



# Progress report

## - Mail measurement using RFID

Richard Wishart



# Agenda

- Project context
- Case studies
- Technology developments
- Technology issues
- Business application context
- Conclusion



# Project Context



**Project Objective:** To provide a cost-effective framework for the worldwide measurement of mail quality of service

**Measurement Standards**

**Measurement Framework**

**Technical Options**



## Measurement Standards

Common Domestic and Cross Border Business Process standards (EN13850 equivalent)

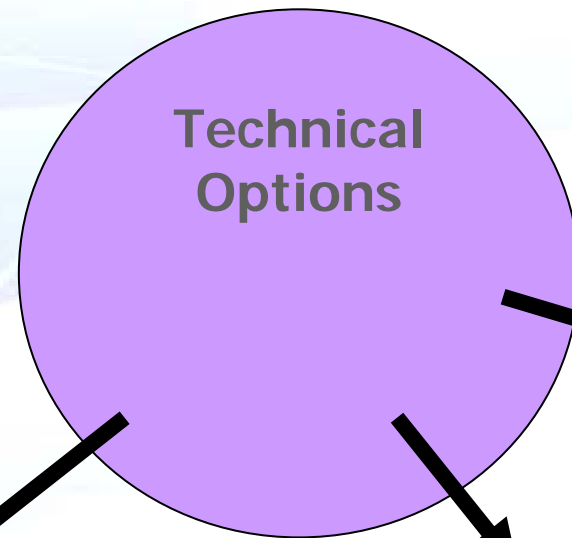


## Measurement Framework

- End to End
- Pay for Performance
- Diagnostic

### Articulation of Stakeholder requirements:

- Customers
- Regulators
- Asian Postal Administrations
- Smaller Postal Administrations



Evaluate alternative technical options.

Requirement for updated Technical Standards

Negotiate lower and more appropriate price options

How to ensure external end-to-end measurement remains covert

Reconcile with bag/container and vehicle tracking (must coexist)



# Case Studies



- Being used in Live Operation
- Applied research



<u>Post</u>	<u>Witnessed in live operation</u>	
Denmark	Production Areas within Sort Centres	A
Denmark	Local depot concept	A
Denmark	Roll cage tracking	A
Germany	First and Last mile registration	P
China	Large scale EMS Bag Tracking	P
Spain	Domestic mail measurement	P



## Applied Research

	<b><u>Applied Research</u></b>
Lyngsoe	Denmark Test Centre - Semi active Tags with memory
China Post	Field Trials in Shanghai - Part of National Initiative
Korea Post	Technology Demonstrator Seoul - Part of Post wide strategy
Consultation	-Cambridge University, MIT, IDTechEX





# Technology developments

- Simplified gate technology
- Memory on semi-active tags
- “with panellist” technology
- Passive technology
  - almost global standards
- Technology interfaces “M language”  
“CM squared”



## First and Last Mile registrations



Now semi-active tag with memory  
-Batch  
-On-Line





# Technology Issues

- **Global standards**
  - Power limitations
  - No of channels allocated
  - Protocols (read before write)
- **Business applications**
  - “Covert” and “High Visibility” blurring
  - Functionality creep
  - Impact of large volume “in-parcel” customer RFID tags.



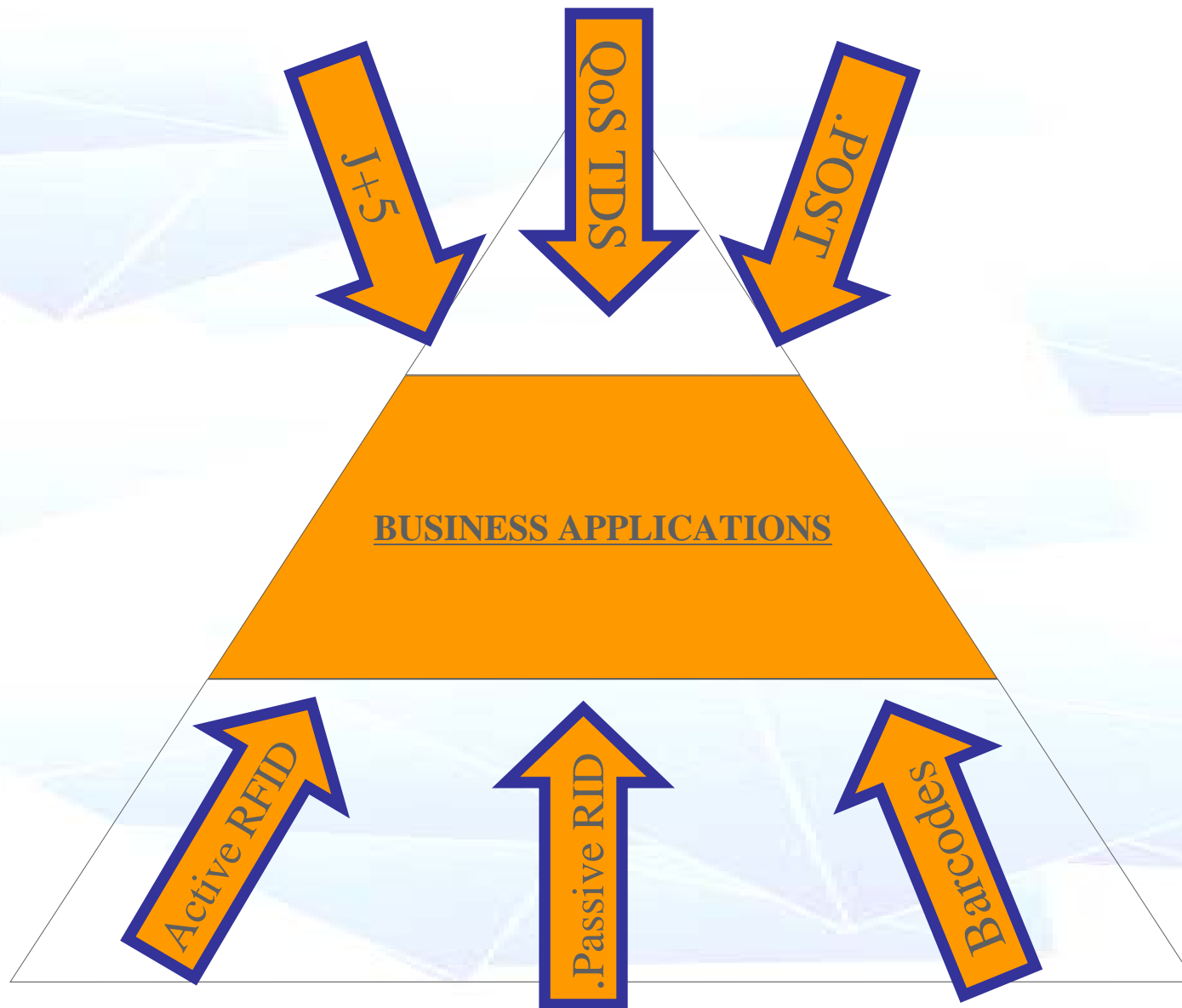
# Business Application Context



**STRATEGY**

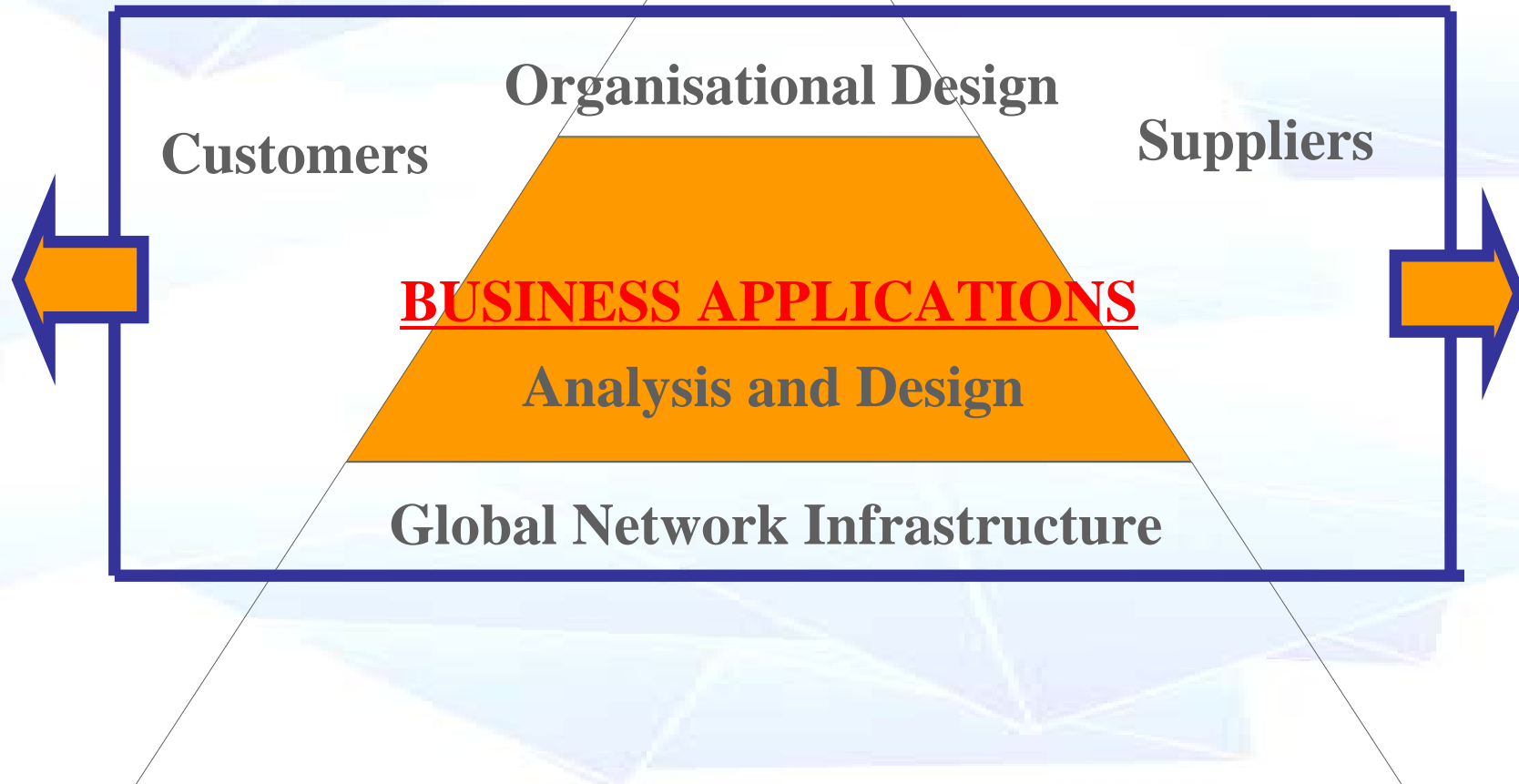
**BUSINESS APPLICATIONS**

**TECHNICAL INFRASTRUCTURE**





## The missing bits





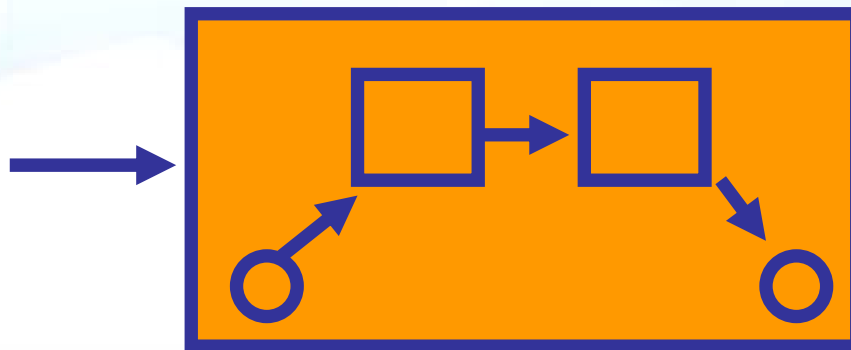
# End to End Measurement



“Black box” independent

- External
- Secret and Covert

- Regulatory Performance
- Sub-contractor payment



Postal self measurement

- High visibility
- Real time control
- Diagnostic Tool
- Incentive Tool
- Customer Benefit



Thank You

Richard Wishart

[Richard.wishart@del-mgt.com](mailto:Richard.wishart@del-mgt.com)

+442076177023