



**Bord Gáis Networks**  
Networks Transformation Programme  
PCTY – London  
10th May 2011

# Contents



## Vision and Scope of the Networks Transformation Programme

Networks Transformation Programme Timeline

### Key Success Factors

- Technology Choices
- Focus on Data and Integration
- Engaging the Business : Conference Room Pilots

Experience post Go Live

# Bord Gáis Networks – Quick Facts



## Background

### Irish Gas Market Place:

- Bord Gáis is the key player, owning and operating the majority of the Irish and Northern Irish (Firmus Energy) T&D Networks
- Networks: asset owner & network operator for Ireland's Gas T&D network
- Supply: provides gas to ~650,000 gas users
- Expanding dual fuel offering in Irish open market, began electricity campaign in February this year and has gained 300,000 customers
- Also moving into renewable energy forms, and building generation asset portfolio

### Key Tenants of Bord Gáis Corporate Strategy:

- Outperform regulatory targets (financial / non-financial)
- Through the offering of dual fuel products with exemplary service the company will strengthen its customer base
- Through significant investment in new electricity and gas assets, value will be added for all shareholders

## Key Financials

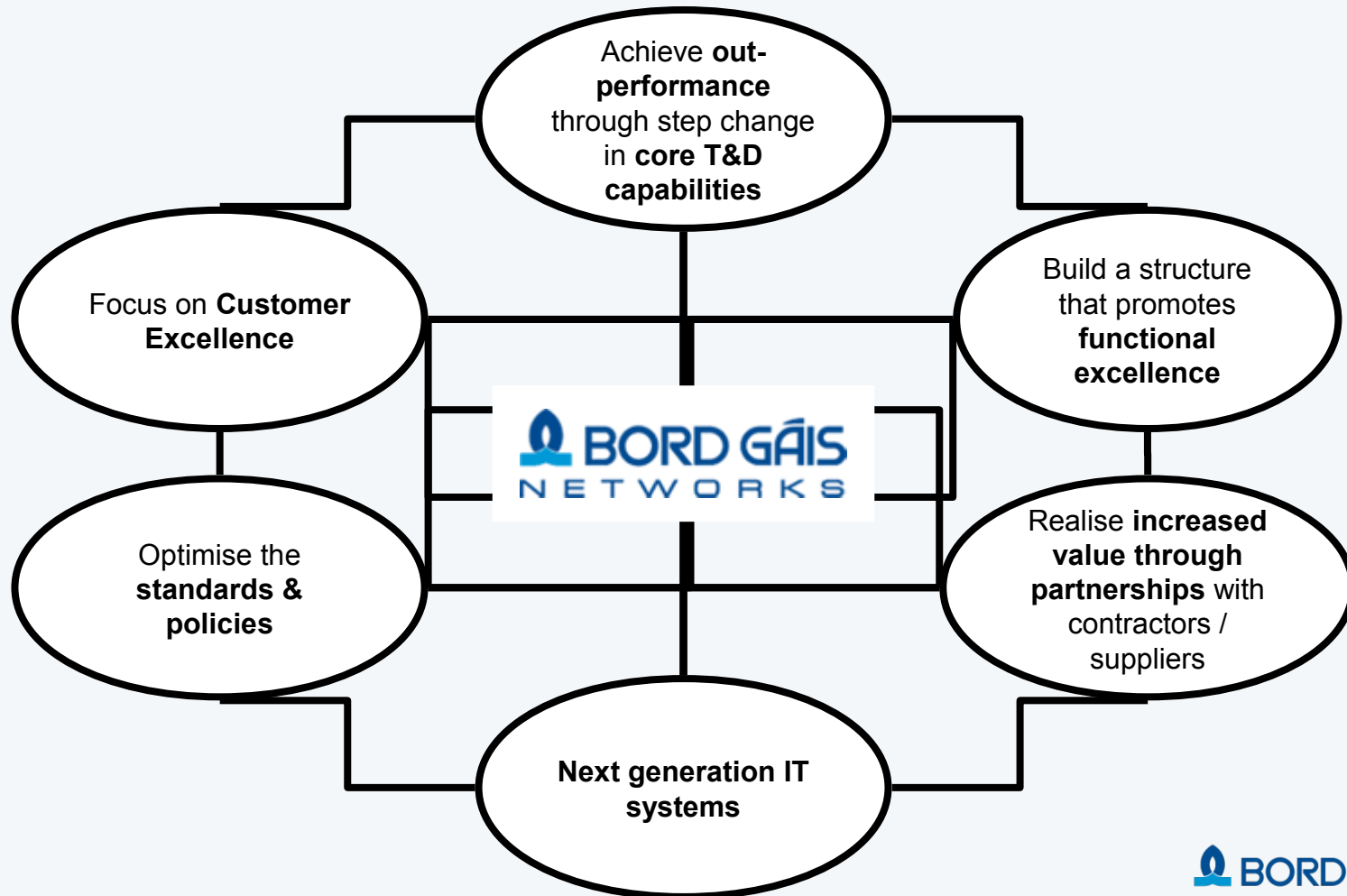
Turnover: €1,349m (2008)  
Profit before tax €119m  
Tangible Fixed Assets €3,543m

## Bord Gáis Networks

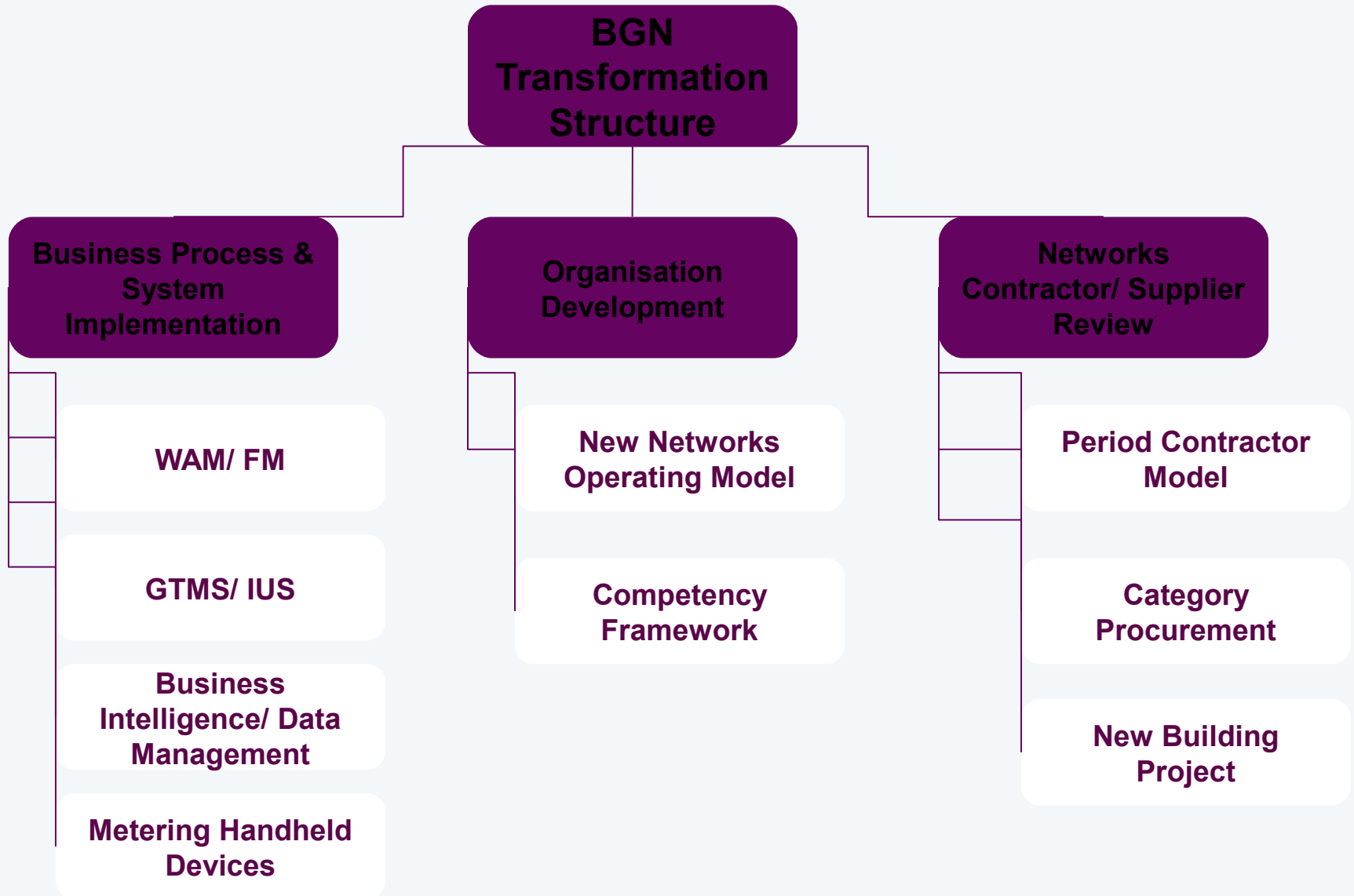
Bord Gáis Networks builds and operates the natural gas networks in Ireland. It also owns and operates significant gas pipeline assets in Northern Ireland. It manages a full 24-hour emergency response service and handles over 20,000 call-outs a year.

# Networks Transformation Vision & Strategy

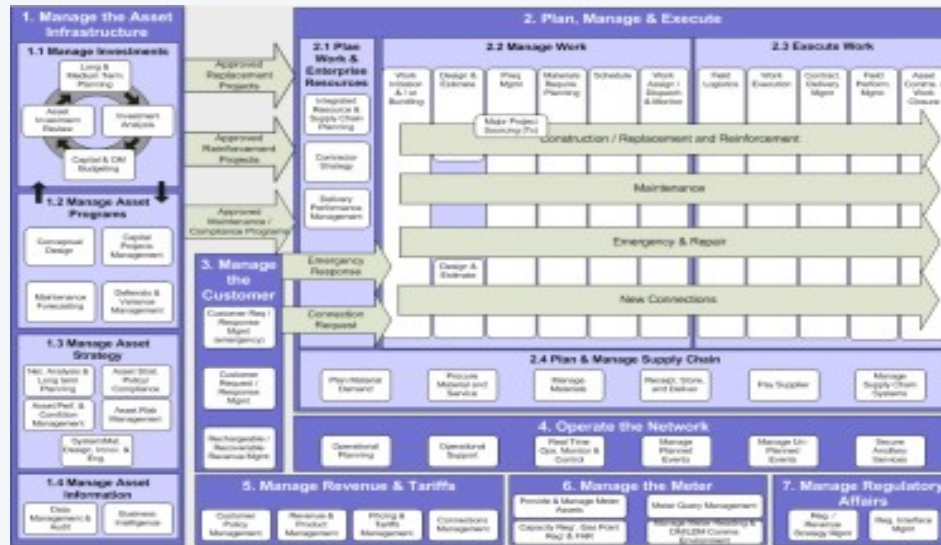
*“Make BGN a best in class Network Utility Service Provider, and Improve our Customer Service capability, allowing us to meet our current and future regulatory targets and expectations”*



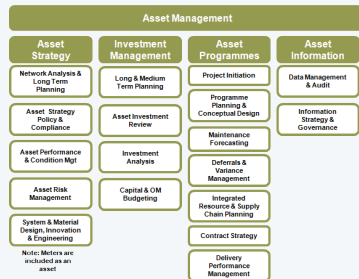
# Transformation Structure and Scope



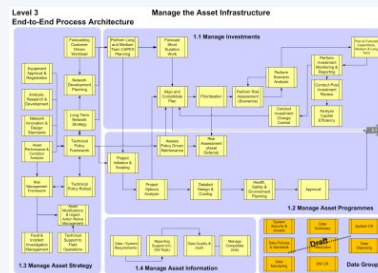
# Transformation Scope



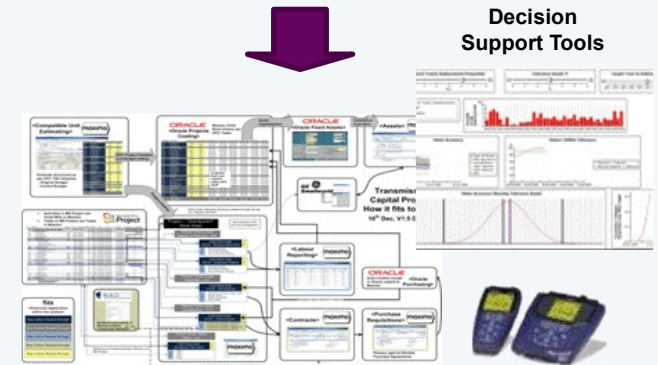
## Bord Gáis Networks High Performance Utility Model



**Organisation Building Blocks**

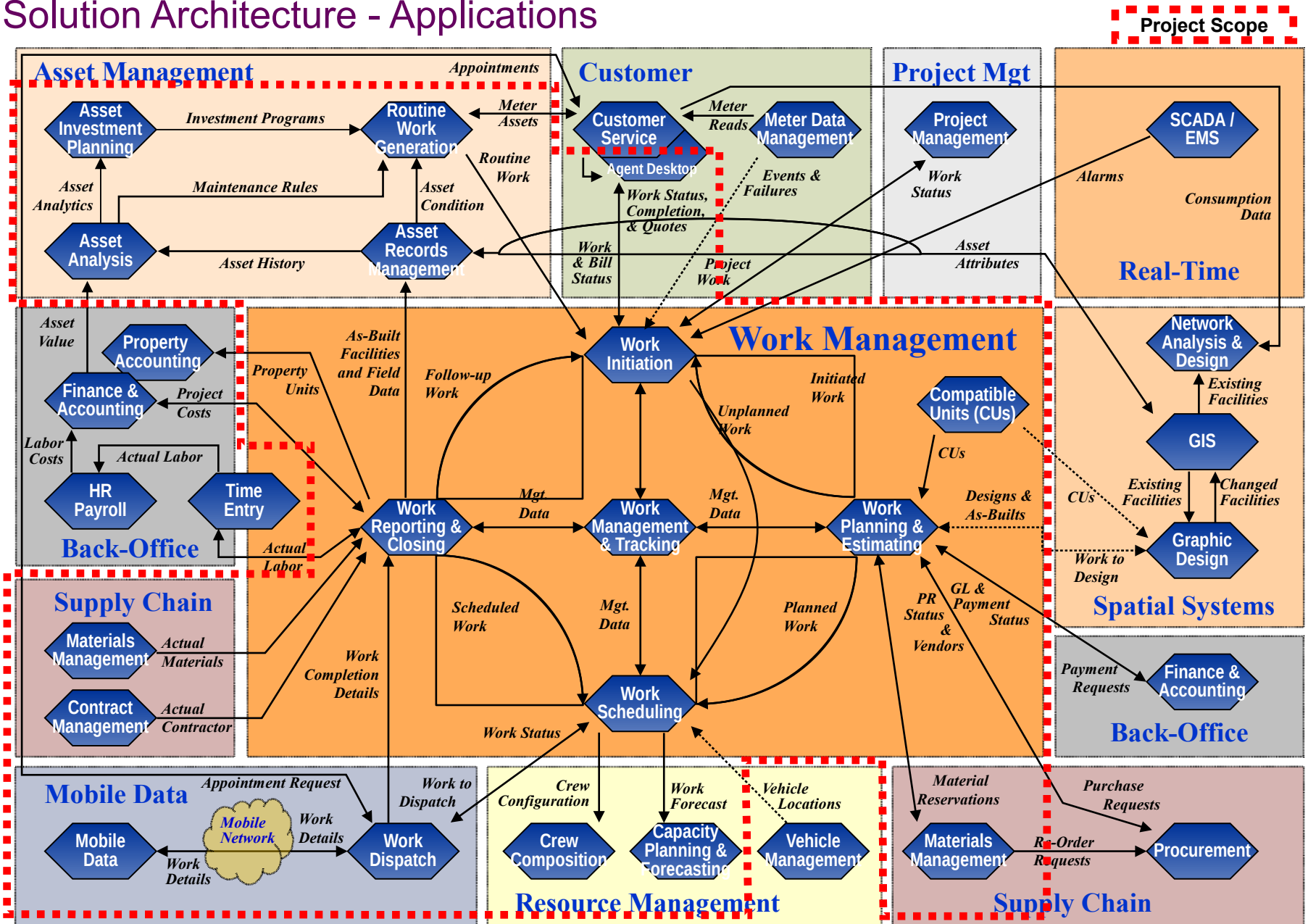


**Business Processes**



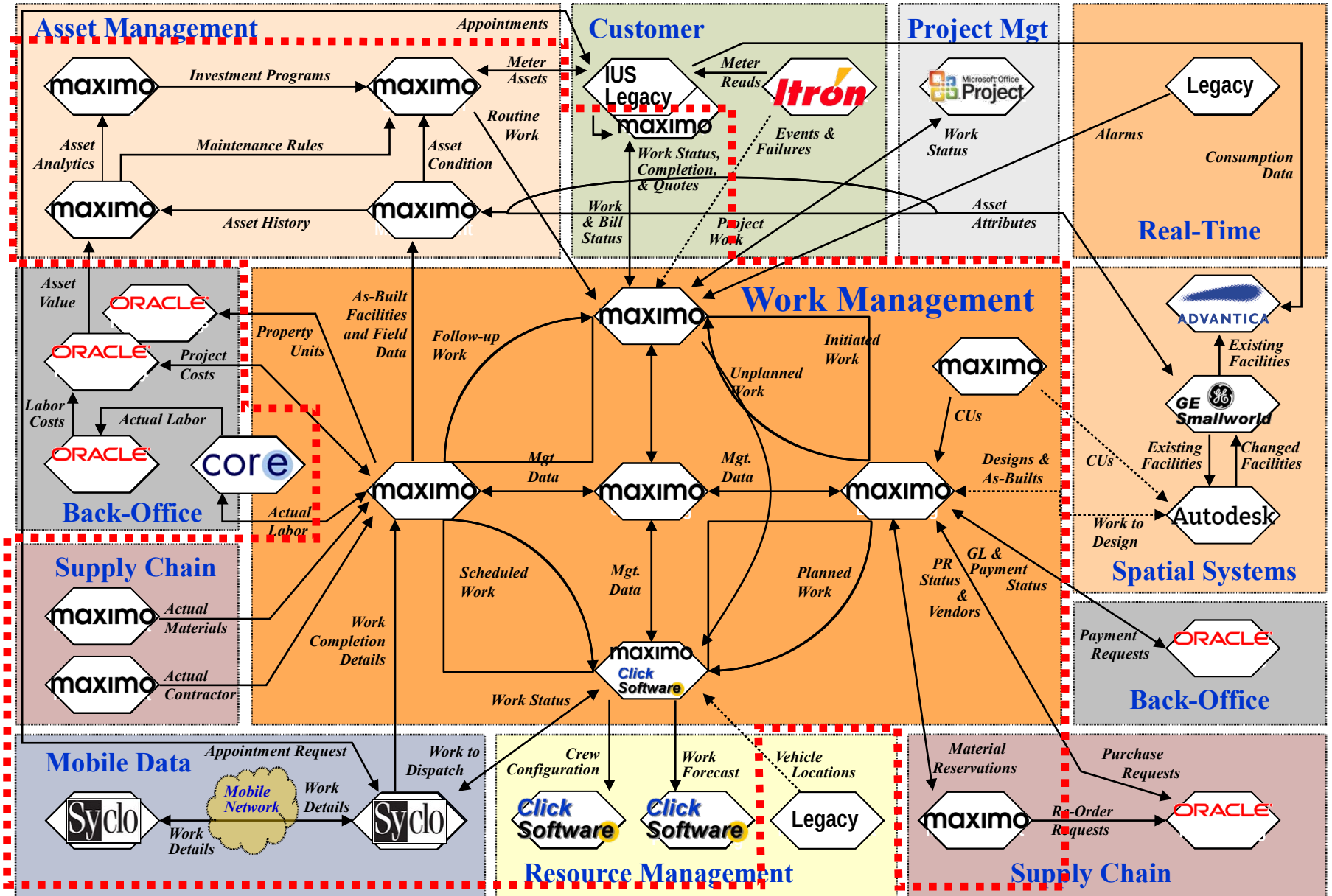
**Systems Landscape**

# Solution Architecture - Applications



# Solution Architecture - Applications

**Project Scope**





# Solution Architecture - Supporting Technologies



**Enterprise Service Bus (Oracle Fusion Middleware)**

**Decision Support and Reporting / Enterprise Data Warehouse**

**Document Management Integration (MS SharePoint)**

**E-Mail Integration (MS Outlook)**

# Contents



Vision and Scope of the Networks Transformation Programme

## Networks Transformation Programme Timeline

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Experience post Go Live

2009

2010

WAM / FM Go Live

2011



May to Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr

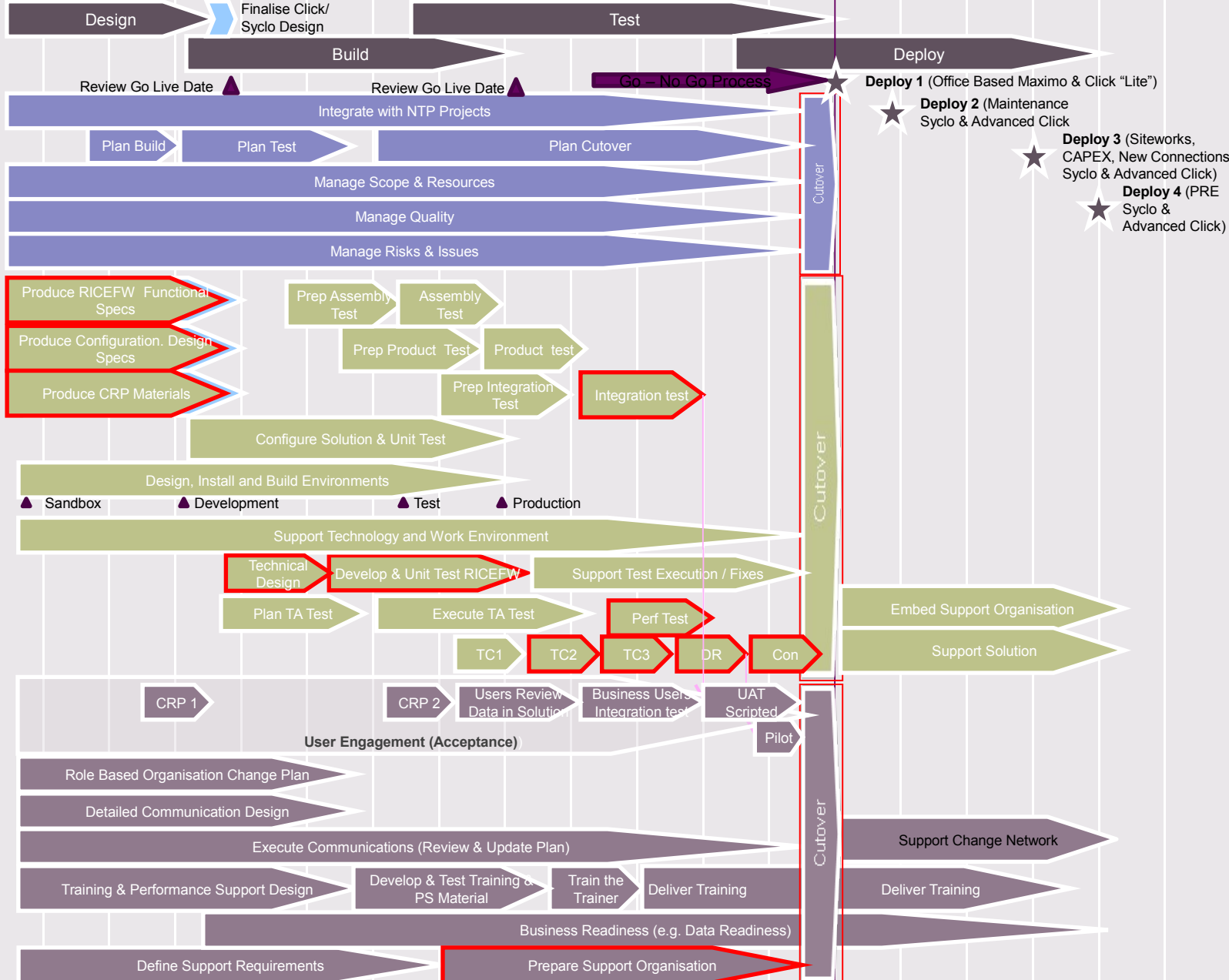
Phases

Project Management

Application Delivery

Business Delivery

TOM and PDD



# The Right Team

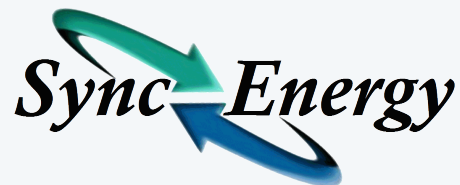


- Program Leadership
- Executive Sponsorship
- Training Delivery
- Data Quality



*High performance. Delivered.*

- Program Management
- Business Transformation
- Systems Delivery / Industry Experience
- Change Management / Training
- Local UK/Ireland Resources
- Maximo / Click / Syclo Experience



- Maximo Functional and Industry Experts
- Maximo Technical Experts
- T&D Best Practices

# Contents



Vision and Scope of the Networks Transformation Programme

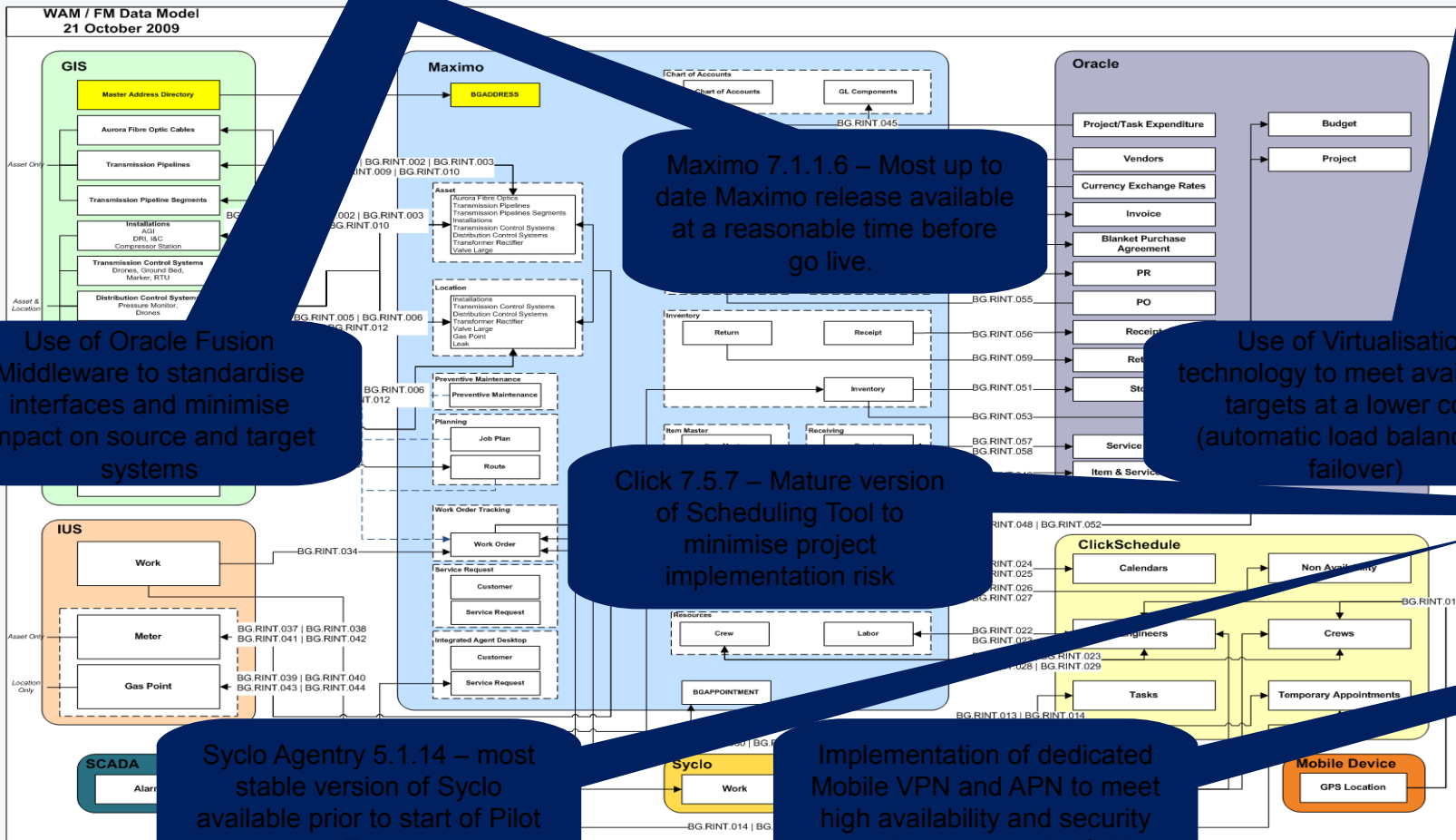
Networks Transformation Programme Timeline

## Key Success Factors

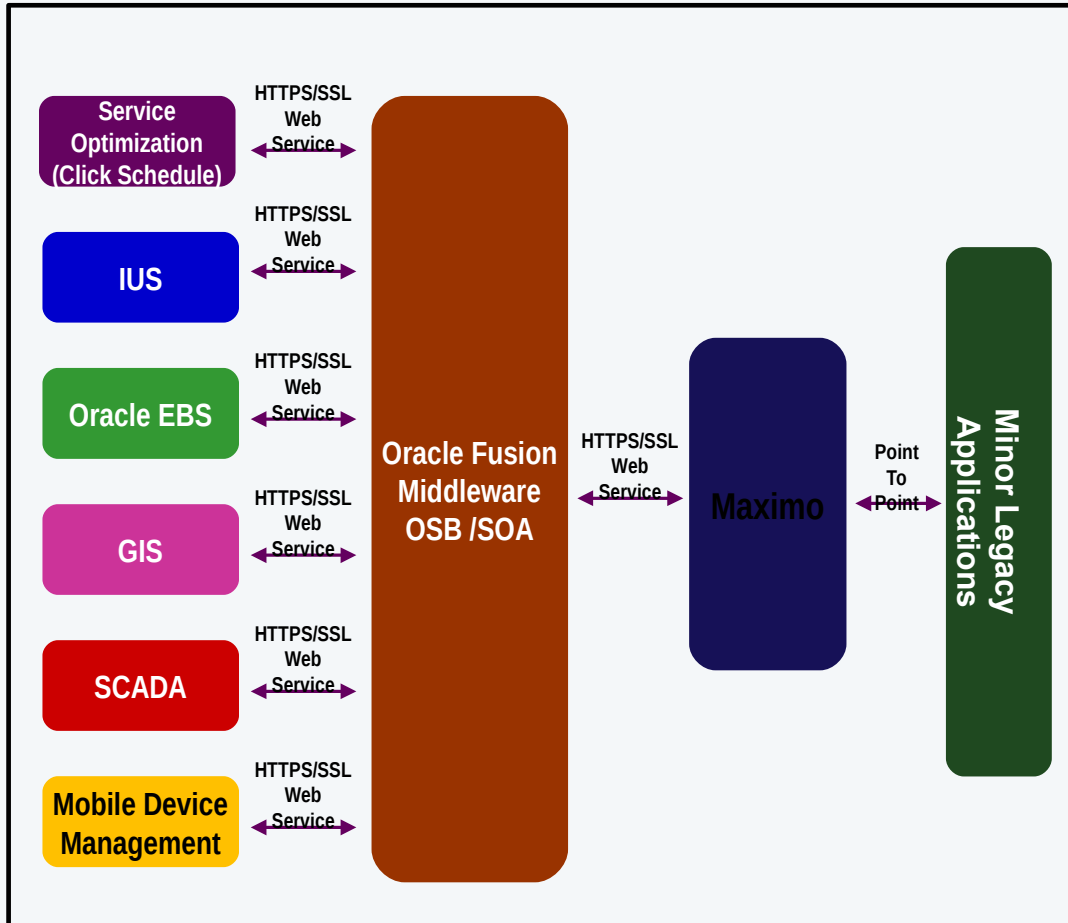
- Technology Choices
- Focus on Data and Integration
- Engaging the Business : Conference Room Pilots

Experience post Go Live

# Key Success Factors



# Key Success Factors



## Oracle Fusion Middleware

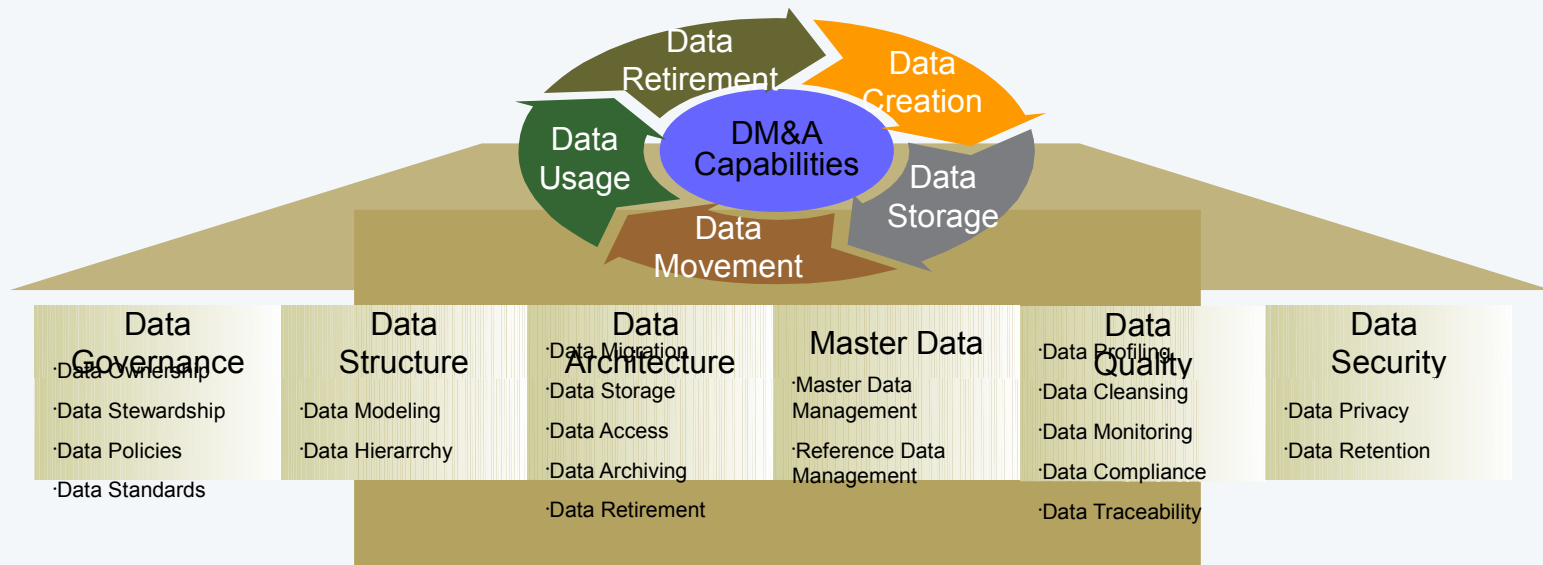
- All major interfaces to Maximo via Oracle Fusion Middleware
- (SOA Suite 11g / Service Bus 11g)
- Synchronous / Asynchronous Interfaces
- Reusable Web Services
- Guaranteed message delivery
- Ordered delivery of messages where required
- Use of canonical message enables reuse across multiple applications e.g. Purchase Requisitions
- Centralised Monitoring of Interfaces via Middleware Administration Tool

## Point to Point Interfaces

- Minor Legacy Applications via direct connection to Maximo

# Key Success Factors

## Bord Gáis has a Robust Data Management Structure





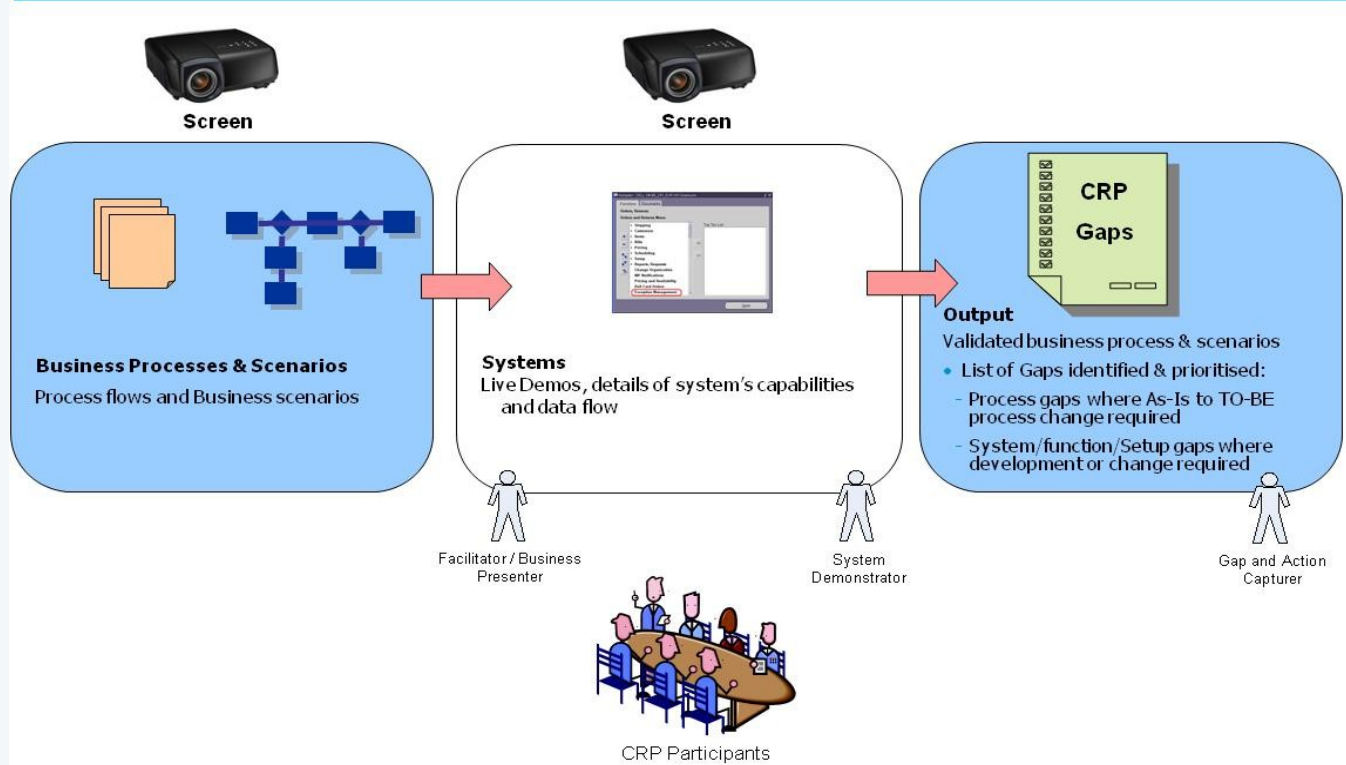
# Key Success Factors

**Data Profiling was very important in understanding our data early**

# Key Success Factors

## Conference Room Pilots Engaged the Business as the programme progressed

Demonstration of NTP business processes & system functionality in tandem, providing the opportunity to validate & verify the future business processes and system functionality



# Inventory of Conference Room Pilot (CRP)

## Scenarios

1. Construction – Large Transmission Project
2. Maintenance – PM Schedule / Survey programme
3. Emergency Response & Repair – Class 1 including GIS integration
4. Customer Requested New Connection
5. Appointment based Siteworks/ Customer Service Order – Fit/Set Meter
6. Distribution Project for replacements/refurbishments
7. Grid Control / SCADA Alarm
8. Additional Detail Flows
  - a. Inventory Management
  - b. Contractor Payment Management
  - c. Scheduling and Dispatch
  - d. Work Execution / Mobile

# Emergency Response and Repair – Design Phase CRP

IAD  
Welcome, Barry O'Donnell

Bulletins: (0) Go To Reports Start Center Profile Sign Out Help

Change Content/Layout Display Settings Create New Template Modify Existing Template Update Start Center

**Favorite Applications**

- Service Requests
- Work Order Tracking (T&D)

**Quick Insert**

- Escape Call
- No Gas Call
- New Call (Other)

**Bulletin Board**

Subject	Message	Post Date	Expiration Date
Gas outage	There is a damaged mains pipe on St.Margarets Road in Finglas.	02/12/2009	03/12/2009

**Inbox / Assignments**

Description	Owner Table	Due Date
No Assignments found for Barry O'Donnell		

**Result Set**

Service Request	Description	Due Date	Owner Table
1,003	Complaint regarding Work done by fitter	03/12/2009	BODONNEL
1,011	Customer wants to enquire about new connection charge	04/12/2009	BODONNEL
1,015	Customer Charter Query by customer.	04/12/2009	BODONNEL

1 - 3 of 3

# IAD – Escape Call Scripting

Integrated Agent Desktop (IAD)

Bulletins: (0)

Go To

Reports

Start Center

Profile

Sign Out

Help

Find:



Select Action



List

Service Request

Escape

Related Records

Log

Specifications

Please Read: "Are you calling to report an Escape?"

Report Escape?

Please Read: "May I take your Name?"

Customer Name

Please Read: "May I take your GPRN Number (Meter Point Number) ?" If GPRN not available click the arrow to search:

GPRN Number

Meter

GPRN Point Status

GPRN Service Status

Please Read: "Is this the correct Address?"

Correct Address?

Select the button below to view work history at this location

Please Read: "Your Contact Numbers?"

Phone: (H)

Phone: (M)

Please Read: "Is the gas escape Internal or External?"

Internal/External

Please Read: "At what location is the smell?"

Smell Location

Do you want to Enter Job Remarks?

Remarks

Please Read: "Can you Access your meter?"

Access Meter

Please Read: "Please confirm if you are able to turn off your Gas supply at the valve next to the meter?"

Turn off Meter

Please Read: "Are there any works in the area of the escape?"

Works in Area

Please Read: "Is the Smell from a Bord Gais Installation?"

BGN Installation

Please Read: "Is there broken or damaged Pipe?"

Damaged Pipe

Select the button below to Complete the Service Request

# IAD – Escape Call Scripting – Safety Advice

Integrated Agent Desktop (IAD)

Bulletins: (0)

Go To

Reports

Start Center

Profile

Sign Out

Help

Find:



Select Action



List

Service Request

Escape

Related Records

Log

Specifications

Please Read: "Are you calling to report an Escape?"

Correct Address?

Please Read: "May I take your Name?"

Customer Name

Please Read:

(Meter Point M  
click the arro

View Work Details

Please Read:

- Do not operate an electrical appliance, switches, or equipment. If switched on leave on.
- Do not smoke and extinguish any naked flames.
- Do not use mobile phones in the vicinity of the escape
- Do not work in the area of the escape
- Remove all personnel from the affected area.
- The Senior Person on site should identify themselves to the Bord Gais representative

Please confirm that you have understood this safety advice

OK

Please Read:

- Do not operate an electrical appliance, switches, or equipment. If switched on leave on.
- Do not smoke and extinguish any naked flames.

Select the but

Please Read:

- Do not use mobile phones in the vicinity of the escape
- Do not work in the area of the escape

Please Read:

- Remove all personnel from the affected area.
- The Senior Person on site should identify themselves to the Bord Gais representative

Please Read:

Please confirm that you have understood this safety advice

Do you want t

Please Read:

Please Read: "Please confirm if you are able to turn off your Gas supply at the valve next to the meter?"

Turn off Meter

Please Read: "Are there any works in the area of the escape?"

Works in Area

Please Read: "Is the Smell from a Bord Gais Installation?"

BGN Installation

Please Read: "Is there broken or damaged Pipe?"

Damaged Pipe

Select the button below to Complete the Service Request

Complete SR

# Completed SR – WO Creation Confirmation

IAD Bulletins: (3) Go To List Reports Start Center Profile Sign Out Help

Find:  Select Action

List **Service Request** Related Records Log Specifications

Service Request\*  Reported Date  CSR Name  Owner  Owner Group  Status  Attachments

**End User Information** **Caller Information**

GRPN  Meter  End User Name  End User Phone (H)  End User Phone (M)  End User E-Mail  Type of End User  Domestic/IC?  EAC  Road Impact Type

**System Message**

Work Order 1005 Created

**End User Street Address Information**

Building Number  Unit No.  Building Name  Building Group Name   
Street Name  Town  GeoCode   
Secondary St. Name  County  Latitude   
Locality  Postal Code  Longitude   
Secondary Locality  Country

**Caller Address**

**Service Request Details** **Complaints**

Summary  Classification   
Details  Class Description   
Public/Private?  Installer Number  Installer Name  Documentation Sent?  Source   
Complainants Name   
Complainants Phone   
Dept. Responsible   
Category   
Complaint Type

**Meter Information** **Meter Read**

Gas Point Status  Meter Type  Last Meter Read Date  Meter Read Date   
Gas Service Status  Meter Size  Last Meter Read  Meter Read   
Gas Use  Meter Number  Next Meter Read   
Meter Position

# Completed SR

View Call Script Flow

IAD

Bulletins: (3) Go To Reports Start Center Profile Sign Out Help

Find: Select Action

List Service Request Related Records Log Specifications

Service Request\* 12345 Reported Date 5/01/10 07:45 AM CSR Name CHEINEMA Owner Owner Group CALLCTR Status NEW Attachments

**End User Information**

GRPN 368367 30, Clonard Street, Balbriggan, County  
Meter M12345 Meters G4 Diaphragm Type

End User Name Susan Martin  
End User Phone (H) 087 668 2798 End User Phone (W)  
End User Phone (M) 087 432 8765 End User Fax  
End User E-Mail smartin@abc.com  
Type of End User Vulnerable End User?  
Domestic/IC? Supplemental Charge Applies?  
EAC SPC  
Road Impact Type

**Caller Information**

Caller Name Susan Martin  
Caller Phone (H) 087 668 2798 Caller Phone (M)  
Caller E-mail smartin@abc.com  
Contact Type Resident  
Inbound/Outbound Inbound Use End User Details?

**End User Updates**

Updates Required?  
Update Details

**End User Street Address Information**

Building Number 30 Unit No. Building Name Building Group Name  
Street Name Clonard Street Town Dublin GeoCode  
Secondary St. Name County Latitude 3954.6543  
Locality Balbriggan Postal Code Ireland Longitude 8632.9871  
Secondary Locality Country

**Caller Address**

**Service Request Details**

Summary Escape Call  
Details Gas service hit by Water Company  
Classification RESPOND / ESCAPE  
Class Description Respond to Escape  
Installer Number  
Installer Name  
Documentation Sent?

**Complaints**

Source  
Complainants Name  
Complainants Phone  
Dept. Responsible  
Category  
Complaint Type

**Meter Information**

Gas Point Status Gas On Meter Type Gas On  
Gas Service Status Installed Meter Size  
Gas Use Meter Number  
Meter Position

**Meter Read**

Last Meter Read Date 13/10/2009 Meter Read Date  
Last Meter Read 12321 Meter Read  
Next Meter Read



# ClickSchedule Task List

The screenshot displays the ClickSchedule software interface. The top window is titled "ClickSchedule from ClickSoftware - Engineers Gantt [05/Jan/2010 - 06/Jan/2010]". It features a menu bar (File, Edit, View, Task, Engineer, Gantt, Tools, Window, Help) and a toolbar. The main area shows a Gantt chart for "Engineers Gantt [05/Jan/2010 - 06/Jan/2010]" with a task list on the left and a calendar view on the right. The task list includes resources like Claire McNeill, Dave Morrison, Eoin Coyne, Kevin Shannon, Mick Killeen, and Pat Tully. A yellow callout bubble points to the "Tasks List" window, which contains a table of task details.

...task arrives in Task list showing all relevant information, including:

- work type
- time constraints
- location
- resource type

CallID	Number	TaskType	Conf	Status	Region	District	PreferredEngineers
12345	1	Escape		NEW	Leinster	Leinster NE	0
12345	1	Escape		ALLOC	Leinster	Leinster NE	0
12345	1	No Gas		ALLOC	Leinster	Leinster NE	0
12345	1	No Gas		NEW	Leinster	Leinster NE	0
12345	1	Repair		IN PROG	Leinster	Leinster NE	0
12345	1	Repair		IN PROG	Leinster	Leinster NE	0

# ClickSchedule Semi-Automated Scheduling

The screenshot displays the ClickSchedule software interface. The main window shows a Gantt chart for 'Engineers Gantt [05/Jan/2010 - 06/Jan/2010]'. The chart shows tasks for various engineers, including Claire McNeill, Dave Morrison, Eoin Coyne, Kevin Shannon, Mick Killeen, and Pat Tully. A yellow callout bubble points to the 'Search Results' dialog box, which lists scheduling options.

Search Results

The following options are available:

Engineer	Start	Finish	Region	Available	District
Claire McNeill	05/01/10 15:30 PM	05/01/10 18:00 PM	Leinster	Yes	No
Mick Killeen	05/01/10 15:30 PM	05/01/10 18:00 PM	Leinster	Yes	Yes
Pat Tully	05/01/10 10:00 AM	05/01/10 15:30 PM	Leinster	Yes	Yes

...user launches Schedule Wizard (semi-automated scheduling) to return list of scheduling options

TaskType	Confirma...	Priority	Status
Escape		9	NEV
Escape		9	ALL
No Gas		7	ALL
No Gas		7	NEV
Repair		8	IN P
Repair		8	IN PROG

# ClickSchedule Engineer Gantt

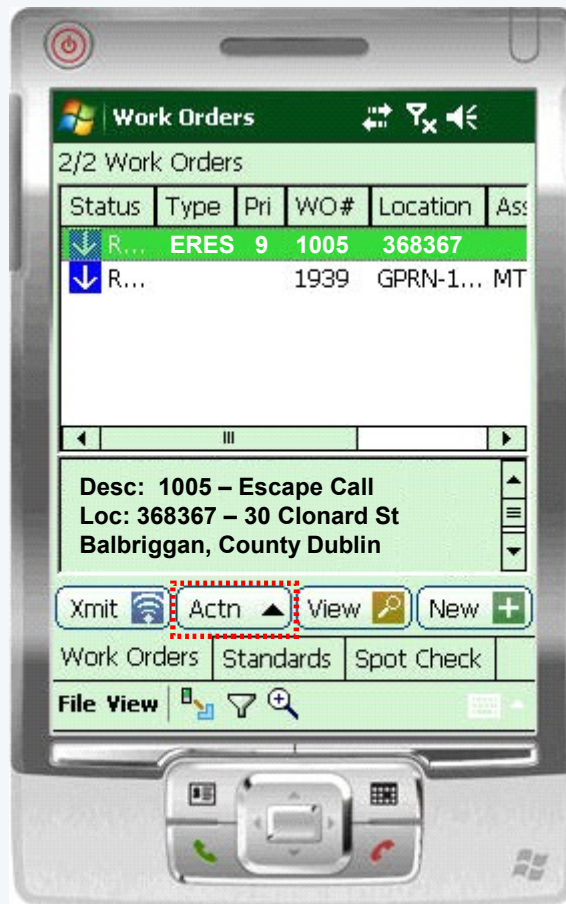
The screenshot displays the ClickSchedule Engineers Gantt software interface. The main window is titled "ClickSchedule from ClickSoftware - Engineers Gantt [05/Jan/2010 - 06/Jan/2010]". The interface includes a menu bar (File, Edit, View, Task, Engineer, Gantt, Tools, Window, Help), a toolbar, and a navigation tree on the left. The navigation tree shows a hierarchy of locations: Galway & the West, Leinster Middle, Leinster North, Leinster North West, Leinster North Middle, Leinster North East, Leinster South, Munster, and Transmission. The main Gantt chart area shows a timeline from 06/01/10 08:15 to 06/01/10 08:15, with tasks displayed as bars. A yellow callout bubble points to a task bar in the Gantt chart, stating: "...user has selected appropriate resource option and task is now displayed (scheduled) in Gantt chart against appropriate resource". Below the Gantt chart is a "Tasks List" table with the following data:

CallID	Number	TaskType	Confirma...	Priority	Status	Re
12345	1	Escape		9	ALLOC	
12345	1	Escape		9	ALLOC	
12345	1	No Gas		7	ALLOC	
12345	1	No Gas		7	NEW	Leins...
12345	1	Repair		8	IN PROG	Leinster Leinster NE
12345	1	Repair		8	IN PROG	Leinster Leinster NE

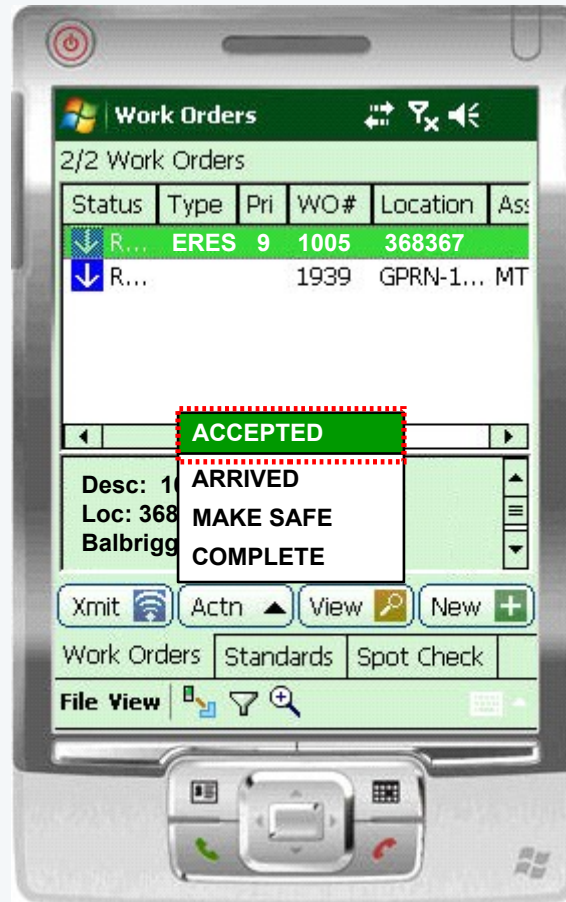
The bottom of the interface shows a timeline for Dec 2009 and Jan 2010, with the current date set to 07/01/2010. The status bar at the bottom indicates: "In Domain: Tasks: 13 Selected: 1 Scheduled: 11 Engineers: 6".

...user has selected appropriate resource option and task is now displayed (scheduled) in Gantt chart against appropriate resource

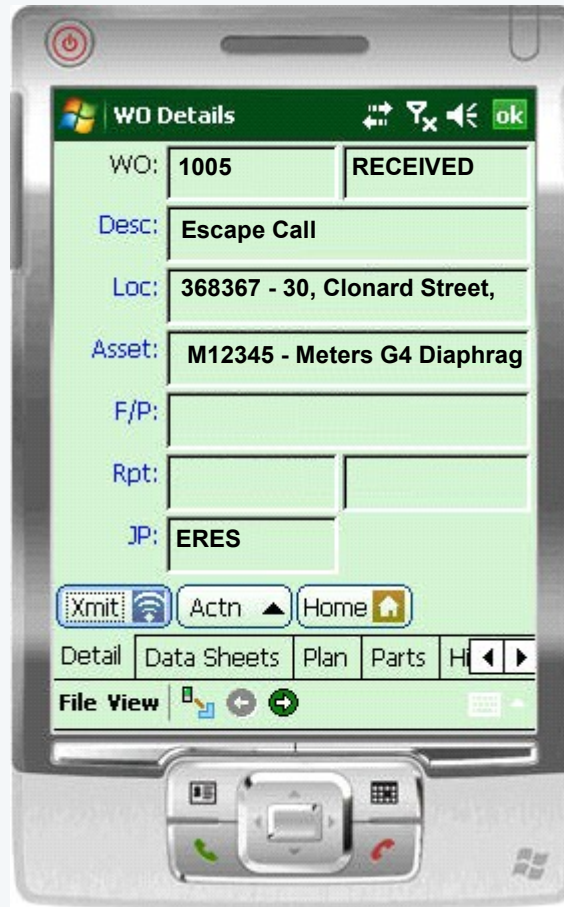
# Syclo - Job List



# Syclo - Job List – Status Menu



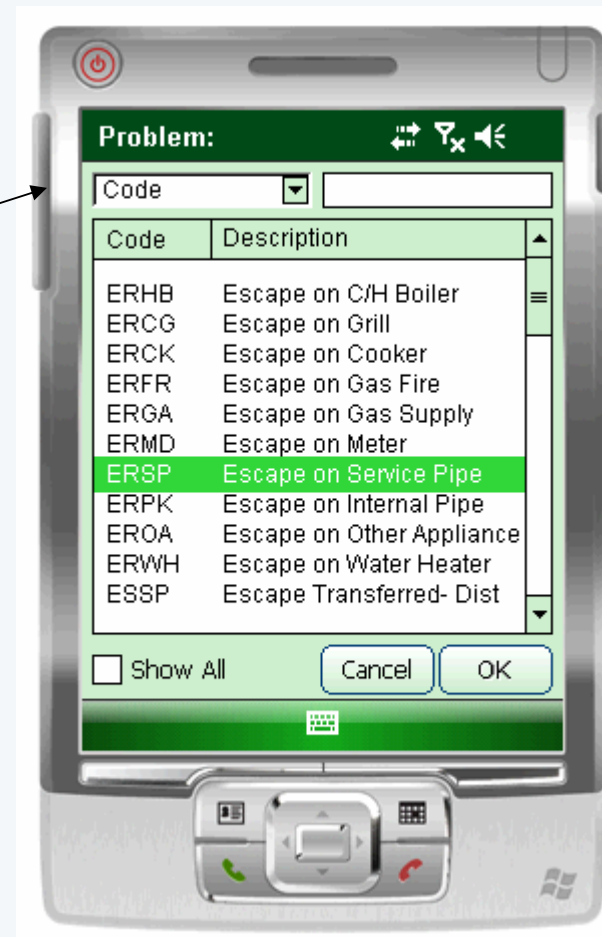
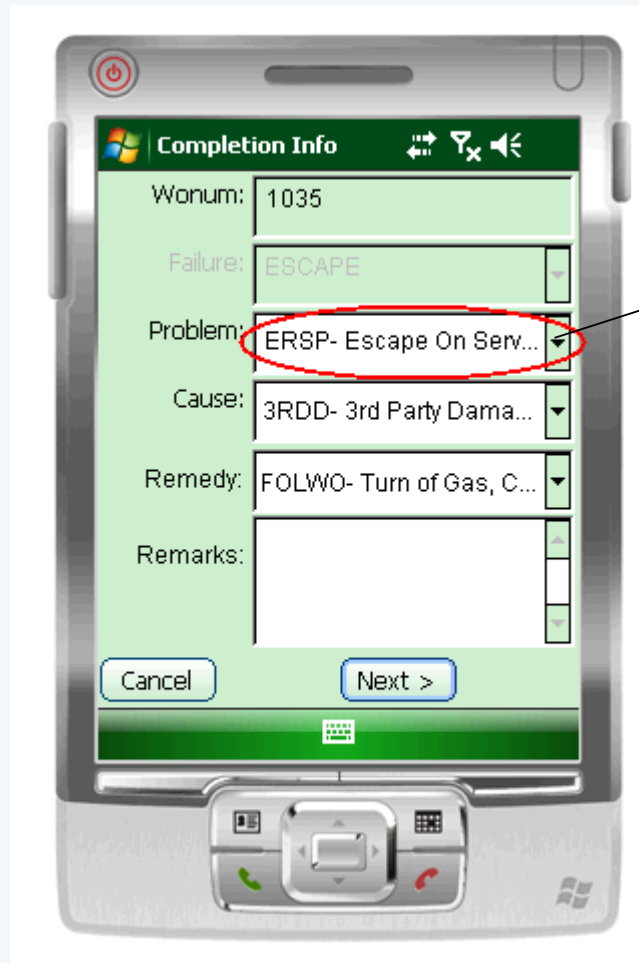
# Syclo - Job Details



# Syclo - X/Y Coordinate

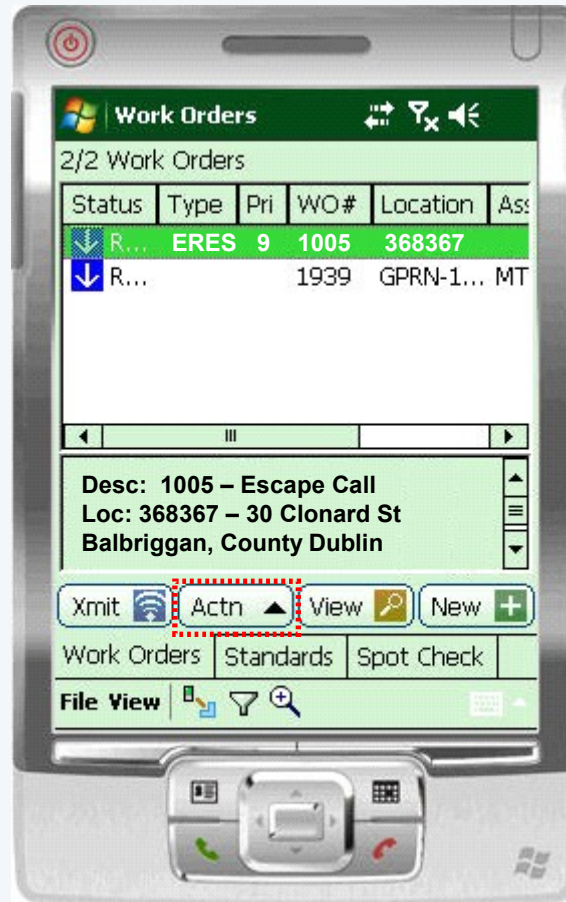


# Syclo – Capture Failure Codes

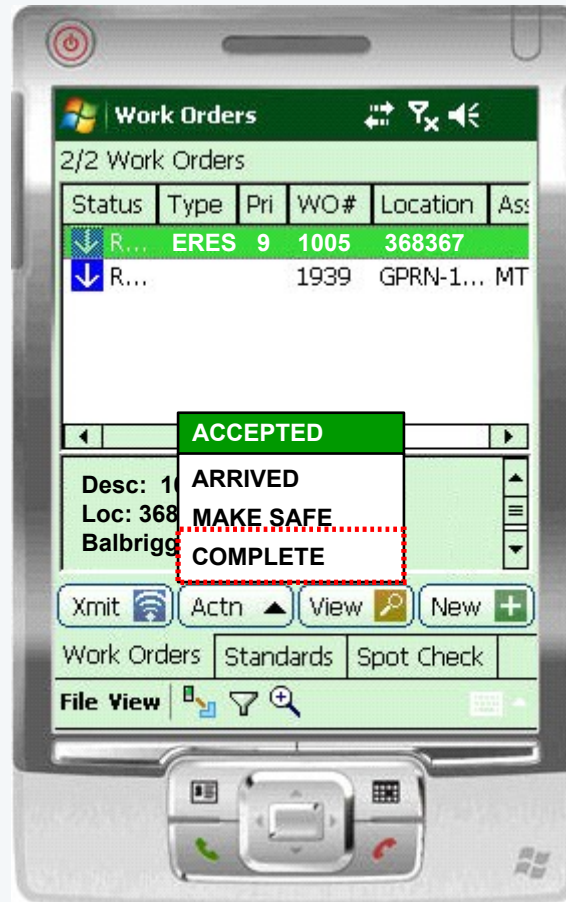




# Syclo - Job List



# Syclo - Job List – Status Menu



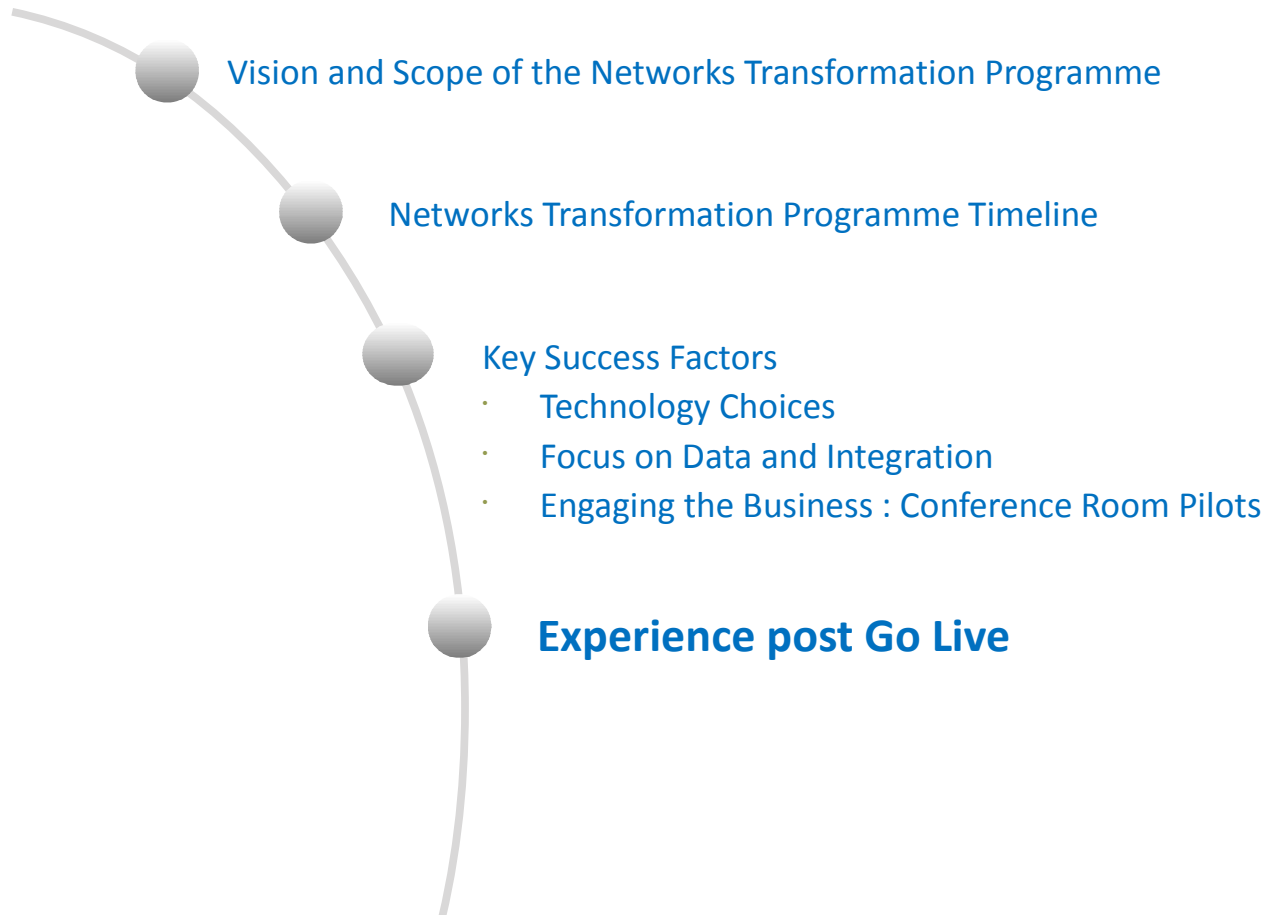
## Other innovative features of the NTP Maximo Solution

- Integrated Agent Desktop (IAD) – Call Center application
- Prerequisites Management in Work Order Tracking
- “Bulk” work order creation for distribution projects and outage restorations
- Data requirements based on Status and Work Type – Table Driven
- Implementation of Calibrations solution
- Contractor Unit reporting for Payments
- “Projects” module

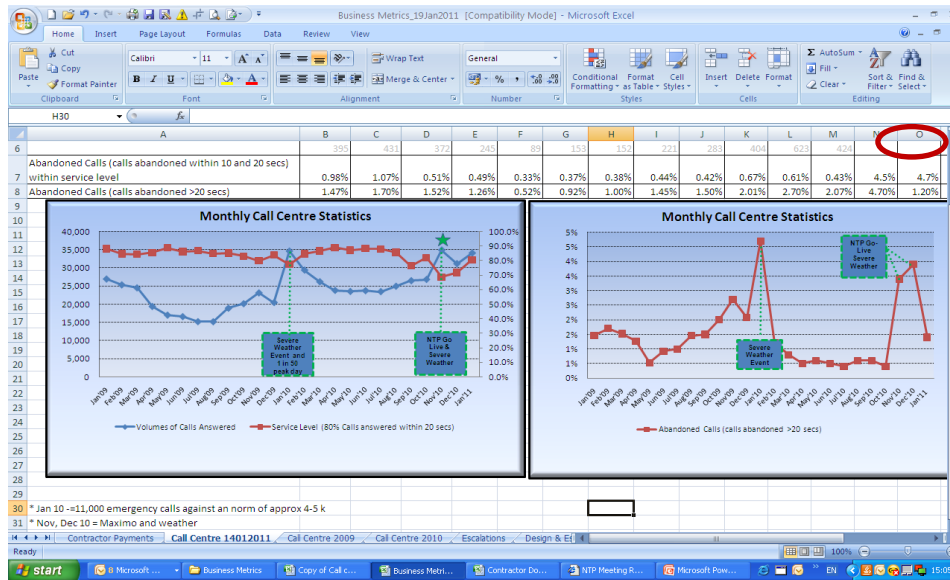
# NTP Program Video



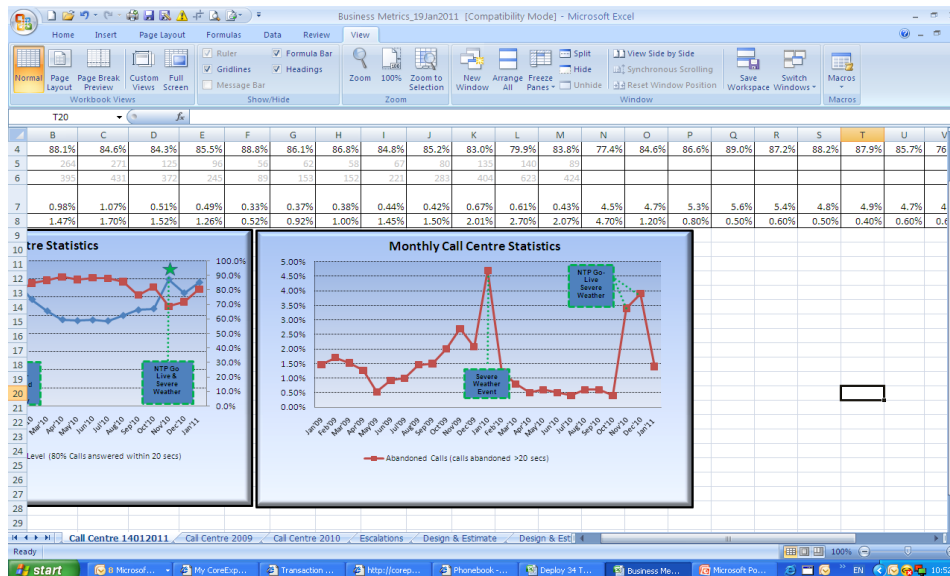
# Contents



# Call Centre



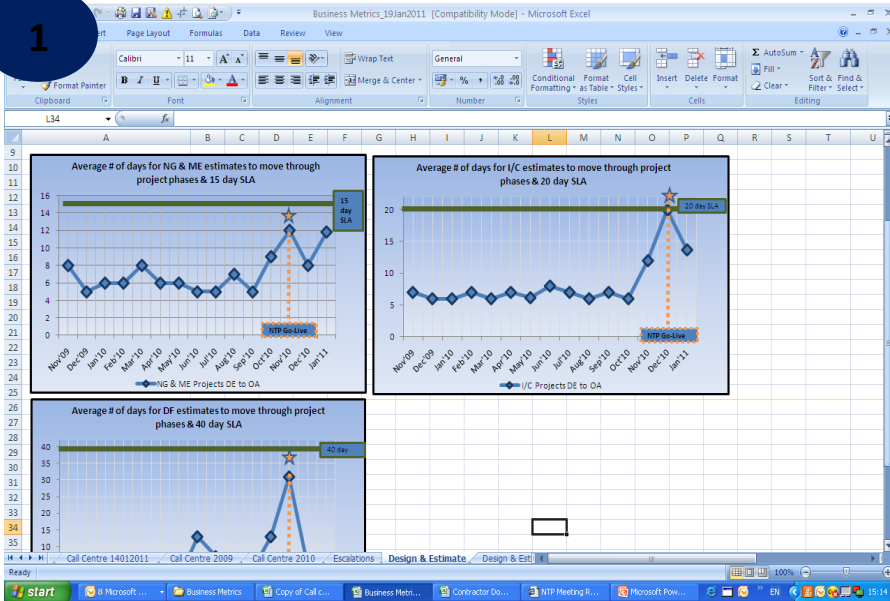
- No. of calls received in Call Centre increased over NTP Go Live due to a larger number of shipper queries on appointment and customer queries on appointments
- Severe weather event also increased the number of calls in Nov'10 & Dec'10
- Service Level dropped with the increased no. of calls handled in Call Centre



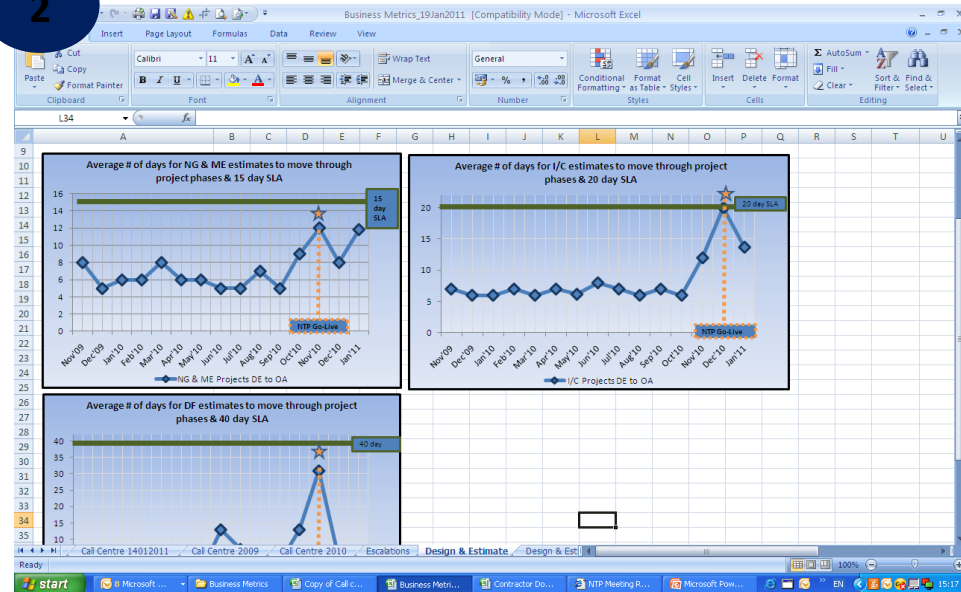
- No of abandoned calls (outside of Service Level of 20 seconds) peaked in Jan'10 due to severe weather event and also peaked at NTP go-live – severe weather also had an impact on the number of abandoned calls.

# Projects & Estimations

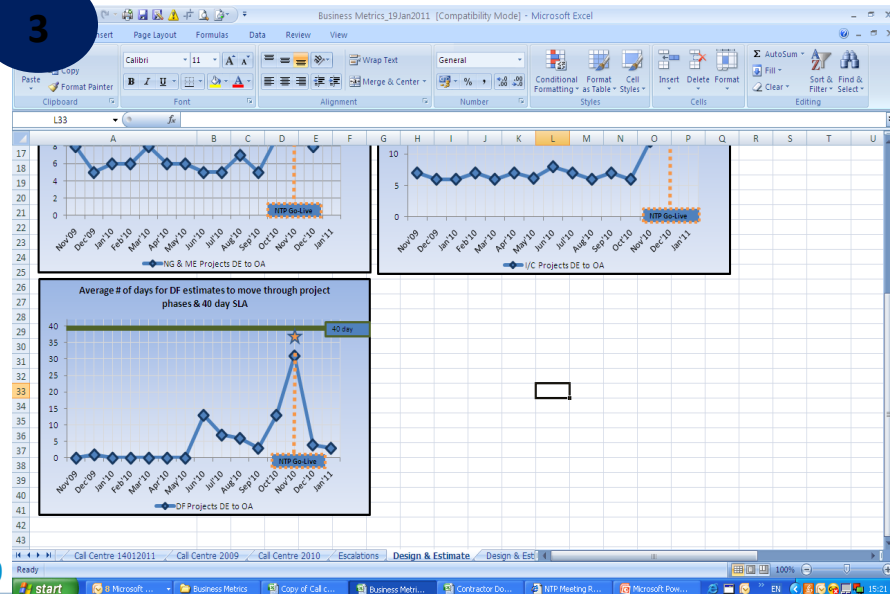
1



2

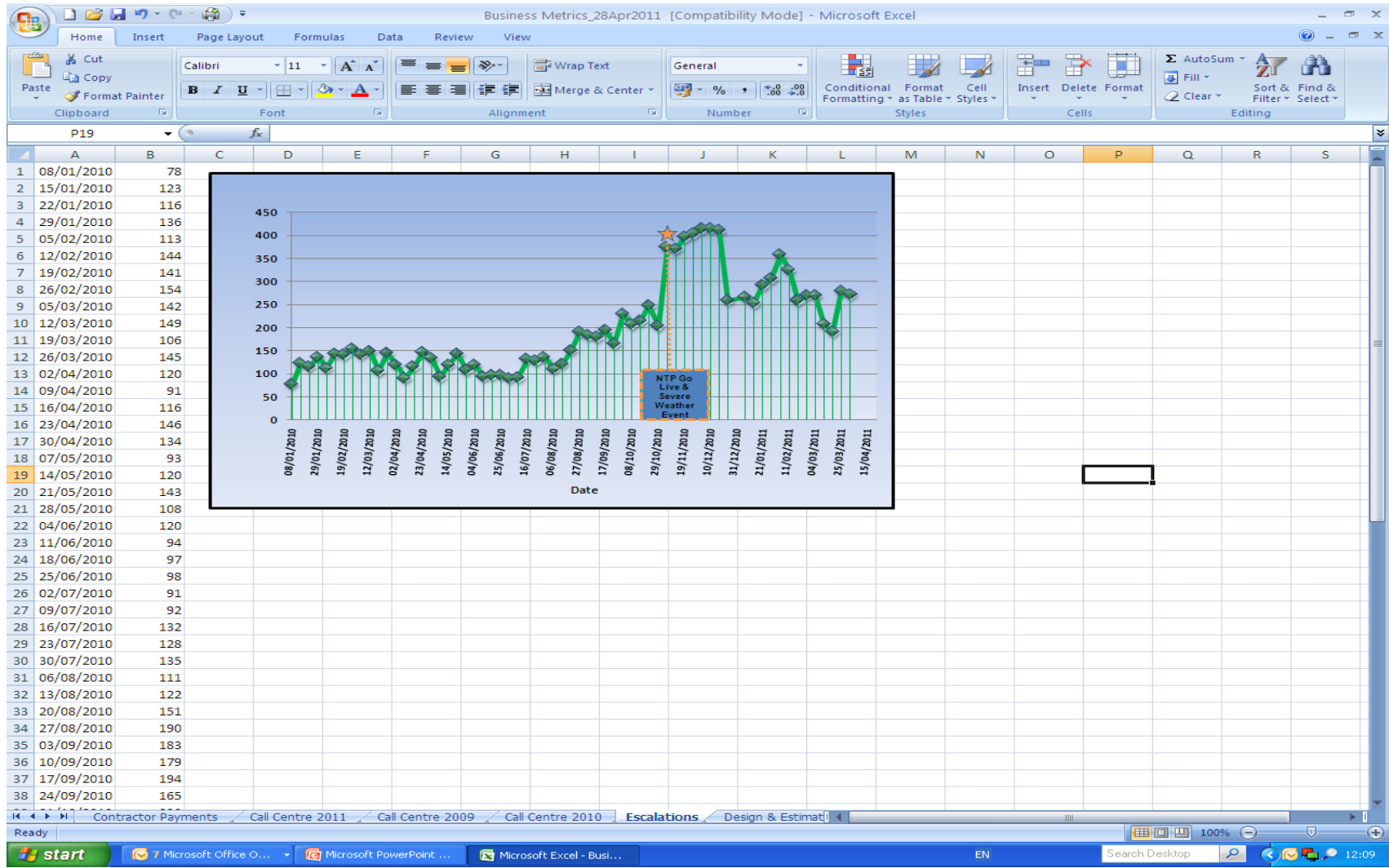


3



- (1) Shows that the average length of time for Non Gas Estate & Mains Extension Projects to reach Design / Operations Approval increased over the period of NTP Go-Live
- (2) Similarly for I/C estimates
- (3) Similarly for Development Feeder Main Projects (worth noting in this case that the size of the project can also lead to a slower rate of turnaround – this combined with new Maximo system contributes to Nov'11 peak)

# Escalations – no's raised per week





# Questions



Backup / CRP Slides

Do not remove

# IAD – Escape Call Scripting – GPRN Search

Integrated Agent Desktop (IAD)

Bulletins: (0)

Go To

Reports

Start Center

Profile

Sign Out

Help

Find:

Select Action

List

Service Request

Escape

Related Records

Log

Specifications

Please Read: "Are you calling to report an Escape"?

Correct Address?

Please Read: "May I take your Name?"

Customer Name

Select Value

Filter By\*  CSR Name

Refresh

GPRN	Meter	WO Num	Name	Address	Telephone	E-Mail Address
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clonard Dublin	<input type="text"/>	<input type="text"/>

Continue Cancel

# IAD – Escape Call Scripting – GPRN Search Select

Integrated Agent Desktop (IAD)

Bulletins: (0)

Go To

Reports

Start Center

Profile

Sign Out

Help

Find:

Select Action

List

Service Request

Escape

Related Records

Log

Specifications

Please Read: "Are you calling to report an Escape"?

Correct Address?

Please Read: "May I take your Name?"

Customer Name

Select Value

Filter By\*

All

CSR Name

Refresh

Filter

Download ?

GPRN

Meter

WO Num

Name

Address

Telephone

E-Mail Address

Clonard Dublin

368367	M123456	Susan Martin	30 Clonard St, Balbriggan	087 382 44345	smartinn@abc.com
123456	M543264	Susan Jones	34 Clonard St, Balbriggan	087 654 9864	sjones@over.ie
768529	M883721	Chris Heineman	40 Clonard St, Balbriggan	087 324 99876	dch3l@sync.com

Continue

Cancel

# IAD – Escape Call Scripting – Work History

Find:

Select Action



- List
- Service Request
- Escape**
- Related Records
- Log
- Specifications

Please Read: "Are you calling to report an Escape"? Correct Address?

Please Read:

Please Read: (Meter Point) click the arrow

Please Read:

Select the button

View Work Details

Location:

Include Children?

Include Ancestors?

Include History?

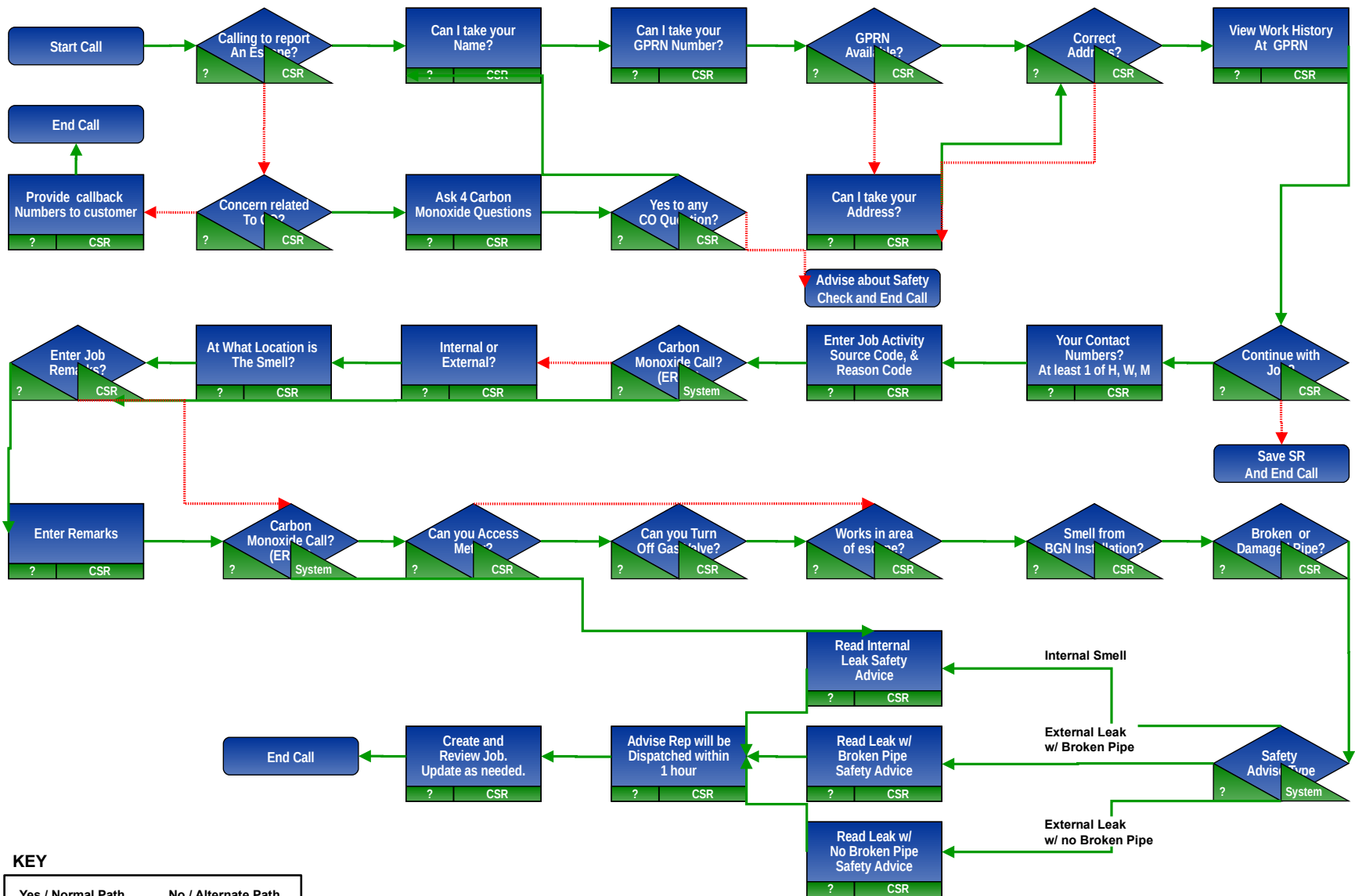
Work Preventive Maintenance Routes Collections

Work  1 - 10 of 91

Record	Class	Status	Reported Date	Target Start Date	Description	Priority	History?	Is Task?
<input type="checkbox"/>							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	1004	SR	9/8/09 9:01 AM		Emergency Leak Call		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	WO1205	WORKORDER	9/23/09 3:26 AM	9/23/09 12:00 AM	PM fit Meter Flow control JT	3	<input type="checkbox"/>	<input type="checkbox"/>

# Emergency Call Script – Flow Diagram

Return to Completed SR



**KEY**

