

WEBINAR:

EFFECTIVE CHANGE MANAGEMENT



PRISM CONNECT 2017

A promotional poster for the PRISM CONNECT 2017 event in San Diego. The background features a night-time photograph of the San Diego skyline with its lights reflecting on the water. At the top center is a stylized logo for 'PRISM CONNECT' that incorporates a speedometer and a checkered racing flag pattern. The text 'PRISM CONNECT 2017' and 'SAN DIEGO' is prominently displayed in the center. In the bottom left corner is the 'ARES PRISM' logo, which consists of a colorful 3D pyramid icon next to the word 'PRISM'. On the bottom right, there is a block of text providing event details: 'Conference & Networking Event', 'Manchester Grand Hyatt', 'San Diego, California', 'Conference: October 30-31, 2017', 'Training: November 1-3, 2017', and 'Registration: www.aresprism.com/prismconnect2017'.

PRISM CONNECT

PRISM CONNECT 2017
SAN DIEGO

Conference & Networking Event
Manchester Grand Hyatt
San Diego, California
Conference: October 30-31, 2017
Training: November 1-3, 2017
Registration: www.aresprism.com/prismconnect2017

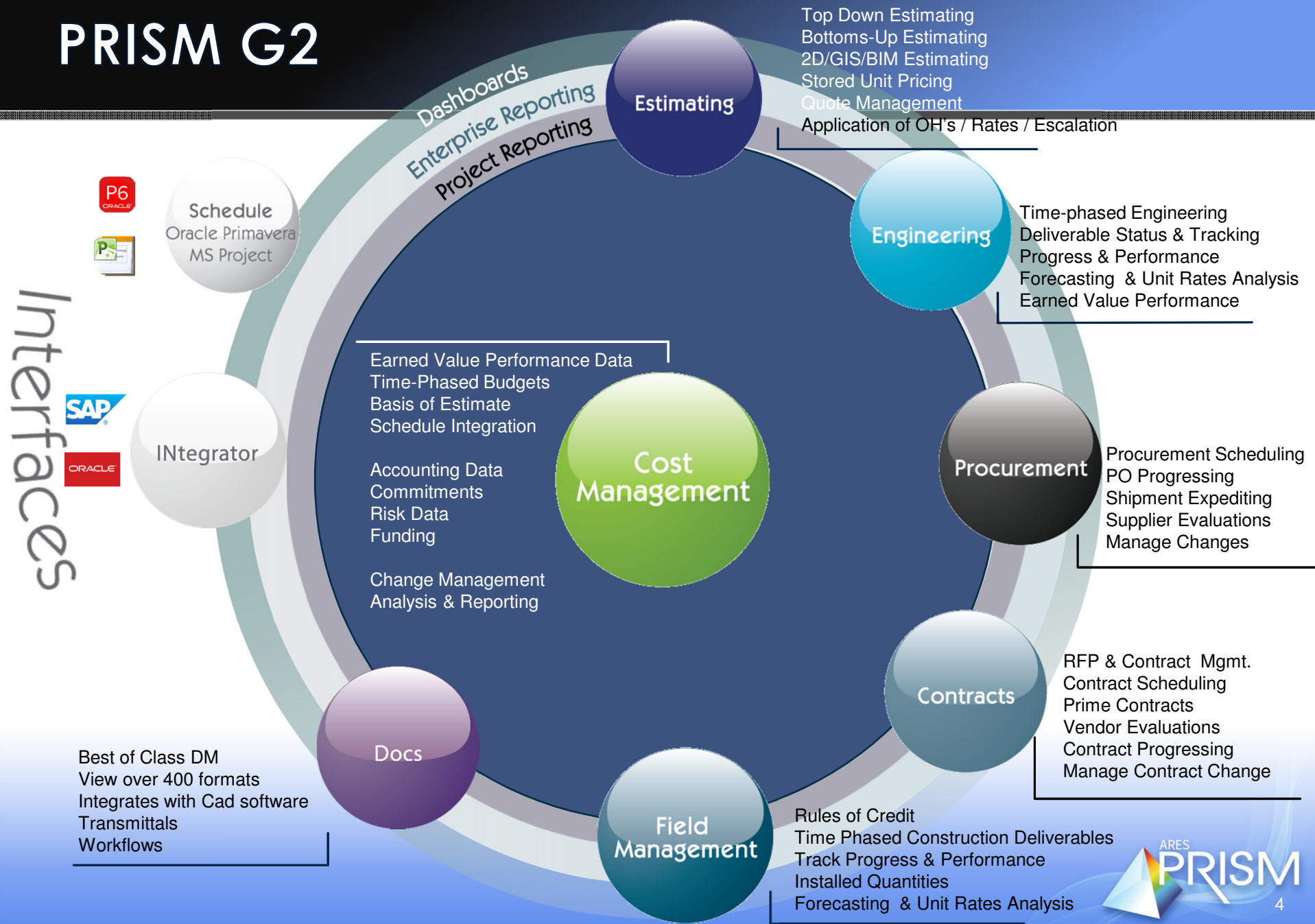
ARES PRISM

INTRODUCTIONS

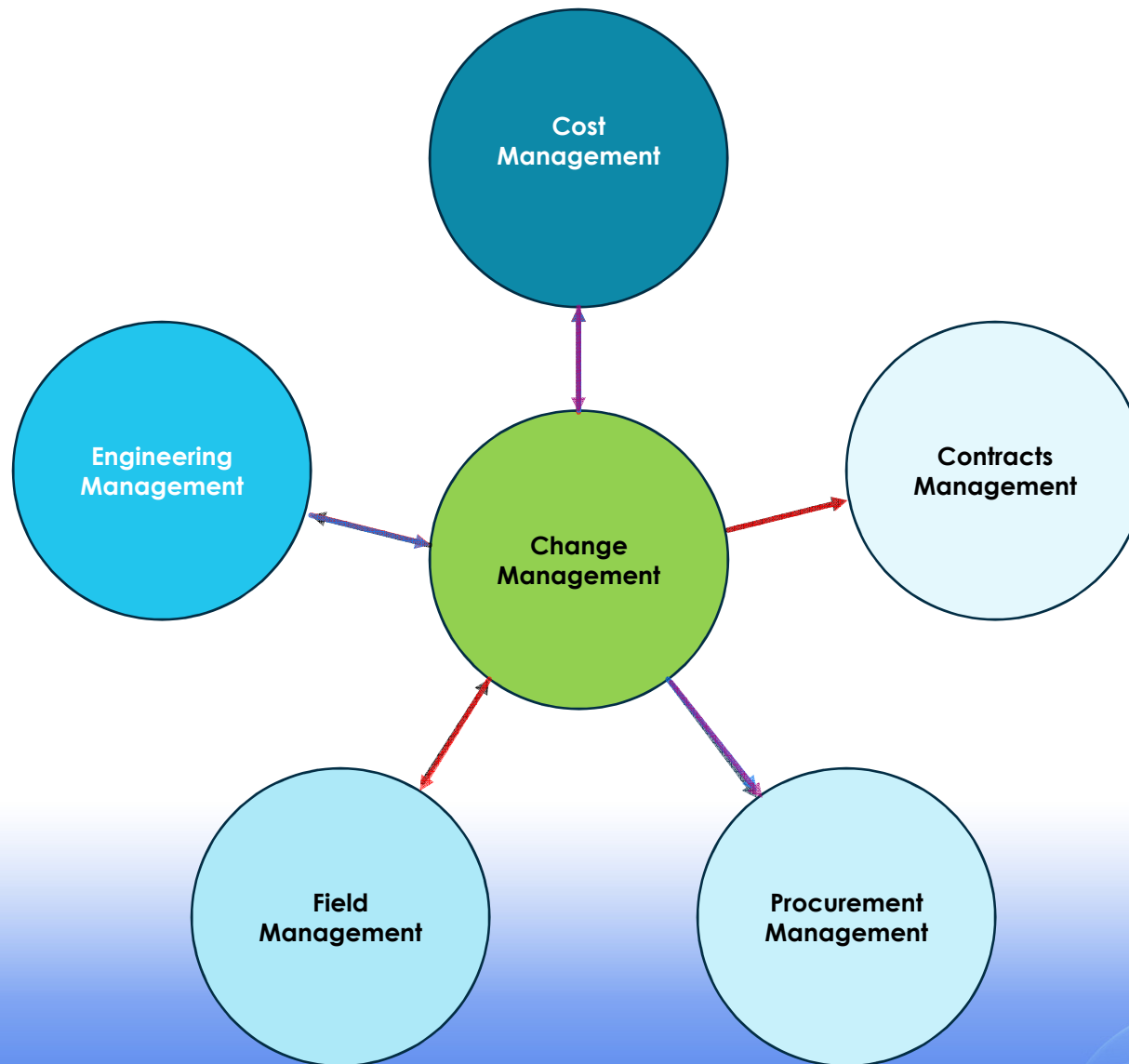
► Etti DiGiovanni

- Etti DiGiovanni leads product management for ARES Project Management, developers of ARES PRISM integrated cost management software. Etti's career started off as a scheduler during the "BC" period (i.e. before computerized scheduling). Over the past 30 years, Etti has also obtained practical knowledge and experience in estimating, cost engineering, earned value, contracts administration, purchasing, project accounting, materials management, document control and field management.

PRISM G2



CENTRALIZED CHANGE MANAGEMENT



ISSUES WITH PROJECT CHANGES

- A change normally results in rising Estimate At Completion
- Pressure exists to forecast accurately and quickly
- Keeping separate logs + paper trails slow down process
- Change is not only a project issue
- Involving other parties increases complexity & cost:
 - More sites, more stakeholders... the more signatures required
- Many project changes are out of governance:
 - Wrong approval or incomplete transactions
- Period-closing takes too long

PROJECT CHANGES THEN AND NOW

- Traditionally people asked:
 - What's our Budget / Remaining Budget?
 - What are our Commitments/ Actuals/ Accruals/VOWD
- More Recently:
 - What contracts have been let?
 - What is our unawarded scope?
 - What funding has been approved / is available this year?
 - What is the contingency for each element of scope? Are we using it?
 - What risks do we predict? What risks occurred? Who paid?
 - What is our pain / gain prediction for each contract?

As the picture changes we are required to move money around, which requires approval

THIS MEANS VOLUME

TO PROPERLY IMPLEMENT CHANGE YOU NEED TO DETERMINE:

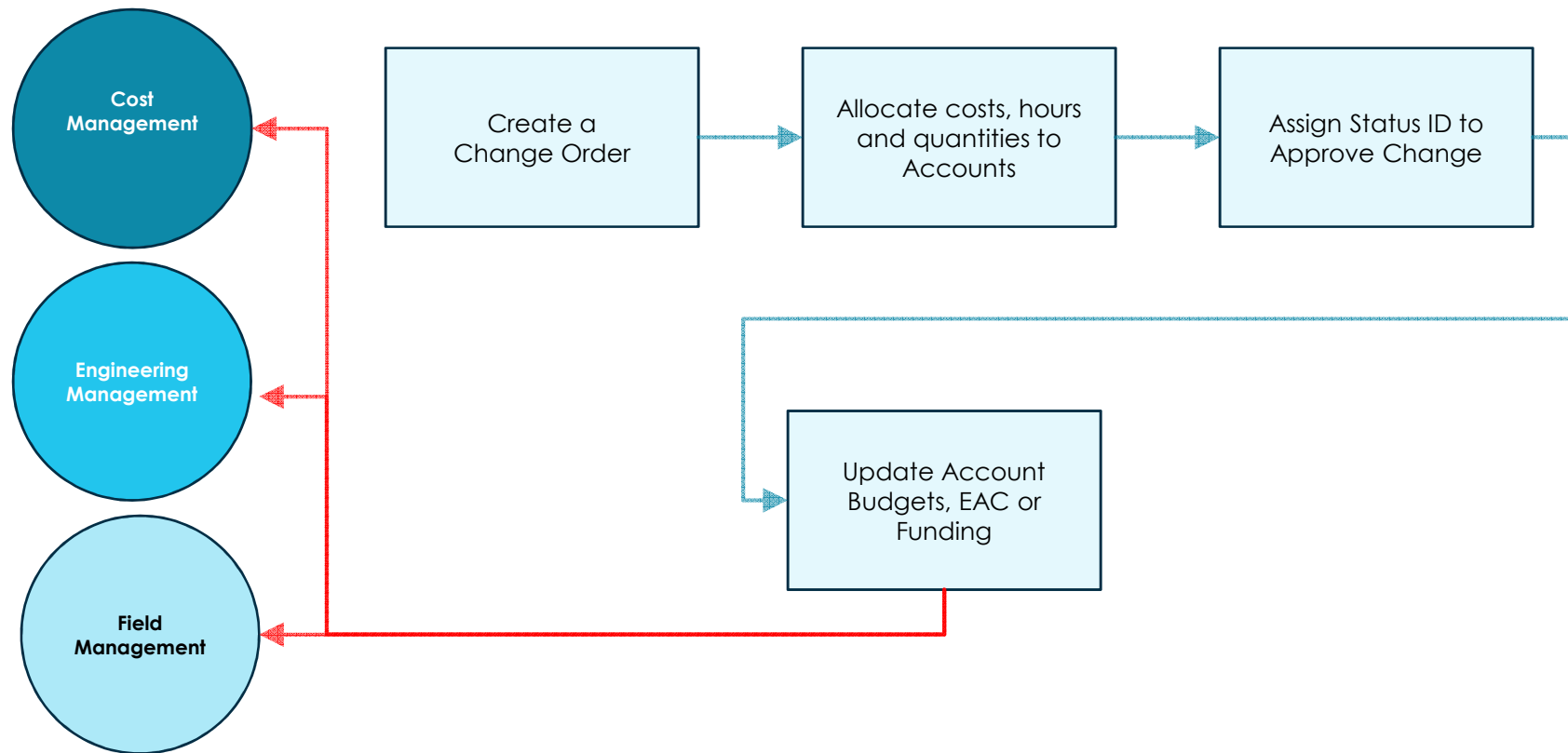
- Where should it be managed?
 - We recommend the cost management system
- What are we changing?
 - Typically budgets, forecasts, risks, funding
- What types of change do we handle:
 - Forecasts, transfers, changes in scope, funding awards
- Who would initiate change?
 - We recommend anyone qualified
- Who should review change details?
 - Subject Matter Experts (Estimator, Engineers, Planners)
 - Account Owners
 - Including those with insufficient monetary authority levels
- Who would approve these changes?
 - Those with sufficient monetary authority
- What process would we use for monetary change approval?
 - Basic, intermediate or advanced

CHANGE MANAGEMENT APPROACHES

- ▶ Basic Approaches
 - ▶ Manually create Change Orders only
 - ▶ Manually create Trends and Change Orders
- ▶ Intermediate Approaches
 - ▶ Use Workflows on Trends
 - ▶ Use Workflows on Change Orders
- ▶ Advanced Approaches
 - ▶ Use Monetary Authority levels
 - ▶ Use Change Requests
 - ▶ Use Workflows, Change Requests and Monetary Authority levels
- ▶ Other Approaches
 - ▶ Generate Change Order from External sources
 - ▶ Linking Cost Change Orders to PO's and Contracts

- ▶ User determines which options to use

MANUAL CHANGE ORDERS ONLY



MANUAL CHANGE ORDERS ONLY

Change Orders >

Grid Mode | 3 of 4 | Add | Copy | Delete | Filter | Tools | Add To History | Copy Trend | Generate Control Accounts

Change Orders - Data

Change ID: 0003-0003 ☐ Risk Change OBS ID:

Description: Contractor Claim for additional surveying work

Applied To: ☒ Control Accounts ☐ Engineering Accounts ☐ Progress Accounts ☐ Purchase Orders ☒ Contracts ☐ Prime Contracts

Details

Change Impact ID: SCOPE

Change Variety ID: CLAIM

Change Reason ID: UFC

Change Source: Contractor

Company:

Requester: Les Bargain

Request Date: 5/5/2014

Reporting Period: 3

Alternate ID:

Funding ID:

Summary

| | Approved Budget | Control Budget | Financial Budget | EAC | Trend Changes |
|----------------|--------------------------|----------------|------------------|-------|---------------|
| Total Hours | 32 | | | 32 | |
| Total Cost | 3,840 | | | 3,840 | |
| Absolute Hours | 32 | | | 32 | |
| Absolute Cost | 3,840 | | | 3,840 | |
| Currency ID | USD <input type="text"/> | | | | |

Status

Status ID: APPR ☐ Final Status

Status Date: 2/27/2017

Percent Complete: 100.00

Current Event:

Administration

Administrator: JUSTIN

Primary Change Owner: ADMINISTRATOR

Secondary Change Owner:

Review And Approve

Review Method: None

Approve Method: None

☐ Copy Change Owners On Email Notification

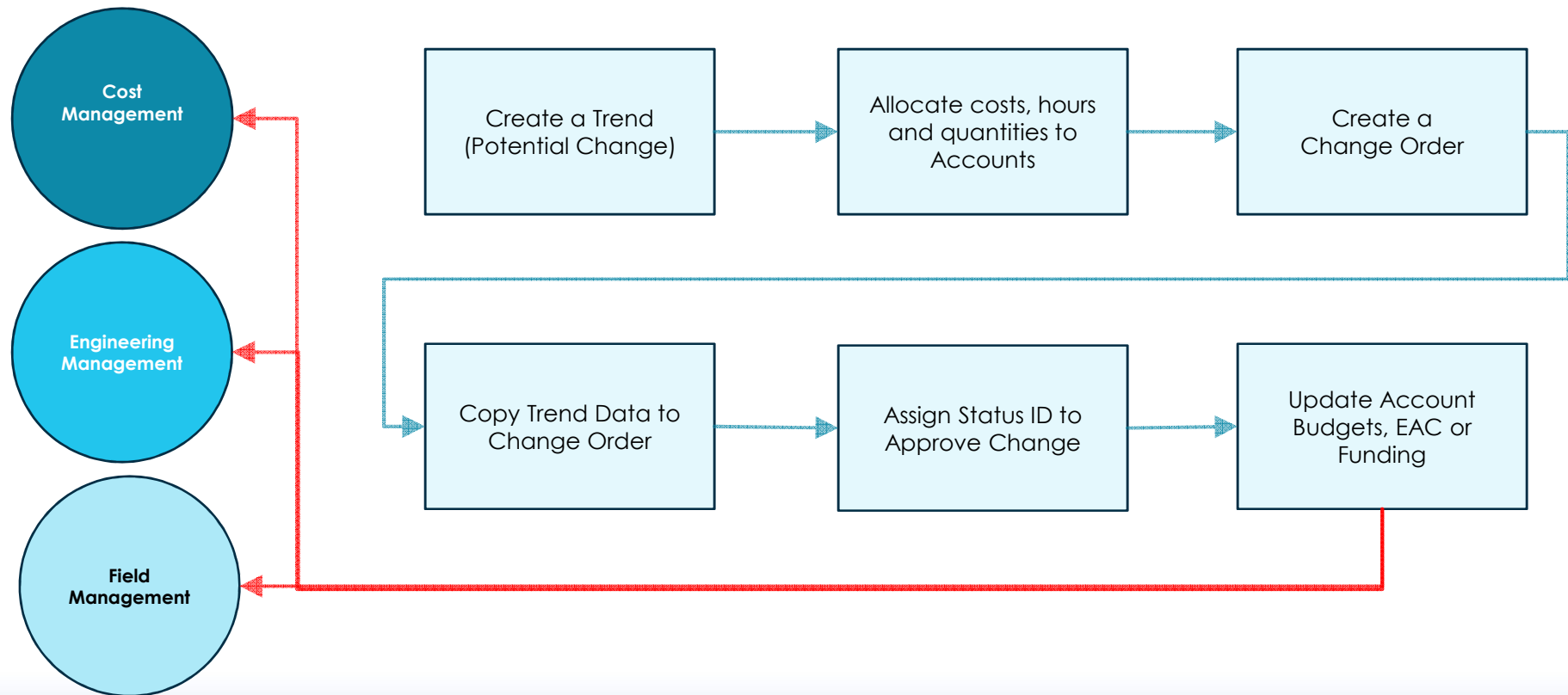
Change Orders - Control Accounts

1 of 2 | Add | Delete | Filter | Tools | Copy From Budget Details

| Control Account ID | Control Account Description | Item | Scope | Quantity Element ID | Approved Budget Quantity | Control Budget Quantity | Financial Budget Quantity | EAC Quantity | Hours Element ID | Approved Budget Hours | Control Budget Hours | Financial Budget Hours | EAC Hours | Trend Hours | Cost Element ID | App Budget |
|--------------------|--------------------------------|------|------------------------|------------------------|--------------------------|-------------------------|---------------------------|--------------|------------------------|-----------------------|----------------------|------------------------|-----------|-------------|-------------------------|------------|
| 152.0171.C002 | Surveying - Potable Water Area | 1 | Additional surveyin... | Q <input type="text"/> | 1.00 | | | 1.00 | C <input type="text"/> | 16.00 | | | 16.00 | | 2L <input type="text"/> | |
| 173.0171.C002 | Surveying - Fuel Storage Area | 2 | Additional surveyin... | Q <input type="text"/> | 1.00 | | | 1.00 | C <input type="text"/> | 16.00 | | | 16.00 | | 2L <input type="text"/> | |
| | | | | | | | | | | 32.00 | 0.00 | 0.00 | 32.00 | 0.00 | | |

Detailed Description | **Control Accounts** | Approvals | Documents | Events | Action Items | Time Phased Data Setup | Activities | Links | Revision History | Log | Progression | Why work is required? | How did it come at

MANUAL TRENDS AND CHANGE ORDERS



MANUAL TRENDS AND CHANGE ORDERS

Trends
2 of 5
Add
Delete
Filter
Tools

Trends - Data

Trend ID: TR-0002
OBS ID:
Description: May 2014 Engineering Overruns
Applied To:
☒ Control Accounts
☒ Engineering Accounts
☐ Progress Accounts
☐ Purchase Orders
☐ Contracts
☐ Prime Contracts

Details

Change VarietyID: DESIGN
Change ReasonID: RPS
Change Source: Engineering
Company: ABC Limited
Requester: Justin Forekast
Request Date: 5/22/2014
Administrator: ALBERT
Alternate ID:

Summary

Trend Totals
Trend Value
Hours: 452
Cost: 25,402
Currency ID:
Engineering Total Hours: 452

Status

Step ID:
Step Date:
Percent Complete:
Current Event:

Estimate

ROM Estimate: 0.00
Added Days:

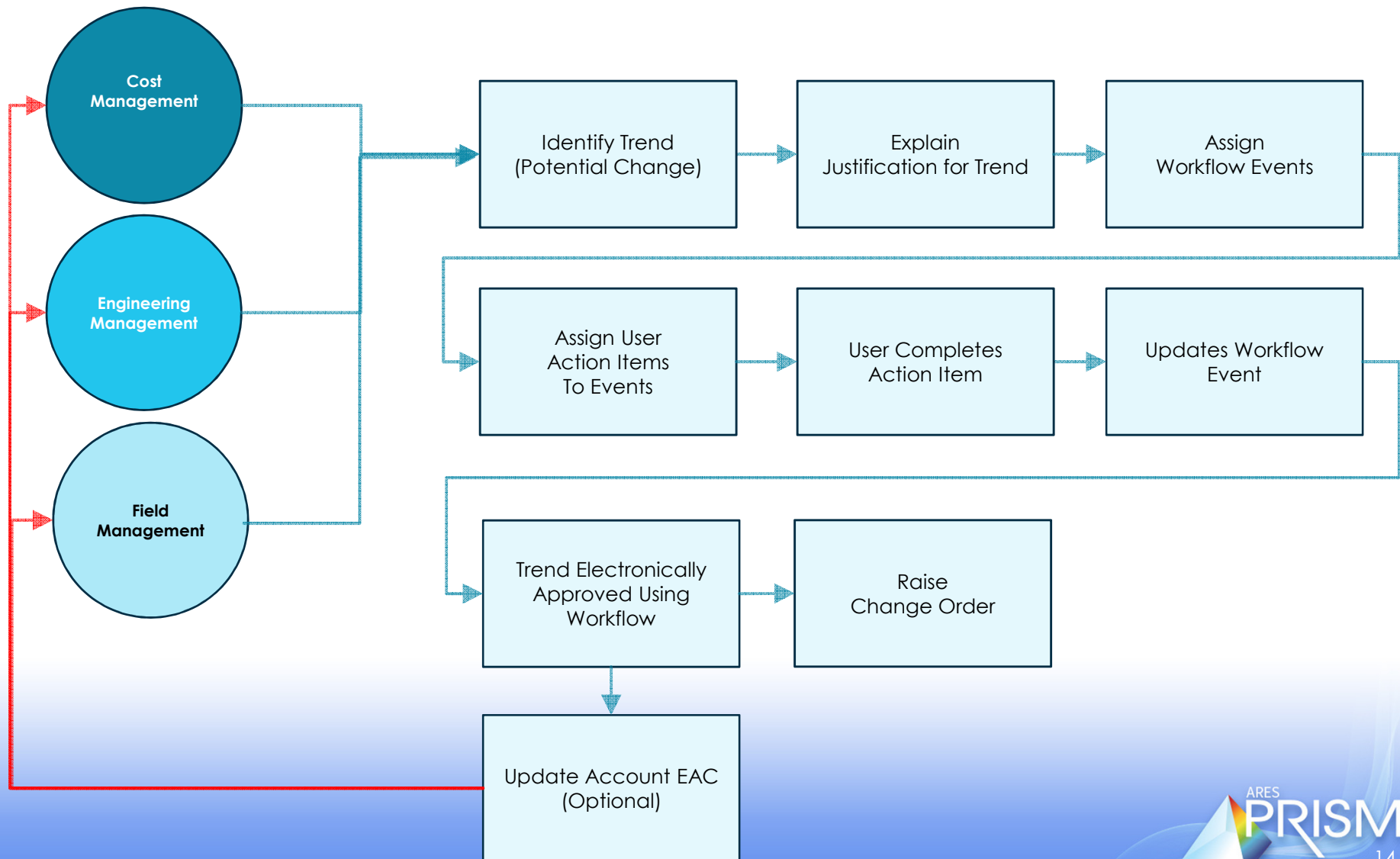
Trends - Change Orders / Control Accounts

1 of 4
Add
Delete
Filter
Tools

| Control Account ID | Control Account Description | Change ID | Item | Scope | Hours Element ID | Trend Hours | Hours | Cost Element ID | Trend Cost | Cost | Currency ID | Post Date | Original Current Cost |
|--------------------|--|-----------|------|-------------------------------|------------------|-------------|-------|-----------------|------------|------|-------------|-----------|-----------------------|
| 100.9012.C... | Engineering non-drawing, Home Office Labour - General Area | 0003-0001 | 01 | May 2014 Engineering Overruns | EHRS | 20.00 | | 1L | 1,100.00 | | USD | | |
| 100.9013.C... | Design drawing, Home Office Labour - General Area | 0003-0001 | 02 | May 2014 Engineering Overruns | EHRS | 425.00 | | 1L | 23,380.00 | | USD | 5/22/2014 | |
| 152.9016.C... | Procurement, Home Office Labour - Potable Water Area | 0003-0001 | 03 | May 2014 Engineering Overruns | EHRS | 2.00 | | 1L | 832.00 | | USD | 5/22/2014 | |
| 173.9016.C... | Procurement, Home Office Labour - Fuel Storage Area | 0003-0001 | 04 | May 2014 Engineering Overruns | EHRS | 5.00 | | 1L | 90.00 | | USD | 5/22/2014 | |
| | | | | | | 452.00 | 0.00 | | 25,402.00 | 0.00 | | | |

Detailed Description
Control Accounts
Engineering Accounts
Claims
Documents
Events
Action Items
Log
Progression
Why work is required?
How did it come about?
Why no in original scope?
Merit Ass

USE WORKFLOWS ON TRENDS



Trends

Grid Mode
4 of 5
Add
Delete
Filter
Tools

Trends - Data

Trend ID: TR-0004

OBS ID:

Description: Contractor Claim for additional surveying work

Applied To
☒ Control Accounts
☐ Engineering Accounts
☒ Progress Accounts
☐ Purchase Orders
☒ Contracts
☐ Prime Contracts

Details

Change VarietyID: CLAIM
Change ReasonID: UFC
Change Source: Contractor
Company: ACME
Requester: Les Bargain
Request Date: 5/5/2014
Administrator: JUSTIN
Alternate ID:

Status

Step ID: RCO
Step Date: 5/13/2014
Percent Complete: 100.00
Current Event:

Summary

| | Trend Totals | Trend Value |
|-------------------|--------------|-------------|
| Hours | 32 | 32 |
| Cost | 3,840 | 3,840 |
| Currency ID | USD | |
| Field Total Hours | 32 | |

Estimate

ROM Estimate: 4,000.00
Added Days: 2

Trends - Events

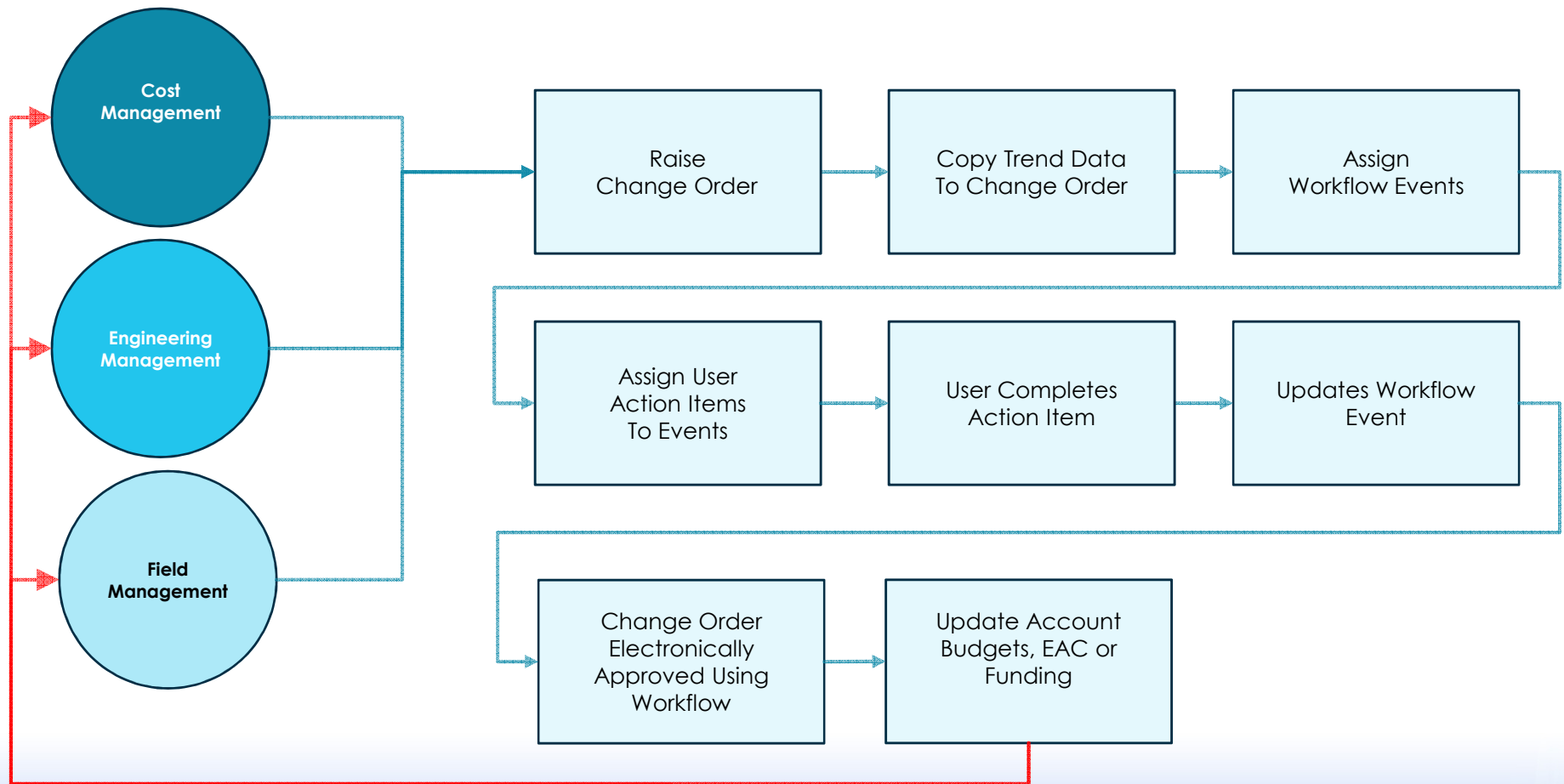
1 of 7

Delete
Tools
Copy Event Template
Copy Planned To Forecast
Copy Actual To Forecast

| Event ID | Event Description | Event Template ID | Repetition / | Planned Duration | Planned Date / | Forecast Duration | Forecast Date | Actual Duration | Actual Date | Weight | Step ID | User ID | Notified | Notify User | Remarks |
|----------|-------------------------------|-------------------|--------------|------------------|----------------|-------------------|---------------|-----------------|-------------|--------|-----------|---------|-------------------------------------|--------------------------|------------------------|
| CR | Claim Raised | PR_TR... | 2 | 0 | 5/5/2014 | 0 | 5/5/2014 | 0 | 5/5/2014 | 8.00 | INITIATED | JUSTIN | <input type="checkbox"/> | <input type="checkbox"/> | Completed by ADMINI... |
| CDACC | Collect Dwg and Check Clauses | PR_TR... | 2 | 0 | 5/5/2014 | 0 | 5/5/2014 | 0 | 5/5/2014 | 40.00 | IN_DIS | SHEILA | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Completed by ADMINI... |
| CMA | Claim Merits Assessment | PR_TR... | 2 | 2 | 5/7/2014 | 2 | 5/7/2014 | 2 | 5/7/2014 | 8.00 | IN_DIS | JUSTIN | <input type="checkbox"/> | <input type="checkbox"/> | Completed by ADMINI... |
| CCE | Confirm Claim Entitlement | PR_TR... | 3 | 2 | 5/9/2014 | 2 | 5/9/2014 | 2 | 5/9/2014 | 16.00 | UASS | SHEILA | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Completed by ADMINI... |
| PMCA | PM Consultant Assessment | PR_TR... | 3 | 3 | 5/12/2014 | 3 | 5/12/2014 | 3 | 5/12/2014 | 24.00 | UASS | LES | <input type="checkbox"/> | <input type="checkbox"/> | Completed by ADMINI... |
| PCOR | Prepare CO Recommendation | PR_TR... | 3 | 1 | 5/13/2014 | 1 | 5/13/2014 | 1 | 5/13/2014 | 8.00 | UASS | SHEILA | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Completed by ADMINI... |
| RSCO | Raise Scope Change Order | PR_TR... | 3 | 0 | 5/13/2014 | 0 | 5/13/2014 | 0 | 5/13/2014 | 8.00 | RCO | JUSTIN | <input type="checkbox"/> | <input type="checkbox"/> | Completed by ADMINI... |

Detailed Description
Control Accounts
Progress Accounts
Claims
Documents
Events
Action Items
Log
Progression
Why work is required?
How did it come about?
Why no in original scope?
Merit Assess...

USE WORKFLOWS ON CHANGE ORDERS



USE WORKFLOWS ON CHANGE ORDERS

Change Orders - Navigation

Change Orders x

Grid Mode | 1 of 4 | Add | Copy | Delete | Filter | Tools | Add To History | Copy Trend | Generate Control Accounts

Change Orders - Data

Change ID: 0003-0001 ☐ Risk Change OBS ID:

Description: April and May 2014 Engineering Overrun

Applied To: ☒ Control Accounts ☒ Engineering Accounts ☐ Progress Accounts ☐ Purchase Orders ☒ Contracts ☐ Prime Contracts

Details

Change Impact ID: EAC

Change Variety ID: DESIGN

Change Reason ID: DCC

Change Source: Engineering

Company:

Requester: Justin Forekast

Request Date: 5/22/2014

Reporting Period: 3

Alternate ID:

Funding ID:

Summary

| | Approved Budget | Control Budget | Financial Budget | EAC | Trend Changes |
|-------------------------|-----------------|----------------|------------------|--------|---------------|
| Total Hours | | | | 63 | 464 |
| Total Cost | | | | 0 | 27,902 |
| Absolute Hours | | | | 63 | 464 |
| Absolute Cost | | | | 37,314 | 27,902 |
| Currency ID | | | | | |
| Engineering Total Hours | | | | | |

Status

Status ID: NTP ☒ Final Status

Status Date: 3/31/2017

Percent Complete: 100.00

Administration

Administrator:

Primary Change Owner: ADMINISTRATOR

Secondary Change Owner:

Review And Approve

Review Method: In Sequence

Approve Method: First User

☐ Copy Change Owners On Email Notification

Change Orders - Events

1 of 8 | Delete | Tools | Copy Event Template | Copy Planned To Forecast | Copy Actual To Forecast

| Event ID | Event Description / Approver Title | Event Template ID | Repetition | Planned Duration | Planned Date | Forecast Duration | Forecast Date | Actual Duration | Actual Date | Event Has Started | Obsolete | Weight | Change Status ID | User ID | Notified | Notify User | |
|----------|------------------------------------|-------------------|------------|------------------|--------------|-------------------|---------------|-----------------|-------------|--------------------------|--------------------------|--------|------------------|---------|-------------------------------------|-------------------------------------|-------------|
| PSD | Prepare Sc... | SC | 1 | 0 | 6/1/2014 | 0 | 6/1/2014 | 0 | 6/1/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 16.00 | PEND | JUSTIN | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |
| PCE | Prepare Co... | SC | 1 | 5 | 6/6/2014 | 8 | 6/9/2014 | 8 | 6/9/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 40.00 | PEND | OTTO | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |
| DSI | Determine... | SC | 1 | 2 | 6/8/2014 | 2 | 6/11/2014 | 2 | 6/11/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 16.00 | PEND | BEN | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |
| PBA | Prepare Bu... | SC | 1 | 2 | 6/10/2014 | 4 | 6/15/2014 | 4 | 6/15/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 16.00 | PEND | JUSTIN | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |
| PPS | Prepare Pr... | SC | 1 | 2 | 6/12/2014 | 4 | 6/19/2014 | 4 | 6/19/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 16.00 | PEND | HOWARD | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |
| PBC | Prepare Bu... | SC | 1 | 3 | 6/15/2014 | 3 | 6/22/2014 | 3 | 6/22/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 24.00 | PEND | DONW | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |
| SA | Submissio... | SC | 1 | 2 | 6/17/2014 | 4 | 6/26/2014 | 4 | 6/26/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 16.00 | PEND | JACK | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |
| CBS | Change Bo... | SC | 1 | 1 | 6/18/2014 | 1 | 6/27/2014 | 1 | 6/27/2014 | <input type="checkbox"/> | <input type="checkbox"/> | 8.00 | UR | JUSTIN | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Completed b |

Detailed Description | Control Accounts | Engineering Accounts | Approvals | Documents | Events | Action Items | Time Phased Data Setup | Activities | Links | Revision History | Log | Progression | Why work is required

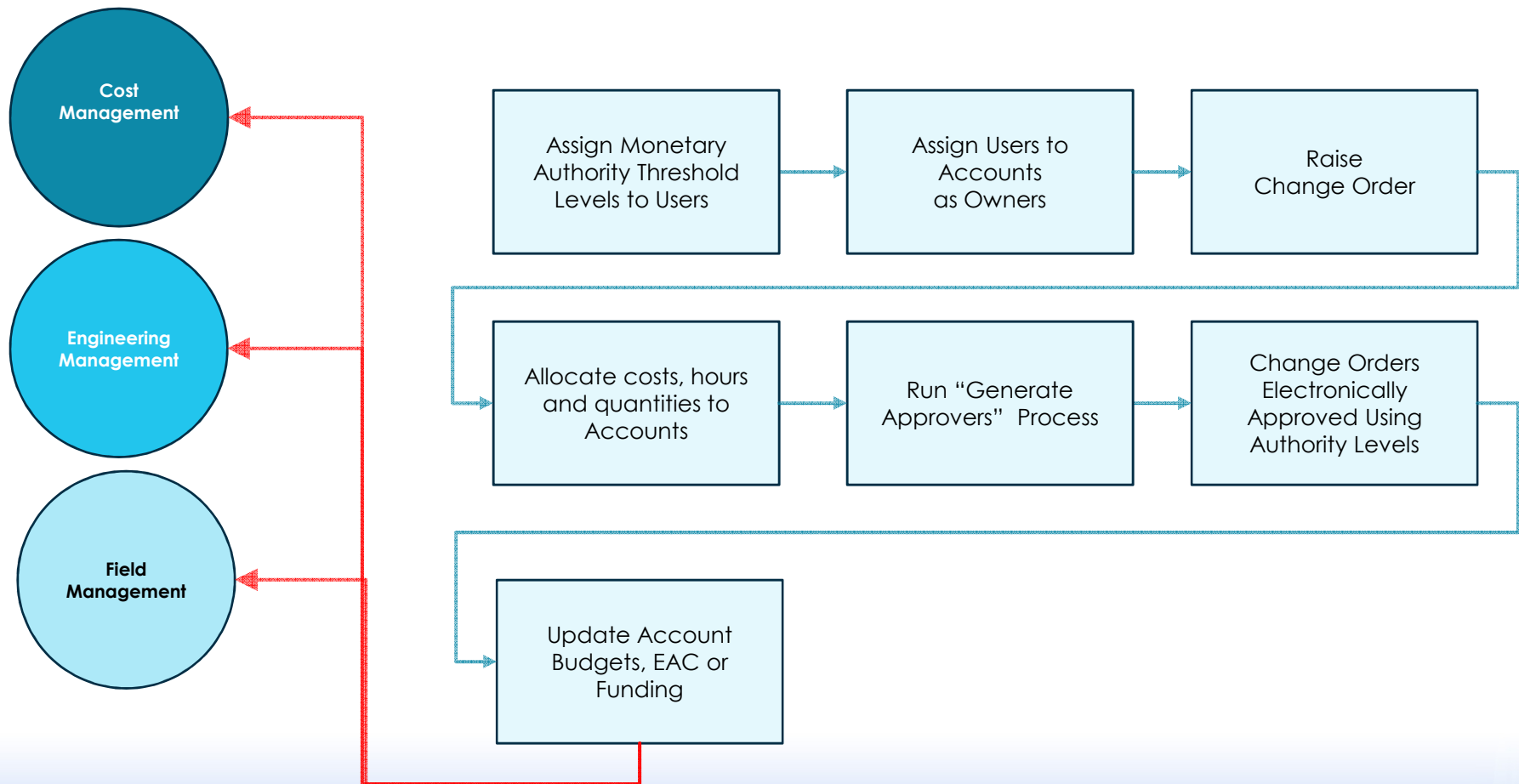
USE MONETARY AUTHORITY LEVELS

Approval Authority x

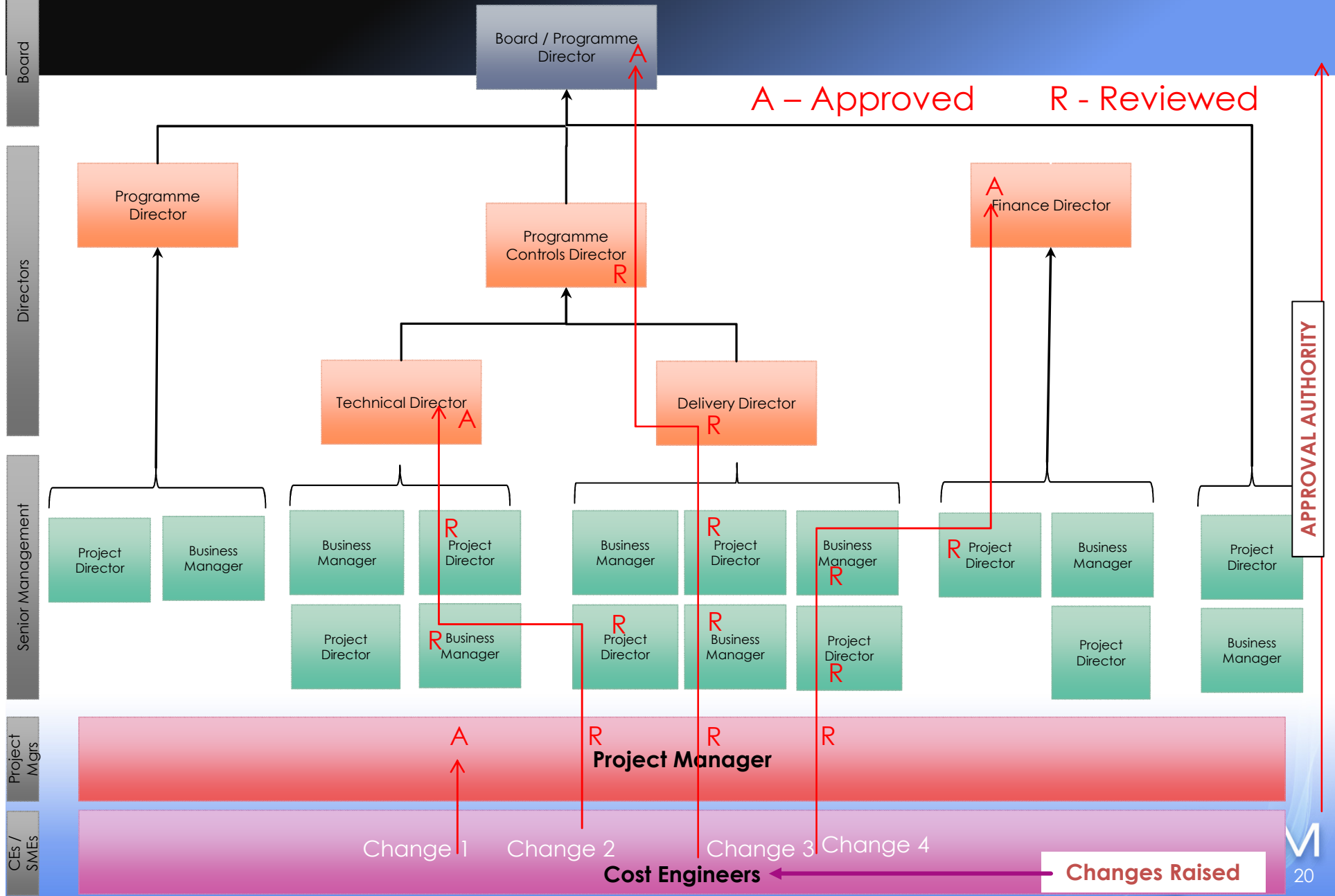
11 of 11 | + Add | X Delete | Filter | Tools

| Authority ID | Description | Approved Budget Cost Limit | Control Budget Cost Limit | Financial Budget Cost Limit | EAC Cost Limit | Currency ID |
|--------------|------------------------------|----------------------------|---------------------------|-----------------------------|----------------|-------------|
| BOARD | Board of Directors | 1,000,000.00 | 0.00 | 1,000,000.00 | 1,000,000.00 | USD |
| CONSTRUCT | Construction Manager | 5,000.00 | 0.00 | 0.00 | 5,000.00 | USD |
| CONTROLS | Project Controls Manager | 5,000.00 | 5,000.00 | 0.00 | 10,000.00 | USD |
| COST ENG | Lead Cost Engineer | 0.00 | 0.00 | 0.00 | 0.00 | USD |
| DIRECTOR | Director of Project Controls | 50,000.00 | 50,000.00 | 0.00 | 50,000.00 | USD |
| ENGINEER | Engineering Manager | 0.00 | 0.00 | 0.00 | 0.00 | USD |
| ESTIMATE | Estimator | 0.00 | 0.00 | 0.00 | 0.00 | USD |
| FINANCE | Accounting | 0.00 | 0.00 | 250,000.00 | 0.00 | USD |
| PM | Project Manager | 25,000.00 | 25,000.00 | 0.00 | 30,000.00 | USD |
| PURCHASE | Purchasing Manager | 0.00 | 0.00 | 0.00 | 0.00 | USD |
| REVIEW | Reviewer Only | 0.00 | 0.00 | 0.00 | 0.00 | USD |

USE MONETARY AUTHORITY LEVELS



CHANGE REVIEW & APPROVAL ROUTING HIERARCHY



PRISM G2 REVIEW & APPROVE CYCLE

Enterprise Budget/EAC Changes

Change ID: 0005-0139

Description: Signaling award Transfer from Allowances to Target account as basis for parity gain measurement

Change Impact ID: COMP

Change Variant ID:

Change Scenario:

Project: 0005-0139

Project Owner: NICK SCHWAB

Project Manager: Nick Schwab

Project Status: New

Change Date: 10/10/2012

Reporting Period: 65

Company: ACME Signals

Programmer: Programme Director

Request Date: 09/10/2012

Approval ID: SAP Reference: 5640497806

Approved Budget: 0

Control Budget: 0

Financial Budget: 0

Estimate At Completion: 0

Hours: 0

Cost: 0

Approvers

Reviewers

Status

Enterprise Budget/EAC Changes - Approvals

1 of 14

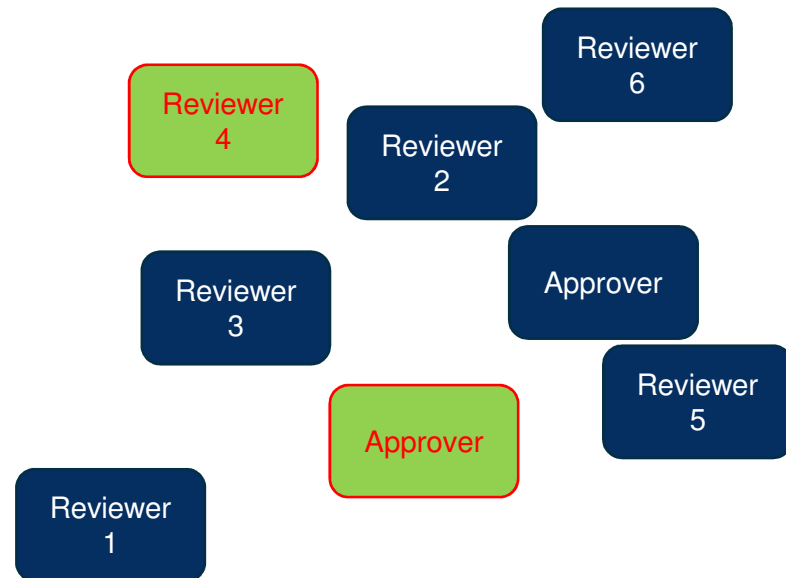
Generate Submit

| Name/Description | Team | Authority ID | Approved Budget Change Cost | Control Budget Change Cost | Financial Budget Change Cost | EAC Change Cost | Reviewer | Approver | Reviewer Notify Date | Reviewed | Date Reviewed | Approver Notify Date | Approved | Date Approved | Rejected | Date Rejected | Remarks |
|--------------------|------|---------------|-----------------------------|----------------------------|------------------------------|-----------------|----------|----------|----------------------|----------|---------------|----------------------|----------|---------------|----------|---------------|---------|
| Change Owner | | UAT_COST_C815 | -1,200,000.00 | 0.00 | -1,200,000.00 | 0.00 | ✓ | | 10/10/2012 | ✓ | 10/10/2012 | | | | | | |
| Change Owner | | UAT_COST_C620 | 1,200,000.00 | 0.00 | 1,200,000.00 | 0.00 | ✓ | | 10/10/2012 | ✓ | 10/10/2012 | | | | | | |
| Cost Engineer | | UAT_COST_C260 | -1,200,000.00 | 0.00 | -1,200,000.00 | 0.00 | ✓ | | 10/10/2012 | | | | | | | | |
| Cost Engineer | | UAT_COST_C233 | 1,200,000.00 | 0.00 | 1,200,000.00 | 0.00 | ✓ | | | | | | | | | | |
| Project Manager | | UAT_PMGR_P064 | -1,200,000.00 | 0.00 | 0.00 | 0.00 | ✓ | | | | | | | | | | |
| Project Manager | | UAT_PMGR_P050 | 1,200,000.00 | 0.00 | 0.00 | 0.00 | ✓ | | | | | | | | | | |
| Area Director | | UAT_AREA_WEST | -1,200,000.00 | 0.00 | 0.00 | 0.00 | ✓ | | | | | | | | | | |
| Area Director | | UAT_AREA_TECH | 1,200,000.00 | 0.00 | 0.00 | 0.00 | ✓ | | | | | | | | | | |
| Delivery Director | | UAT_DDIR_CSEC | 1,200,000.00 | 0.00 | 0.00 | 0.00 | ✓ | | | | | | | | | | |
| Delivery Director | | UAT_DDIR_CSEC | -1,200,000.00 | 0.00 | 0.00 | 0.00 | ✓ | | | | | | | | | | |
| Project Accountant | | UAT_PA_WEST | 0.00 | 0.00 | -1,200,000.00 | 0.00 | ✓ | | | | | | | | | | |
| Project Accountant | | UAT_PA_TECH | 0.00 | 0.00 | 1,200,000.00 | 0.00 | ✓ | | | | | | | | | | |
| Board | | UAT_CBRD_0000 | -1,200,000.00 | 0.00 | -1,200,000.00 | 0.00 | | ✓ | | | | | | | | | |
| Board | | UAT_CBRD_0000 | 1,200,000.00 | 0.00 | 1,200,000.00 | 0.00 | | ✓ | | | | | | | | | |

Detailed Description Control Accounts Breakdown Approvals Events Documents Time Phased Data Setup Activities Links Revision History Last Update Comments Notes

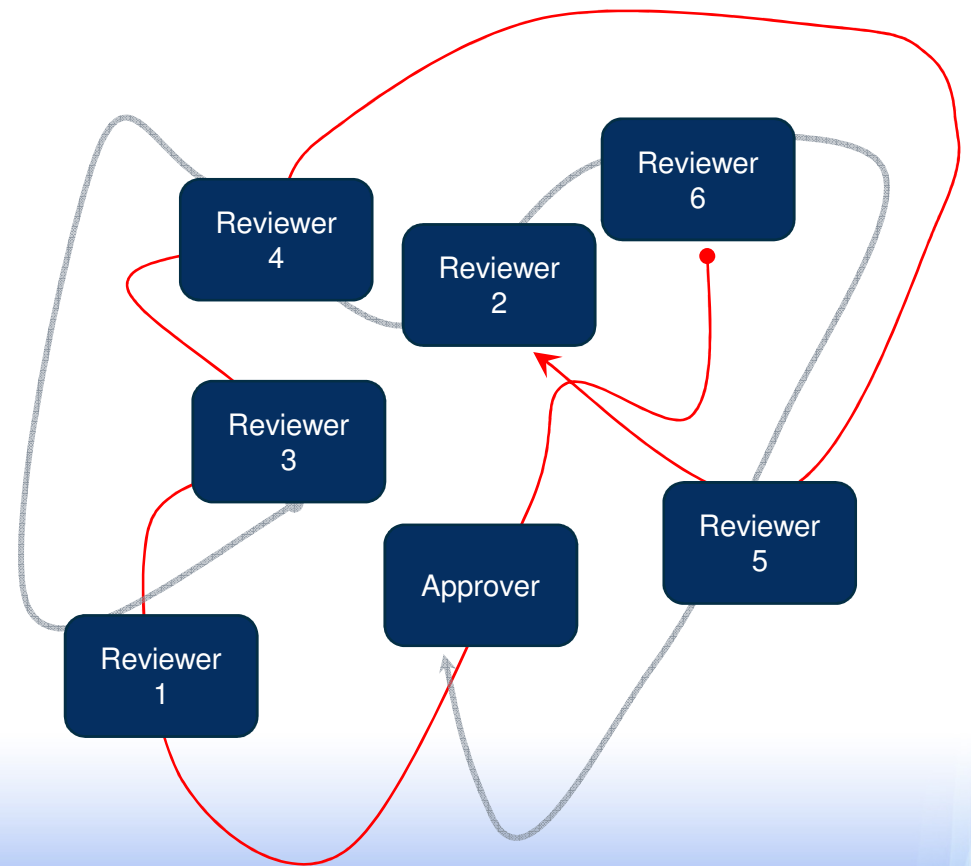
MONETARY APPROVAL – SIMPLE METHOD

- Any one reviewer and any one approver must electronically sign the Change Order to approve it
 - Generate Approvers process identifies the change approvers for each control account affected
 - Copies the approvers to the Change Order; lists them all as “reviewers” and contacts them all via email
 - The reviewers with the sufficient authority level are identified as the Change Order approvers
 - Although there may be many qualified reviewers, the ‘electronic signature’ of one reviewer and one approver is sufficient to approve the Change Order



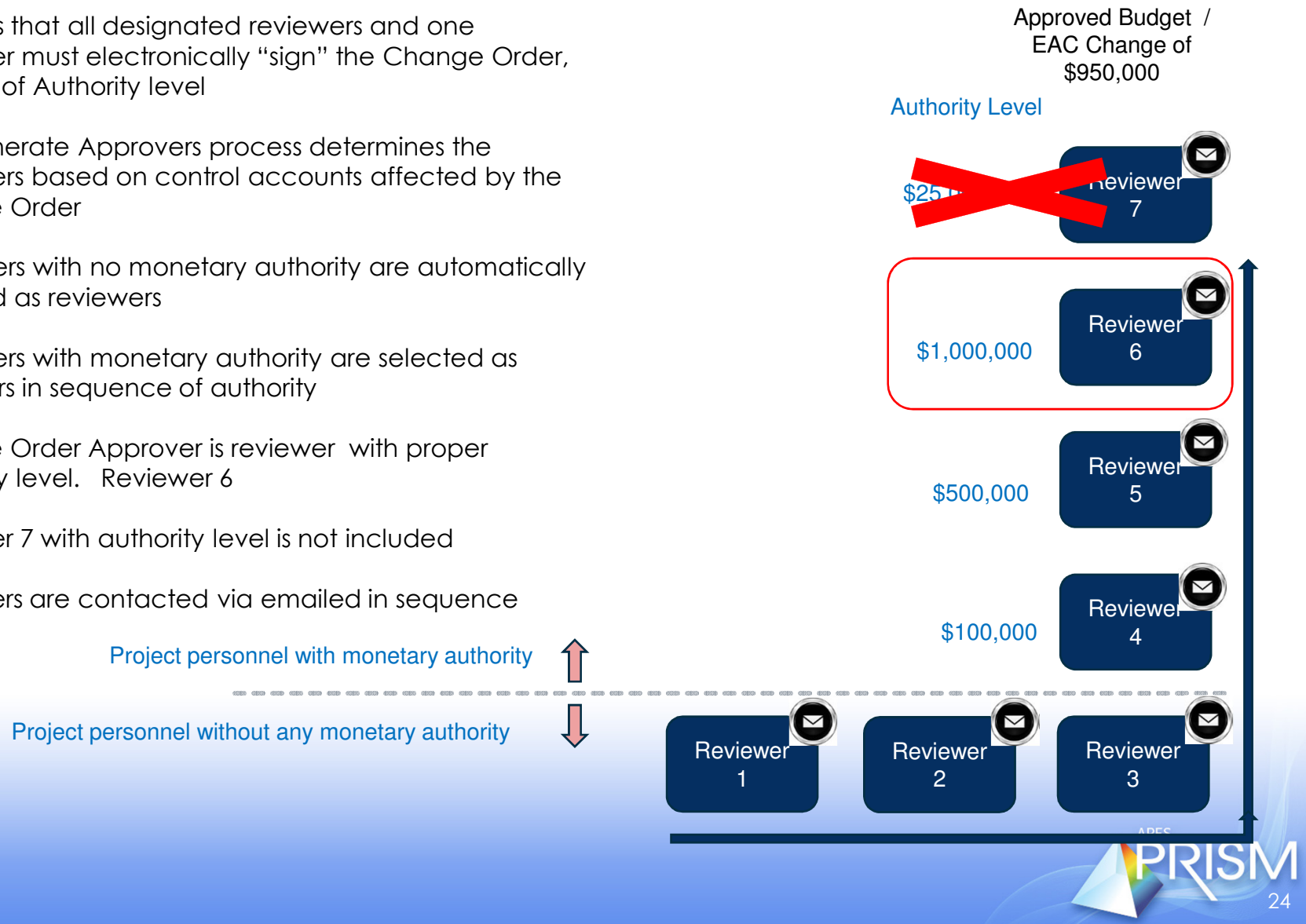
MONETARY APPROVAL – NO SEQUENCING

- Requires that all reviewers and one approver must electronically “sign” the Change Order, but in no particular order
 - The Generate Approvers process identifies the change approvers for each control account affected
 - Copies the approvers to the Change Order; lists them all as “reviewers” and contacts them all via email
 - The Change Order Approver is identified as the first reviewer with proper monetary authority level.
- All reviewers and the approver must electronically “sign” the Change Order but in no particular order
- Once all electronic ‘signatures’ have been obtained the change order is electronically approved.



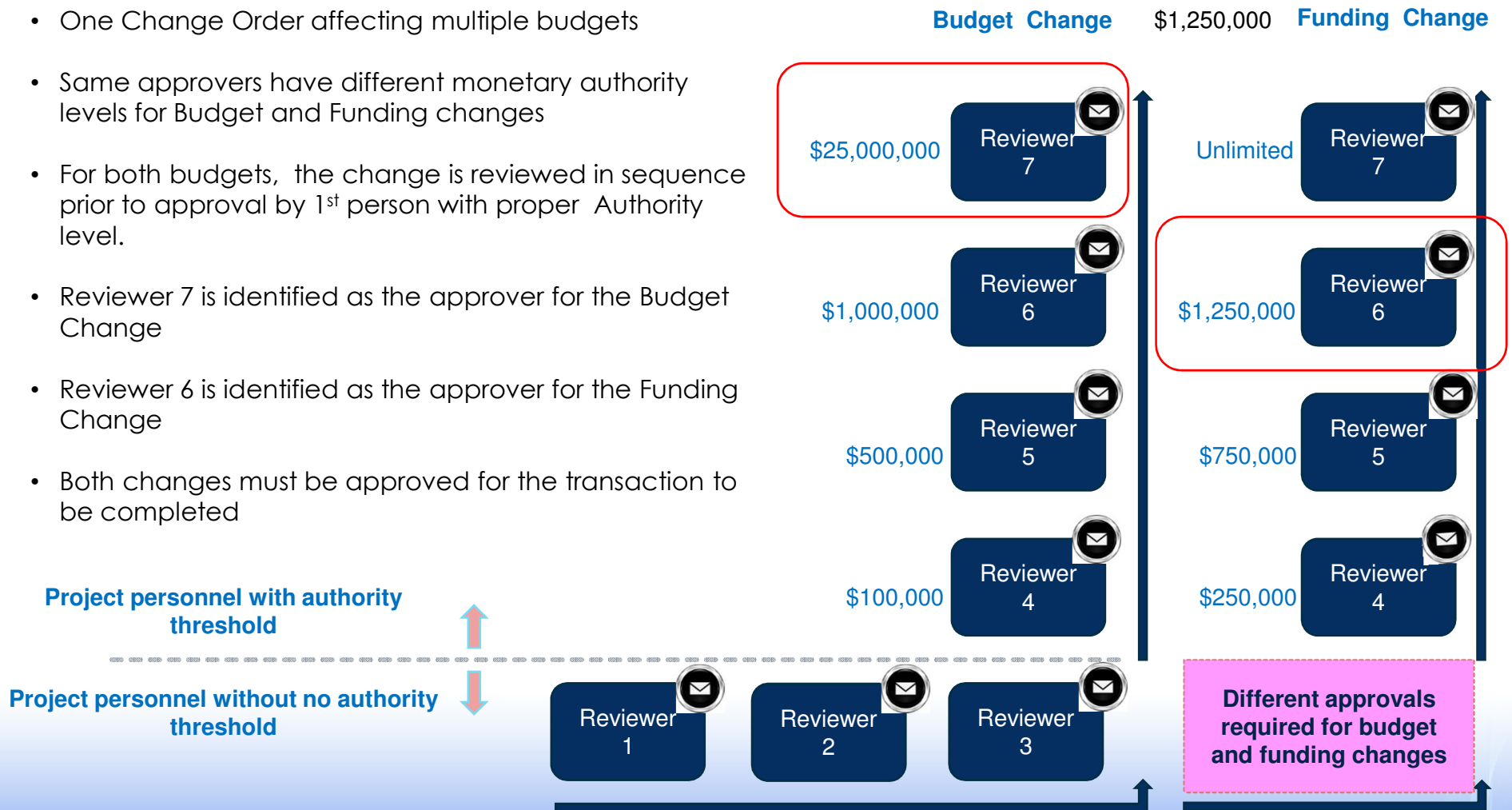
MONETARY APPROVAL - IN SEQUENCE

- Requires that all designated reviewers and one approver must electronically "sign" the Change Order, in order of Authority level
- The Generate Approvers process determines the approvers based on control accounts affected by the Change Order
- Approvers with no monetary authority are automatically selected as reviewers
- Approvers with monetary authority are selected as reviewers in sequence of authority
- Change Order Approver is reviewer with proper authority level. Reviewer 6
- Reviewer 7 with authority level is not included
- Reviewers are contacted via email in sequence



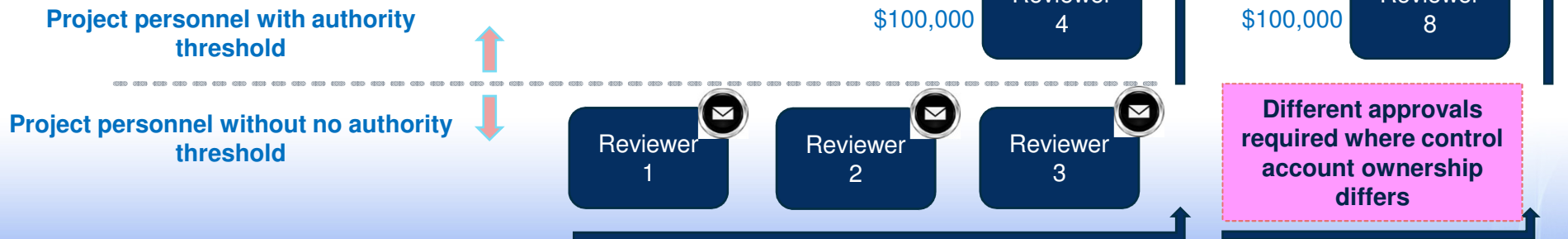
MONETARY APPROVAL - MULTIPLE BUDGETS

- One Change Order affecting multiple budgets
- Same approvers have different monetary authority levels for Budget and Funding changes
- For both budgets, the change is reviewed in sequence prior to approval by 1st person with proper Authority level.
- Reviewer 7 is identified as the approver for the Budget Change
- Reviewer 6 is identified as the approver for the Funding Change
- Both changes must be approved for the transaction to be completed

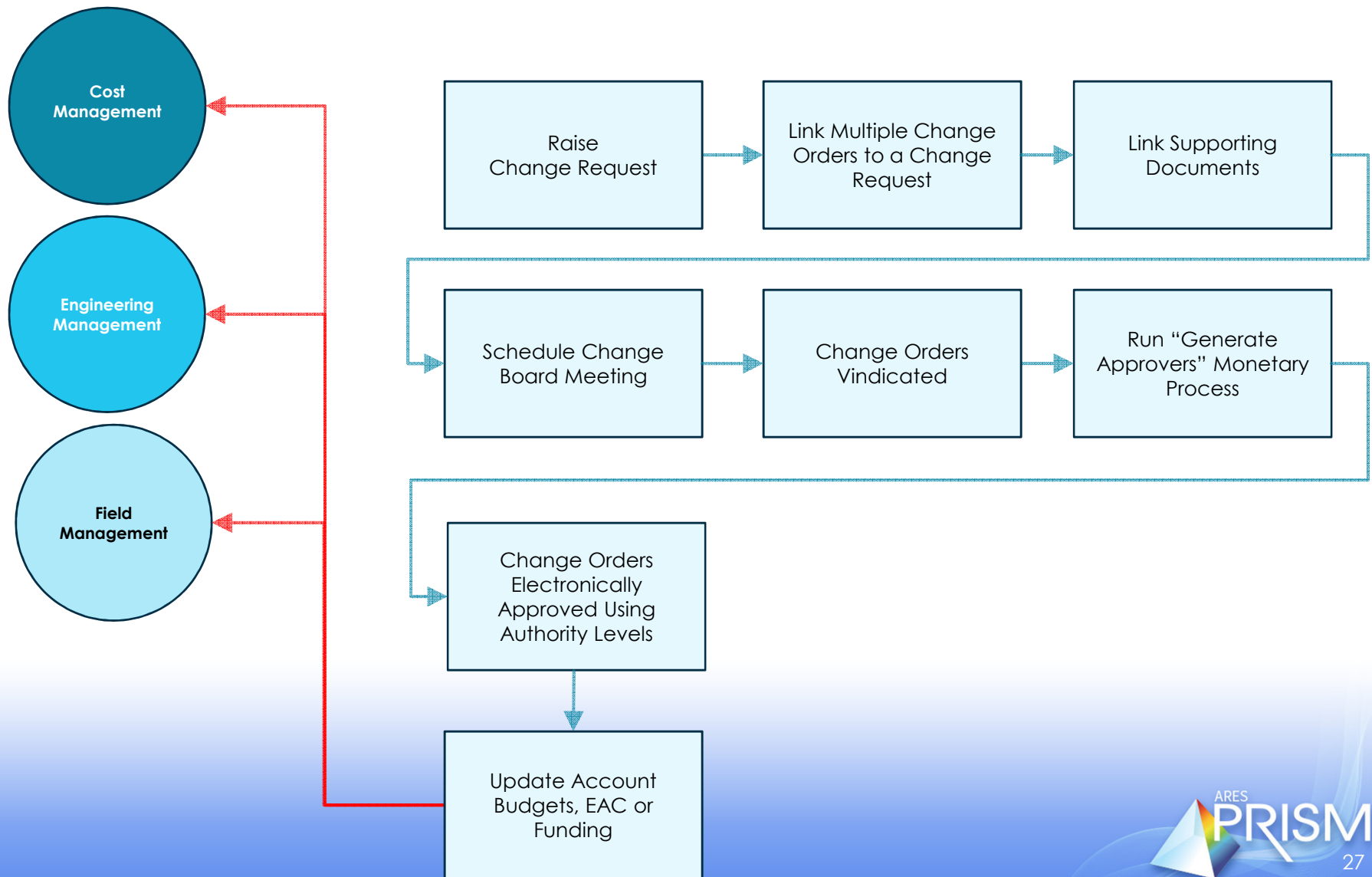


MONETARY APPROVAL – BUDGET TRANSFERS

- In this example there are different sets of control account approvers to approve each side of the transaction
- Though the net impact is \$0.00, the approval is treated as two transactions of \$950K. The Minus and Plus values are treated the same.
- Reviewer 6 is identified as the approver for Control Account A
- Reviewer 10 is identified as the approver for Control Account B
- Both changes must be approved for the Change Order to be approved



USE CHANGE REQUESTS



USE CHANGE REQUESTS AND CHANGE MEETINGS

Change Requests

Grid Mode | 1 of 1 | Add | Delete | Filter | Tools

Change Requests - Data

Request ID: CR-001

Description: May 2014 Engineering Overruns

Meeting ID: 140529

☒ Approved

Revision

Revision Number:

Revision Date:

Meeting

Plan Meet Date: 5/29/2014

Actual Meet Date: 5/29/2014

Change Requests - Change Orders

1 of 2 | Add | Delete | Filter | Tools

| Change Order ID | Change Description | Alternate ID | Variety ID | Variety Description | Reason ID | Reason Description |
|-----------------|--|--------------|------------|---------------------------|-----------|-------------------------|
| 0003-0001 | April and May 2014 Engineering Over... | | DESIGN | Design Engineering Change | DCC | Design Criteria Changes |
| 0003-0002 | Pumps purchase overrun | | PURCH | Purchasing Change | OWC | Owner Changes |

Change Requests | Change Board Meetings

Grid Mode | 1 of 1 | Add | Delete | Filter | Tools

Change Board Meetings - Navigation

| Change Board Meeting ID | Description |
|-------------------------|----------------------------|
| 140529 | Change Board Meeting No. 7 |

Change Board Meetings - Data

Meeting ID: 140529

Description: Change Board Meeting No. 7

Meeting

Plan Meet Date: 5/29/2014

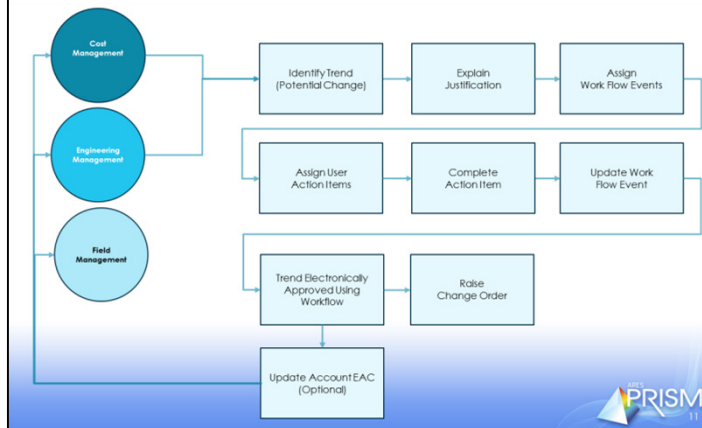
Actual Meet Date: 5/29/2014

Change Board Meetings - Decision Makers

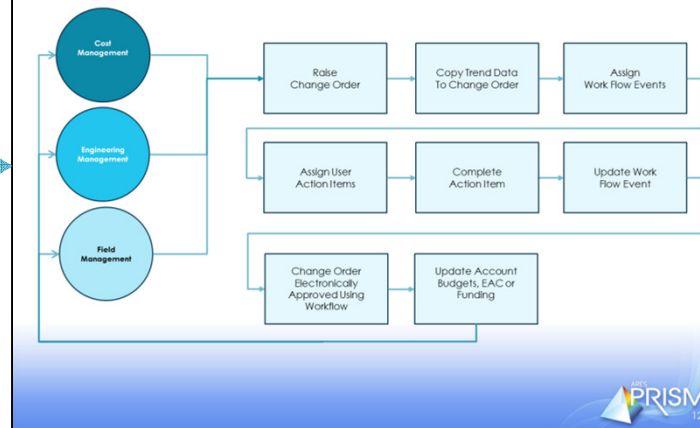
Julius Csar
Albert Knight
Jack B. Nimble
Knowle Itall

USE WORKFLOWS, CHANGE REQUESTS AND MONETARY AUTHORITY LEVELS

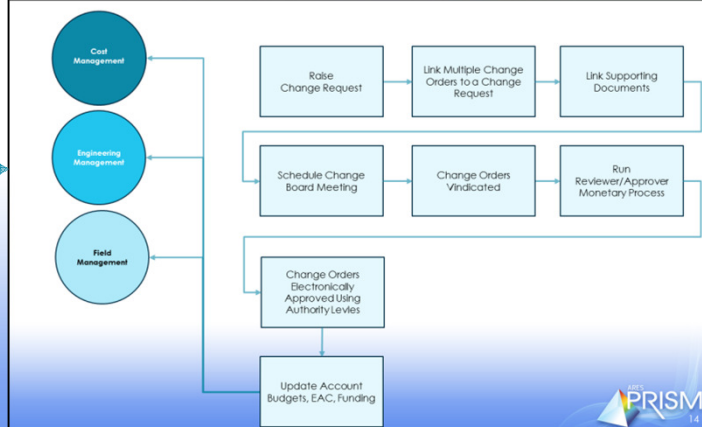
WORKFLOWS ON TRENDS



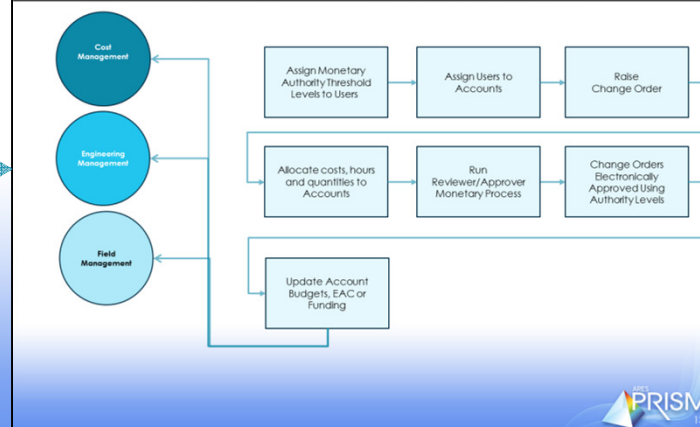
WORK FLOWS ON CHANGE ORDERS



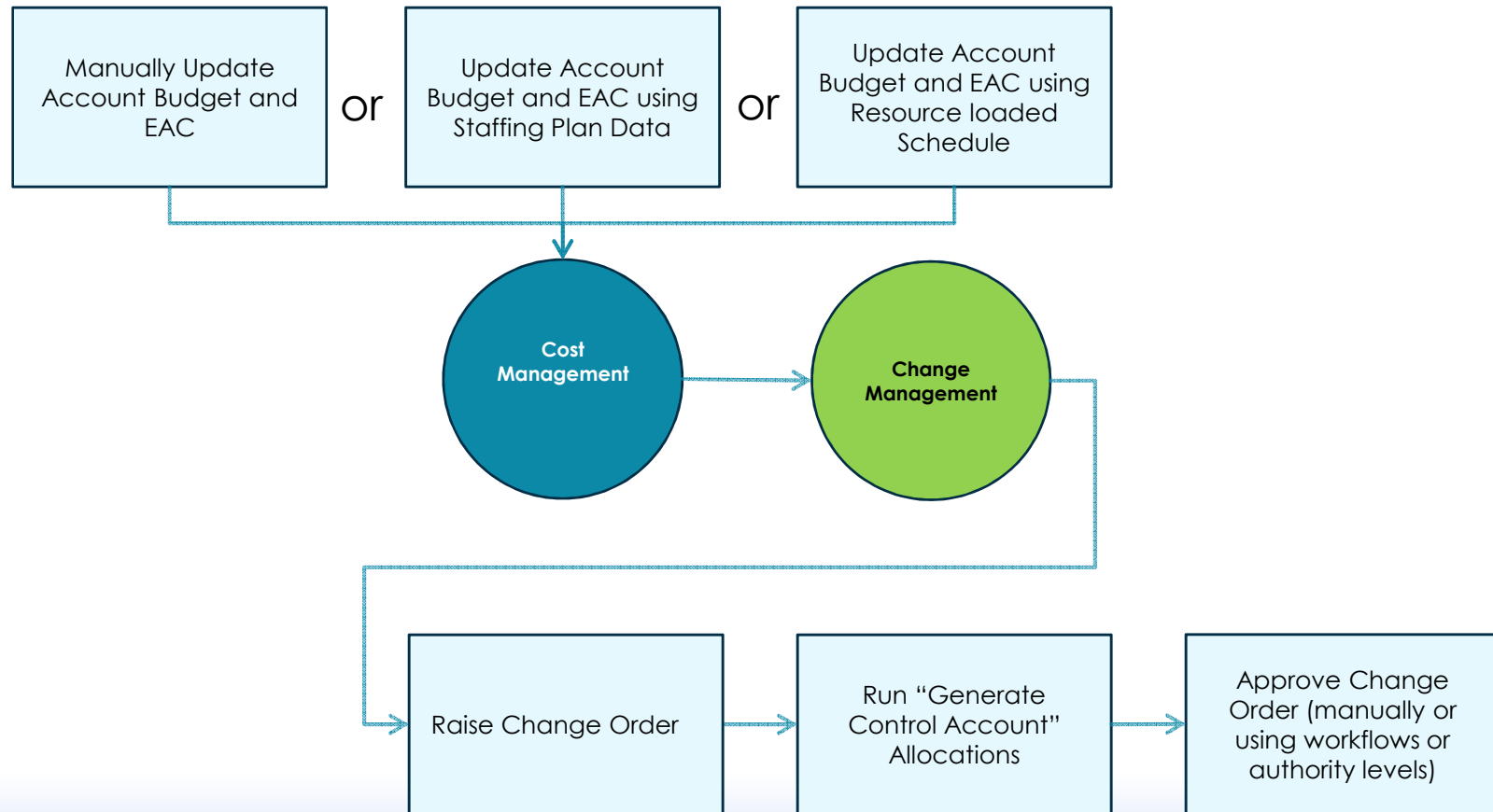
USE CHANGE REQUESTS



USE MONETARY AUTHORITY LEVELS

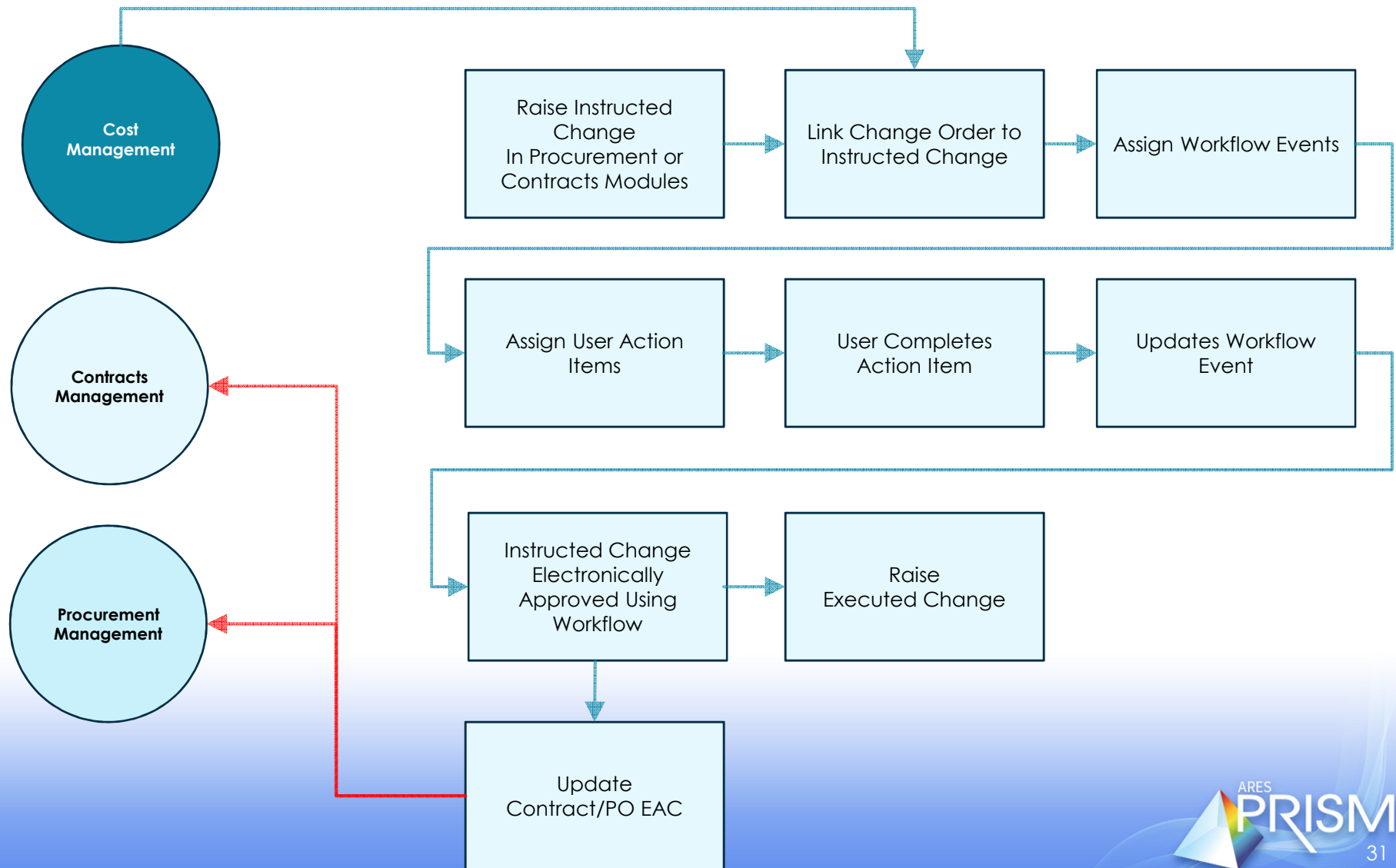


GENERATE CHANGE ORDER FROM EXTERNAL SOURCES

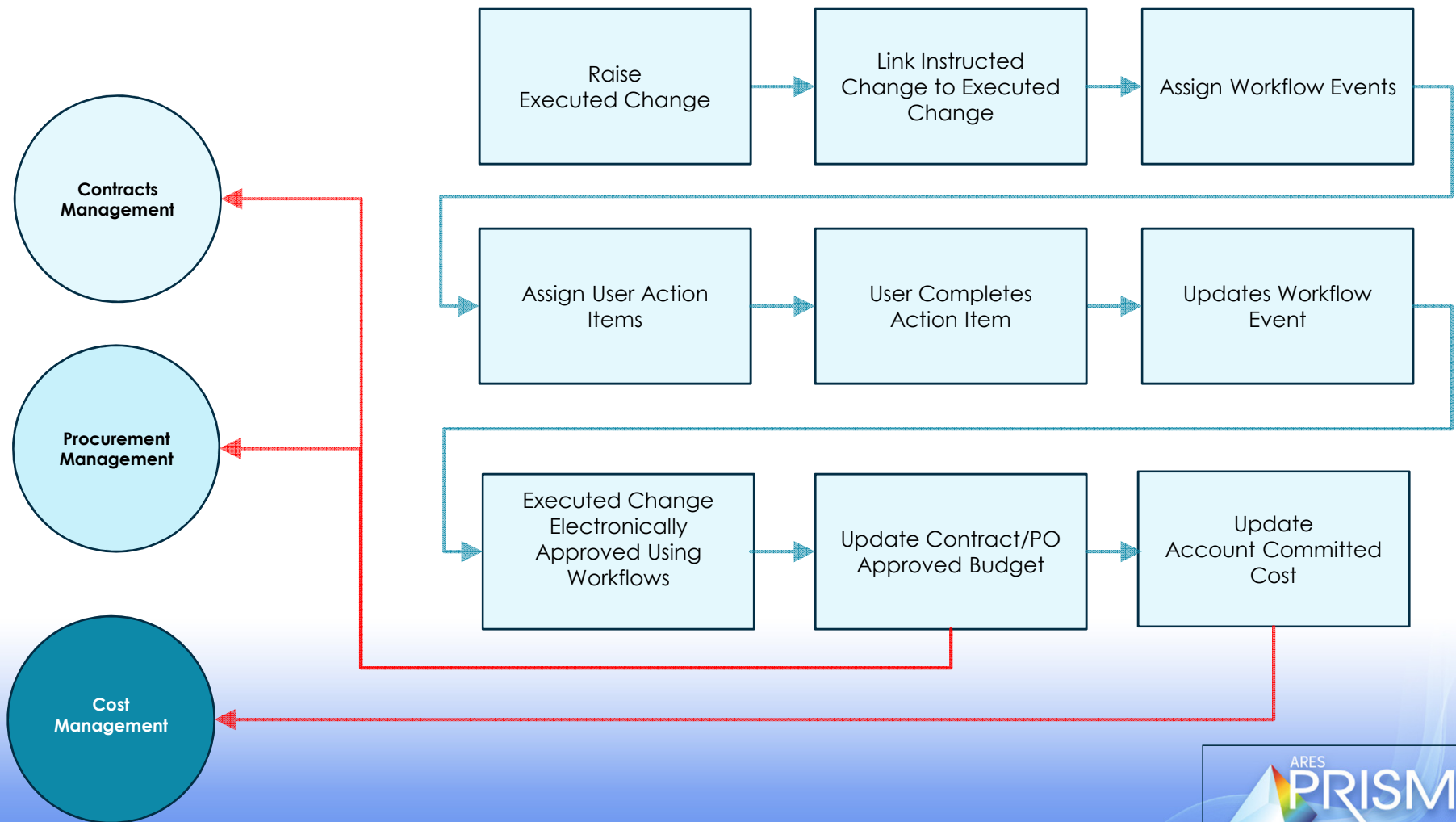


Provides an audit trail for external source changes

LINK CHANGE ORDERS TO CONTRACT/PO'S



LINK CHANGE ORDERS TO CONTRACT/PO'S



ENSURING DATA INTEGRITY

- Incomplete data
- Irregular Values
- Wrong Change Type
- Wrong Budget
- Wrong Approval Method

| Current Change Data Checks | |
|----------------------------|--|
| Check | Description |
| 01 | Change or Detail Description not completed |
| 02 | Change Impact ID has not been selected |
| 03 | Change Variety ID has not been selected for a Trend Change |
| 04 | Change Status ID is not populated |
| 05 | Change Status Date is not populated |
| 06 | Request Date is not populated |
| 07 | Change Owner is not assigned |
| 08 | Control Account IDs not assigned |
| 09 | Cost Element IDs not assigned |
| 10 | PGCP Change Incorrect - This either doesn't net to 0 or has monies against target accounts for CCB or Fin Budget |
| 11 | Approved Budget has no values - Impact id not in TRND, FPER, FUND, P50R, AWRD, COMP and Budget = 0 |
| 12 | Trend Change that doesn't have AFC value |
| 14 | Funding Change that doesn't have an Fin Budget value |
| 15 | Cost or Schedule Impact has not been completed |
| 16 | Compensation change incorrect - Either doesn't net to 0 or has monies against ccb or fin budget on in correct account types (not TG, AL, CJ or CA) |
| 17 | Budget Transfer change incorrect - doesn't net to 0 or has monies against ccb on target accounts |
| 18 | Contract Contingency accounts being used |
| 19 | Change has been approved but status is not set to approved. |
| 20 | Incorrect Comp or Award. has no budget or fin budget |
| 21 | Incorrect Approval Method |
| 22 | Should be an PGCP (Indirects L&P) - Movement between Indirects and L&P to other areas on CCB and FinBudget |

ROUTING REPORT

Who, when, how long, how often?

| A | B | C | D | E | F | G |
|-----------|--|----------------------|-------------------|------------------|---------------|-----------|
| Change ID | Change Description | Change Owner | User Actioned | Action Required | Date Notified | Days Task |
| 0074-6321 | P&S-C340-PMI043-Revised C340 VDP Materials and Workmanship Specification | UTKAN KOCAK | KEVIN DAWES | Needs to Review | 25/01/2013 | 4 |
| 0075-0233 | C305 - Royal Victoria DLR Station Trial Pits - further additional scope. | IAN WEAR | RICHARD STANIER | Needs to Review | 25/01/2013 | 4 |
| 0075-0438 | BT.P001-C132_Design costs for BOS ETH Out of Position Piles & WTH Plunge Column installed 795mm high | MARK MCCOLGAN | RIYADH ALKHAZRAJI | Needs to Approve | 25/01/2013 | 4 |
| 0076-0028 | LIS-C503 ICE00236 Repairs to Existing Platform 3 Precast planks | MIKE OGORMAN | DAMIAN LAMB | Needs to Approve | 25/01/2013 | 4 |
| 0076-0130 | C740 Escalator budget adjustment following project team review | DINESH CHAUHAN | WALTER MACHARG | Needs to Review | 25/01/2013 | 4 |
| 0076-0181 | C740 Escalator AFC adjustment following project team review | DINESH CHAUHAN | RON SURROCK | Needs to Review | 25/01/2013 | 4 |
| 0076-0182 | C730 Lift AFC adjustment following project team review | DINESH CHAUHAN | RON SURROCK | Needs to Review | 25/01/2013 | 4 |
| 0076-0299 | M021 - Settlement and Mitigation Budget Transfer to C310 | DINESH CHAUHAN | ALIE MACADAM | Needs to Approve | 25/01/2013 | 4 |
| 0076-0356 | C510-BT-M021 to C510-Utility Connection Between Main & Piled Buildings | JONATHAN GREENFIELD | COLIN NICCOLLS | Needs to Approve | 25/01/2013 | 4 |
| 0077-0046 | C305 - BT from C305 to C121 Cross Passage Excavation Sequence Change. | IAN WEAR | RAYNON FURTADO | Needs to Review | 25/01/2013 | 4 |
| 0077-0067 | P&S-C340-Track trolley runs along the DLR | UTKAN KOCAK | KEVIN DAWES | Needs to Review | 25/01/2013 | 4 |
| 0077-0073 | C305 - BT from C305 to C121 STG Stub Tunnel Removal Study. | IAN WEAR | RAYNON FURTADO | Needs to Review | 25/01/2013 | 4 |
| 0077-0128 | C140 WO 55 Rev 2 - TW replacements TM planning | RAYNON FURTADO | MARIELLA TSOPELA | Needs to Review | 25/01/2013 | 4 |
| 0077-0129 | C140 WO 55 Rev 2 - (BT) TW replacements TM planning | RAYNON FURTADO | MARIELLA TSOPELA | Needs to Review | 25/01/2013 | 4 |
| 0077-0159 | C122: WO-083 Rev 0 - Secondment of a RAMS Engineer to support CRL (Rhys Williams) | RAYNON FURTADO | GILES GRANGE | Needs to Review | 25/01/2013 | 4 |
| 0077-0162 | C122: WO-083 Rev 0 - (BT) Secondment of a RAMS Engineer to support CRL (Rhys Williams) | RAYNON FURTADO | GILES GRANGE | Needs to Review | 25/01/2013 | 4 |
| 0077-0164 | C122: WO-083 Rev 0 - Secondment of a RAMS Engineer to support CRL (Rhys Williams) - ICE | RAYNON FURTADO | RAYNON FURTADO | Needs to Approve | 25/01/2013 | 4 |
| 0075-0103 | R272 Increase in Recharge to Programme Contingency | ANDREAS CAREY BAILEY | KEITH SIBLEY | Needs to Review | 24/01/2013 | 5 |
| 0075-0140 | C435 - Tunnels - Pile Cutting - Documentary evidence to satisfy Building Control | KAREN DICKSON | REZA HAJI | Needs to Review | 24/01/2013 | 5 |
| 0076-0016 | LIS-C503 ICE 00223 Infilling voids to 1-14 Liverpool St basements | MIKE OGORMAN | DAMIAN LAMB | Needs to Approve | 24/01/2013 | 5 |
| 0076-0017 | LIS-C503 ICE00224 Combined Instruction for the Duct rerouting in corridor 2/202 | MIKE OGORMAN | DAMIAN LAMB | Needs to Approve | 24/01/2013 | 5 |
| 0076-0018 | LIS-C503 ICE00225 Cable Tunnel and shaft drainage instruction | MIKE OGORMAN | DAMIAN LAMB | Needs to Approve | 24/01/2013 | 5 |
| 0076-0031 | LIS-C503 Grouting up bleed holes in shaft | MIKE OGORMAN | DAMIAN LAMB | Needs to Review | 24/01/2013 | 5 |
| 0076-0340 | LU07 WHI - Costs for set-up of Whitechapel station Temporary Ticket Office (TTO) _ Design/Procure | LES STUBBS | JOHN MCGRATH | Needs to Review | 24/01/2013 | 5 |
| 0076-0438 | C512 WHI - ICE00038 Relocation of Scotch and Clip box | LES STUBBS | JOHN MCGRATH | Needs to Approve | 24/01/2013 | 5 |
| 0077-0031 | C122: WO-055 Rev 2 (BT) - Secondment of Rebecca Casey from Oct 2012 to Mar 2013 | RAYNON FURTADO | SIMON LOH | Needs to Review | 24/01/2013 | 5 |
| 0077-0032 | C122: WO-065 Rev 1 - (BT) UIC GB Structure Gauge & TSI compliance | RAYNON FURTADO | SIMON LOH | Needs to Review | 24/01/2013 | 5 |
| 0077-0115 | C134: WO-021 Rev 1 - (OSD) - TCR Transaction Documents Production & Support - ICE | RAYNON FURTADO | RAYNON FURTADO | Needs to Approve | 24/01/2013 | 5 |
| 0077-0122 | M033(Connaught Tunnel)-DLR Survey-schedule 9 | ARASH NAZARIAN | CHAD LEGERE | Needs to Review | 24/01/2013 | 5 |
| 0077-0130 | C140 WO 55 Rev 2 - TW replacements TM planning - ICE | RAYNON FURTADO | RAYNON FURTADO | Needs to Approve | 24/01/2013 | 5 |
| 0070-9715 | C510-AW-Division of responsibilities for Integrated Design of SCL | JONATHAN GREENFIELD | COLIN NICCOLLS | Needs to Review | 23/01/2013 | 6 |
| 0073-5680 | C300 - Additional Contractor's Management Staff costs due to managing increased scope of works | KOSTAS KIKIRAS | JAMES MOLLOY | Needs to Review | 23/01/2013 | 6 |
| 0074-6100 | C430 - ETH - Scope transfer from C430 to C136 due to casings cast into pile T130. | HAMZEH HABIB | NISRINE CHARTOUNY | Needs to Review | 23/01/2013 | 6 |
| 0074-6323 | P&S-C340-PMI057 "Drill and Tap the 14" steel pipe found | UTKAN KOCAK | SOPHIE SAUSSIER | Needs to Approve | 23/01/2013 | 6 |

DATA VALIDATION

Over 20 data validation checks

Change Management Data Check Report

| Change ID | STATUS_ID | Change Description | Change Owner | Verification Check |
|-----------|-----------|--|-----------------|--|
| 0075-0078 | DRAFT | C512 WHI - Scope associated with the installation of Lifts and Escalators at Whitechapel Station | LES STUBBS | DC 8: Control Account IDs not assigned |
| 0075-0099 | DRAFT | LIS - C501 Additional propping to support the floor slabs. | SARAH MILES | DC 8: Control Account IDs not assigned |
| 0075-0339 | DRAFT | C430 - WTH Additional costs to C430 due to C435 stand down | HAMZEH HABIB | DC 8: Control Account IDs not assigned |
| 0075-0361 | DRAFT | | DANIEL VENN | DC 8: Control Account IDs not assigned DC 1: Change or Detail Description not completed |
| 0075-0380 | DRAFT | LIS - C502 - MEP Blomfield Box Level -1 and Stair Case Pressurisation Changes | DAMIAN LAMB | DC 8: Control Account IDs not assigned |
| 0075-0386 | DRAFT | LIS-C503 Removal and replacement of four floodlights from Ticket Hall A | MIKE OGORMAN | DC 8: Control Account IDs not assigned |
| 0075-0400 | DRAFT | Transfer from C300 for the House of St Barnabus Monitoring Handover costs | VINCENT FOGARTY | DC 8: Control Account IDs not assigned |
| 0075-0444 | DRAFT | L&P Capex AFC at P9 | MELISSA BROWN | DC 3: Change Variety ID has not been selected for a Trend Change |
| 0076-0034 | DRAFT | WHI C511 - Delayed Damages | RICHARD TAYLOR | DC 8: Control Account IDs not assigned |
| 0076-0051 | DRAFT | WHI A042 - Journal transfer to Ops cost centres reducing forecast | RICHARD TAYLOR | DC 9: Cost Element IDs not assigned |

Grand Total

CHANGE TOTALS REPORT

Current state, Future state and the Potential state

| Area Descr | Project Des | Contract Description | OB | CCB | New CCB | Potential CCB | AFC | New AFC | Unresolved | Potential AFC | FinBudge | New FinBudge | Potential FinBudge |
|--------------------------------------|---|---|--------------|--------------|--------------|---------------|--------------|--------------|-------------|---------------|--------------|--------------|--------------------|
| 1WE - West | P001 - Bond St Station | A014 - Bond Street Urban Realm | | | | | | | | | | | |
| | | C207 - Bond Street Station | £5,198,463 | £5,198,463 | £5,198,463 | £5,198,463 | £5,198,463 | £5,198,463 | £0 | £5,198,463 | £5,198,463 | £5,198,463 | £5,198,463 |
| | | C223 - Bond Street (Site Facilities) | £5,444,595 | £6,764,871 | £6,764,871 | £6,764,871 | £6,792,544 | £6,792,544 | £0 | £6,792,544 | £6,764,872 | £6,764,872 | £6,764,872 |
| | | C240 - Bond Street (Civilians) | £857,624 | £845,977 | £845,977 | £845,977 | £847,499 | £847,499 | £0 | £847,499 | £845,977 | £845,977 | £845,977 |
| | | C410 - BOS Access shafts & SCL Wrks | £2,906,204 | £4,658,241 | £4,658,241 | £4,658,241 | £4,671,198 | £4,671,198 | £0 | £4,671,198 | £4,658,240 | £4,658,240 | £4,658,240 |
| | | C411 - BOS - Piling and Dia Wall | -£14,440,000 | £0 | £0 | £0 | £0 | £0 | £0 | £0 | £0 | £0 | £0 |
| | | C412 - BOS Main Sta Wrks/Fit | £44,686,494 | £110,412,449 | £110,412,449 | £109,281,579 | £100,669,723 | £100,669,723 | £3,145,000 | £103,814,723 | £110,412,452 | £110,412,452 | £109,281,582 |
| | | LU03 - Bond Street | £190,736,576 | £168,977,826 | £168,977,826 | £168,977,826 | £177,946,810 | £177,946,810 | -£1,070,000 | £176,876,810 | £168,977,826 | £168,977,826 | £168,977,826 |
| | | M005 - Bond St Highway Alterations | £41,331,600 | £40,017,434 | £40,017,434 | £40,017,434 | £29,137,733 | £29,137,733 | £2,084,998 | £31,222,731 | £40,017,434 | £40,017,434 | £40,017,434 |
| | | P001 - Bond St Station (Project Description) | £473,448 | £769,800 | £769,800 | £769,800 | £769,800 | £769,800 | £0 | £769,800 | £769,800 | £769,800 | £769,800 |
| | | Row: 1WE - West - P001 - Bond St Station | £0 | £0 | £0 | £0 | £0 | £0 | £0 | £0 | £0 | £0 | £0 |
| | | P001 - Bond St Station | £0 | £140,175 | £140,175 | £140,175 | £140,175 | £140,175 | £0 | £140,175 | £140,175 | £140,175 | £140,175 |
| | | R132 - Recharges (Bond St Station) | £0 | £10,839,000 | £10,839,000 | £10,839,000 | £10,839,301 | £10,839,301 | £0 | £10,839,301 | £10,839,000 | £10,839,000 | £10,839,000 |
| | | | £0 | £28,212,093 | £28,212,093 | £29,789,629 | £64,479,555 | £64,479,555 | £0 | £64,479,555 | £28,212,091 | £28,212,091 | £29,789,627 |
| P010 - Farringdon Station | A016 - Farringdon Urban Realm | | £0 | -£5,060,000 | -£5,060,000 | -£5,060,000 | -£5,055,588 | -£5,055,588 | £0 | -£5,055,588 | -£5,060,000 | -£5,060,000 | -£5,060,000 |
| | | AX13 - Farringdon - Thames Water | £4,305,947 | £4,305,947 | £4,305,947 | £4,305,947 | £4,305,947 | £4,305,947 | £0 | £4,305,947 | £4,305,947 | £4,305,947 | £4,305,947 |
| | | AX14 - Farringdon - LUL East Ticket | £898,324 | £887,679 | £887,679 | £887,679 | £887,679 | £887,679 | £0 | £887,679 | £887,679 | £887,679 | £887,679 |
| | | AX18 - Enabling Works (Retained) | £2,400,458 | -£1 | -£1 | -£1 | £0 | £0 | £0 | £0 | £0 | £0 | £0 |
| | | AX19 - CLRL Works (Central Stations) | £2,102,317 | -£0 | -£0 | -£0 | -£0 | -£0 | £0 | -£0 | £0 | £0 | £0 |
| | | Farringdon (IA2) | £45,702,223 | £42,000,000 | £42,000,000 | £42,000,000 | £42,000,000 | £42,000,000 | £0 | £42,000,000 | £42,000,000 | £42,000,000 | £42,000,000 |
| | | C209 - Farringdon Station - E Ticket | £1,915,663 | £1,491,897 | £1,491,897 | £1,491,897 | £1,460,803 | £1,460,803 | £0 | £1,460,803 | £1,491,897 | £1,491,897 | £1,491,897 |
| | | C242 - FARE Tokt Hall Civ Adv | £5,083,142 | £5,249,646 | £5,249,646 | £5,249,646 | £5,083,142 | £5,083,142 | £0 | £5,083,142 | £5,249,646 | £5,249,646 | £5,249,646 |
| | | C430 - FAR Station-Shaft/Piling/Dia | £22,634,805 | £40,239,577 | £40,239,577 | £40,239,577 | £41,388,187 | £41,388,187 | £5,310,000 | £46,698,187 | £40,239,576 | £40,239,576 | £40,239,576 |
| | | C435 - FAR Main Sta Wrks/Tun/Fit | £388,738,484 | £245,731,032 | £245,731,032 | £245,731,032 | £248,494,313 | £248,494,313 | £62,973,000 | £311,467,313 | £245,731,032 | £245,731,032 | £245,731,032 |
| | | LU02 - BARIMR Relocation | £4,370,117 | £5,450,000 | £5,450,000 | £5,450,000 | £4,056,368 | £4,056,368 | £0 | £4,056,368 | £5,450,000 | £5,450,000 | £5,450,000 |
| | | NR15 - NR Asset Protection For C435 | £0 | £1,400,000 | £1,400,000 | £1,400,000 | £1,470,000 | £1,470,000 | £0 | £1,470,000 | £1,400,000 | £1,400,000 | £1,400,000 |
| | | P010 - Farringdon Station | £0 | £40,055,555 | £40,055,555 | £40,055,555 | £96,760,110 | £96,760,110 | £0 | £96,760,110 | £40,055,554 | £40,055,554 | £40,055,554 |
| | | 1WE0 - Area Contingency or Risk | £0 | £55,491,016 | £55,491,016 | £55,491,016 | £98,800,000 | £98,800,000 | £0 | £98,800,000 | £55,491,016 | £55,491,016 | £55,491,016 |
| P028 - Old Oak Common | C220 - Old Oak Common (Site Facilities) | | £1,033,339 | £736,034 | £736,034 | £736,034 | £736,034 | £736,034 | £0 | £736,034 | £736,034 | £736,034 | £736,034 |
| | | C277 - Old Oak Common - Demolition of Depot Area 2 | £465,550 | £983,034 | £983,034 | £983,034 | £983,034 | £983,034 | £0 | £983,034 | £983,034 | £983,034 | £983,034 |
| | | C280 - Old Oak Common Temp Bus | £6,865,659 | £1,191,884 | £1,191,884 | £1,191,884 | £1,056,608 | £1,056,608 | £0 | £1,056,608 | £1,191,884 | £1,191,884 | £1,191,884 |
| | | P028 - Old Oak Common - Enabling | £0 | £72,452 | £72,452 | £72,452 | £0 | £0 | £0 | £0 | £72,451 | £72,451 | £72,451 |
| | | | | | | | | | | | | | |
| P030 - Paddington Integrated Project | AX17 - Contribution to development of PIP | | £1,201,831 | £0 | £0 | £0 | -£0 | -£0 | £0 | -£0 | £0 | £0 | £0 |
| | | C271 - PAD Int - Site Fac/Pile/Grnd | £8,425,838 | £8,242,998 | £8,242,998 | £8,242,998 | £7,289,786 | £7,289,786 | £0 | £7,289,786 | £8,242,999 | £8,242,999 | £8,242,999 |
| | | C272 - PAD Int - Main Works (incl) | £35,096,484 | £67,447,496 | £67,447,496 | £67,447,496 | £68,982,832 | £68,982,832 | £20,426,080 | £89,408,912 | £75,497,495 | £75,497,495 | £75,497,495 |
| | | P030 - Paddington Integrated Project | £0 | £281,315 | £281,315 | £281,315 | £26,322,846 | £26,322,846 | £0 | £26,322,846 | £281,315 | £281,315 | £281,315 |
| | | R131 - Paddington Integration Programme - C131 Recharge to LU | £0 | -£3,277,168 | -£3,277,168 | -£3,277,168 | -£3,277,168 | -£3,277,168 | £0 | -£3,277,168 | -£3,277,168 | -£3,277,168 | -£3,277,168 |

PAIN GAIN REPORT

Looks at the increase in forecast and helps determine the effect these movements will have on the program vs. the contractor's cost.

| | | | | | | | | | | | | | | | |
|------------------|-----------------------------|---|------------|-------------|-------------|-----------------|-------------|------------|-----------------|-------------|-------------|-------------------|--------------------|------------------------|--|
| Refresh | | | | Pain Gain | | | | | | | | | | | |
| | | | | PRISM2 Data | | | | | Contractor Data | | | | | | |
| Are | Project | Contract ID & Des | % Complete | CCB | AFC | Comercial Issue | AFC - CI | PG PQT | Pain Gain | ECC | ECC - CI | Contractor Target | Contractor Forecas | Contractor Pain Gain C | |
| I/E - West | P001 - Bond St Station | C411 - BOS - Piling and Dia Wall | 68.28 | 108,809,606 | 100,911,195 | 0 | 100,911,195 | 7,898,411 | -1,554,033 | 116,708,018 | 116,708,018 | 103,793,562 | 98,284,189 | -2,754,687 | |
| | | C412 - BOS Main Sta Wrks/Fit-out/M&E | 0.00 | 168,977,826 | 177,946,810 | 0 | 177,946,810 | -8,968,984 | 0 | 160,008,842 | 160,008,842 | 0 | 0 | 0 | |
| | P010 - Farringdon Station | C430 - FAR Station- Shaft/Piling/Dia Wall | 66.66 | 44,269,577 | 45,638,187 | 0 | 45,638,187 | -1,368,610 | -1,223,031 | 42,900,966 | 42,900,966 | 42,511,742 | 43,435,979 | 462,119 | |
| | | C435 - FAR Main Sta Wrks/Tun/Fit-out/M&E | 5.36 | 219,796,848 | 223,063,028 | 0 | 223,063,028 | -3,266,180 | -3,730,158 | 216,530,667 | 216,530,667 | 215,162,504 | 282,321,151 | 33,579,324 | |
| | | P010 - Farringdon Station | 0.00 | 1,240,000 | 0 | 0 | 0 | 1,240,000 | 0 | 2,480,000 | 2,480,000 | 0 | 0 | 0 | |
| | P028 - Old Oak Common - | C280 - Old Oak Common Temp Bus Facility | 100.00 | 1,191,884 | 1,056,608 | 0 | 1,056,608 | 135,276 | 0 | 1,327,160 | 1,327,160 | 1,191,884 | 1,191,884 | 0 | |
| | P030 - Paddington | C272 - PAD Int - Main Works (incl M&E) | 77.21 | 84,997,496 | 94,177,495 | 15,000 | 94,162,495 | -9,164,998 | -13,599,749 | 75,832,498 | 75,847,498 | 88,427,636 | 92,632,060 | 2,102,212 | |
| | P031 - Paddington | C405 - PAD Main Station Wrks-Fit Out/M&E | 20.09 | 191,061,831 | 194,100,229 | 19,298,873 | 174,801,356 | 16,260,475 | -10,726,910 | 207,322,305 | 226,621,178 | 153,156,997 | 226,990,539 | 36,916,771 | |
| | P060 - Tottenham Court | C421 - TCR - Piling and Dia Wall | 96.66 | 11,978,318 | 10,931,904 | 0 | 10,931,904 | 1,046,414 | 323,434 | 13,024,732 | 13,024,732 | 11,581,000 | 10,931,904 | -324,548 | |
| | | C422 - TCR Main Station Wrks/Fit-out/M&E | 1.50 | 98,817,956 | 97,667,956 | 0 | 97,667,956 | 1,150,000 | 0 | 99,967,956 | 99,967,956 | 85,051,966 | 85,051,966 | 0 | |
| I/E - West Total | | | 435.76 | 931,141,342 | 945,493,411 | 19,313,873 | 926,179,538 | 4,961,804 | -30,510,445 | 936,103,145 | 955,417,018 | 700,877,291 | 840,839,672 | 69,981,191 | |
| 2CE - Cent | P017 - Liverpool St Station | C216 - LIS Civ Adv Wrks - Util, svcs Pk | 100.00 | 2,682,048 | 2,904,504 | -582,024 | 3,486,528 | -804,480 | 0 | 1,877,568 | 1,295,544 | 2,682,047 | 3,081,509 | 199,731 | |
| | | C501 - LIS Station Piling & Diap Wall | 38.75 | 63,626,257 | 67,833,528 | -92,000 | 67,925,528 | -4,299,271 | -2,535,116 | 59,326,986 | 59,234,986 | 73,951,091 | 77,367,332 | 1,708,121 | |

CONTINGENCY DRAW DOWN REPORT

Original, Current, Residual Contingency.

% Contingency Committed vs Physical % Complete.

Risk Forecast.

| AreaDescription | ProjectDescription | Calculation | P69 | P70 | P71 | P72 | P73 |
|--------------------------------------|--|-------------|----------------|----------------|----------------|----------------|----------------|
| IWE - West | Contingency CCB | | 29,046,692.12 | 28,973,031.12 | 28,858,679.12 | 28,763,579.12 | 28,476,570.30 |
| | Approved Change (CCB - OBB) | | 0.00 | 73,661.00 | 188,013.00 | 283,113.00 | 570,121.82 |
| | VAC (AFC - CCB, excluding risk) | | -19,000,823.34 | -11,315,614.34 | -11,342,245.34 | -11,437,345.34 | -11,867,008.34 |
| | Total Change (Approved Change + VAC) | | -19,000,823.34 | -11,241,953.34 | -11,154,232.34 | -11,154,232.34 | -11,296,886.52 |
| | Residual Contingency (Original Contingency less approved budget changes and resolved trends) | | 48,047,515.46 | 40,288,645.46 | 40,200,324.46 | 40,200,324.46 | 40,343,578.64 |
| | P50 Risk Forecast | | 70,349,811.00 | 70,349,811.00 | 64,479,555.00 | 64,479,555.00 | 64,479,555.00 |
| | Physical % Complete | | 23.00 | 24.50 | 25.66 | 27.28 | 27.92 |
| | % of Original Contingency Committed | | -65.41 | -38.70 | -38.40 | -38.40 | -38.89 |
| | Residual Contingency as % of ETC | | 0.20 | 0.16 | 0.16 | 0.17 | 0.17 |
| | Contingency OBB (p04 Target) | | 41,872,758.73 | 41,872,758.73 | 41,872,758.73 | 41,872,758.73 | 41,872,758.73 |
| P010 - Farringdon Station | Contingency CCB | | 41,872,758.73 | 40,602,984.18 | 40,602,984.18 | 40,567,984.18 | 40,154,087.48 |
| | Approved Change (CCB - OBB) | | 0.00 | 1,269,774.55 | 1,269,774.55 | 1,304,774.55 | 1,718,671.25 |
| | VAC (AFC - CCB, excluding risk) | | 700,216.75 | -4,011,311.06 | 972,935.02 | 1,230,935.02 | 1,116,042.22 |
| | Total Change (Approved Change + VAC) | | 700,216.75 | -2,741,536.51 | 2,242,709.57 | 2,535,709.57 | 2,834,713.47 |
| | Residual Contingency (Original Contingency less approved budget changes and resolved trends) | | 41,172,541.98 | 44,614,295.24 | 39,630,049.16 | 39,337,049.16 | 39,038,045.26 |
| | P50 Risk Forecast | | 82,720,244.00 | 82,720,244.00 | 96,760,110.00 | 96,760,110.00 | 96,760,110.00 |
| | Physical % Complete | | 19.14 | 19.98 | 21.06 | 22.04 | 23.11 |
| | % of Original Contingency Committed | | 1.67 | -6.55 | 5.36 | 6.06 | 6.77 |
| | Residual Contingency as % of ETC | | 0.15 | 0.17 | 0.15 | 0.15 | 0.15 |
| | Contingency OBB (p04 Target) | | 89,047.47 | 89,047.47 | 89,047.47 | 89,047.47 | 89,047.47 |
| P028 - Old Oak Common - Enabling | Contingency CCB | | 89,047.47 | 72,451.47 | 72,451.47 | 72,451.47 | 72,451.47 |
| | Approved Change (CCB - OBB) | | 0.00 | 16,596.00 | 16,596.00 | 16,596.00 | 16,596.00 |
| | VAC (AFC - CCB, excluding risk) | | -135,277.22 | -135,277.22 | -135,277.22 | -135,277.22 | -135,277.22 |
| | Total Change (Approved Change + VAC) | | -135,277.22 | -118,681.22 | -118,681.22 | -118,681.22 | -118,681.22 |
| | Residual Contingency (Original Contingency less approved budget changes and resolved trends) | | 224,324.69 | 207,728.69 | 207,728.69 | 207,728.69 | 207,728.69 |
| | P50 Risk Forecast | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Physical % Complete | | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| | % of Original Contingency Committed | | -151.92 | -133.28 | -133.28 | -133.28 | -133.28 |
| | Residual Contingency as % of ETC | | -1,019,657.68 | -944,221.32 | -944,221.32 | -944,221.32 | -944,221.32 |
| | Contingency OBB (p04 Target) | | 5,856,744.40 | 5,856,744.40 | 5,856,744.40 | 5,856,744.40 | 5,856,744.40 |
| P030 - Paddington Integrated Project | Contingency CCB | | 5,856,744.40 | 5,712,592.44 | 5,712,592.44 | 5,712,592.44 | 281,315.44 |
| | Approved Change (CCB - OBB) | | 0.00 | 144,151.96 | 144,151.96 | 144,151.96 | 5,575,428.96 |
| | VAC (AFC - CCB, excluding risk) | | 1,098,311.82 | 1,636,210.57 | 1,656,711.57 | 9,793,111.57 | 582,122.57 |
| | Total Change (Approved Change + VAC) | | 1,098,311.82 | 1,780,362.53 | 1,800,863.53 | 9,937,263.53 | 6,157,551.53 |
| | Residual Contingency (Original Contingency less approved budget changes and resolved trends) | | 4,758,432.58 | 4,076,381.87 | 4,055,880.87 | -4,080,519.13 | -300,807.13 |
| | P50 Risk Forecast | | 12,621,292.00 | 12,621,292.00 | 34,372,846.00 | 34,372,846.00 | 26,322,846.00 |
| | Physical % Complete | | 77.20 | 86.50 | 76.71 | 75.28 | 92.77 |
| | % of Original Contingency Committed | | 18.75 | 30.40 | 30.75 | 169.67 | 105.14 |
| | Residual Contingency as % of ETC | | -1.64 | -0.45 | -0.34 | 0.66 | 0.03 |
| | Contingency OBB (p04 Target) | | 21,990,685.57 | 21,990,685.57 | 21,990,685.57 | 21,990,685.57 | 21,990,685.57 |
| P031 - Paddington Station | Contingency CCB | | 21,990,685.57 | 21,977,861.57 | 21,990,685.57 | 21,990,685.57 | 21,736,279.92 |
| | Approved Change (CCB - OBB) | | 0.00 | 12,824.00 | 0.00 | 0.00 | 254,405.65 |
| | Residual Contingency (Original Contingency less approved budget changes and resolved trends) | | 21,990,685.57 | 21,984,685.57 | 21,990,685.57 | 21,990,685.57 | 21,990,934.57 |

BENEFITS OF EFFECTIVE CHANGE MANAGEMENT

- Provide more accurate and quicker forecasts by:
 - Eliminating the need for 'wet' signatures, couriers, printers and meetings
 - Automating the update of Change status
- Eliminate the need for maintaining manually updated logs by:
 - Providing a single live source for identifying and approving of changes
 - Automatically informing other departments of the approval of Trends and Change Orders

BENEFITS OF EFFECTIVE CHANGE MANAGEMENT

- Efficient handling of multiple budget owners and approvers by:
 - Change reviewers and approvers automatically selected based on ownership and authority
 - Email notifications and reports monitor progress
 - The impact is immediate

BENEFITS OF EFFECTIVE CHANGE MANAGEMENT

- Eliminates changes that are out of governance by:
 - Making it impossible to break the rules.
- Publish cost reports within 4-5 days of month end by:
 - Treating changes in real-time and as an integral part of the cost management system.

QUESTIONS & ANSWERS



THANK YOU FOR JOINING US!



www.aresprism.com