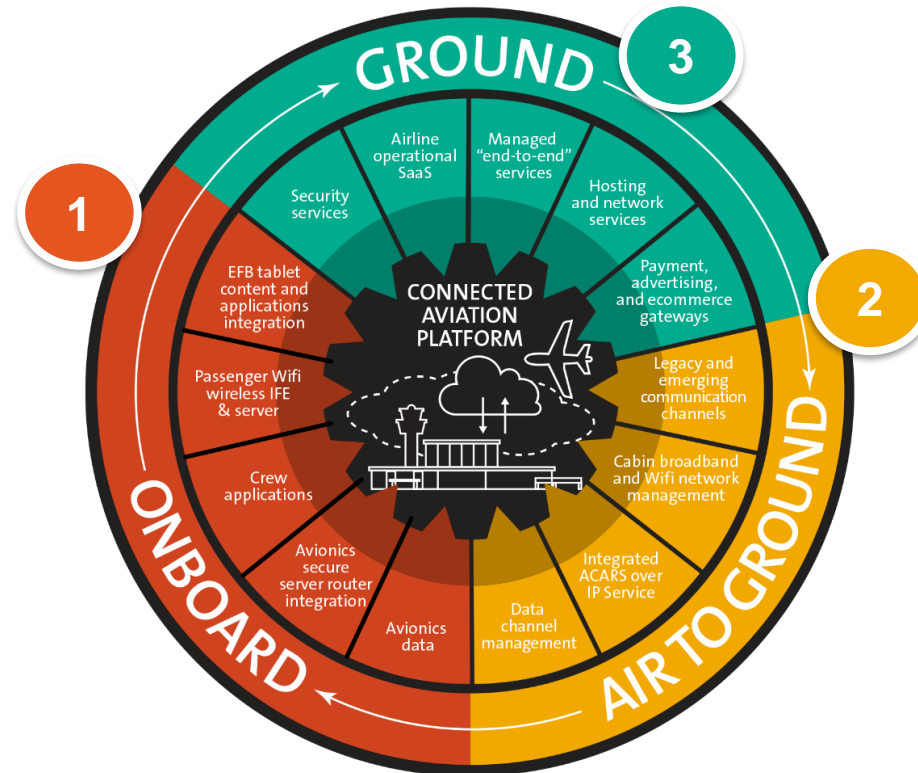
OpsConnect suite of applications

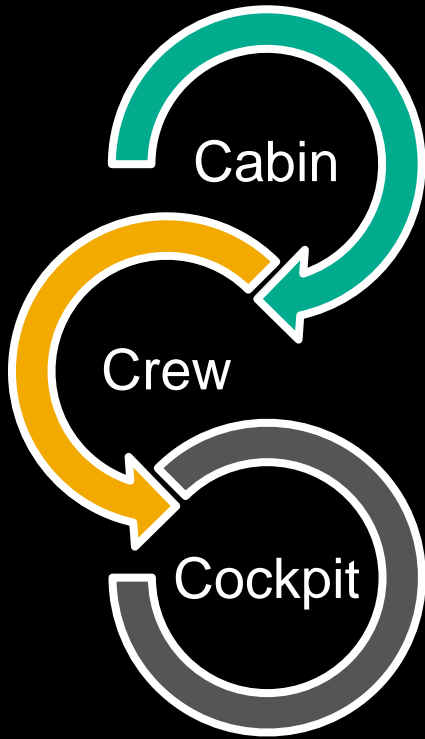


ONE OPERATIONAL ENVIRONMENT

MANAGING A SOLUTION ACROSS ALL THREE DOMAINS DELIVERS SIGNIFICANT ADVANTAGES

- More efficient End to end Data Routing
- No Data Duplication or Data Mismatches in your Organization
- Advanced Traffic Monitoring / Intrusion Detection (Cybersecurity)
- A True End to End Cybersecurity Strategy can be implemented
- No Complex Gateways / Converters to route Data between multiple suppliers supporting different data formats





COLLINS AEROSPACE: SIMPLY CONNECTING THE AVIATION INDUSTRY