



# **IFRS 15 workshop material**

# IFRS 15 next steps



Rolls-Royce

## Workshops today

- Walkthrough of IFRS 15 changes to 2015 results for Civil Aerospace for:
  - revenue
  - profit
  - balance sheet
- Examples to contrast current and IFRS 15 accounting
- Modelling IFRS 15

# Highlights



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- Significant non-cash adjustments to OE and AM revenue and profit recognition in the near-term
  - Heavily influenced by high production volumes; new engine programmes and market share gains in aftermarket
- No change over product life cycle to profit achieved
  - Same overall profit recognised per engine
- No change to cash flow

# Scope of impact Civil Aerospace



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## Civil Aerospace OE revenue

Large Engine OE

Business jet and  
V2500

Installed OE

Spare  
Engines



Around 50% of OE  
revenues generate  
positive cash margin

- Typical range of cash losses on installed large engines £1-2m
- Targeting cash break even on XWB-84 by 2020
- Cost reduction activity underway to reduce the average installed engine cash loss over the next few years

## Civil Aerospace AM revenue

Large Engine AM

Business/  
Regional V2500

TotalCare® &  
CorporateCare®

Time &  
Materials



Around 1/3 of AM  
revenues accounted  
for on a 'time &  
materials' basis

- Around 2/3 of aftermarket revenues affected by IFRS 15
- Over 80% of long term contracts are pay as you go style contracts
- Pay at shop visit not materially impacted by IFRS 15

# Estimated IFRS 15 changes – 2015 Civil OE



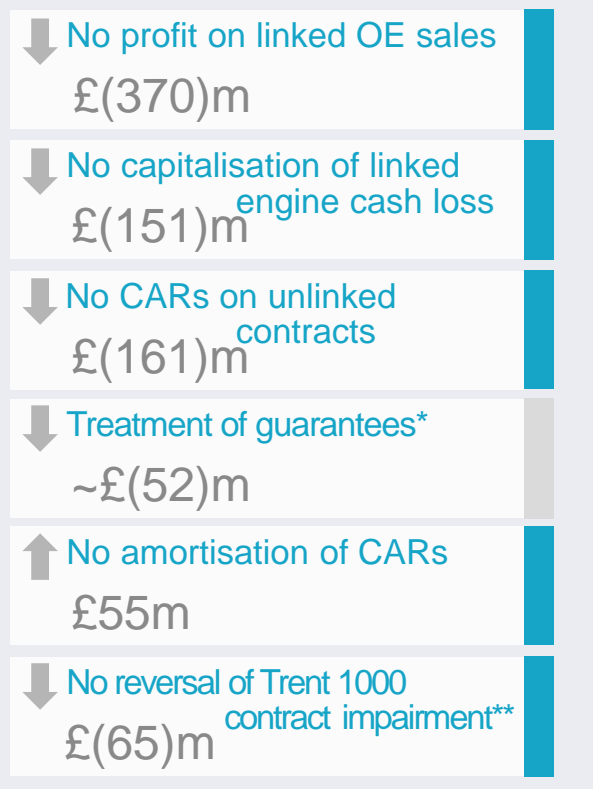
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## Underlying Revenue



£(734)m

## Underlying Profit



£(744)m

No change to cash flows from any of the revenue and profit changes

Note: All adjustments shown pre-tax effects

\* Based on Initial assessment

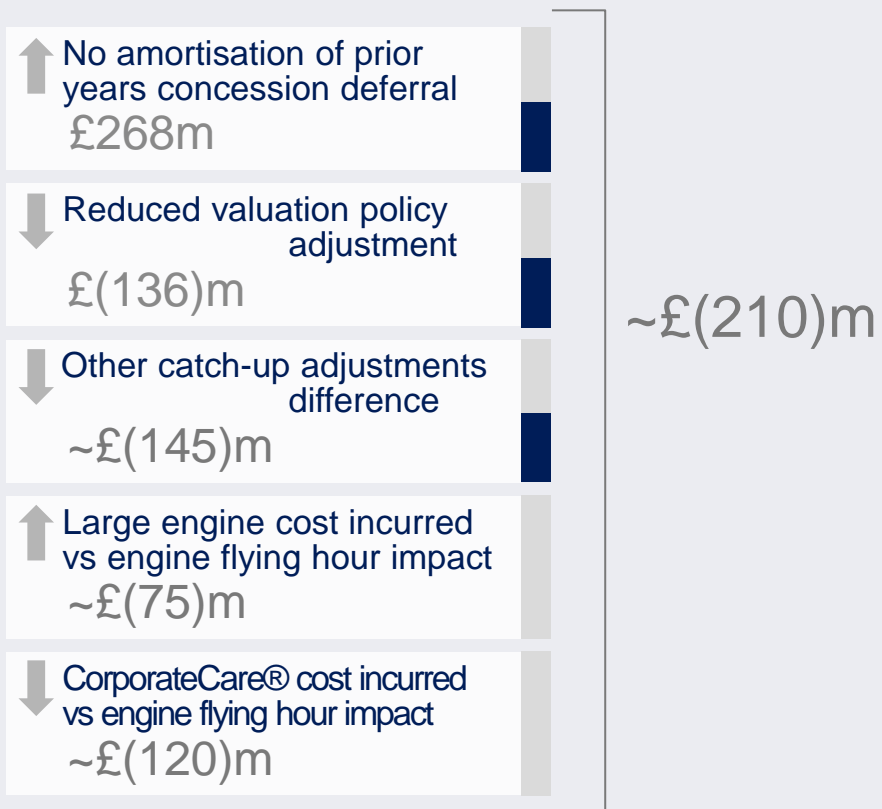
\*\* Relates to £50m CARs impairment reversal and £15m related provision release

# Estimated IFRS 15 changes – 2015 Civil AM

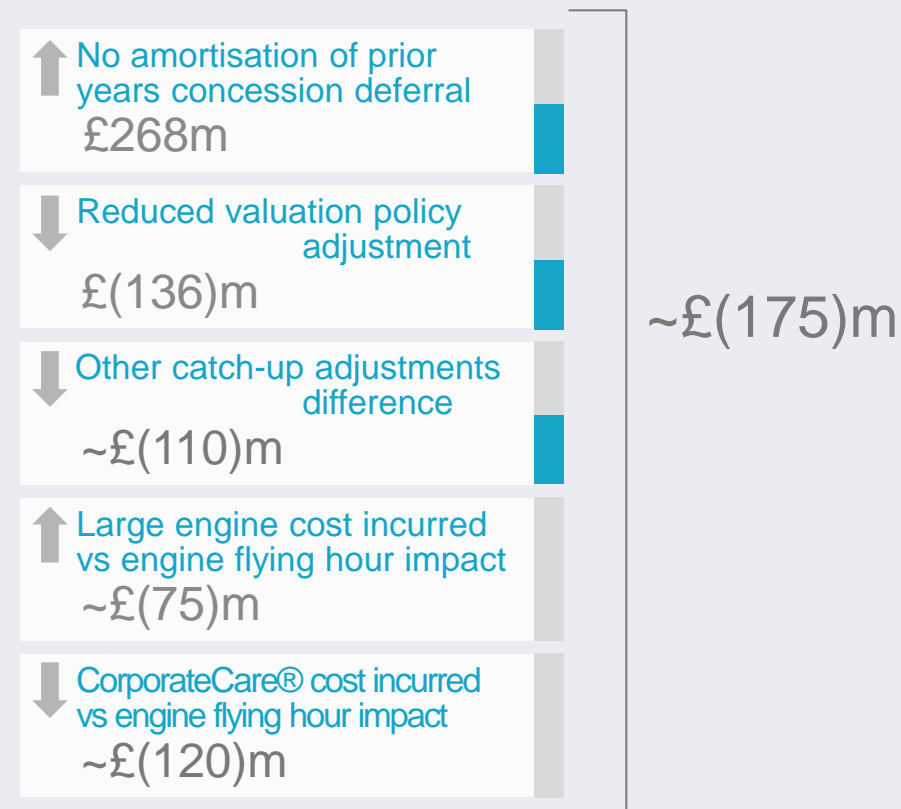


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## Underlying Revenue



## Underlying Profit



No change to cash flows from any of the revenue and profit changes

# Estimated IFRS 15 changes

## Civil 2015 balance sheet – pre-tax adjustments



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### Intangible Assets

↓ Reversal of the CARs balance

£(0.4)bn

### TotalCare® net assets

↓ Reversal of cumulative linked contract profit reported ahead of cash

~£(2.3)bn

↓ Transition from flying hour to cost basis

~£(0.8)bn\*

### Total Impact

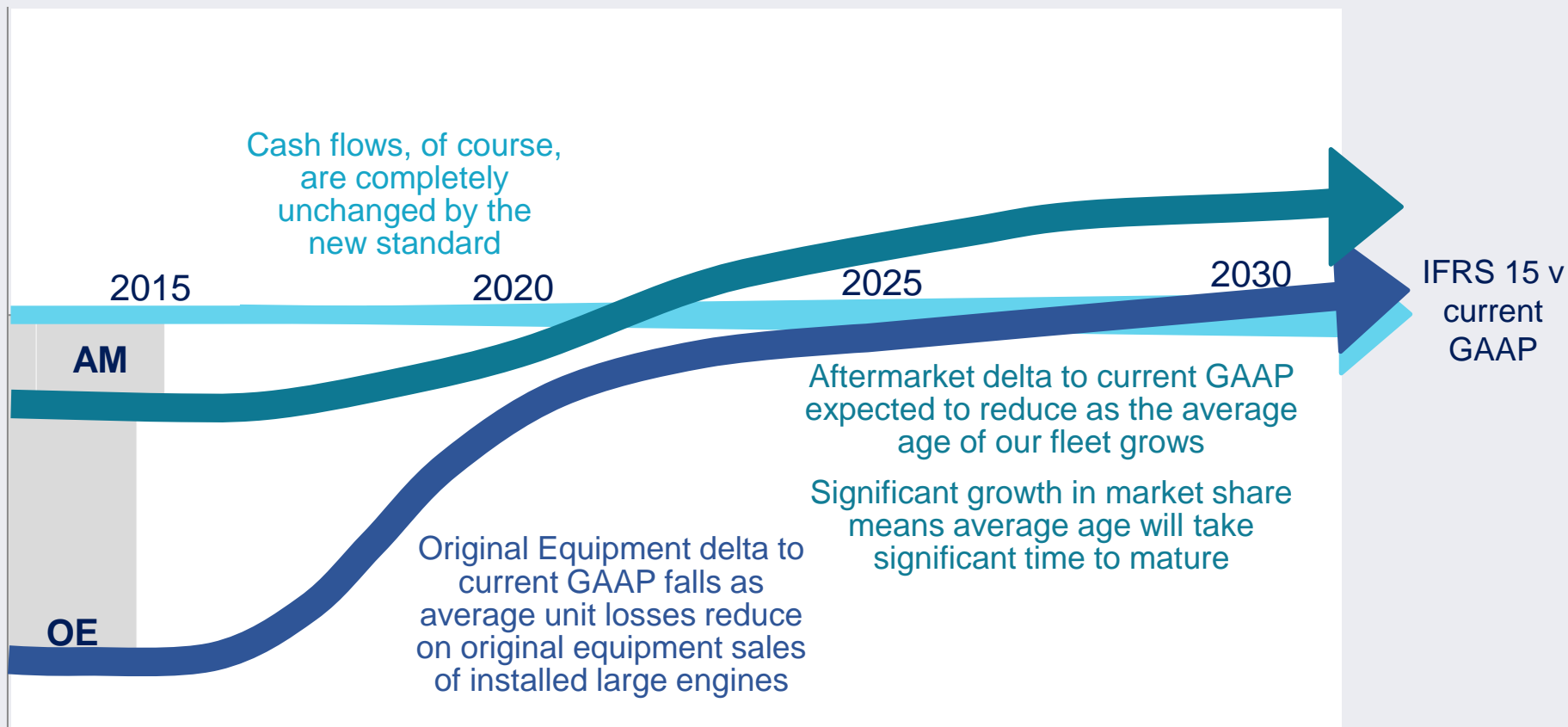
↓ ~£(3.5)bn\*

\* based on Initial assessment – more detailed assessment at the date of transition may result in a materially different outcome

# IFRS 15 v Current GAAP



Rolls-Royce







# **Andrew Dickinson**

Chief Financial Officer – Civil Aerospace



## Workshops today

- Walkthrough of IFRS 15 changes to 2015 results for Civil Aerospace for:
  - revenue
  - profit
  - balance sheet
- Examples to contrast current and IFRS 15 accounting
- Modelling IFRS 15

# Rules governing the 'Capitalising' of engine losses will change under IFRS 15



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Cash \$m	10 engines		
Gross revenue			100
Concession			(60)
Net revenue		1	40
Cost			(50)
Margin			(10)

Current accounting	Year 0	Years 1-15	Total
Net revenue	2 50	-	50
Cost of sales	(50)	3 (10)	(60)
Margin	-	(10)	(10)
CARs	10	-	
Cash	(10)		(10)

IFRS 15	Year 0	Years 1-15	Total
Net revenue	40	-	40
Cost of sales	(50)	5 -	(50)
Margin	4 (10)	-	(10)
Cash	(10)		(10)

## Example Figures

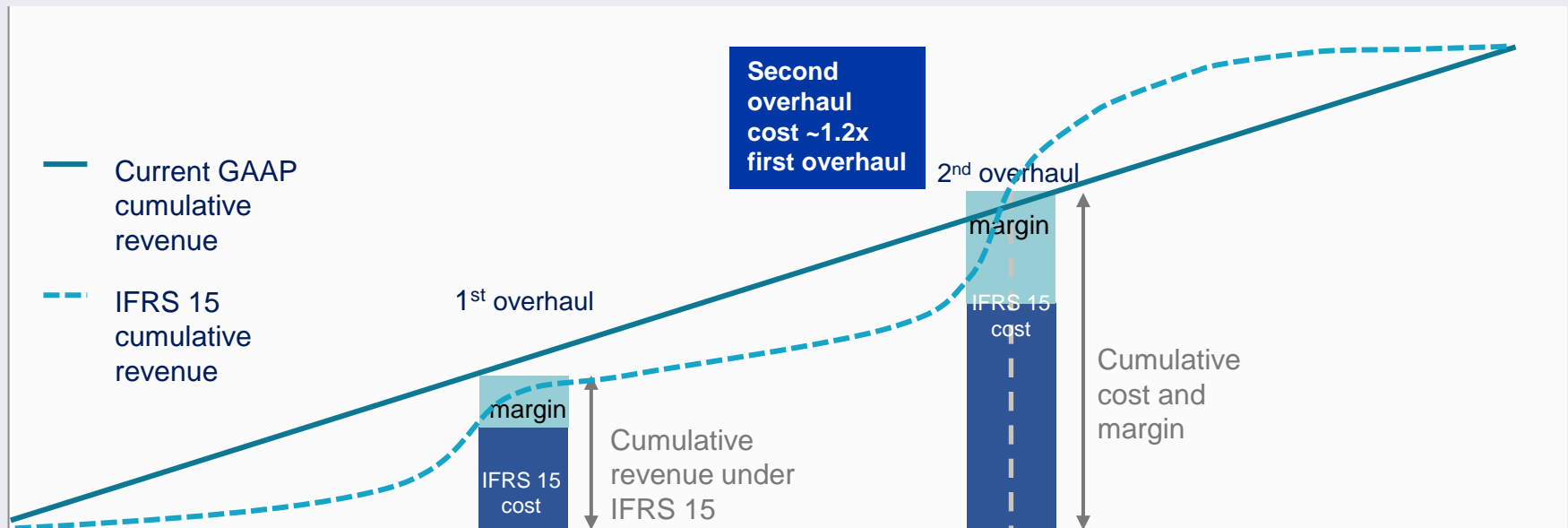
- 1 The net revenue (net transaction price) is the revenue under IFRS 15
- 2 Under current accounting the net transaction price is increased by the value of the cash loss to take the margin to zero
- 3 Under current accounting the cash loss is deferred and taken through the margin over 15 years as amortisation within cost of sales
- 4 Under IFRS 15 the cash loss is taken to margin when the OE sale occurs
- 5 No deferral of cash loss recognised in future years

Under IFRS 15 there is no linked/unlinked distinction so all OE sales will be treated on the same basis.

# Current v IFRS 15 revenue from long-term service agreements



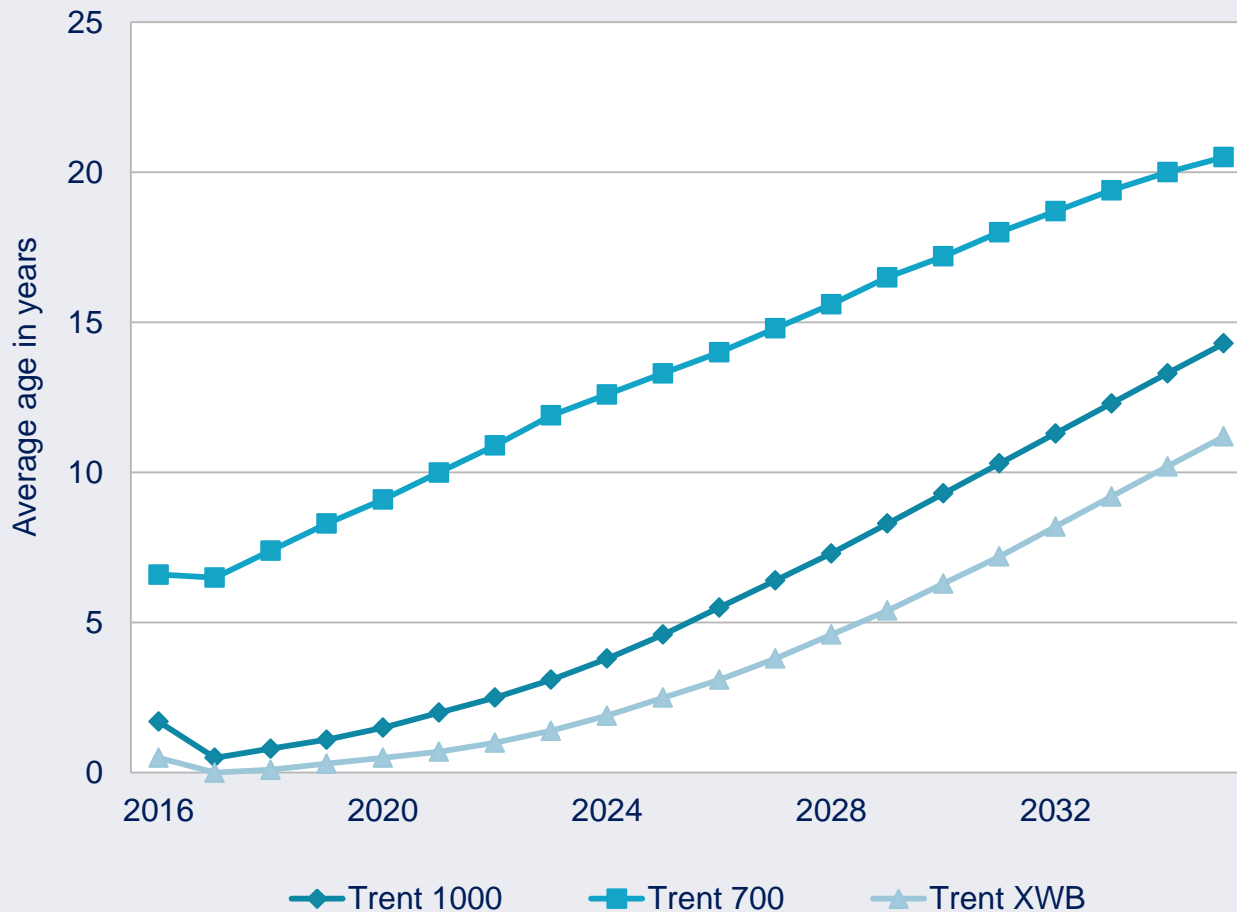
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# Large engine fleet maturity



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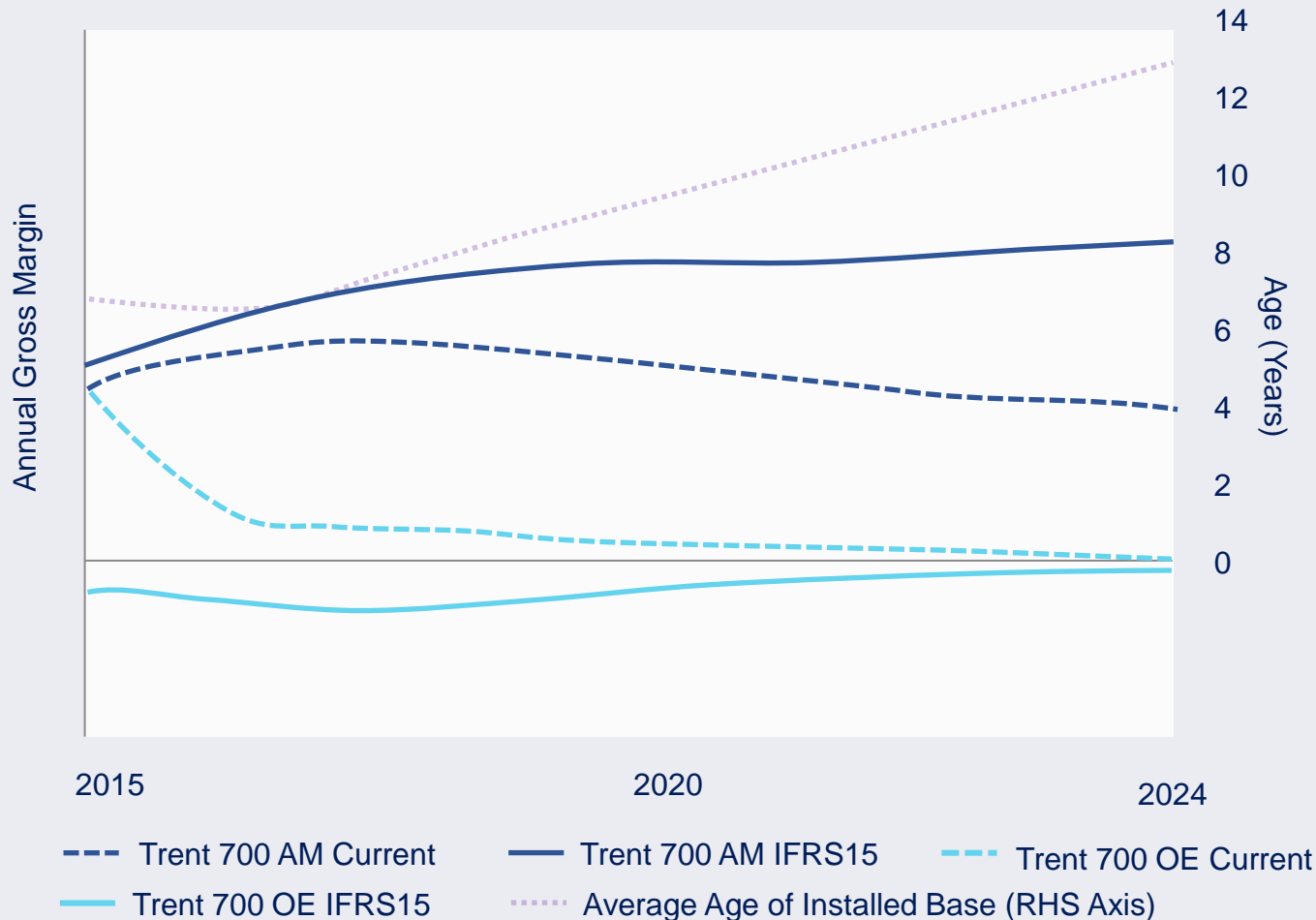


- Fleet maturity beneficial for reporting under IFRS 15
- Significant growth in market share means average age will take significant time to mature
- The faster the production ramp, the faster the fleet matures

# Trent 700 margin



Rolls-Royce



- Mature engine programme with good service volumes
- Benefits under IFRS 15 from absence of amortisation of aftermarket profit pulled ahead on OE via linked accounting

# Trent XWB margin



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- OE breakeven by 2020:
  - Focused cost reduction activity
  - Step up through launch pricing reduces engine losses
- Minimal benefit from linked profit amortisation

# Summary



Rolls-Royce

- Significant non-cash adjustments to OE and AM revenue and profit recognition in the near-term
  - Heavily influenced by high production volumes; new engine programmes and market share gains in aftermarket
- No change over product life cycle to profit achieved
  - Same overall profit recognised per engine
- No change to cash flow





# Rolls-Royce

**Illustrative examples to contrast accounting for large engines in Civil Aerospace using current GAAP and IFRS 15**

# Illustrative examples content



Rolls-Royce

1. **OE**: Unlinked installed large engine OE
2. **AM**: Unlinked long-term service agreement
3. **OE + AM**: Combined unlinked OE and long-term service agreement
4. **OE + AM**: IFRS 15 vs linked OE and long-term service agreement
5. **AM**: Unlinked long-term service contract with a cost estimate change
6. **OE + AM**: IFRS 15 vs linked OE and long-term service contract with a cost estimate change
7. **OE + AM**: IFRS 15 vs current accounting for RRSPs

## Context: current treatment



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- Under current GAAP, when an engine is sold it is either accounted for on a **linked** or an **unlinked** basis
- On an **unlinked** basis engines are sold and any loss on sale is capitalised as a Contractual Aftermarket Right (CAR). This CAR, which reflects the future profitability of the service revenues on an engine, is amortised on a straight line basis over 15 years and
- Using this method service revenues are recognised as they are received and costs are accrued on a flying hours basis
- On a **linked** basis OE sales and TotalCare® agreements are negotiated as part of one commercial package
- OE margins and TotalCare margins are combined into a “blended” margin
- Profit is recognised on % complete of the combined contracts on a revenue basis

# IFRS 15 implications



Rolls-Royce

The introduction of IFRS15 will have the following implications:

Linked accounting  
will cease to exist  
so all OE sales will  
be treated on the  
same basis

OE Engine losses  
will no longer be  
capitalised as  
CARs

Revenue in the  
aftermarket will be  
recognised on a  
cost input basis

# 1. Unlinked installed large engine OE



Rolls-Royce

Under IFRS 15 there is no linked/unlinked distinction so all OE sales will be treated on the same basis and the cash loss is taken to margin when the OE sale occurs.

Cash \$m	10 engines
Gross revenue	100
Concession	(60)
Net revenue	40
Cost	(50)
Margin	(10)

1

Current accounting \$m	Year 0	Years 1-15	Total
Net revenue	50	-	50
Cost of sales	(50)	(10)	(60)
Margin	-	(10)	(10)

2

3

CARs	10	-	
Cash	(10)		(10)

IFRS 15 \$m	Year 0	Years 1-15	Total
Net revenue	40	-	40
Cost of sales	(50)	-	(50)
Margin	(10)	-	(10)

4

Cash	(10)		(10)
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## Example Figures

- 1 The net revenue (net transaction price) is the revenue under IFRS 15
- 2 Under current accounting the net transaction price is increased by the value of the cash loss to take the margin to zero
- 3 Under current accounting the cash loss is deferred and taken through the margin over 15 years as amortisation within cost of sale
  - Under current accounting recognise \$40m transaction price and \$10m revenue from Contractual Aftermarket Rights (CARs), taking margin to zero
  - No additional revenue is recognised in respect of the CARs under IFRS 15
- 4 Under IFRS 15 the cash loss is taken to margin when the OE sale occurs

## 2. Unlinked long-term service agreement



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The tables below illustrate a simplified TotalCare contract; cash revenues received annually (constant flying hours) and infrequent costs driven solely by engine overhauls:

Cash \$m	Year											Total	
	0	1	2	3	4	5	6	7	8	9	10		
Net revenue	–	10	10	10	10	10	10	10	10	10	10	10	100
Cost	–	–	–	–	(25)	–	–	–	(25)	–	–	–	(50)
Margin	–	10	10	10	(15)	10	10	10	(15)	10	10	10	50
Margin %													50%

Current accounting \$m	Year											Total	
	0	1	2	3	4	5	6	7	8	9	10		
Net revenue	–	10	10	10	10	10	10	10	10	10	10	10	100
Cost of sales	–	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(50)
Margin	–	5	5	5	5	5	5	5	5	5	5	5	50
Margin %		50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Completion %	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%		

IFRS 15 accounting \$m	Year											Total	
	0	1	2	3	4	5	6	7	8	9	10		
Net revenue	–	–	–	–	50	–	–	–	50	–	–	–	100
Cost of sales	–	–	–	–	(25)	–	–	–	(25)	–	–	–	(50)
Margin	–	–	–	–	25	–	–	–	25	–	–	–	50
Margin %		n/a	n/a	n/a	50%	n/a	n/a	n/a	50%	n/a	n/a	n/a	50%
Completion %	0%	0%	0%	0%	50%	50%	50%	50%	100%	100%	100%		

### Current Accounting

- 1 Revenues are recognised as they are received.
- 2 Costs are accrued to match the stage of completion of the contract based on flying hours.
- 3 An even margin is recognised over the term of the contract.

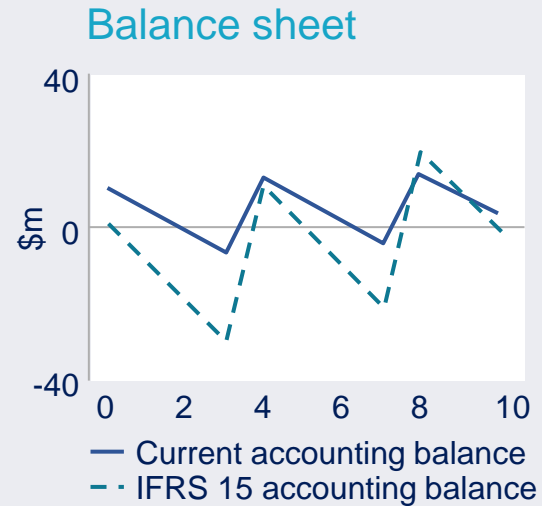
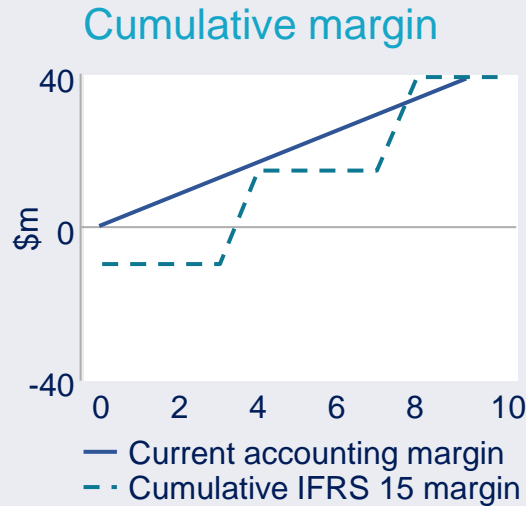
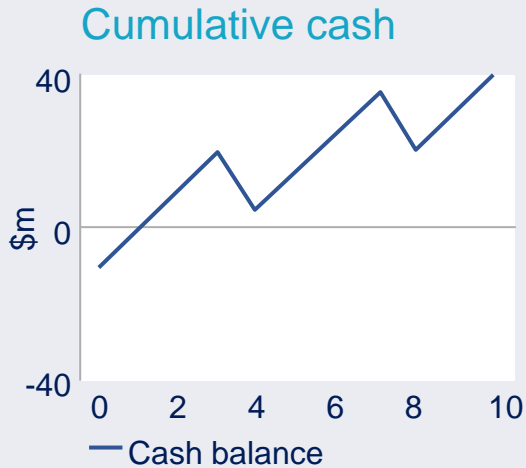
### IFRS 15

- 4 Revenue is recognised to match the stage of completion of the contract based on costs.
- 5 Costs are recognised as they are incurred.
- 6 Margin is recognised when contract activity occurs.

Lower revenues will be recognised in early stages of service agreements under IFRS 15

NB: In practice, costs will be spread more evenly as: a) Routine monitoring and service costs are incurred continuously; and b) Not all the engines in a fleet will be overhauled in the same period.

# 3. Combined unlinked OE and long-term service agreement



- Cash is unchanged under IFRS 15
- Under IFRS 15 any cash deficit on OE will be recognised immediately, rather than as a CAR
- IFRS 15 AM margin is recognised as goods and services are provided, rather than in line with engine flying hours
- Initially AM cash is collected in advance of margin recognition
- Current accounting comprises CARs and TotalCare balances. CARs will not exist under IFRS 15 and any cash deficit on OE delivery will be recognised immediately
- Under both cases there are timing differences between margin and cash recognised through TotalCare balance
- Before the first overhauls, the IFRS 15 balance is negative, as cash is collected, but no margin is recognised
- At the time of the overhauls (years 4 and 8), revenue is recognised to reflect the goods and services provided, reducing the balances

# 4. IFRS 15 vs linked OE and long-term service agreement



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The tables below illustrate the same OE and simplified TotalCare® contract, but now it is assumed to be linked:

Cash \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
OE - Gross revenue	100	-	-	-	-	-	-	-	-	-	-	100
OE - Concession	(60)	-	-	-	-	-	-	-	-	-	-	(60)
AM - Gross revenue	-	10	10	10	10	10	10	10	10	10	10	100
Net revenue	40	10	10	10	10	10	10	10	10	10	10	140
OE - Cost	(50)	-	-	-	-	-	-	-	-	-	-	(50)
AM - Cost	-	-	-	-	(25)	-	-	-	(25)	-	-	(50)
Margin	(10)	10	10	10	(15)	10	10	10	(15)	10	10	40
Margin %												29%

Current accounting \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
OE - Gross revenue	100	-	-	-	-	-	-	-	-	-	-	100
Concession	(30)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(60)
AM - Gross revenue	-	10	10	10	10	10	10	10	10	10	10	100
Net revenue	70	7	7	7	7	7	7	7	7	7	7	140
OE - Cost of sales	(50)	-	-	-	-	-	-	-	-	-	-	(50)
AM - Cost of sales	-	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(50)
Margin	20	2	2	2	2	2	2	2	2	2	2	40
Margin %	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%
Completion %	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%	

## 1 Current Accounting

The linked accounting allocates the OE cash concessions between the OE and AM to give an even accounting margin over the combined contract.

## IFRS 15

There is no linked accounting under IFRS 15, so this is simply the sum of the OE and AM accounting shown on the previous slides.

IFRS 15 accounting \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
OE - Gross revenue	100	-	-	-	-	-	-	-	-	-	-	100
Concession	(60)	-	-	-	-	-	-	-	-	-	-	(60)
AM - Gross revenue	-	-	-	-	50	-	-	-	50	-	-	100
Net revenue	40	-	-	-	50	-	-	-	50	-	-	140
OE - Cost of sales	(50)	-	-	-	-	-	-	-	-	-	-	(50)
AM - Cost of sales	-	-	-	-	(25)	-	-	-	(25)	-	-	(50)
Margin	(10)	-	-	-	25	-	-	-	25	-	-	40
Margin %	-25%	n/a	n/a	n/a	50%	n/a	n/a	n/a	50%	n/a	n/a	29%
Completion %	50%	50%	50%	50%	75%	75%	75%	75%	100%	100%	100%	

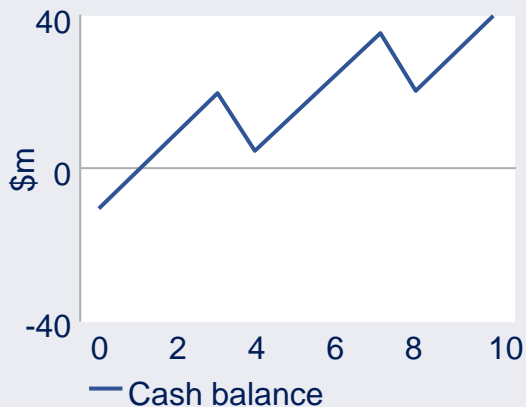


# 4. IFRS 15 vs linked OE and long-term service agreement

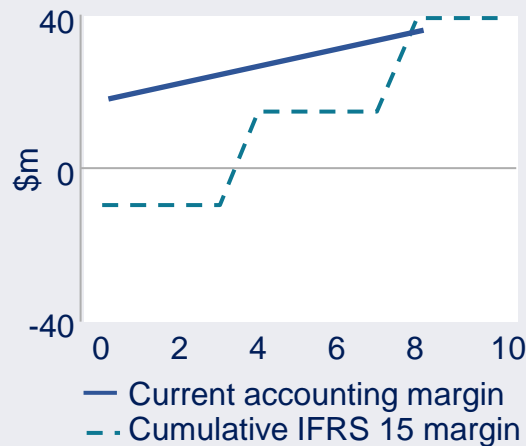


Rolls-Royce

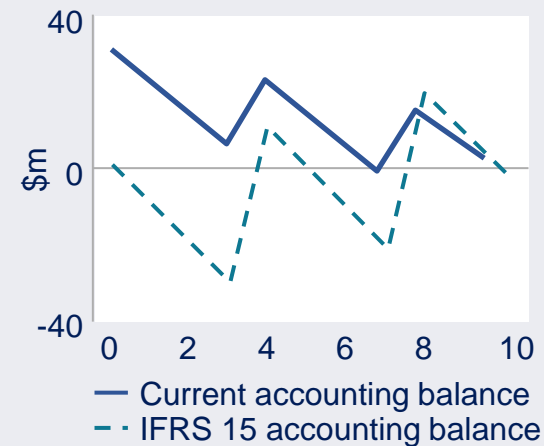
Cumulative cash



Cumulative margin



Balance sheet



- Cash is unchanged under IFRS 15

- Any cash deficit on OE is recognised immediately, rather than recognising a margin on the linked contracts
- IFRS 15 AM margin is recognised as goods and services are provided, rather than in line with engine flying hours
- Initially AM cash is collected in advance of margin recognition

- Balance is difference between cumulative margin and cumulative cash
- No IFRS 15 balance on OE delivery as any cash deficit is recognised immediately
- An IFRS 15 credit balance builds up initially as cash is collected, but no margin recognised until the overhaul
- At the end of the contract they will be the same and the TotalCare balance will be zero

# Context: current treatment

## Margin changes during the contract



Rolls-Royce

- The forecast margin on the TotalCare contract will change over its life as estimates are revised
- A change in forecast TotalCare margin due to a change in estimates results in a catch-up adjustment in the period in which the re-assessment is made
- The catch-up reflects over/under recognition of revenue in prior periods compared to the latest assessment
- Catch-up adjustments may be significant, particularly later in the life of a contract when the catch-up covers a number of prior years

### Factors re-assessed include

Market conditions

Utilisation rates

Cost improvements

- Shop visit costs
- Service intervals

### Drivers of the TotalCare balance

Contract outlook and margin improves

- Increased debits

Contract outlook and margin deteriorates

- Increased credits

# 5. Unlinked long-term service contract with a cost estimate change



- 1 The tables below illustrate the same simplified TotalCare contract, but with a change in future cost estimates during year six. It is now expected a cost reduction of \$5m will be achieved in year 8

	Year											
Cash \$m	0	1	2	3	4	5	6	7	8	9	10	Total
Net revenue	-	10	10	10	10	10	10	10	10	10	10	100
Cost	-	-	-	-	(25)	-	-	-	(20)	-	-	(45)
Margin	-	10	10	10	(15)	10	10	10	(10)	10	10	55
Margin %												55%

	Year											
Current \$m	0	1	2	3	4	5	6	7	8	9	10	Total
Net revenue	-	10	10	10	10	10	10	10	10	10	10	100
Cost	-	(5)	(5)	(5)	(5)	(5)	(2)	(5)	(5)	(5)	(5)	(45)
Margin	-	5	5	5	5	5	8	6	6	6	6	55
Margin %		50%	50%	50%	50%	50%	80%	55%	55%	55%	55%	55%
Cum. margin%		50%	50%	50%	50%	50%	55%	55%	55%	55%	55%	55%

No change to amounts recognised in prior years

	Year											
IFRS 15 \$m	0	1	2	3	4	5	6	7	8	9	10	Total
Net revenue	-	-	-	-	50	-	6	-	44	-	-	100
Cost	-	-	-	-	(25)	-	-	-	(20)	-	-	(45)
Margin	-	-	-	-	25	-	6	-	24	-	-	55
Margin %		n/a	n/a	n/a	50%	n/a	100%	n/a	55%	n/a	n/a	55%
Cum. margin%		n/a	n/a	n/a	50%	50%	55%	55%	55%	55%	55%	55%

- 2 **Current Accounting**  
A catch-up adjustment of \$2.5m is included in cost of sales to reflect the 'over accrual' of costs in years 1-5, so that the cumulative margin recognised at the end of year 6 is 55%, the revised overall forecast contract margin.
- 3 **IFRS 15**  
A catch-up adjustment of \$5.6m is included in revenues to reflect the 'under recognition' of revenues in years 1-5, so that the cumulative margin recognised at the end of year 6 is 55%, the revised overall forecast contract margin.

# 6. IFRS 15 vs linked OE and long-term service contract with a cost estimate change



## Rolls-Royce

Cash \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
OE - Gross revenue	100	-	-	-	-	-	-	-	-	-	-	100
OE - Concession	(60)	-	-	-	-	-	-	-	-	-	-	(60)
AM - Gross revenue	-	10	10	10	10	10	10	10	10	10	10	100
Net revenue	40	10	10	10	10	10	10	10	10	10	10	140
OE - Cost	(50)	-	-	-	-	-	-	-	-	-	-	(50)
AM - Cost	-	-	-	-	(25)	-	-	-	(20)	1	-	(45)
Margin	(10)	10	10	10	(15)	10	10	10	(10)	10	10	45
Margin %												32%

Current accounting \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
OE - Gross revenue	100	-	-	-	-	-	-	-	-	-	-	100
Concession	(30)	(3)	(3)	(3)	(3)	(3)	(2)	(3)	(3)	(3)	(3)	(60)
AM - Gross revenue	-	10	10	10	10	10	10	10	10	10	10	100
Net revenue	70	7	7	7	7	7	8	7	7	7	7	140
OE - Cost of sales	(50)	-	-	-	-	-	-	-	-	-	-	(50)
AM - Cost of sales	-	(5)	(5)	(5)	(5)	(5)	(2)	(5)	(5)	(4)	(5)	(45)
Margin	20	2	2	2	2	2	6	2	2	2	2	45
Margin %	29%	29%	29%	29%	29%	29%	76%	32%	32%	32%	32%	32%
Cum. margin %	29%	29%	29%	29%	29%	29%	32%	32%	32%	32%	32%	32%

No change to amounts recognised in prior years

IFRS 15 accounting \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
OE - Gross revenue	100	-	-	-	-	-	-	-	-	-	-	100
Concession	(60)	-	-	-	-	-	-	-	-	-	-	(60)
AM - Gross revenue	-	-	-	-	50	-	6	-	44	-	-	100
Net revenue	40	-	-	-	50	-	6	-	44	-	-	140
OE - Cost of sales	(50)	-	-	-	-	-	-	-	-	-	-	(50)
AM - Cost of sales	-	-	-	-	(25)	-	-	-	(20)	-	-	(45)
Margin	(10)	-	-	-	25	-	6	-	24	-	-	45
Margin %	-25%	n/a	n/a	n/a	50%	n/a	100%	n/a	55%	n/a	n/a	32%
Cum. margin %	-25%	-25%	-25%	-25%	17%	17%	22%	22%	32%	32%	32%	32%

\* rounding

- The tables illustrate the same simplified contract, but with a change in future cost estimates during year six. It is now expected a
- 1 cost reduction of \$5m will be achieved in year 8.
  - 2 Current Accounting A catch-up adjustment of \$4.4m is included (split between concession re-phasing and cost of sales), so that the cumulative margin recognised at the end of year 6 is 32%, the revised overall forecast contract margin.
  - 3

### IFRS 15

There is no linked accounting under IFRS 15, so this is simply the sum of the OE and AM accounting shown on the previous slides.

# 7. IFRS 15 vs current accounting for Risk and Revenue Sharing Partners (RRSPs)



**Rolls-Royce**

Recognition of partner's share of aftermarket flows will be re-phased to match Rolls-Royce activity to meet our aftermarket obligations.

Cash \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
Net revenue	–	10	10	10	10	10	10	10	10	10	10	100
Cost	–	–	–	–	(25)	–	–	–	(25)	–	–	(50)
RRSP share	–	(2)	(2)	(2)	3	(2)	(2)	(2)	3	(2)	(2)	(10)
Margin	–	8	8	8	(12)	8	8	8	(12)	8	8	40
Margin %												40%

Current accounting \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
Net revenue	–	10	10	10	10	10	10	10	10	10	10	100
Cost of sales	–	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(60)
Margin	–	4	4	4	4	4	4	4	4	4	4	40
Margin %		40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Completion %	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	

IFRS 15 accounting \$m	Year											Total
	0	1	2	3	4	5	6	7	8	9	10	
Net revenue	–	–	–	–	50	–	–	–	50	–	–	100
Cost of sales	–	–	–	–	(30)	–	–	–	(30)	–	–	(60)
Margin	–	–	–	–	20	–	–	–	20	–	–	40
Margin %		n/a	n/a	n/a	40%	n/a	n/a	n/a	40%	n/a	n/a	40%
Completion %	0%	0%	0%	0%	50%	50%	50%	50%	100%	100%	100%	

20% RRSP partner receives a share of Rolls-Royce revenues and costs whilst providing free of charge parts.

(In year of service the RRSP partner has \$5m cost share but still receives \$2m revenue, so net \$3m received by Rolls-Royce).

## Current Accounting

RRSP payments, like any other cost, are accrued within CoS to match the stage of completion of the contract based on flying hours.

## IFRS 15

Recognition of payments to RRSP matched to periods when Rolls-Royce performs activity for the customer. Revenue and margin is recognised when contract activity occurs.