

P18A Review/P38

2nd November 2001

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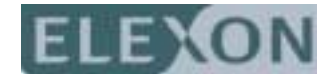


P18A Review & P38 Agenda



- P18A Review Process & Timetable (Panel 32/021)
- Review of P18A Performance
- CAD Definitions Review
 - P18A CAD Definition
 - Modification P38
- Timeliness of Price Reporting
- Implementation Issues
- Consultation Process

Timetable

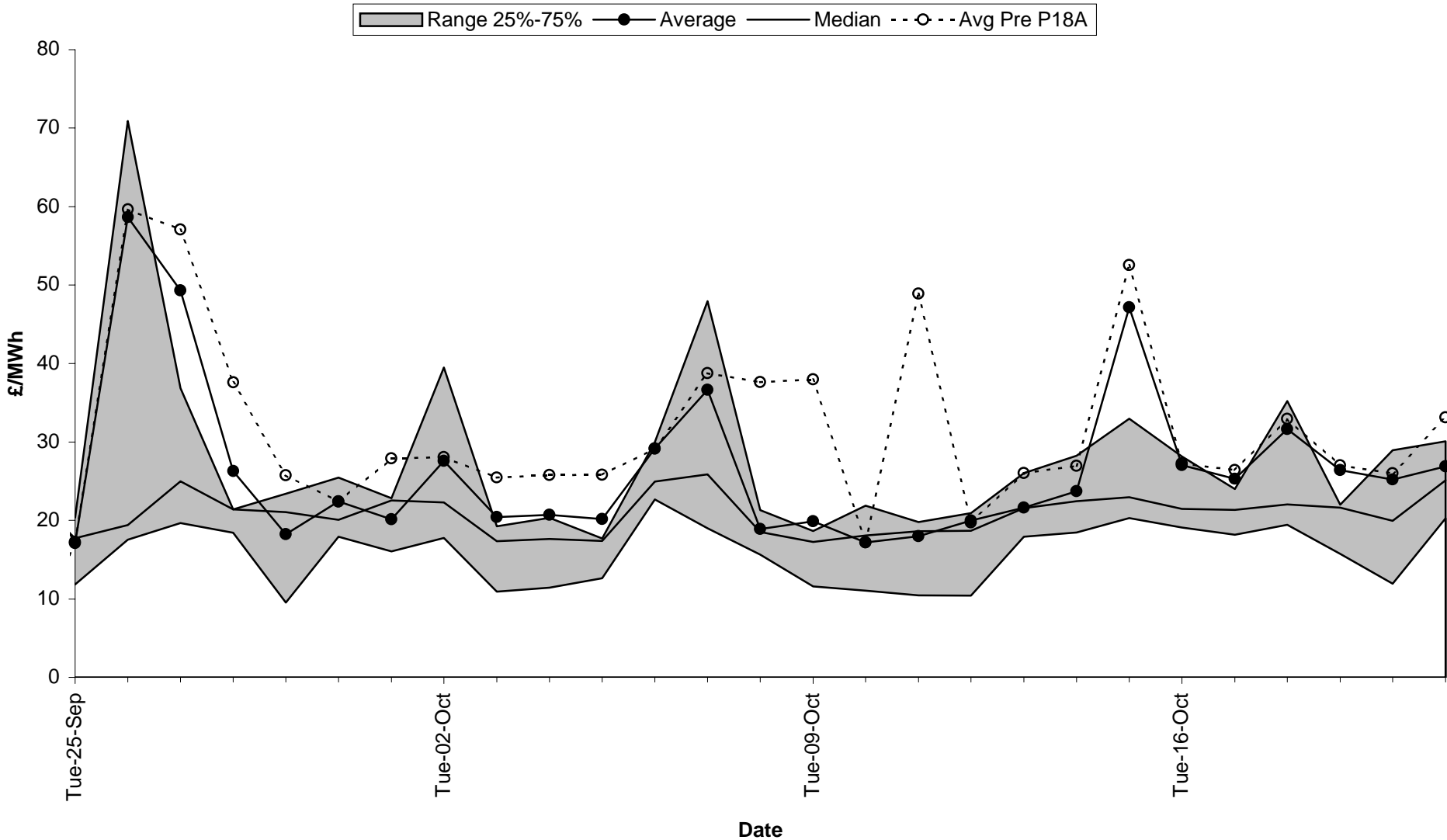


ID	Task Name	Duration	Start	November					December			
				15/10	22/10	29/10	05/11	12/11	19/11	26/11	03/12	10/12
1	P18A Review Business Requirements	41 days	18 Oct									
2	Panel Meeting	1 day	18 Oct									
3	Develop Terms of Reference/Panel Paper	4 days	24 Oct									
4	Panel meeting	1 day	31 Oct									
5	Modification Group Meeting - TOR/Understanding	1 day	02 Nov									
6	Create Report	5 days	05 Nov									
7	Industry Consultation (Fact Find)	6 days	12 Nov									
8	Collate Responses	1 day	20 Nov									
9	Modification Group Meeting	1 day	21 Nov									
10	Create Consultation Document	2 days	22 Nov									
11	Industry Consultation (BSC Objectives/Alternative:	5 days	26 Nov									
12	Modification Group	1 day	03 Dec									
13	Create Inteim Panel Report	3 days	04 Dec									
14	Panel Paper Deadline	0 days	06 Dec									
15	Panel Review Period	4 days	07 Dec									
16	Panel Meeting	1 day	13 Dec									

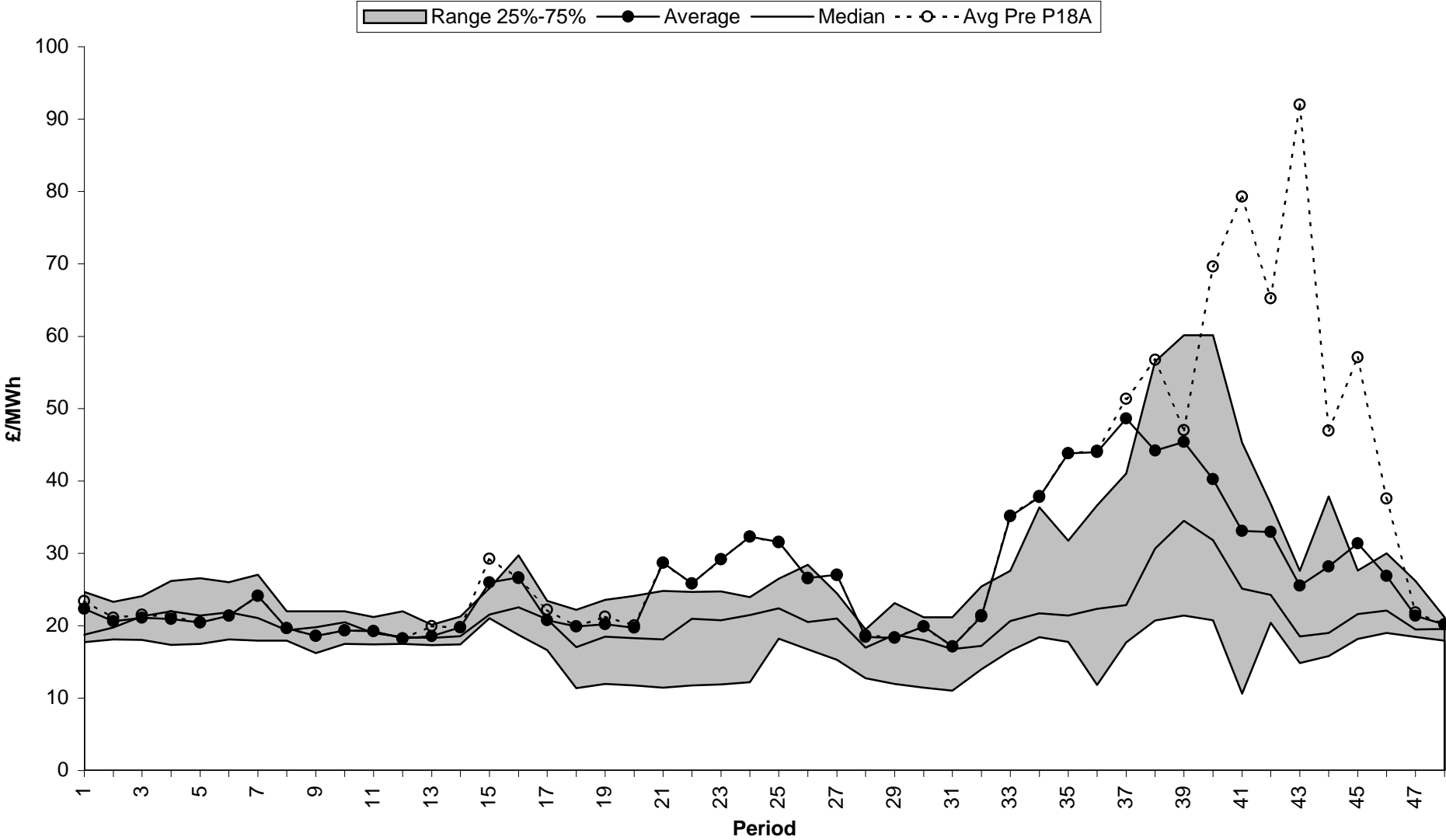
- Process initially concentrates on business requirements
- If recommendation is to proceed, then additional time will be required

Review of P18A Performance

Daily Average



Period Average



Removed Volumes (Key)

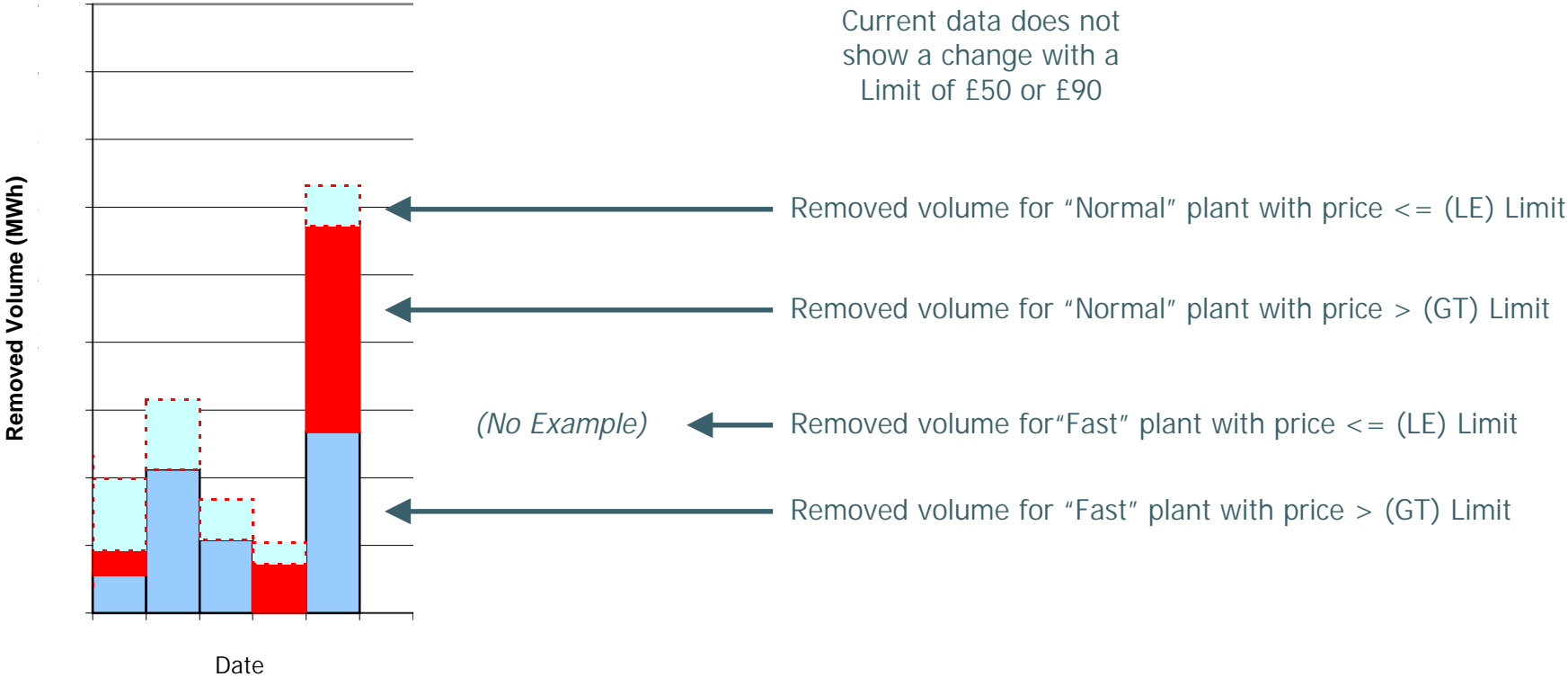


P18A Effectiveness

(Removed volume categorised by a price limit of either £50 or £90/MWh - both graphs the same)



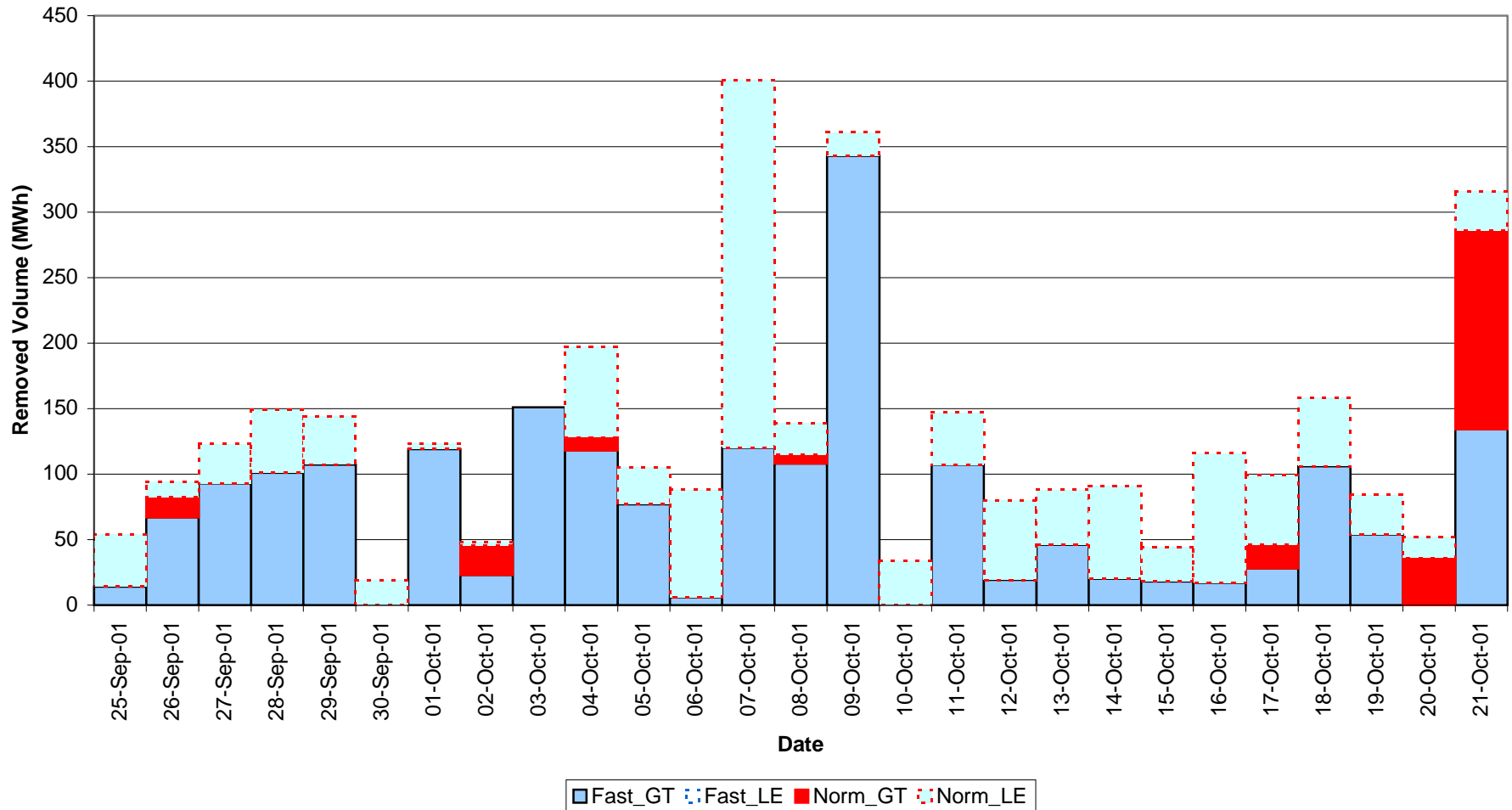
Current data does not show a change with a Limit of £50 or £90



Removed Volumes



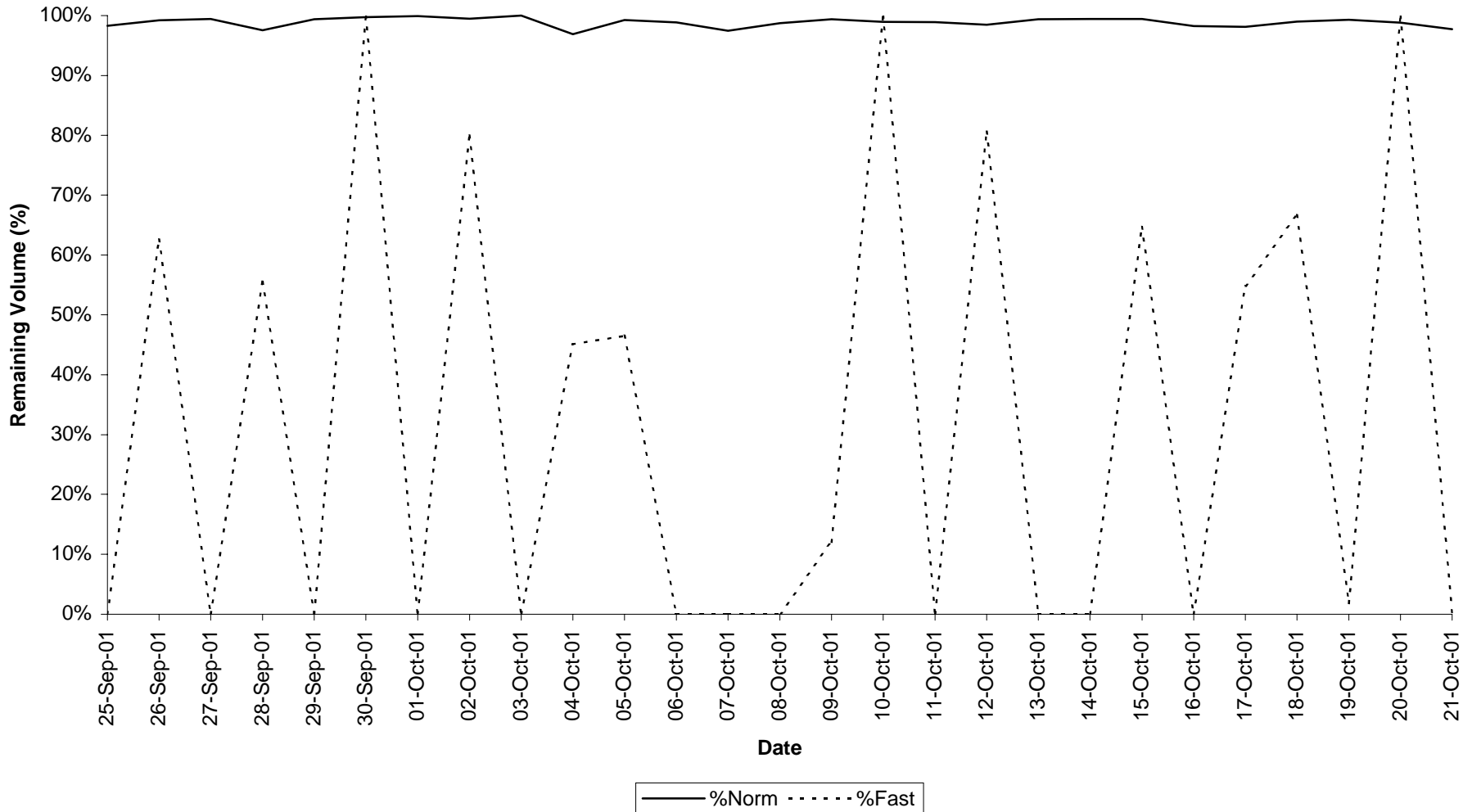
P18A Effectiveness
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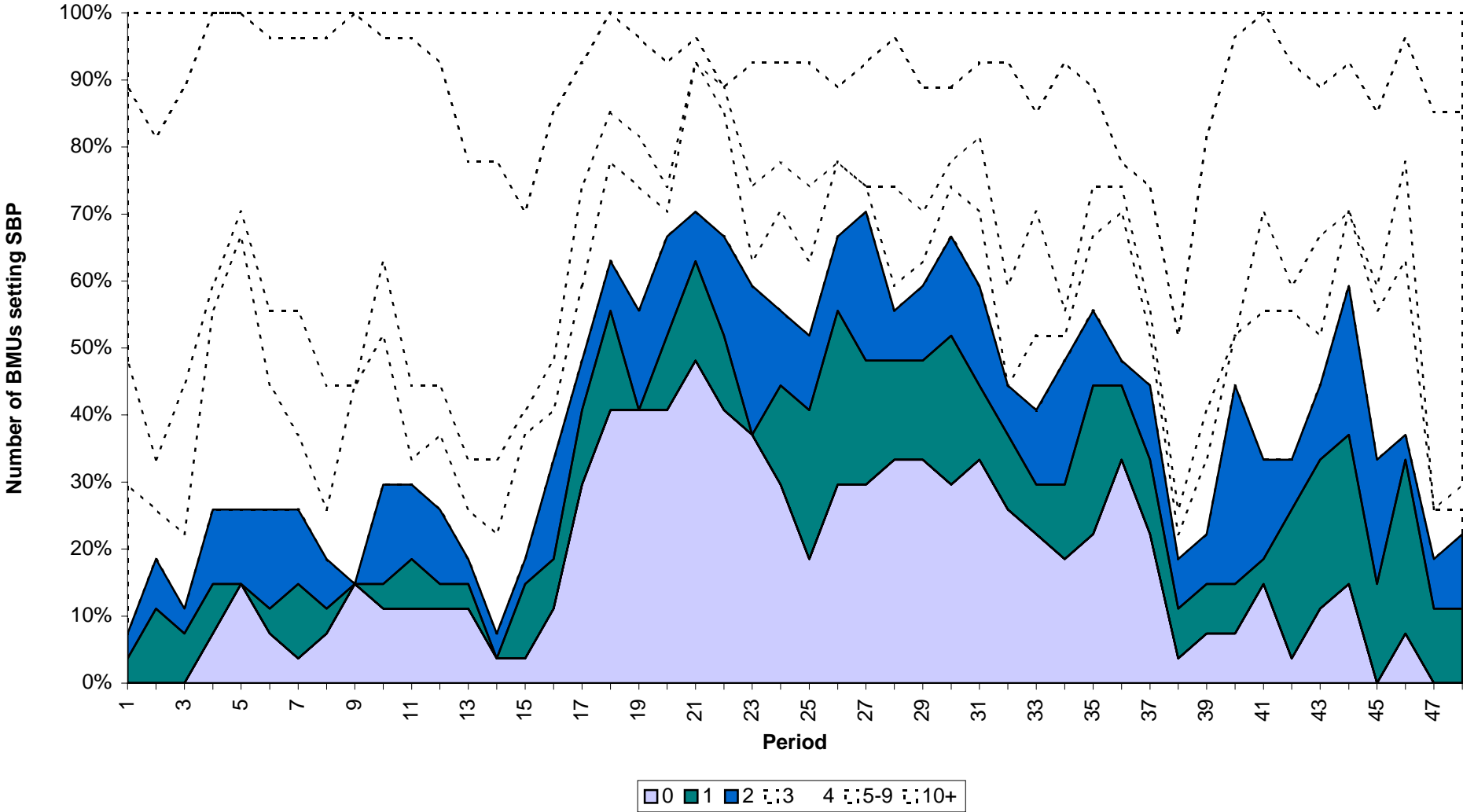
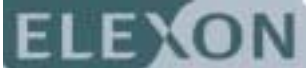
Remaining Volumes



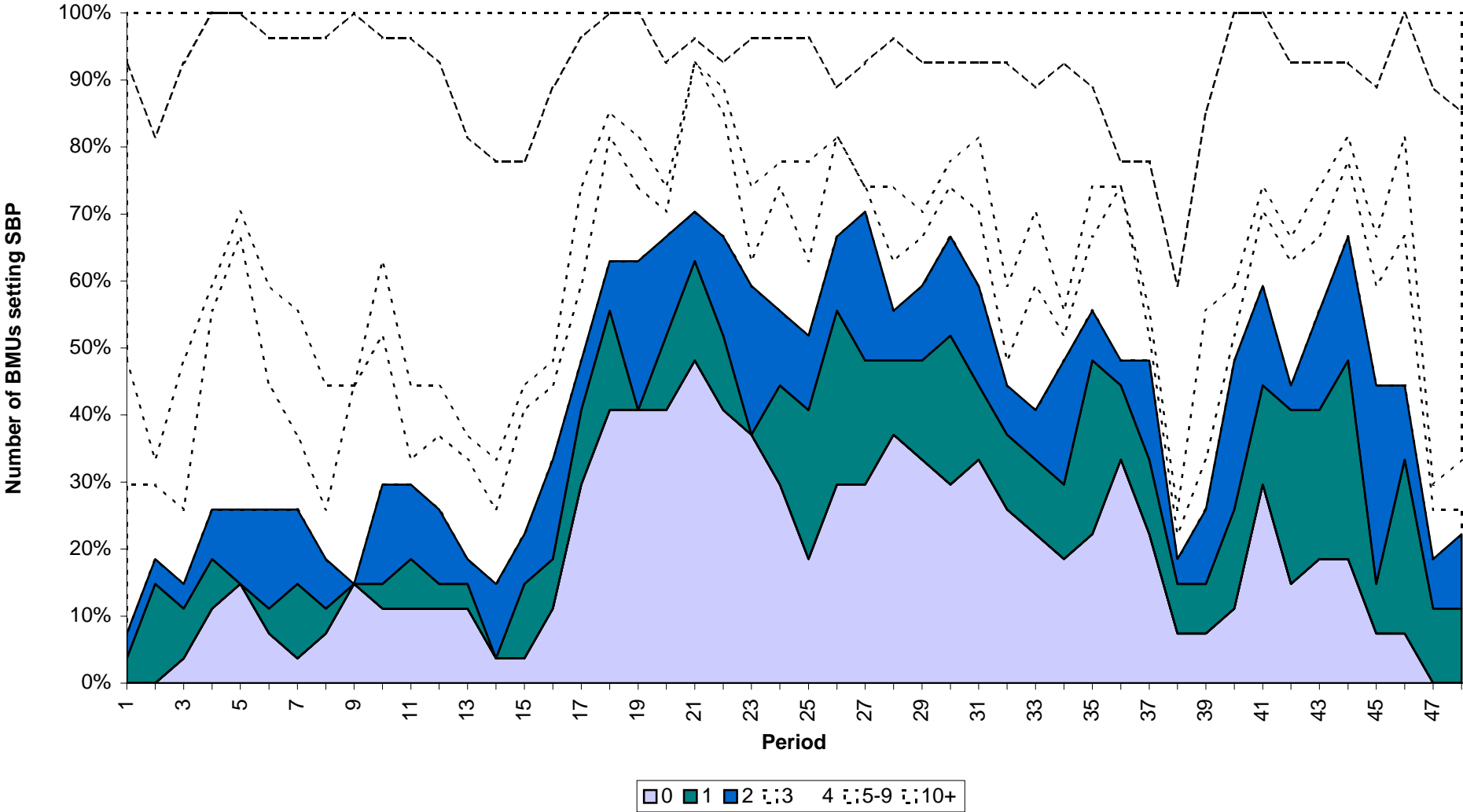
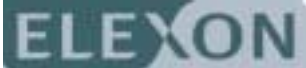
P18A Effectiveness (Remaining Volume)



Stack Size Without P18A



Stack Sizes With P18A



Summary



- P18A is currently working as expected
 - Low impact on “normal” volumes
 - High impact on “fast” response volumes
 - Low impact on stack sizes
- Most impact in reducing later evening peaks
- Other pricing issues are now more noticeable
 - Price peaks due to “system constraints”
 - Default price calculation
 - See P15/P18B Consultation Document & ISG 09/076

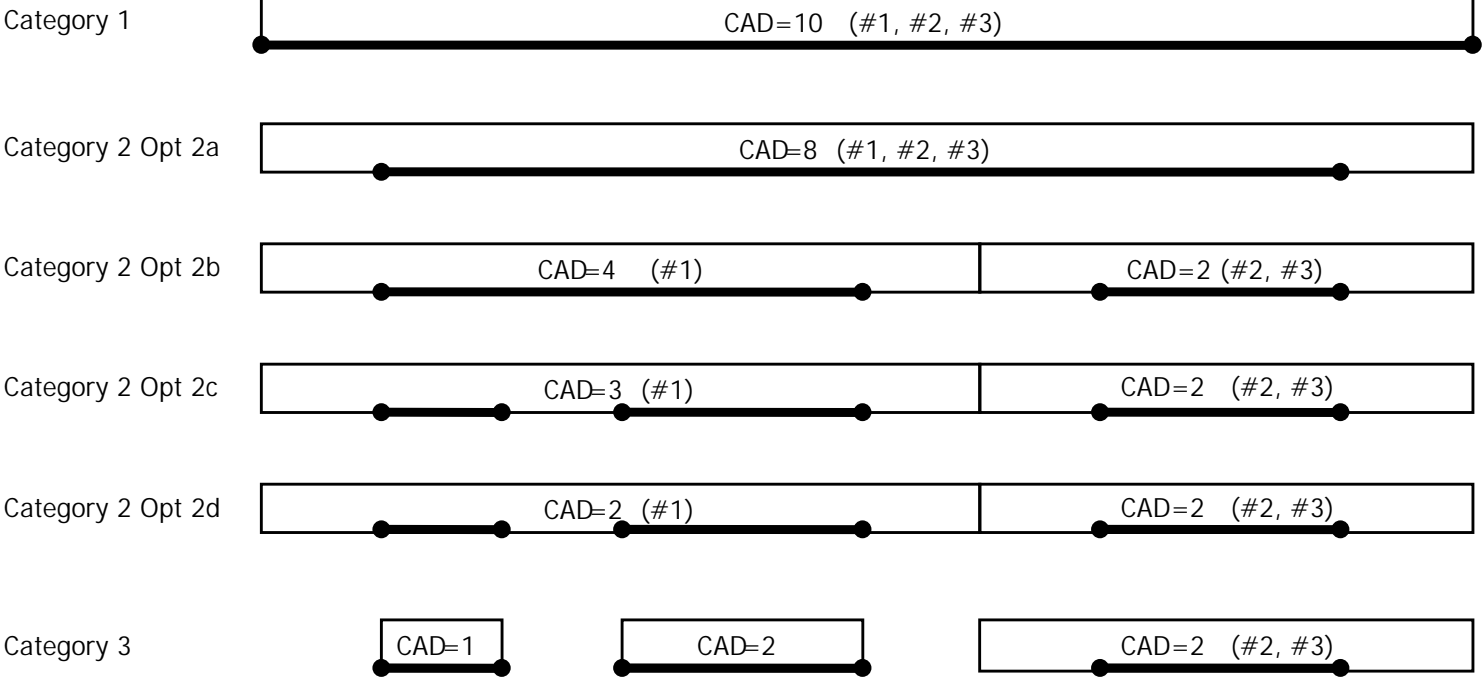
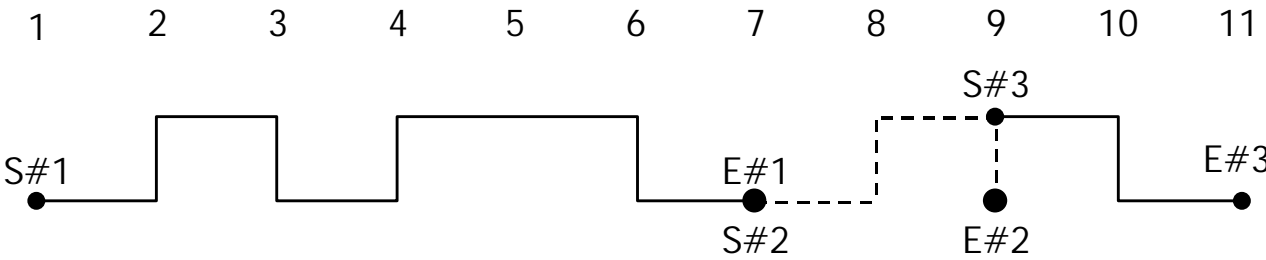
CAD Definitions Review

CAD Definition History

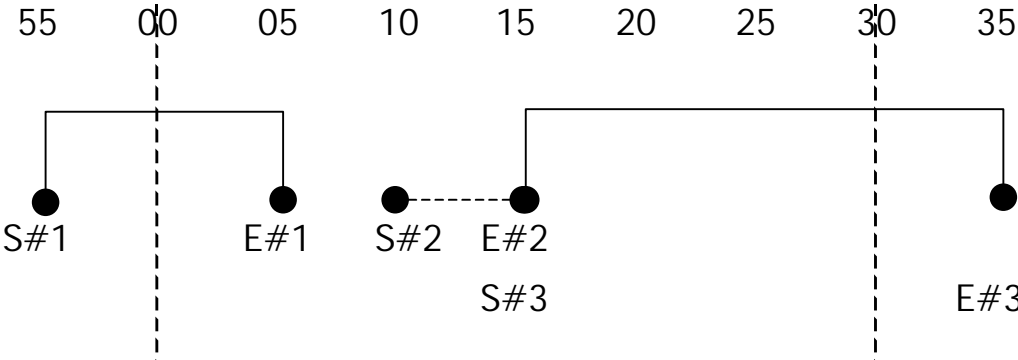
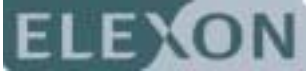


- 3 initial P18A categories
 - 1 - Simple BOA start/end time analysis
 - 2 - BOA against FPN profile analysis
 - 3 - Split BOA into multiple non-zero part-BOA
- CAD Definition 0
 - Does not look into next Settlement Period
- Modification Proposal P38
 - Treats each Settlement Period independently

CAD Categories 1, 2 & 3



CAD1 Options



			<u>Include Volumes</u>
Opt 1a	CAD=10 (#1)	CAD=25 (#2, #3)	none
Opt 1b	CAD=10 (#1)	CAD=25 (#2, #3)	#2 #3 (15 mins)
Opt 1c	CAD=10 (#1)	CAD=20 (#3)	#3 (15 mins)

CAD0 - History



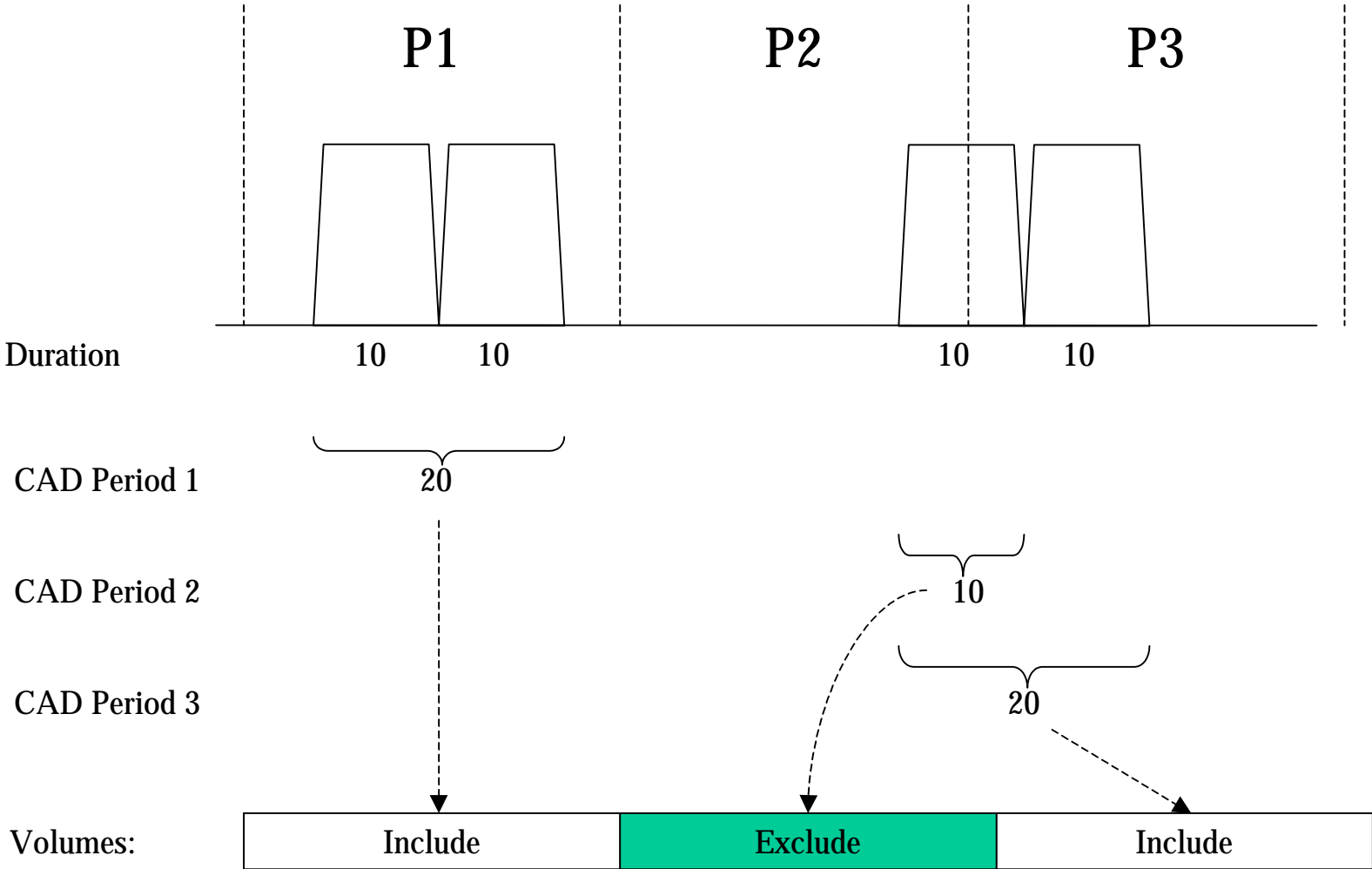
- Concern expressed at meeting on 28 June 2001 that all definitions introduced a delay in publishing prices
- Majority view that attaining good split between energy and system balancing more important
- New CAD0 category introduced in 2nd Consultation document
- Category CAD0 includes any CAD definition which allows prompt price reporting at the end of the real-time period

CAD0 - Definition

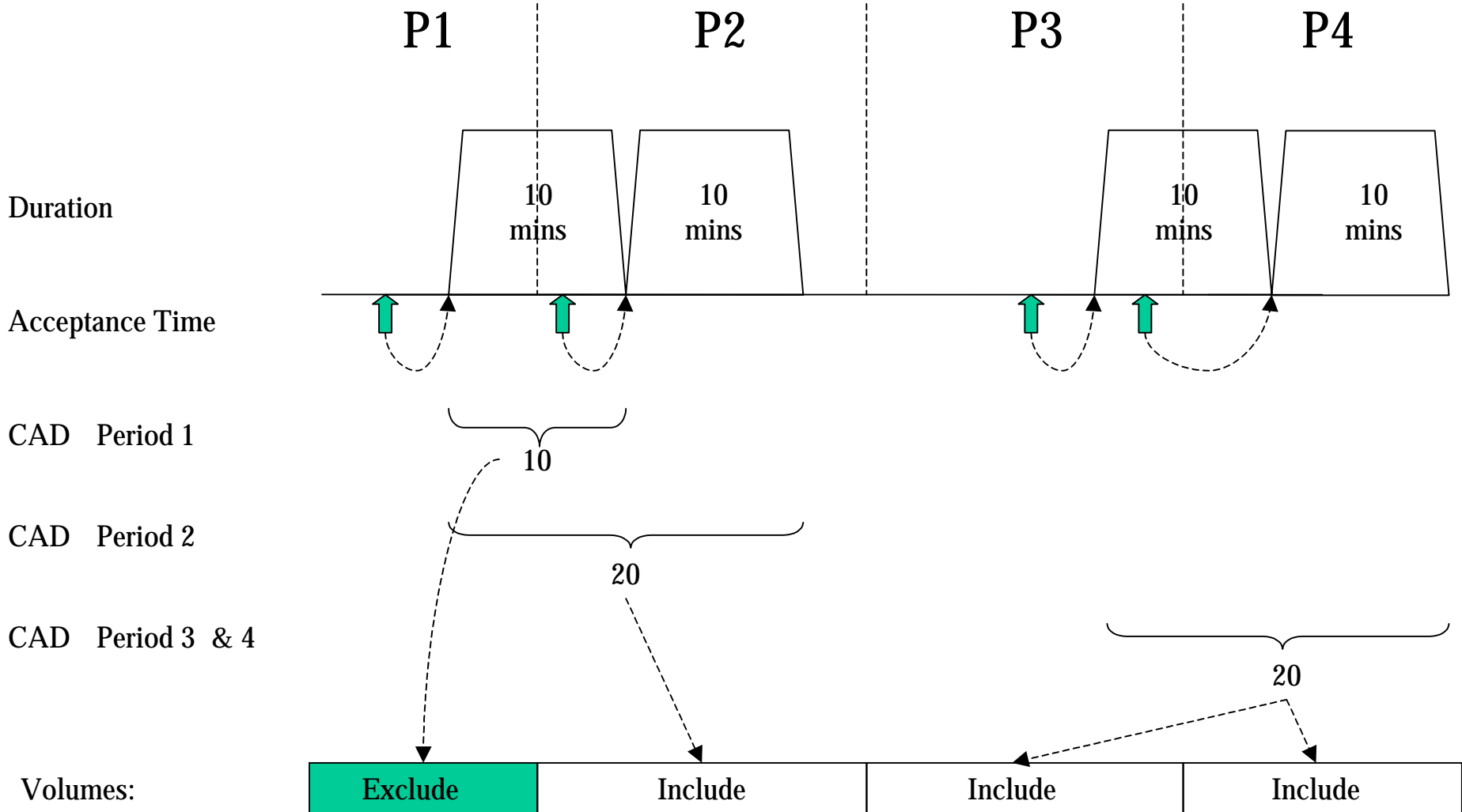


- Any existing P18A CAD Definition can be converted to Category 0
- Do not include any information not “known” at the end of the period concerned.
- Potential anomalies caused by period boundaries
 - BOA taken over period boundary
 - Acceptance times before period boundary

CADO - Anomaly 1



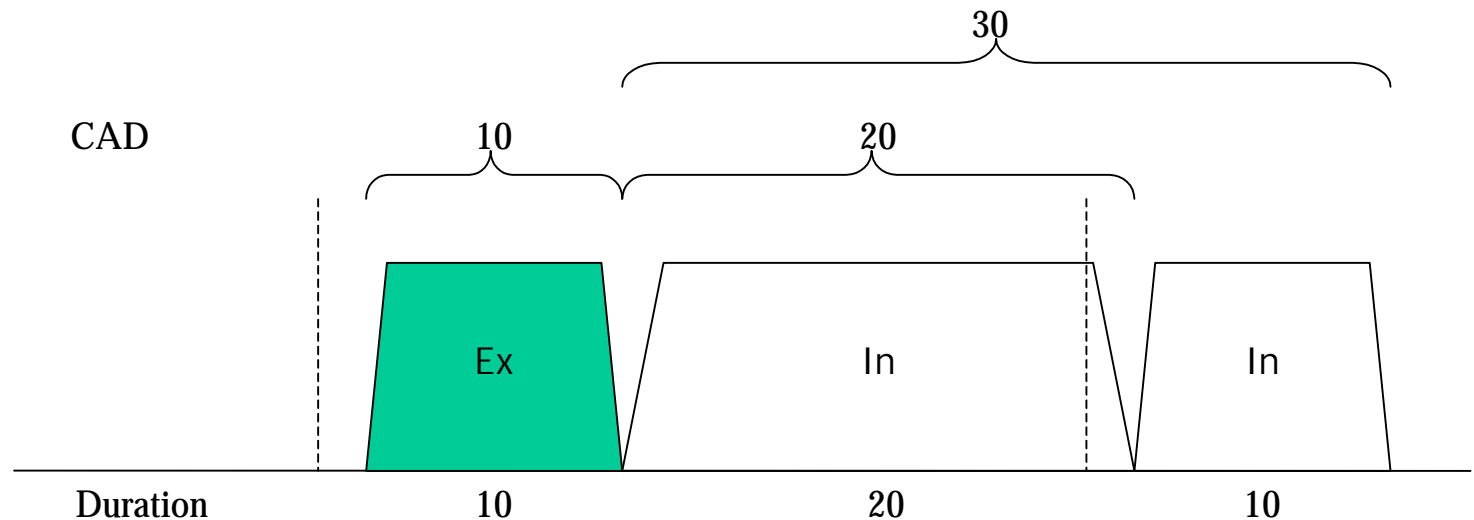
CAD0 - Anomaly 2



CAD0 - As proposed in P18A



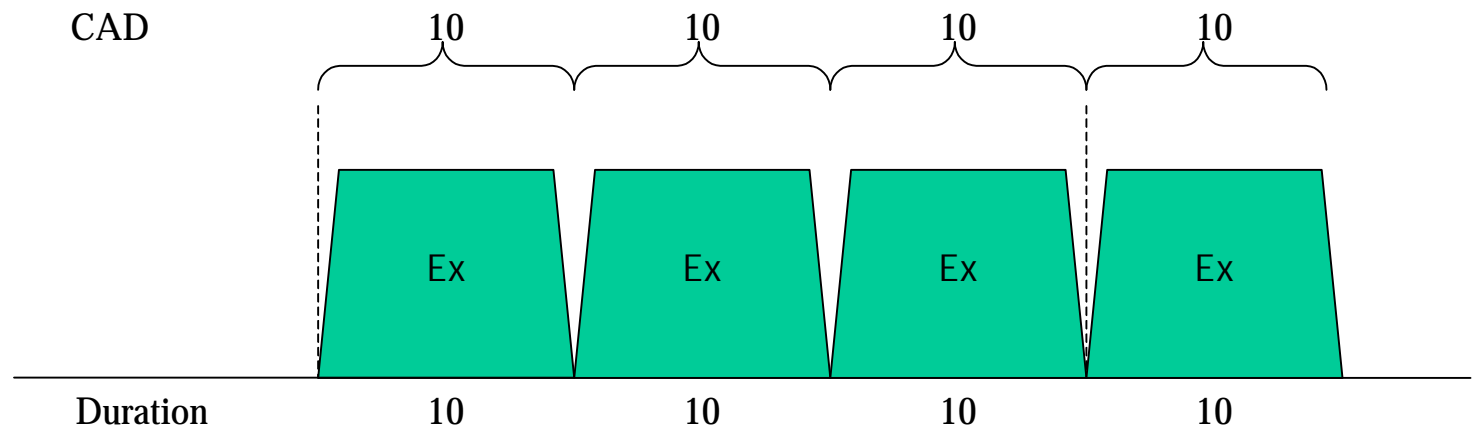
- Decision to include an example CAD0 definition that did not have any issues relating to when acceptance taken
- For a group of acceptances to be formed the first acceptance must be greater than CADL



CADO - Gaming Issue



- A series of acceptances can be excluded by keeping them all short in duration
- Is this a real issue?



P18A Summary 1



- Little desire to wait until Enduring Solution available
- Interim Solution required to reduce exposure to non-P18A prices
- Interim Solution only capable of CAD 0 or 1A
- Do not change the CAD Definition between reconciliation runs for those Settlement Days initially processed using Interim Solution
- Recommend a single set of BSC rules for both Interim and Enduring

P18A Summary 2



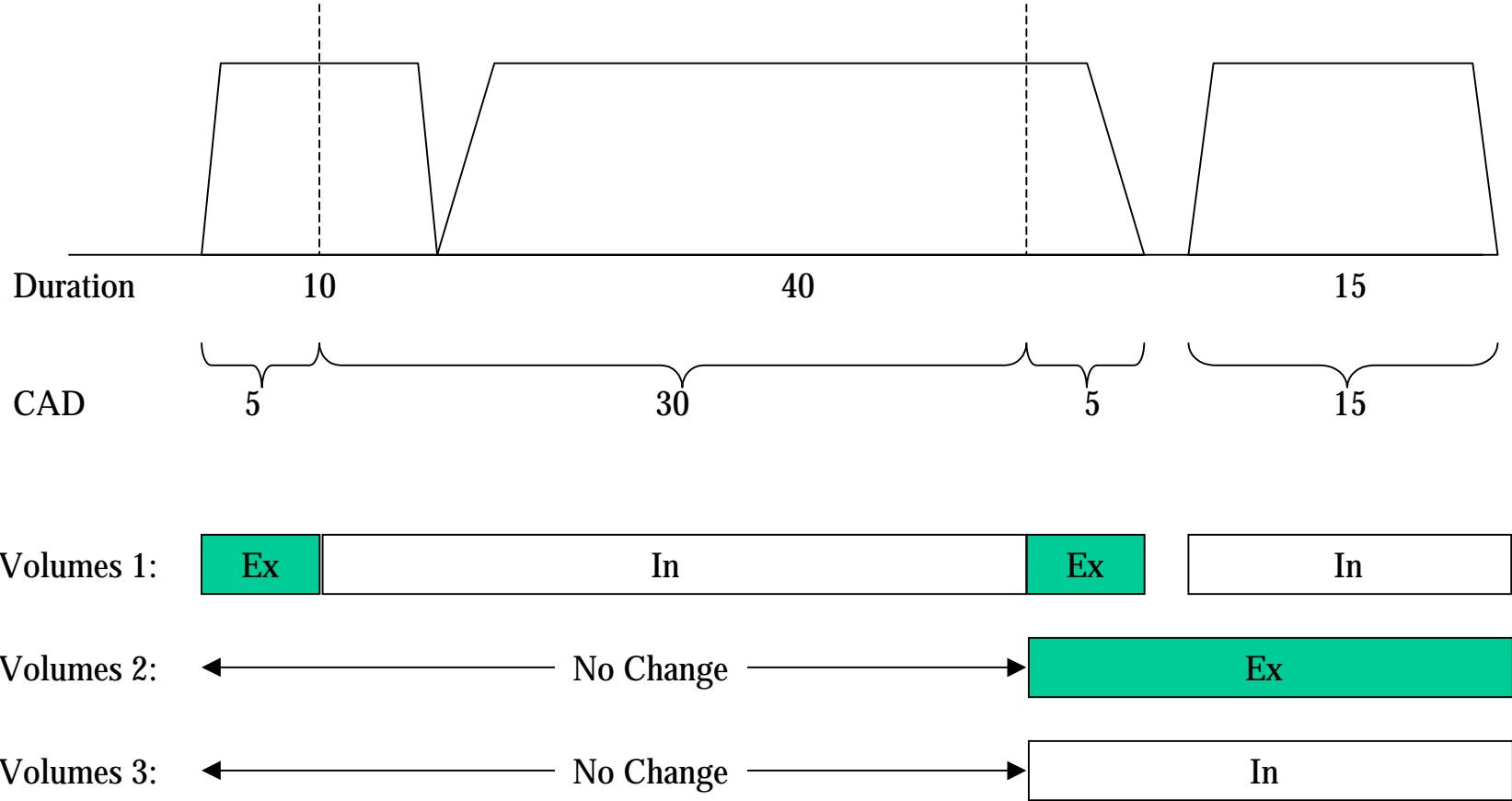
- Choice of CAD Definition 0 or 1A
 - CAD0
 - Introduced too late with insufficient time to consider in necessary detail
 - Too much compromise on CAD definition, especially when compared to CAD3
 - Potential gaming issues with proposed definition
- ∴ CAD Definition 1A for Interim and Enduring

P38 - Introduction



- Main motivation to ensure prompt price reporting
- Secondary justification suggests that as Bids & Offers are priced differently in each period, the treatment of BOAs should reflect this

P38 - Example



Which is the most appropriate Definitional Alternative?

P38 Initial Analysis 1



- Data studied between 1 Jul 01 and 22 Oct 01
- 44 BMU Offer Volumes with price > £500 / MWh
 - 7 have Bid Offer numbers other than 1
 - 4 have a volume < 1 MWh (P10)
 - 11 have a volume > 20 MWh - significant events?
 - 21 show no Offer price change in the adjacent periods
- 1 has a price change and also crosses the period boundary

P38 Initial Analysis 2



- P40 on 03 July 01 for T-DINO-3
- Acceptances

Acceptance Id	From Time (GMT)	To Time (GMT)
994	18:59	19:00
	19:00	19:05
995	19:04	19:09

- Offer Prices

From Time (GMT)	To Time (GMT)	Offer Price (£/MWh)
18:30	19:00	5000
19:00	19:30	145

- In this case the P18A CAD would be 10 and it would have been removed

Potential CAD0 Definitions



- P18A Category 1 Equivalents:
 - CAD0 version of 1a
 - CAD0 version of 1b
 - CAD0 version of 1c
- CAD0 Definition proposed in 2nd P18A Consultation
- P38 Initial Definition proposed in P38
 - Remove individual BOA
 - One BOA removed all BOA removed
 - Use total duration within period
- Must also compare rationale to CAD 1-3

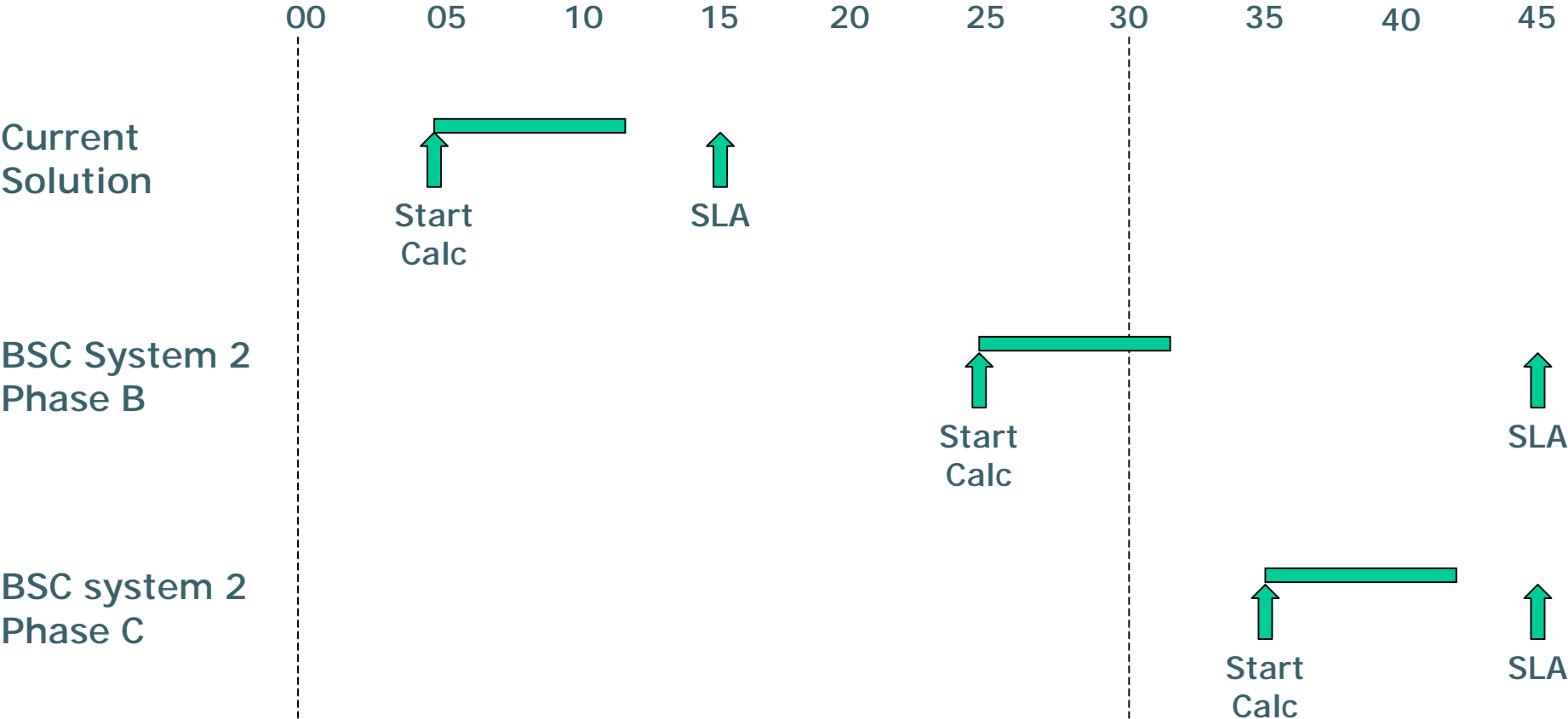
Timeliness Of Price Reporting

Price Reporting



- A value for $CADL_{\max}$ is not explicitly stated in BSC, but the definition of CAD restricts it to 30 minutes
- Issue that Section V was not updated during P18A (See Panel 32/022)

Planned Approach



Reporting Options



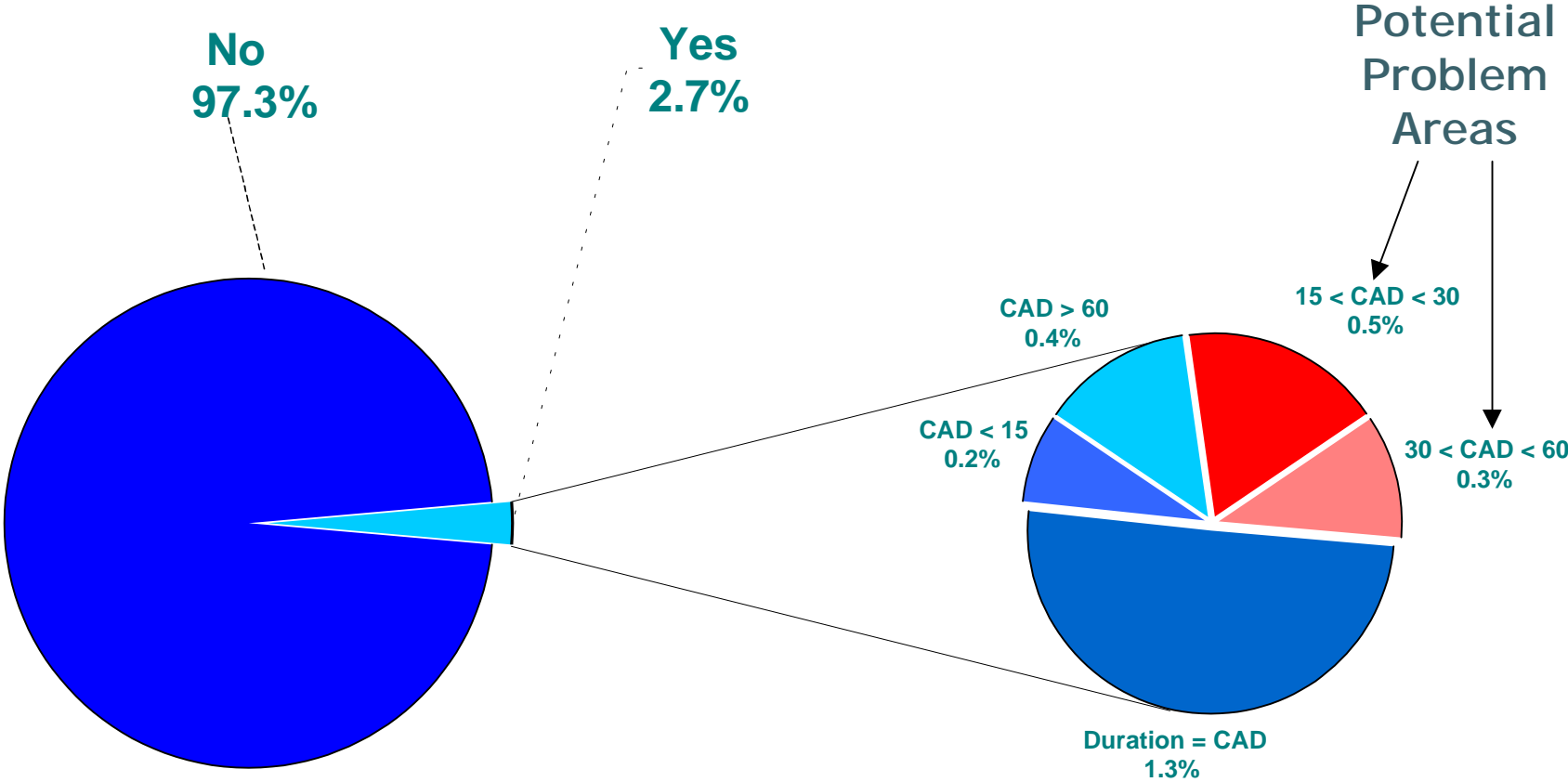
CAD Definition	Option	Start calculation after 5 mins	Start calculation after 35 mins	Comments
Current	Current	-	Y	Present Solution
	"Indicative"	Y	-	Reported prices will be more "indicative" and potentially less accurate – but how much?
	Report Twice	Y	Y	Reporting prices twice will mean a change to BMRS volumetrics
P38 or Alternative	"Prompt"	Y	-	

Both options 1 and 2 can be combined with a reduction in $CADL_{max}$, i.e. a new limit of 20 minutes would conform to the design of BSC Systems Phase B

What is the Materiality?



Duration < 15 and spans into next Period?



Implementation Issues

Introduction



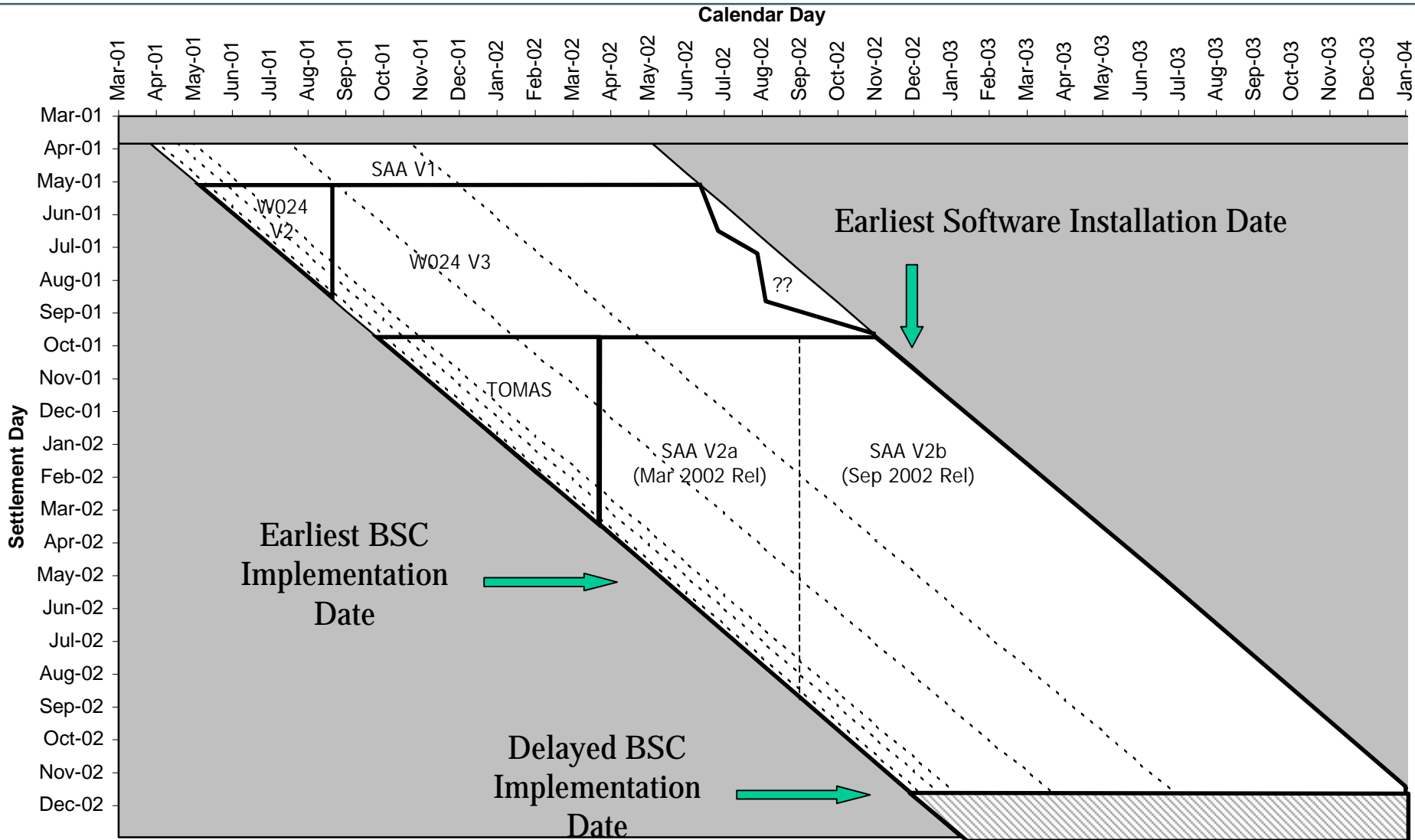
- Implementation issues should not drive solution
- However implementation issues can dramatically impact timescales
- Firm plans cannot be made without positive Ofgem determination:
 - Ofgem can only decide on an Alternative Modification against P38 - not a review of P18A
 - Does a P38 Alternative Modification need to adhere to both the prompt reporting, and period boundary principles?
- Some solutions more natural for early implementation than others

Implementation Examples

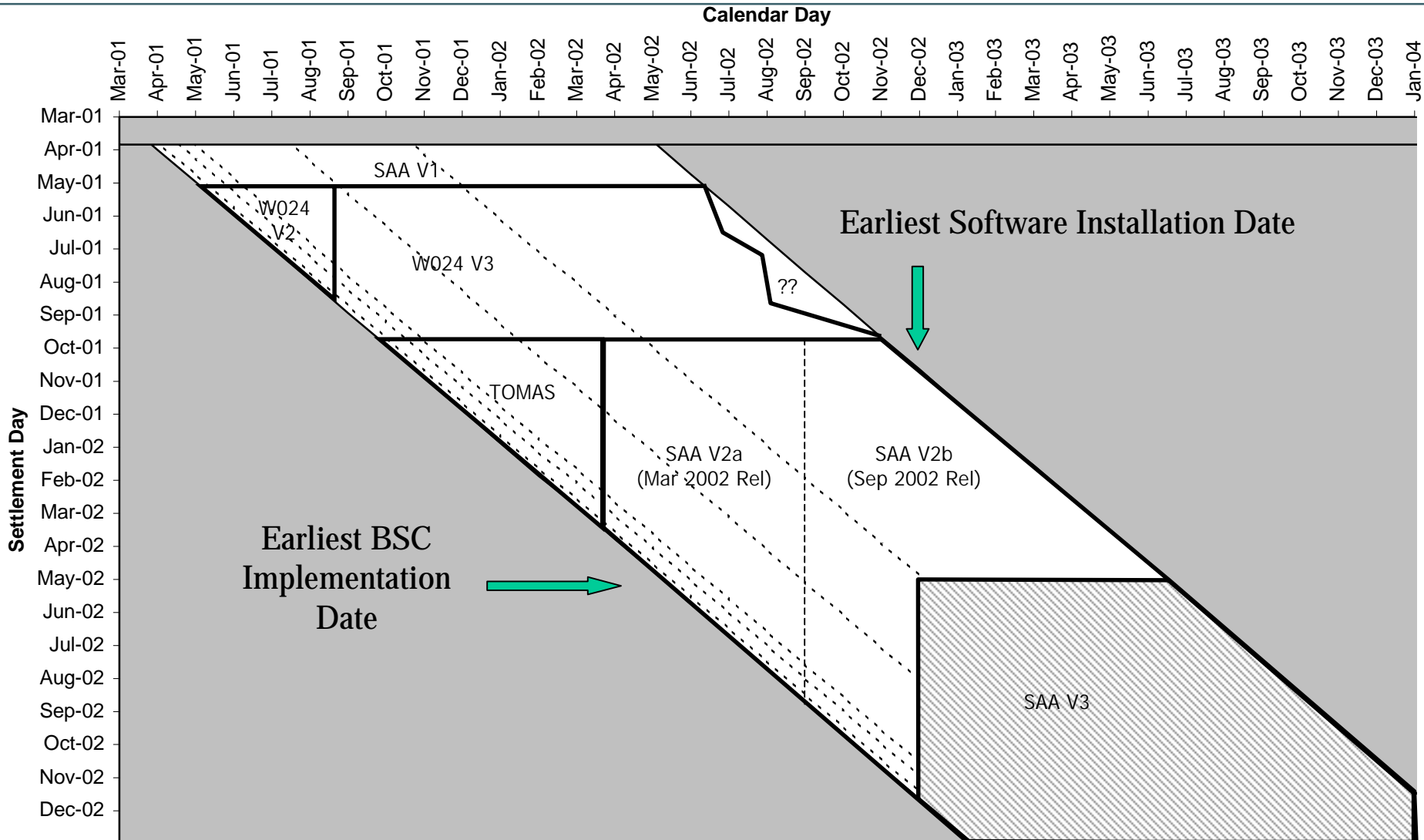


- Based on ideas presented to Panel on 18 Oct 01
- Dates chosen purely to illustrate issues
- Assumptions:
 - New CAD Definition proposed - i.e. prices will change
 - “Medium” complexity software change
 - “Earliest BSC Implementation Date” should be after P18A Interim Solution removed - i.e. May 2002
 - “Earliest Software Installation Date” should be after P18A Enduring Solution - i.e. November 2002

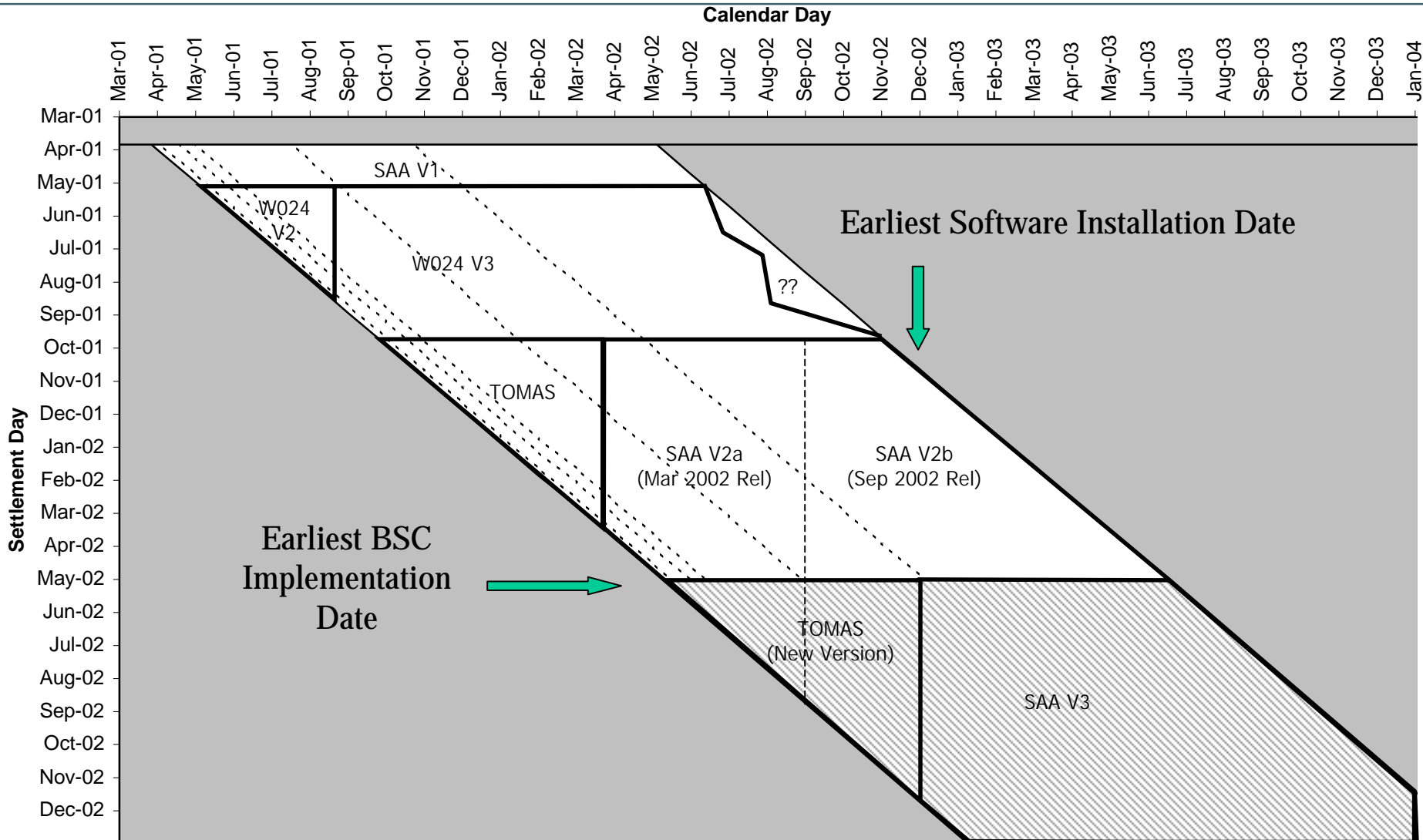
Natural Implementation



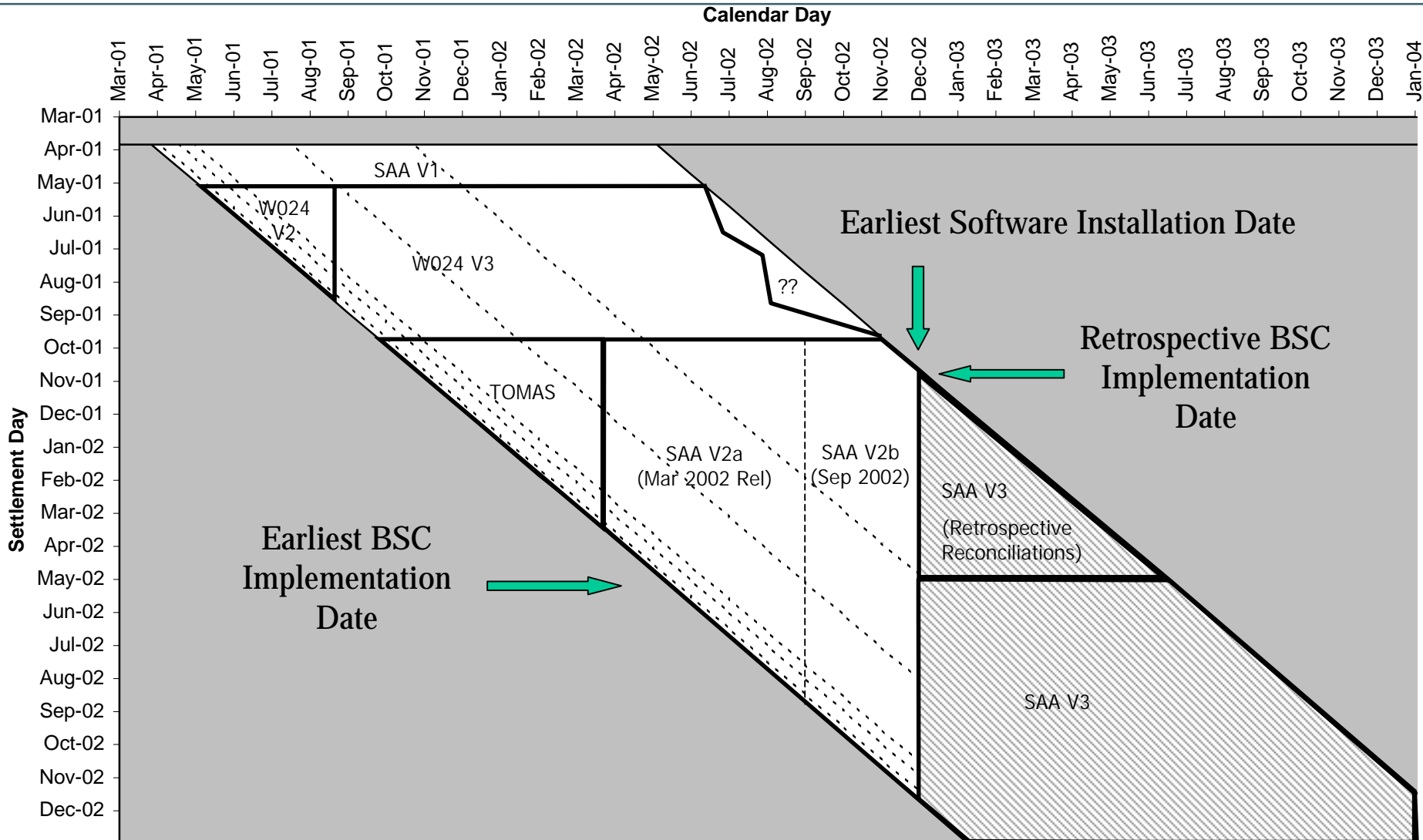
Early Implementation



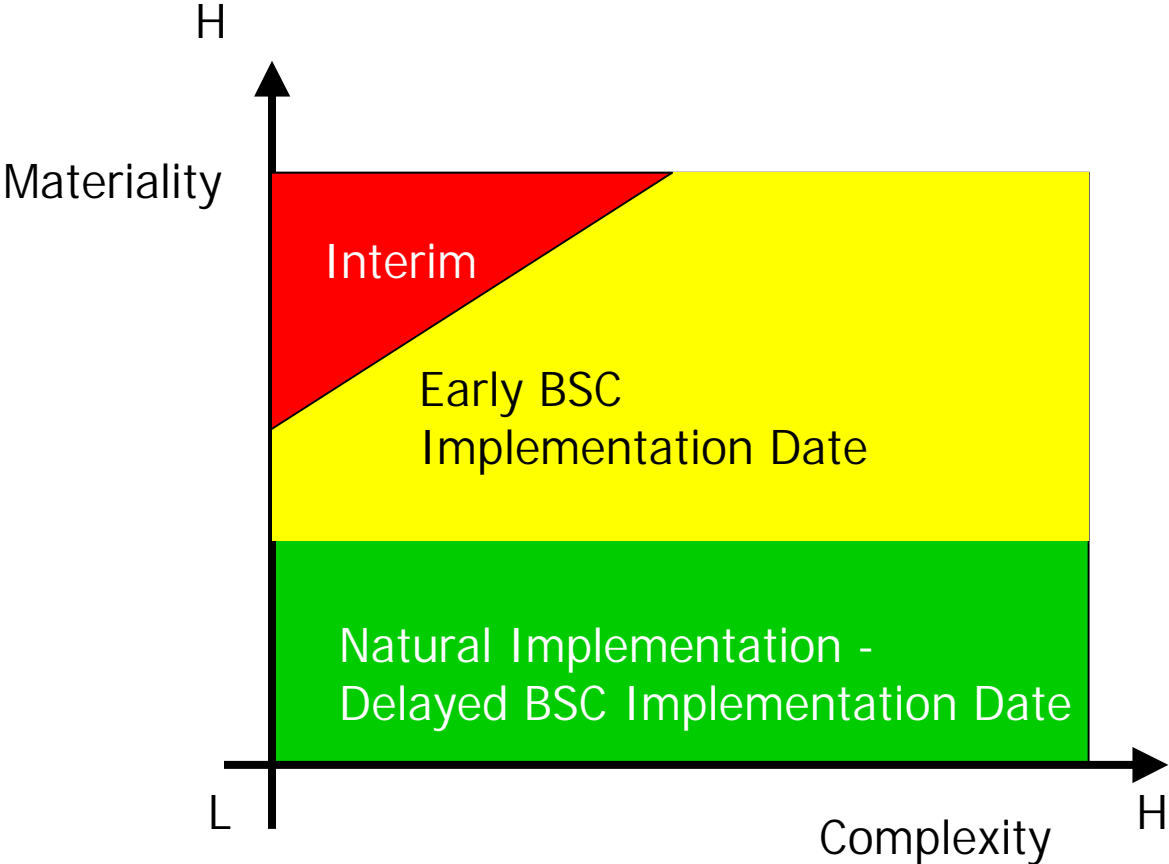
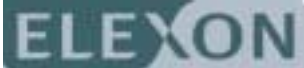
Early Implementation with Interim Solution



Retrospective Implementation



Implementation Complexity vs Materiality

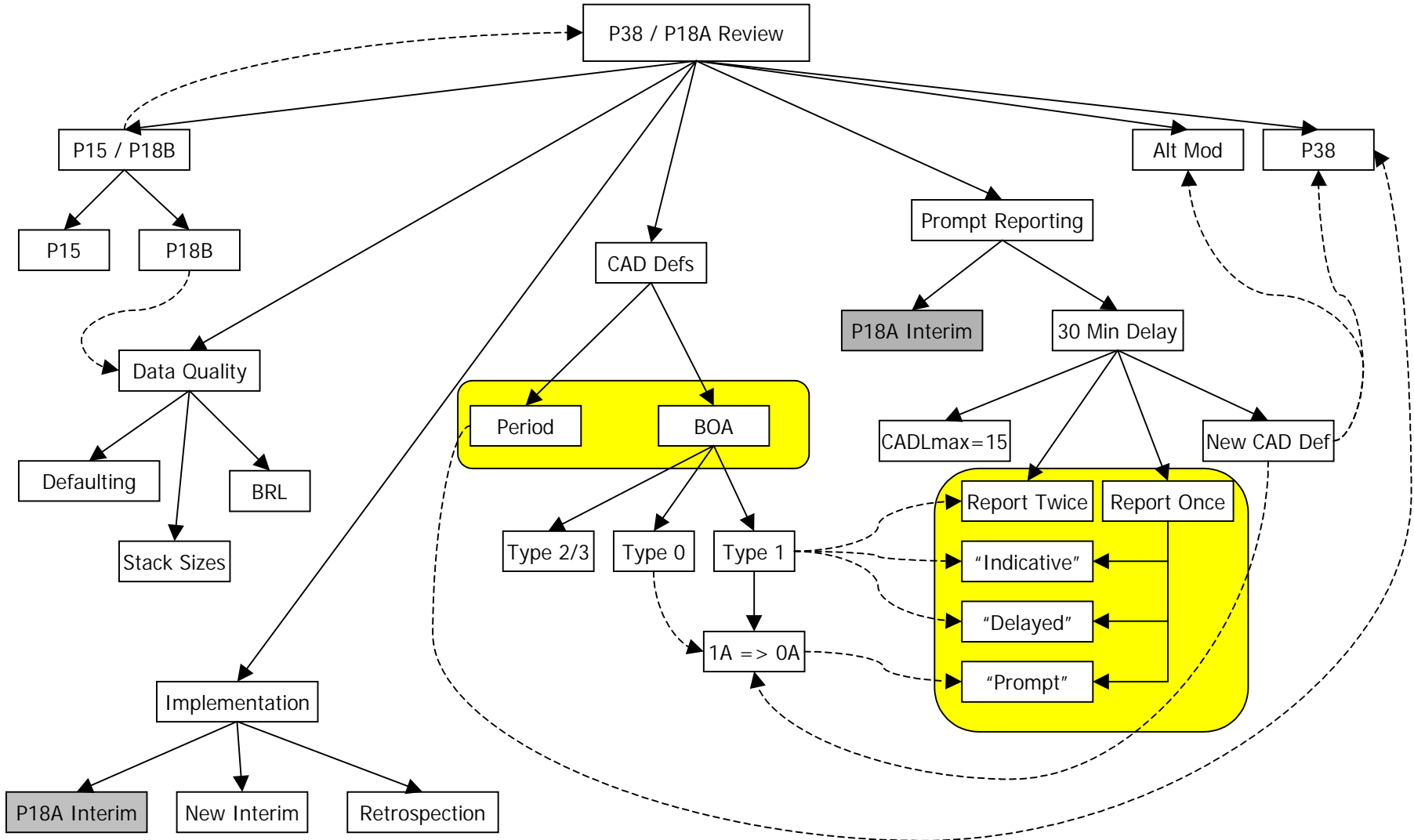


Market Confidence



Consultation Process

Complex Interactions



First Consultation

- Recognise complex interactions
- Initially concentrate on business issues
- First Consultation
 - Fact Finding
 - Value of Accurate / Prompt Prices
 - CAD Definition: Period or BOA based
- What Else?

Promptness vs Complexity



CAD Definition	Option	Price Reporting				Complexity
		5/15 Mins	5 / 15 Mins	x / y Mins	35 / 45 Mins	
		Correct	Indicative	Correct	Correct	
Existing	Current	-	-	-	Y	<div style="text-align: center;"> Low High </div>
	CADL _{max}	-	-	Y	-	
	Indicative	-	Y	-	-	
	Report Twice	-	Y	-	Y	
New	1A => 0A	Y	-	-	-	
	P38 Or Alternative	Y	-	-	-	