QinetiQ HELPING DEFENSE INDUSTRY MITIGATE THE FINANCIAL RISK OF OBSOLESCENCE

Presented By QinetiQ
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Presented At:
DoD DMSMS Workshop
2005
San Antonio TX

QinetiQ Technology Extension Corporation (QTEC), USA

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DMSMS REALITY CHECK
WHAT IS THE COLLECTIVE FINANCIAL IMPACT IN...

- redundant research on common component problems?
- redundant solution cost common components at box level systems?
- production delays?
- rework?
- retesting?
- recertification?
- missed shipment schedules?
- cost overruns?
- increased cost of ownership?
- logistical support for the war fighter?

CAN WE REDUCE THIS FINANCIAL IMPACT?
WHAT CHANGE IN DMSMS INFORMATION SERVICES CAN REDUCE DMSMS COST IMPACT?

What if...with a click of a mouse you could identify all participants in the defense industry that is working the identical component problem?

What if...you had a means of collaboration and solution sharing on common component obsolescence problems industry wide?

What if...all of this could be done with absolute security without divulging participants’ configuration information?

ALL OF THE ABOVE IS NOW POSSIBLE WITHIN DOD...UTILIZING THE “Q-Star™ Coalition and Commonality Server (QCCS)
THE NEED FOR INTERNATIONAL INTEROPERABILITY BETWEEN COALITION COUNTRIES IS INCREASING...

FOR EXAMPLE

Interoperability Solution Sharing On Common Component Obsolescence Will Benefit All Coalition Countries and Their Supplier Bases

DoD

FOR EXAMPLE

Land, Sea & Air Weapon Systems Have Common Suppliers

...And They Use Common Components

MoD

Interoperability Solution Sharing On Common Component Obsolescence Will Benefit All Coalition Countries and Their Supplier Bases
### NUMBER OF Q-Star™ ALERTS PROCESSED IN PAST 12 MONTHS

<table>
<thead>
<tr>
<th>TYPE ALERT</th>
<th>ANNUAL</th>
<th>DAILY AVG</th>
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</thead>
<tbody>
<tr>
<td>Life Time Buy While Supplies Last</td>
<td>4,211</td>
<td>16</td>
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<tr>
<td>Part Re-Instated by Mfr</td>
<td>29,956</td>
<td>115</td>
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<tr>
<td>Consult Mfr; status in flux</td>
<td>3,366</td>
<td>13</td>
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<tr>
<td>Part Placed on Lifetime Buy</td>
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<tr>
<td>Parts Discontinued (no longer in production)</td>
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<tr>
<td>Parts Designated by DSCC as no longer recommended for new design</td>
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Total Alerts Processed: 355,845  Daily Avg. 1,367

### WHAT IS THE COLLECTIVE FINANCIAL IMPACT IN REDUNDANT RESEARCH, REDUNDANT SOLUTION DETERMINATION, SUSTAINMENT STOPPAGE, COST OVERRUNS, REWORK, RETESTING, RECERTIFICATION, PRODUCTION DELAYS, MISSED SHIPMENT SCHEDULES AND INCREASED COST OF OWNERSHIP?
DOD’s BASELINE OF ACTIVE DEVICE USAGE IS INCREASING FURTHER DILUTING PURCHASING POWER INCREASING DMSMS COST IMPACT

FOR EXAMPLE:
As rapid active device functionality expansion increases...frequency of DMSMS occurrences will increase. Thereby increasing DMSMS cost impact.

Other Related Conditions That Impact Component Obsolescence

1. Fewer Components Needed To Achieve System Functionality.
2. Lack of Unit Volume In Weapon System Manufacturing.
3. Long Support Cycles Required.
5. RoHS Compliant Components Raise Reliability Issues In Weapon System Applications.

DATA-CENTRIC OBSOLESCENCE MANAGEMENT IS THE MOST COST EFFECTIVE WAY TO MANAGE COMPONENT LEVEL OBSOLESCENCE.
WHY SHARE OBsolescence SOLUTIONS AT THE COMPONENT LEVEL?

• Obsolescence expenditures are rapidly increasing production costs, eroding sustainment cycles, reducing combat readiness and increasing ownership cost.

• The existing autonomy for program management sub-system support, although essential, is redundant and too costly when working common component problems at the box level.

• Sharing component level obsolescence solutions on common component problems internationally will benefit all participants.

• As industry transitions to RoHS Pb free electronics this will create a whole new realm of technological challenges for military/aerospace applications in areas of reliability and quality.

What Is Your Strategy To Manage Component Problems Across Your Land, Sea and Air Weapon Systems?
TO BE COST EFFECTIVE, OBSOLESCENCE MANAGEMENT IN THE FUTURE WILL REQUIRE...

Utilization of Data Centric Information Technology

- Less platform-centric...more data-centric on common component problems.
- Utilization of a common information system and workflow process.
- Develop a means for collaboration and solution sharing exchanges across Allied Nations and their supply chains.
- System used must not interfere with individual team member program decisions.
- Component availability information updated daily.
- Direct access and open Information support to all coalition friendly countries and their supply chains.

SYSTEM MUST MEET ALL PARTICIPANTS’ SECURITY REQUIREMENTS and BE ITAR COMPLIANT
The QCCS system only contains flat files with no configuration information...only name, point of contact, phone number, email address and generic identification of common component.
Client Q-Star™ Systems Offer A Secured Private System Managed and Controlled By Client

Each Allied Country Would Have A Private Obsolescence System

Q-Star™ System For Each Participating Country

The Private System Would Be Under The Control and Security Of Each Participating Client

NO CONFIGURATION INFORMATION IN BLUE SYSTEM

ALL PARTICIPANTS WITH DOD APPROVAL WOULD HAVE ACCESS TO THE DOD QCCS INTEROPERABILITY SYSTEM.

International Data-Centric Networking On Common Component Problems
CONCEPTUAL EXAMPLE: HOW DoD AND MoD WILL UTILIZE THE QCCS ON COMPONENT OBSOLESCENCE

INTEROPERABILITY DMSMS SOLUTION SHARING AT THE COMPONENT LEVEL WILL BENEFIT ALL PARTICIPANTS

Each Agency Will Transfer A Flat File Summarization of Parts Usage At The Component Level With No Program Identification To Interoperability Cache

All Weapon System Suppliers Will Be Invited To Participate

Participating Suppliers Will Also Transfer A Parts Usage Flat File With No Configuration Identification To The Interoperability File

When A Component Discontinuance Notification Alert Is Issued, All Impacted Participants Will Simultaneously Be Notified. Notification Will Include Point of Contact, Phone Number and Email Address For All Impacted Participants Allowing Them To Collaborate Or Share Solutions On A Common Component SECURED TRANSMISSION OF ALL PARTS LISTS INTEROPERABILITY DMSMS SOLUTION SHARING AT THE COMPONENT LEVEL WILL BENEFIT ALL PARTICIPANTS

Each Agency Will Transfer A Flat File Summarization of Parts Usage At The Component Level With No Program Identification To Interoperability Cache

DoD & MoD Will Create A Secured Data--Centric Interoperability Memory Cache

QinettiQ
QCCS SYSTEM WOULD BE OPEN TO ALL ALLIED COUNTRIES WISHING TO PARTICIPATE ON COMMON COMPONENT OBsolescence PROBLEMS

FOR EXAMPLE: NATO-WIDE PARTICIPATION

SEAMLESS COLLABORATION ON COMMON COMPONENT OBsolescence PROBLEMS AND SOLUTION OPTION VISIBILITY FOR ALL PARTICIPATING NATO COUNTRIES UTILIZING DOD’S QCCS
EXAMPLE: NATO INTEROPERABILITY SOLUTION SHARING USING THE QCCS SYSTEM ON COMMON COMPONENT PROBLEMS

PARTICIPATING NATO COUNTRIES WOULD TRANSFER A FLAT FILE OF THEIR PARTS USAGE WITH NO USAGE IDENTIFICATION OR CONFIGURATION INFORMATION.

QCCS UPDATES CHANGING COMPONENT AVAILABILITY ON A DAILY BASIS.

IF AN AVAILABILITY CHANGE OCCURS, THOSE PARTICIPANTS IMPACTED ARE NOTIFIED AUTOMATICALLY BY QCCS.

GENERIC PART NUMBER, NAME, PHONE NUMBER AND EMAIL ADDRESS IS GIVEN TO THOSE PARTICIPANTS IMPACTED.
QCCS SYSTEM CONCEPT FOR INTERNATIONAL INTEROPERABILITY

QCCS SYSTEM DATA SAFEGUARDS

• NO...CONFIGURATION INFORMATION
• KEY FUNCTIONALITY BENEFITS

QCCS MEMORY

• NO...WEAPON SYSTEM IDENTIFICATION
• PARTS USAGE COMMONALITY
• NO...WHERE USED INFORMATION
• AUTOMATIC NOTIFICATION
• SEAMLESS COLLABORATION
• SOLUTION SHARING
• COMPONENT OBsolescence

WEAPON SYSTEM SUPPLIERS THAT WANT TO PARTICIPATE

NATO NATIONS AND ALLIED COUNTRIES THAT WANT TO PARTICIPATE

FOR EXAMPLE
THE VALUE OF QCCS DATA CENTRIC INTEROPERABILITY!

WHERE AND HOW...?

- Reduce Redundant Research
- Solution Sharing
- Lower Solution Cost
- Faster Reaction Time
- Consolidate Purchasing Power
- Lower Cost of Ownership
- Improve Combat Readiness
- Improve War Fighter Support

...ADOPTED DATA CENTRIC OBSOLESCENCE INFORMATION TECHNOLOGY $BILLIONS COULD BE SAVED
Thank You!

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