



data2impact

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# A CASE STUDY IN THE APPLICATION OF COGNOS TO THE MINISTRY OF DEFENCE JOINT SUPPLY CHAIN PERFORMANCE MANAGEMENT PROCESS

# Presentation Structure

- About d2i – a thumbnail sketch
- Background to PM in MOD JSC
- Events from Dec 07 – Mar 08
- Events from Dec 08 – Mar 09
- The plan going forward
- Key Issues

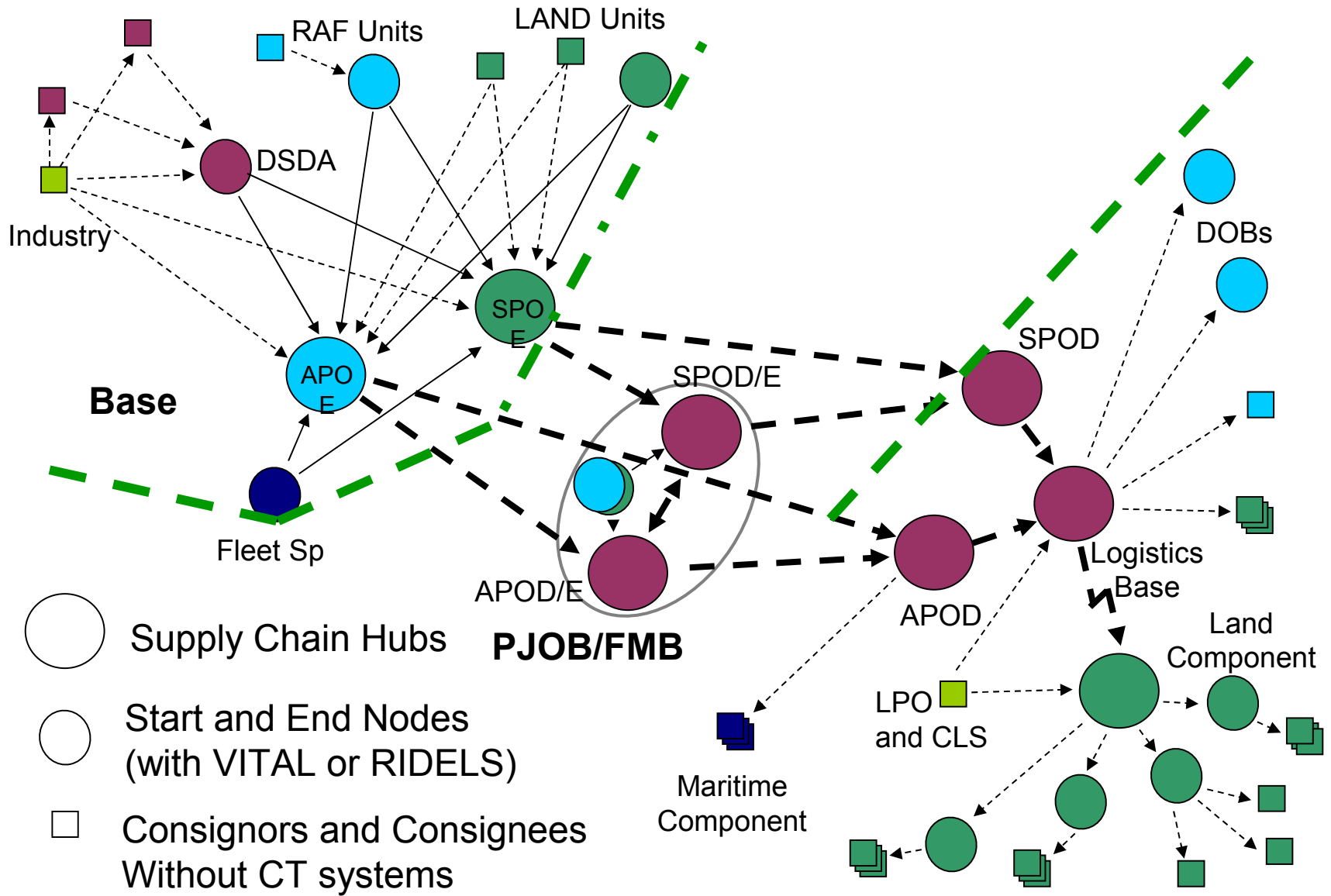
# data2impact overview

- d2i is an analytical services firm with:
  - Long experience building data analysis tools for large corporate clients
  - A blend of business consulting and technical development skills
  - Offices in London, Munich, Cologne, and Atlanta
- d2i helps clients by:
  - Distilling business insights from complex, even chaotic company data
  - Supporting better decision-making and more effective project management
- Typical d2i solutions include:
  - **Project management tools** to coordinate the activities of many far-flung initiative teams
  - **KPI reporting dashboards** to collect key operational metrics and provide senior management with complete, up-to-date information for strategic planning
  - **Application prototypes** to allow operational managers to experiment and fine-tune business rules before implementing a costly enterprise production system

# Background to Performance Management in the MOD Joint Supply Chain

- 2004 - Dual operations in Iraq & Afghanistan
  - Operational Pressure on Supply Chain generated bad behaviours and adverse criticism
  - Uncertainty about truth
  - Performance Management process introduced

# The Complexities of the Defence Supply Chain



# A selection of the source data systems...

■ Data collected and analyzed  
■ Not collected / analysed



Primary purpose

Manage base stock and orders from industry

Manage stock storage and issue processes

Record location of demands in transit

Manage Forward Stock. Process demands extracted to U.K.

Demand, receipt items and manage unit inventory

	Base Inventory	Warehouse	Consignment tracking	Forward Inventory	Unit accounting
•Land	•SS3	•BODMS	•VITAL	•GLOBAL	•UNICOM
•Maritime	•CRISP	•WITS	•RIDELS	•ORAC	•OASIS
•Air	•SCCS	•WTMS	•VITAL	•MJDI POC	•DMJDI POC

# Situation in December 2007

- Monthly Performance Management 'packs' produced for Maritime / Land / Air / Joint environments
- Weekly Performance Management 'pack' produced for Operational Theatres
- Data extracted from 'source' systems, consolidated and sent to d2i for analysis & processing into 'packs' & dashboards
- Combination of MS tools used
- Characteristics
  - Flexible to change
  - Vulnerable to data extraction process
  - Vulnerable to challenge – not a 'single version of the truth'
- MOD Information Exploitation (IX) capacity in Enterprise Data Warehouse and Cognos Business Intelligence

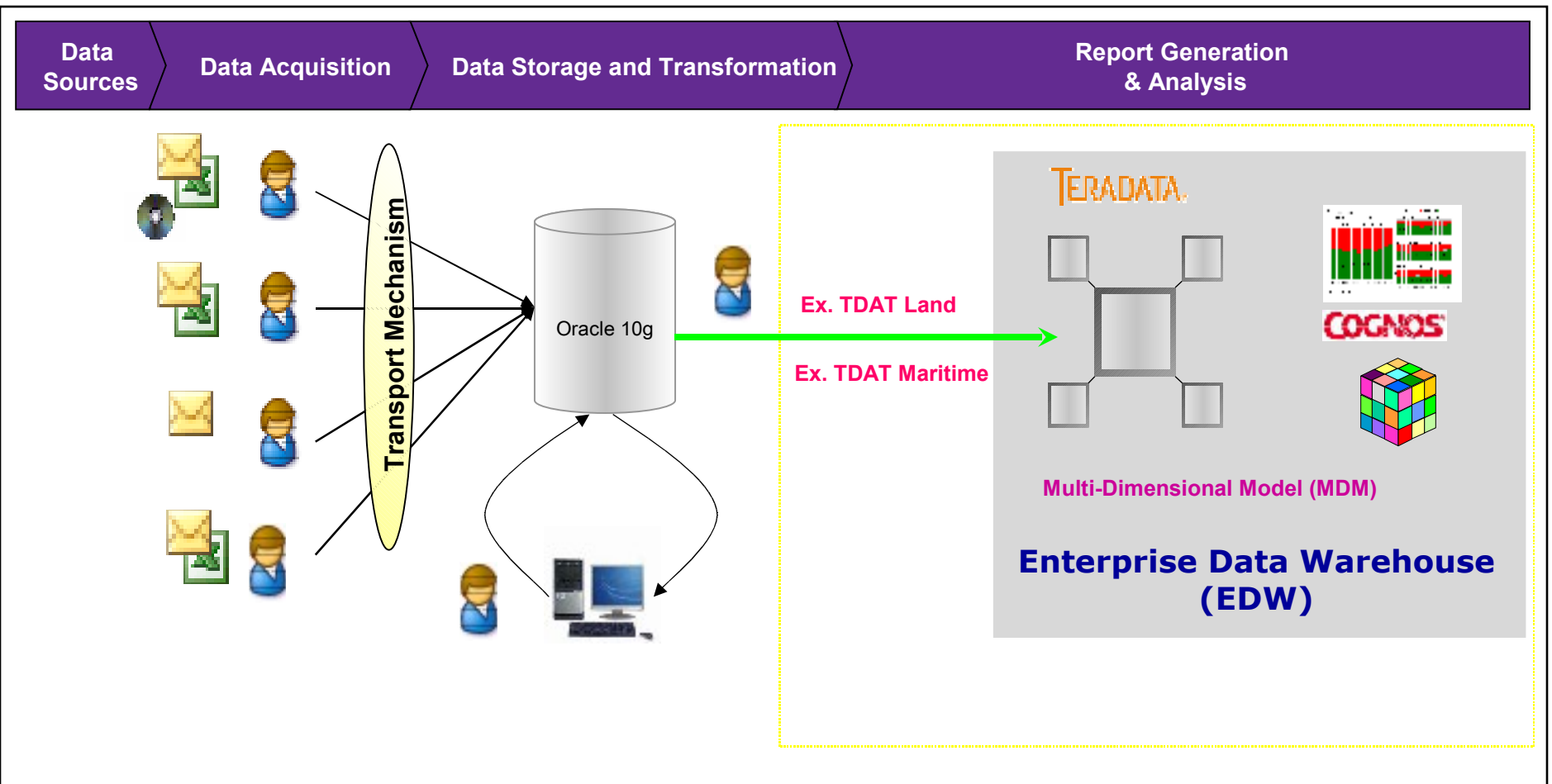


# Proof of Concept (POC)

## OBJECTIVE

- Demonstrate that the existing JSC Performance Management process can be transferred to EDW / Cognos
- Use Maritime and Land 'packs' as the basis for evaluation
- Key to secure end-user confidence that shape and feel of reports identical to extant process

# Proof of Concept (POC)



# Conclusions from the POC Programme

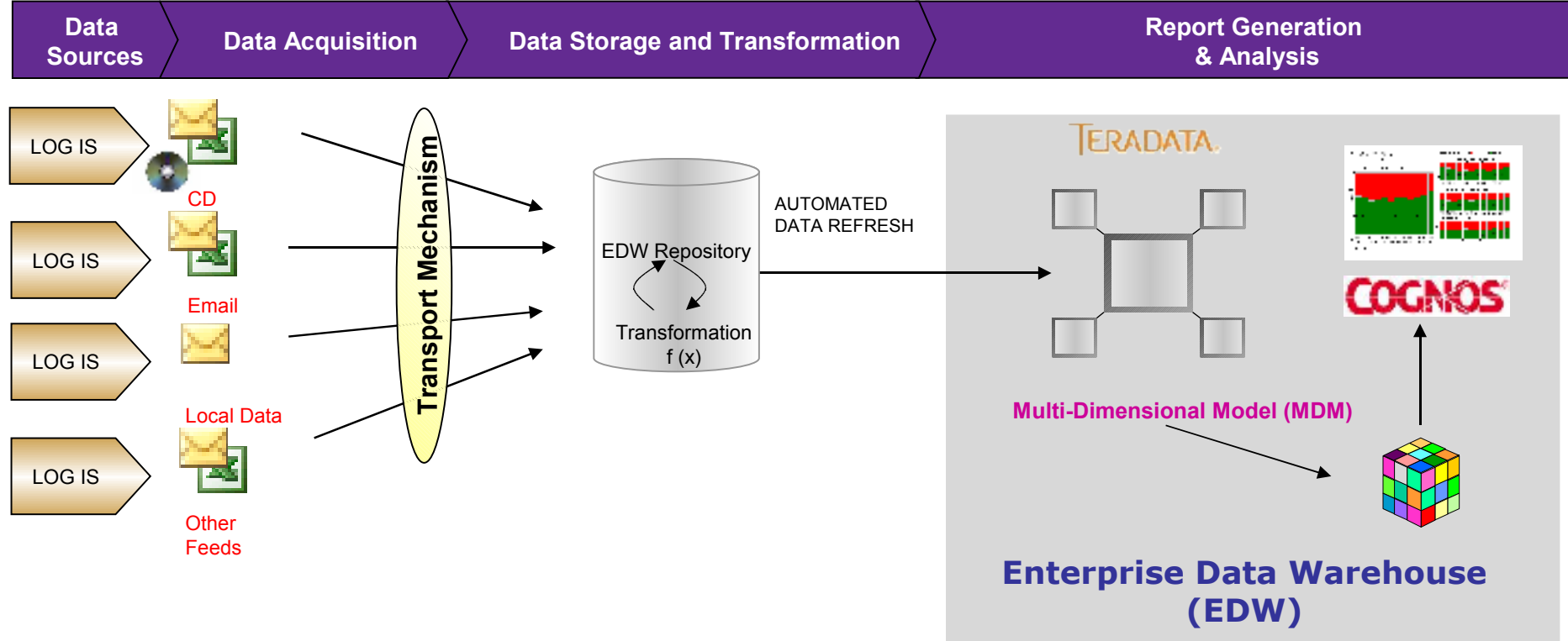
The screenshot displays the Defence Intranet (DIIC) website. The browser window title is "19:07 PM Cell - IDPRS - Cognos Connection - Microsoft Internet Explorer provided by BDFC Resh Ltd". The address bar shows a URL starting with "http://...". The website header includes "Cognos Connection" and "Defence Intranet (DIIC)". The main content area features the "defence intranet" logo, a navigation menu with items like "Home", "Applications & Tools", "Library", "News", and "Service", and several content sections including "What's New in DIIC", "In Applications and Tools", "In Library...", and "Top Stories from News". A large image of a soldier in a desert environment is featured in the "Top Stories from News" section with the headline "New kit helps British".

# Proof of Concept (POC)

## SUMMARY

- Cognos successfully replicated the existing process
- Statistical calculations (percentiles) caused difficulty
  - Requirement for a 'Sandbox' was firmly established
- Exact replication was resource intensive
- Data extraction process remained fragile
- Easy to provide an enhanced analysis option using drill-through reports
- Report distribution required further analysis
- Difficult to overcome dependence on 'hard copy' report packs

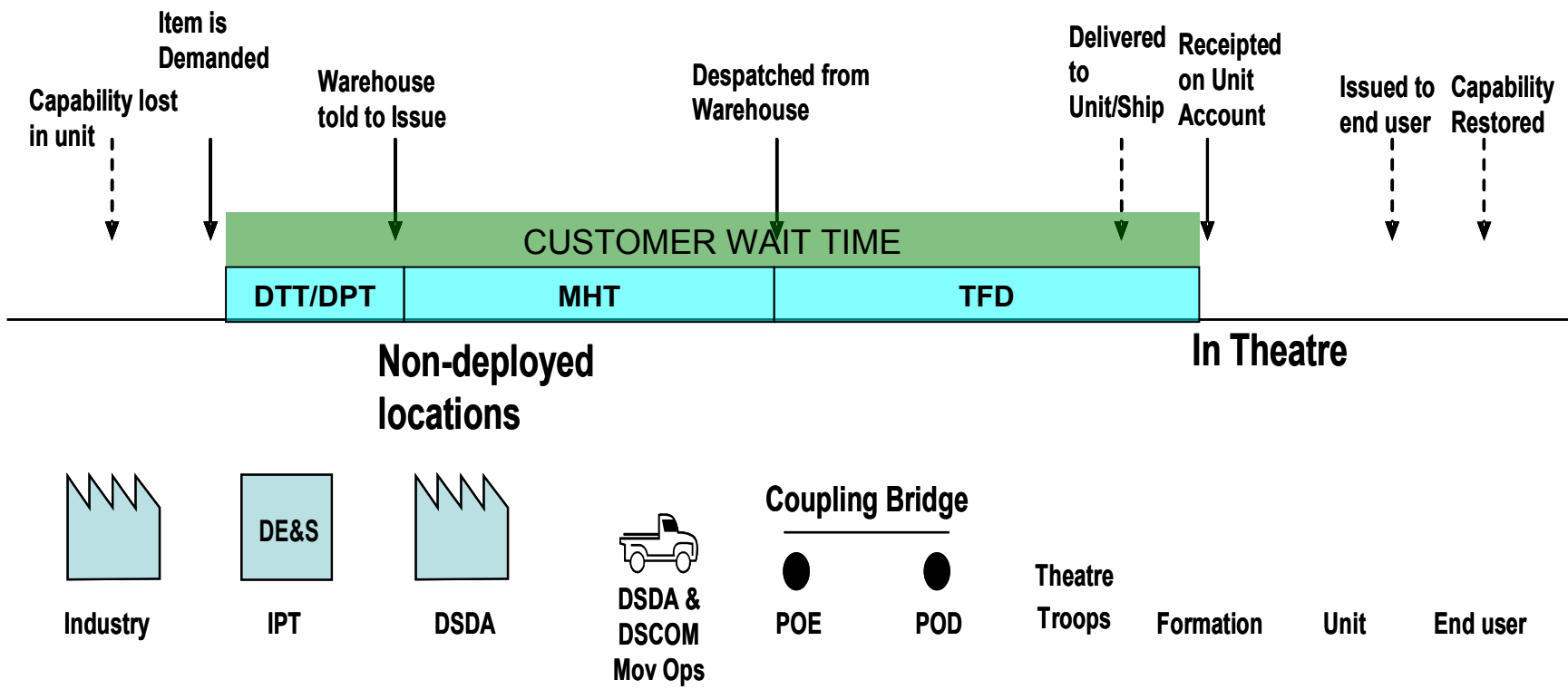
# Desired End State



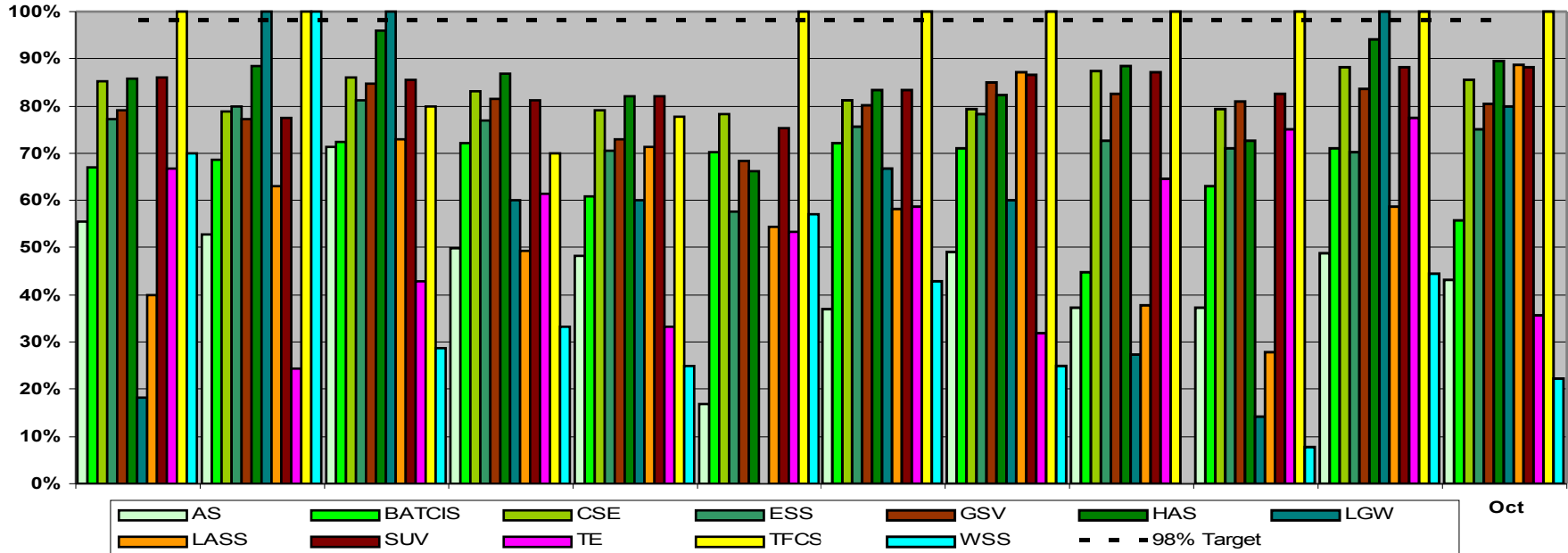
# Situation in December 2008

- Contract awarded at short notice to develop the Land / Air & Commodities standard monthly report packs by 31 Mar 09
- Aim to have Type 1 data from live source feeds
- Default Cognos settings agreed
- End-user confidence that style and format could be changed
- Opportunity to improve outputs

# Typical Metrics – Land & Commodities



# Some Complex Reports



Measurable	7,858	4,872	8,539	8,599	10,774	4,954	8,257	8,263	6,939	6,356	6,515	8,642
Unicom	7,861	4,876	8,542	8,603	10,780	4,954	8,274	8,273	6,948	6,367	6,521	8,646
Total	17,662	11,344	16,913	16,895	20,799	10,794	14,861	14,457	11,751	10,341	10,120	12,997

**\*Notes:**  
 This measure is plotted against the month of issue and excludes demands that are satisfied from secondary depots because no GLOBAL data is available.  
 Note: GLOBAL History Table Request for Change (RFC) has been funded against CPF and is in development.



# Situation in March 2009

- LAND / AIR / Commodities 'packs' have been developed, published and await data refresh
- Parallel running is about to be initiated. Three data iterations to gain better understanding of any discrepancies.
- 'Sandbox' not yet activated
- Secondary customers eager to see system activated
- Data sources are a mixture of Type 1 and Type 2
- Little or no business advantage has been delivered

# Situation today

- New metric being developed that will measure the effectiveness of the 'Forward Inventory'
- Capability Demonstrator being developed using MS toolset
- Plan to migrate to EDW / Cognos by 1 Oct 09
- LAND & MARITIME will use Type 2 data feeds
- AIR will use Type 1 data feed

# Anticipated Situation 1 Jan 2010

- All JSC PM Cell reports will be generated using Cognos
- Hard copy reports will still be required for senior officers
- Limited ability to rapidly change the report format
- Improved consistency ( subject to data feeds)
- Greater time for analysis
- Requirement for anticipatory capability

# KEY ISSUES 1

- Business Process
  - Short highly focused modules that were closely managed ensured delivery was made on time and to a high standard
  - But the lack of a coherent and cohesive programme has diluted the advantages gained
  - Short notice to start projects can compromise thorough evaluation of requirement

# KEY ISSUES 2

- Data
  - Failure to have comprehensive Type 1 data introduces frailties to the process
  - Too much manual intervention remains
  - Overly complex Log IS system difficult to harmonise
  - Business aspirations are hampered by lack of data clarity

# KEY ISSUES 3

- Reporting Framework
  - BI is only applicable at certain levels within a fiercely hierarchical system
  - Cultural challenges exist in accepting a single version of the truth
  - The balance of report generation and analysis will change, for the better

# SUMMARY



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