ASTER FLUIDTECHNIK GMBH

SHA-40 servo-hydraulic actuator – programme cost report

Development and qualification for rail tilt systems · contract AF-2025-0418 · status 30.09.2026 (month 15 of 24)

Prepared by
Katrin Brandt,

BAC	Earned value	Actual cost	CPI	SPI	EAC (selected)
€8,400,000	€4,942,961	€5,230,967	0.94	0.95	€9,146,347
reserve 485,000 EUR	59% complete	CV -288,006	cost efficiency	SV -259,992	VAC -746,347

EAC method Bottom-up (scenario)

Active scenario:
Base case

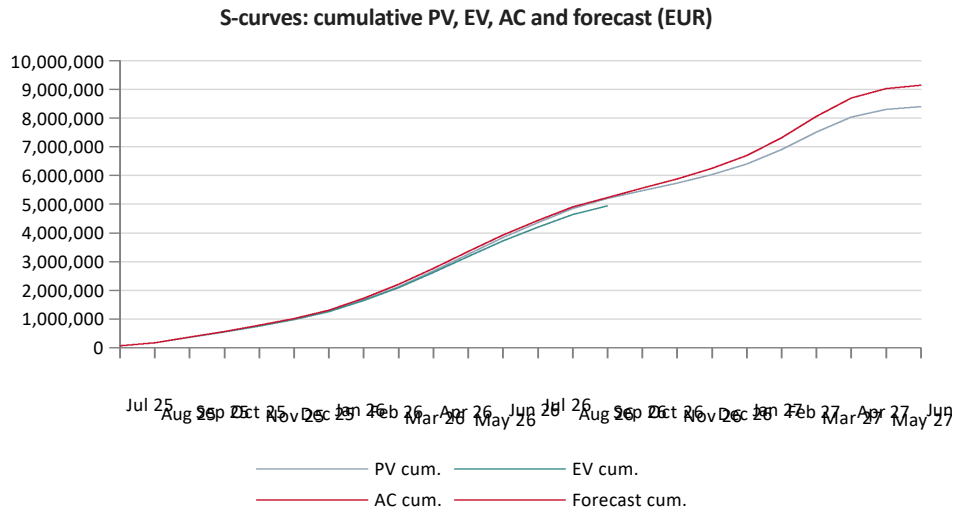
Performance by WBS level 1

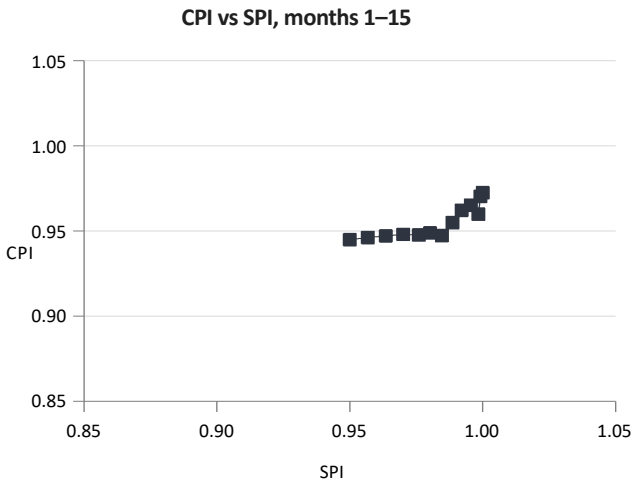
WBS	Element	BAC	EV	AC	CPI	SPI
1	Programme management	1,090,000	705,000	721,053	0.98	1.00
2	System engineering	1,080,000	1,052,723	1,073,442	0.98	0.98
3	Design	2,080,000	2,011,200	2,160,853	0.93	0.97
4	Prototype manufacturing	1,550,000	821,972	905,254	0.91	0.87
5	Qualification testing	1,770,000	347,675	365,974	0.95	0.88
6	Industrialisation	830,000	4,391	4,391	1.00	0.80

Largest risk exposures

Risk	Exposure
Seal wear in endurance test	78,333
Servo-valve B-samples late	73,500
New fire-safety requirement	46,667
Control software not certified	37,000
Test rig commissioning delayed	33,833

Total exposure





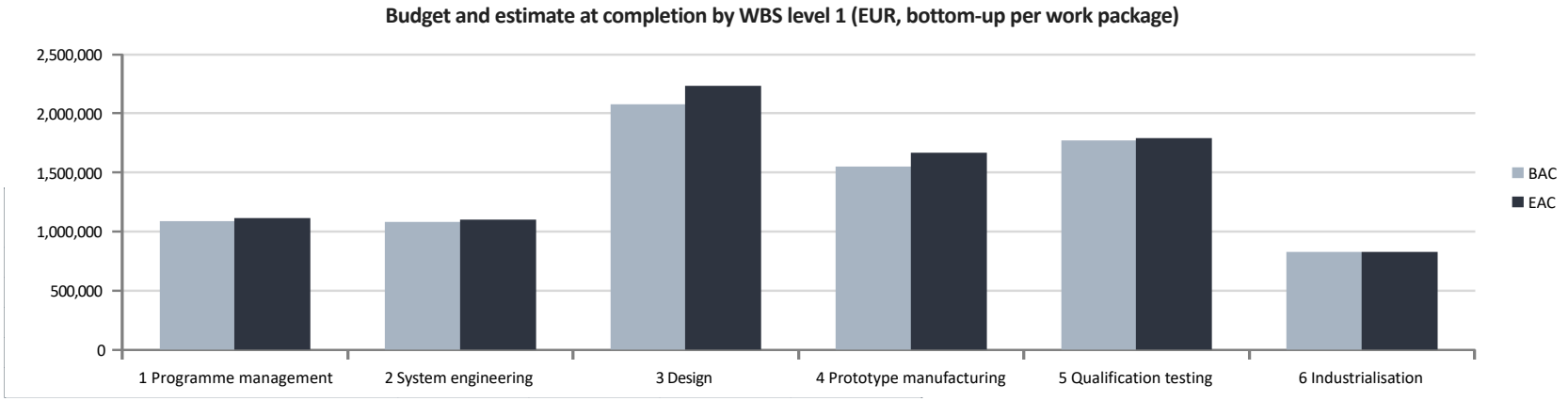
Contents

WBS	Work breakdown structure, earned value, change log
Monthly	Monthly values and schedule
Scenarios	EAC methods and scenarios
Risks	Risk register, heat map, DataPilot

Commentary

Cost: CPI 0.94 – overruns in design (WBS 3) and long-lead materials (4.1); the cost variance to date is -288,006 EUR.

Schedule: SPI 0.95 – machining (4.2) started six weeks late; test rig (5.1) recovery plan with second shift from October 2026.



First article inspection (FAI)	24.06.2027	26.08.2027	+63	Forecast

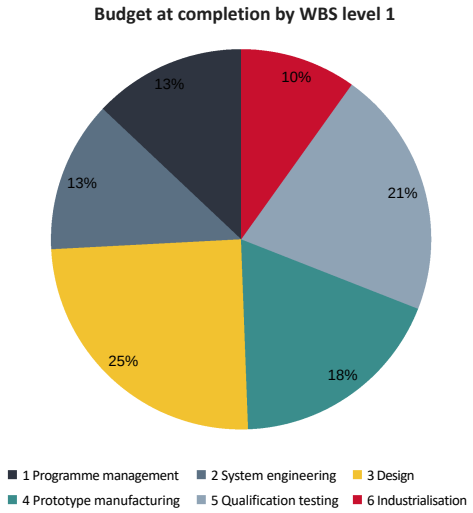
Work breakdown structure and earned value at 30 September 2026

Performance measurement baseline rev. C (incl. approved changes). Values in EUR; level-1 rows and the total use SUBTOTAL so that the grouped outline can be collapsed to level 1.

Element			Baseline				Earned value to date				Variances		Indices		Forecast			
WBS	Element	Owner	Start	Finish	BAC	Material share	PV	EV	AC	% compl.	CV	SV	CPI	SPI	ETC	EAC	VAC	Status
1	**Programme management**		**01.07.25**	**30.06.27**	**1,090,000**	**3%**	**705,000**	**705,000**	**721,053**	**65%**	**-16,053**	**0**	**.98**	**.00**	**392,632**	**1,113,685**	**-23,685**	
1.1	Project management and controls	K. Brandt	01.07.25	30.06.27	620,000	2%	387,495	387,495	399,479	62%	-11,984	0	.97	.00	239,696	639,175	-19,175	In progress
1.2	Quality and certification management	S. Aydin	01.07.25	30.06.27	280,000	3%	175,005	175,005	171,574	63%	+3,431	0	.02	.00	102,937	274,511	+5,489	In progress
1.3	Customer reviews (SRR, PDR, CDR, QR)	K. Brandt	01.09.25	30.04.27	190,000	5%	142,500	142,500	150,000	75%	-7,500	0	.95	.00	50,000	200,000	-10,000	In progress
2	**System engineering**		**01.07.25**	**31.10.26**	**1,080,000**	**0%**	**1,070,235**	**1,052,723**	**1,073,442**	**97%**	**-20,719**	**-17,512**	**.98**	**.98**	**27,834**	**1,101,276**	**-21,276**	
2.1	Requirements and architecture	M. Riedl	01.07.25	31.01.26	540,000	0%	540,000	540,000	562,500	100%	-22,500	0	.96	.00	0	562,500	-22,500	Complete
2.2	Safety and reliability (FMEA, FTA)	T. Novak	01.10.25	31.10.26	360,000	0%	350,235	332,723	339,513	92%	-6,790	-17,512	.98	.95	27,834	367,347	-7,347	In progress
2.3	Interface control documents	M. Riedl	01.09.25	30.06.26	180,000	0%	180,000	180,000	171,429	100%	+8,571	0	.05	.00	0	171,429	+8,571	Complete
3	**Design**		**01.11.25**	**30.09.26**	**2,080,000**	**13%**	**2,080,000**	**2,011,200**	**2,160,853**	**97%**	**-149,653**	**-68,800**	**.93**	**.97**	**74,125**	**2,234,978**	**-154,978**	
3.1	Cylinder, piston and rod	J. Hofer	01.11.25	31.07.26	640,000	10%	640,000	640,000	703,297	100%	-63,297	0	.91	.00	0	703,297	-63,297	Complete
3.2	Servo-valve integration	J. Hofer	01.12.25	31.08.26	480,000	15%	480,000	465,600	523,146	97%	-57,546	-14,400	.89	.97	16,180	539,326	-59,326	In progress
3.3	Position sensor (LVDT), electronics	L. Weiss	01.12.25	30.09.26	420,000	20%	420,000	378,000	406,452	90%	-28,452	-42,000	.93	.90	45,161	451,613	-31,613	In progress
3.4	Seals and bearings	J. Hofer	01.02.26	31.08.26	230,000	25%	230,000	230,000	221,154	100%	+8,846	0	.04	.00	0	221,154	+8,846	Complete
3.5	Structural analysis (FEM)	A. Kaya	01.01.26	30.09.26	310,000	0%	310,000	297,600	306,804	96%	-9,204	-12,400	.97	.96	12,784	319,588	-9,588	In progress
4	**Prototype manufacturing**		**01.03.26**	**28.02.27**	**1,550,000**	**47%**	**947,144**	**821,972**	**905,254**	**53%**	**-83,282**	**-125,172**	**.91**	**.87**	**762,523**	**1,667,777**	**-117,777**	
4.1	Long-lead materials	P. Schulz	01.03.26	30.09.26	520,000	85%	520,000	488,800	543,111	94%	-54,311	-31,200	.90	.94	34,667	577,778	-57,778	In progress
4.2	Machining and surface treatment	P. Schulz	01.06.26	31.12.26	690,000	35%	427,144	333,172	362,143	48%	-28,971	-93,972	.92	.78	387,856	749,999	-59,999	In progress
4.3	Prototype assembly and ATP	P. Schulz	01.10.26	28.02.27	340,000	15%	0	0	0	0%	0	0	–	–	340,000	340,000	0	*Not started*
5	**Qualification testing**		**01.04.26**	**31.05.27**	**1,770,000**	**17%**	**395,085**	**347,675**	**365,974**	**20%**	**-18,299**	**-47,410**	**.95**	**.88**	**1,428,237**	**1,794,211**	**-24,211**	
5.1	Test rig design and build	D. Lorenz	01.04.26	30.11.26	460,000	45%	395,085	347,675	365,974	76%	-18,299	-47,410	.95	.88	118,237	484,211	-24,211	In progress
5.2	Endurance testing (10 million cycles)	D. Lorenz	01.12.26	31.05.27	720,000	10%	0	0	0	0%	0	0	–	–	720,000	720,000	0	*Not started*
5.3	Environmental tests (EN 61373/50155)	D. Lorenz	01.01.27	31.05.27	380,000	5%	0	0	0	0%	0	0	–	–	380,000	380,000	0	*Not started*
5.4	EMC and electrical tests	L. Weiss	01.02.27	30.04.27	210,000	5%	0	0	0	0%	0	0	–	–	210,000	210,000	0	*Not started*
6	**Industrialisation**		**01.09.26**	**30.06.27**	**830,000**	**34%**	**5,489**	**4,391**	**4,391**	**1%**	**0**	**-1,098**	**.00**	**.80**	**825,609**	**830,000**	**0**	
6.1	Production tooling	R. Engel	01.11.26	30.06.27	420,000	60%	0	0	0	0%	0	0	–	–	420,000	420,000	0	*Not started*
6.2	Process qualification (FAI)	R. Engel	01.03.27	30.06.27	260,000	10%	0	0	0	0%	0	0	–	–	260,000	260,000	0	*Not started*
6.3	Supply-chain qualification	R. Engel	01.09.26	30.06.27	150,000	5%	5,489	4,391	4,391	3%	0	-1,098	.00	.80	145,609	150,000	0	In progress
	Total programme (PMB)		**01.07.25**	**30.06.27**	**8,400,000**	**19%**	**5,202,953**	**4,942,961**	**5,230,967**	**59%**	**-288,006**	**-259,992**	**0.94**	**0.95**	**3,510,959**	**8,741,926**	**-341,926**	

Baseline change log

CR	Description	WBS	Date	Budget change	From reserve	Status	Approved by
CR-01	Additional FMEA, fire-safety interface	2.2	14.10.2025	€45,000	yes	Approved	Programme board
CR-02	LVDT redundancy (dual coil)	3.3	03.12.2025	€85,000	no	Approved	Customer CCB
CR-03	Second-source servo valve	3.2	18.02.2026	€60,000	yes	Approved	Programme board
CR-04	Rig extension, 1,500 mm stroke	5.1	09.04.2026	€60,000	yes	Approved	Programme board
CR-05	HVOF coating instead of chrome VI	4.2	27.08.2026	€72,000	yes	Pending	–
CR-06	Duplex steel escalation	4.1	22.09.2026	€38,000	yes	Pending	–
	Approved changes included in BAC			**€250,000**			
	Original BAC (contract baseline, 06.2025)			**€8,150,000**			
	Management reserve remaining			**€485,000**			

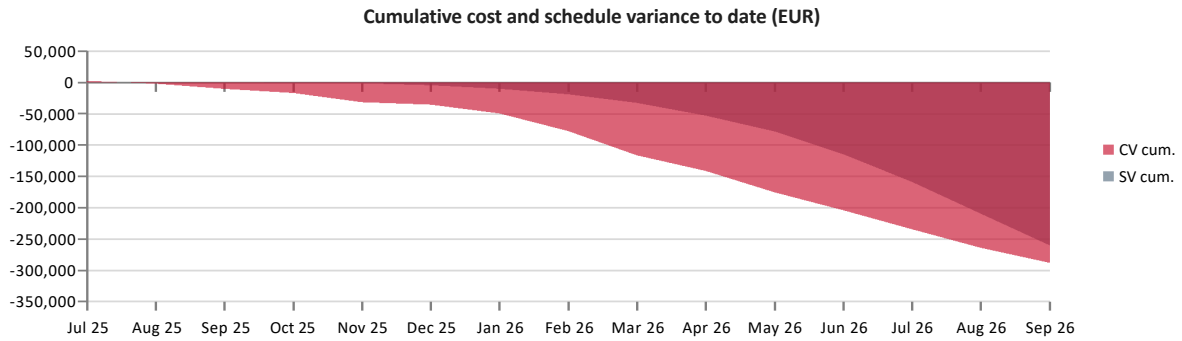


Monthly earned value, July 2025 – June 2027

Actuals from SAP PS up to the status date, forecast from the selected EAC.

Month	M	PV	EV	AC	PV cum.	EV cum.	AC cum.	CPI cum.	SPI cum.	CV cum.	SV cum.	Forecast cum.
Jul 2025	1	68,307	68,307	65,788	68,307	68,307	65,788	1.04	1.00	+2,519	0	65,788
Aug 2025	2	103,199	103,199	107,598	171,506	171,506	173,386	0.99	1.00	-1,880	0	173,386
Sep 2025	3	191,295	191,295	199,678	362,801	362,801	373,064	0.97	1.00	-10,263	0	373,064
Oct 2025	4	186,785	186,297	192,864	549,586	549,098	565,928	0.97	1.00	-16,830	-488	565,928
Nov 2025	5	205,145	204,451	219,129	754,731	753,549	785,057	0.96	1.00	-31,508	-1,182	785,057
Dec 2025	6	232,097	228,905	232,827	986,828	982,454	1,017,884	0.97	1.00	-35,430	-4,374	1,017,884
Jan 2026	7	280,946	275,314	289,313	1,267,774	1,257,768	1,307,197	0.96	0.99	-49,429	-10,006	1,307,197
Feb 2026	8	397,612	388,799	417,016	1,665,386	1,646,567	1,724,213	0.95	0.99	-77,646	-18,819	1,724,213
Mar 2026	9	460,220	446,438	485,263	2,125,606	2,093,005	2,209,476	0.95	0.98	-116,471	-32,601	2,209,476
Apr 2026	10	550,501	530,136	554,953	2,676,107	2,623,141	2,764,429	0.95	0.98	-141,288	-52,966	2,764,429
May 2026	11	581,191	555,963	590,138	3,257,298	3,179,104	3,354,567	0.95	0.98	-175,463	-78,194	3,354,567
Jun 2026	12	581,534	545,164	573,796	3,838,832	3,724,268	3,928,363	0.95	0.97	-204,095	-114,564	3,928,363
Jul 2026	13	519,980	475,751	506,134	4,358,812	4,200,019	4,434,497	0.95	0.96	-234,478	-158,793	4,434,497
Aug 2026	14	492,919	442,146	471,801	4,851,731	4,642,165	4,906,298	0.95	0.96	-264,133	-209,566	4,906,298
Sep 2026	15	351,222	300,796	324,669	5,202,953	4,942,961	5,230,967	0.94	0.95	-288,006	-259,992	5,230,967
Oct 2026	16	270,086			5,473,039							5,561,738
Nov 2026	17	260,707			5,733,746							5,881,022
Dec 2026	18	300,898			6,034,644							6,249,528
Jan 2027	19	364,924			6,399,568							6,696,445
Feb 2027	20	505,777			6,905,345							7,315,863
Mar 2027	21	610,189			7,515,534							8,063,153
Apr 2027	22	519,858			8,035,392							8,699,816
May 2027	23	267,096			8,302,488							9,026,925
Jun 2027	24	97,512			8,400,000							9,146,347
Total		**8,400,000**	**4,942,961**	**5,230,967**								

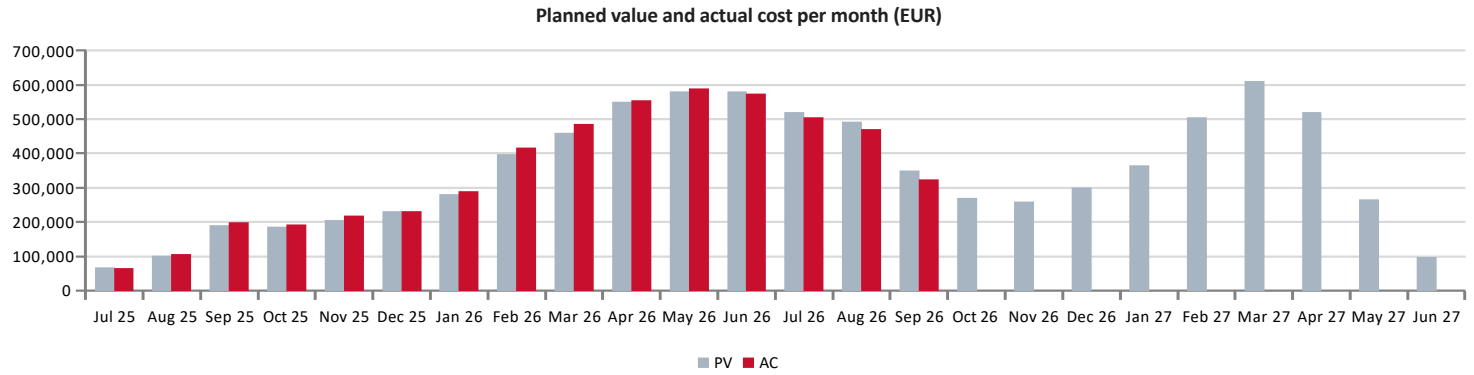
Check vs WBS	OK	OK	OK



Schedule of work packages (baseline, progress at status date)

					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
WBS	Work package	Start	Finish	% compl.	Jul 25	Aug 25	Sep 25	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	Apr 26	May 26	Jun 26	Jul 26	Aug 26	Sep 26	Oct 26	Nov 26	Dec 26	Jan 27	Feb 27	Mar 27	Apr 27	May 27	Jun 27
1.1	Project management and controls	1	24	62%																								
1.2	Quality and certification management	1	24	63%																								
1.3	Customer reviews (SRR, PDR, CDR, QR)	3	22	75%																								
2.1	Requirements and architecture	1	7	100%																								
2.2	Safety and reliability (FMEA, FTA)	4	16	92%																								
2.3	Interface control documents	3	12	100%																								
3.1	Cylinder, piston and rod	5	13	100%																								
3.2	Servo-valve integration	6	14	97%																								
3.3	Position sensor (LVDT), electronics	6	15	90%																								
3.4	Seals and bearings	8	14	100%																								
3.5	Structural analysis (FEM)	7	15	96%																								
4.1	Long-lead materials	9	15	94%																								
4.2	Machining and surface treatment	12	18	48%																								
4.3	Prototype assembly and ATP	16	20	0%																								
5.1	Test rig design and build	10	17	76%																								
5.2	Endurance testing (10 million cycles)	18	23	0%																								
5.3	Environmental tests (EN 61373/50155)	19	23	0%																								
5.4	EMC and electrical tests	20	22	0%																								
6.1	Production tooling	17	24	0%																								
6.2	Process qualification (FAI)	21	24	0%																								
6.3	Supply-chain qualification	15	24	3%																								

Dark: earned progress · light red: planned up to the status date but not yet earned · grey: planned · red line: status date 30.09.2026



Estimate at completion – methods and scenarios

Cells B12:B16 are LibreOffice scenarios (Base case, Optimistic, Pessimistic): switch them in the Navigator; all results update automatically.

A. Status at 30.09.2026

Budget at completion (BAC)	**€8,400,000**
Planned value (PV)	**€5,202,953**
Earned value (EV)	**€4,942,961**
Actual cost (AC)	**€5,230,967**
Cost performance index (CPI)	**0.945**
Schedule performance index (SPI)	**0.950**

B. Scenario assumptions (scenario cells)

Labour productivity on remaining work	1.00
Material escalation on remaining material	4.5%
Rework allowance on remaining qualification	8%
Share of risk exposure realised	50%
Schedule slip	2 months

C. Remaining work

Remaining budget (BAC - EV)	€3,457,039
of which material	€660,471
of which labour and services	€2,796,568
Remaining qualification budget (WBS 5)	€1,422,325
Risk exposure (Risks sheet)	€479,667
Monthly fixed cost (WBS 1.1 and 1.2)	€37,500

D. Estimate at completion

Method	EAC	VAC	TCPI to EAC	Formula
CPI method	€8,889,433	-489,433	0.945	*BAC / CPI*
CPI × SPI method	€9,081,863	-681,863	0.898	*AC + (BAC - EV) / (CPI × SPI)*
Remaining work at budget	€8,688,006	-288,006	1.000	*AC + (BAC - EV)*
Bottom-up (scenario)	€9,146,347	-746,347	0.883	*AC + labour/prod. + material × (1+esc.) + rework + risk + slip*

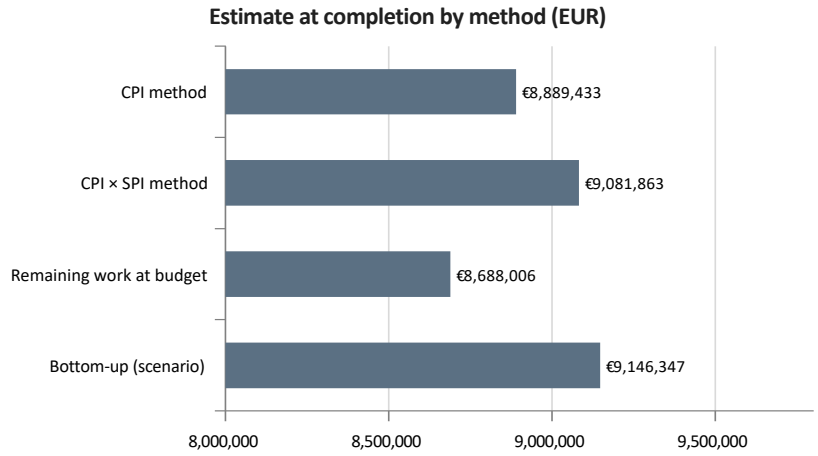
Selected method (Dashboard)	**Bottom-up (scenario)**
EAC used for the forecast	**€9,146,347**

E. Scenario comparison (bottom-up EAC)

Assumption	Base case	Optimistic	Pessimistic
Labour productivity on remaining work	1.00	1.05	0.92
Material escalation on remaining material	4.5%	2.0%	9.0%
Rework allowance on remaining qualification	8%	4%	15%
Share of risk exposure realised	50%	30%	80%
Schedule slip	2 months	1 months	4 months
Estimate at completion	**€9,146,347**	**€8,806,339**	**€9,737,710**
Variance at completion	-746,347	-406,339	-1,337,710
Covered by management reserve	**no**	yes	**no**

F. Indicators (array formulas over the WBS)

Work packages with CPI below 0.90	**1**
Work packages with SPI below 0.90	**3**
Cost overrun of work packages over budget	**-€308,854**
Largest negative CV (one work package)	**-€63,297**



1.00
4.5%
8%
50%
2 months

1.05
2.0%
4%
30%
1 months

0.92
9.0%
15%
80%
4 months

Risk register and heat map

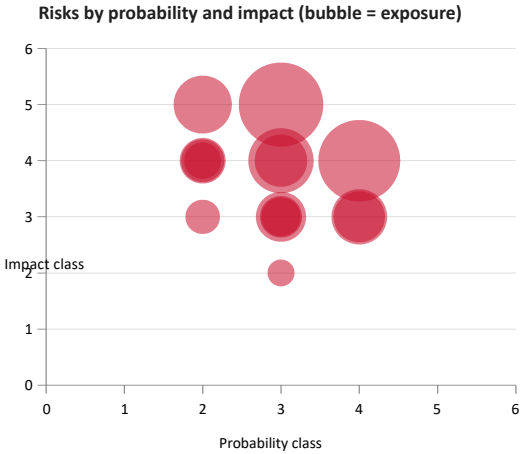
Cost impact as three-point estimate (PERT mean); exposure = probability × PERT mean. Reviewed by the programme board on 28.09.2026.

ID	Risk	Category	WBS	Owner	P	I	Score	Probability	Min	Most likely	Max	PERT mean	Exposure	Mitigation	Progress	Status	Trend
R-01	Servo-valve B-samples late	Supply chain	3.2	J. Hofer	4	4	16	70%	40,000	95,000	210,000	105,000	73,500	Second source qualified in parallel; weekly supplier calls	60%	Mitigating	^
R-02	Seal wear in endurance test	Technical	5.2	D. Lorenz	3	5	15	50%	60,000	140,000	320,000	156,667	78,333	Early seal screening on test rig, PTFE compound alternative	30%	Open	->
R-03	Duplex steel price rise > 8 %	Commercial	4.1	P. Schulz	4	3	12	70%	15,000	38,000	80,000	41,167	28,817	Framework order for 2027 volumes with price cap	50%	Mitigating	^
R-04	LVDT bracket fails shock test	Technical	5.3	L. Weiss	2	4	8	30%	25,000	60,000	140,000	67,500	20,250	Bracket redesign with FEM check before test	40%	Mitigating	v
R-05	Test rig commissioning delayed	Schedule	5.1	D. Lorenz	4	3	12	70%	20,000	45,000	90,000	48,333	33,833	Additional shift for hydraulic power unit installation	70%	Mitigating	->
R-06	New fire-safety requirement	Certification	1.3	K. Brandt	3	4	12	50%	30,000	85,000	190,000	93,333	46,667	Material declaration pack prepared; change request if required	20%	Open	^
R-07	Scrap of first piston rods	Technical	4.2	P. Schulz	3	3	9	50%	12,000	30,000	70,000	33,667	16,833	First-article inspection with CMM before chrome plating	50%	Mitigating	->
R-08	Key engineer leaves project	Schedule	3.3	L. Weiss	2	3	6	30%	15,000	40,000	85,000	43,333	13,000	Knowledge transfer and documentation reviews	80%	Mitigating	v
R-09	EMC immunity fails at 20 V/m	Technical	5.4	L. Weiss	2	3	6	30%	10,000	28,000	60,000	30,333	9,100	Pre-compliance test at supplier lab in M17	10%	Open	->
R-10	Witness test capacity	Certification	1.2	S. Aydin	3	2	6	50%	5,000	15,000	30,000	15,833	7,917	Witness dates booked six months ahead	90%	Mitigating	v
R-11	Chrome VI ban affects plating	Commercial	4.2	P. Schulz	2	4	8	30%	30,000	70,000	150,000	76,667	23,000	HVOF coating qualified as alternative	60%	Mitigating	->
R-12	USD exposure, valve parts	Commercial	3.2	R. Engel	3	2	6	50%	8,000	18,000	40,000	20,000	0	Hedging through group treasury	100%	*Closed*	v
R-13	Tooling lead time 26 weeks	Supply chain	6.1	R. Engel	3	3	9	50%	15,000	35,000	75,000	38,333	19,167	Tooling order released at CDR instead of FAI	40%	Mitigating	->
R-14	Control software not certified	Certification	3.3	L. Weiss	2	5	10	30%	40,000	110,000	260,000	123,333	37,000	Development to EN 50657 SIL 2 with independent assessor	50%	Mitigating	->
R-15	Seal fluid compatibility	Technical	3.4	J. Hofer	1	3	3	10%	5,000	12,000	25,000	13,000	0	Immersion tests completed	100%	*Closed*	v
R-16	Review findings, design loop	Schedule	1.3	K. Brandt	3	3	9	50%	20,000	50,000	110,000	55,000	27,500	Pre-review with customer engineering team	50%	Mitigating	->
R-17	Forged end caps late	Supply chain	4.1	P. Schulz	3	4	12	50%	20,000	55,000	120,000	60,000	30,000	Safety stock of 12 forgings ordered	60%	Mitigating	^
R-18	Endurance rig power unit failure	Technical	5.2	D. Lorenz	2	4	8	30%	15,000	45,000	100,000	49,167	14,750	Redundant pump and condition monitoring	30%	Open	->
	Total exposure (open and mitigating risks)												**€479,667**				

Heat map of open and mitigating risks (count)

Rows: impact class 5 (top) to 1 · columns: probability class 1 to 5

I \ P	1	2	3	4	5
5	0	1	1	0	0
4	0	3	2	1	0
3	0	2	3	2	0
2	0	0	1	0	0
1	0	0	0	0	0



Red zone (score >= 15): 2 risks with an exposure of 151,833 EUR.

Exposure by category and status (DataPilot)

Status: - all -

Data

Category	Risks	Exposure EUR
Certification	3	91,583
Commercial	3	51,817
Schedule	3	74,333
Supply chain	3	122,667
Technical	6	139,267
Total Result	**18**	**479,667**

Material price ranges

Monthly open, low, high and close of the purchase price index used for the long-lead materials (EUR/kg, supplier quotations and LME-linked surcharges).

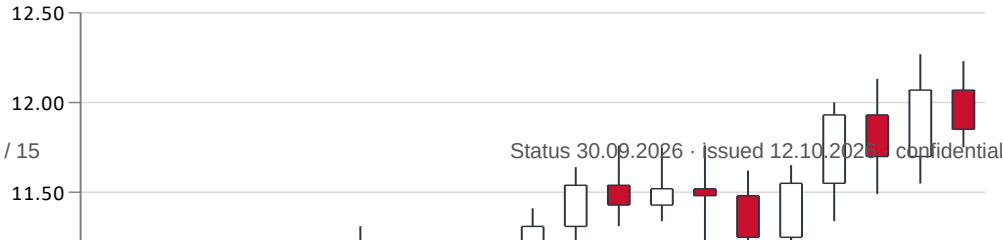
Month	Duplex steel 1.4462 bar (EUR/kg)				Aluminium 7075-T7351 plate (EUR/kg)				Index (Jul 2025 = 100)	
	Open	Low	High	Close	Open	Low	High	Close	Duplex	Aluminium
Jan 2025	6.10	5.87	6.27	6.05	9.85	9.57	10.05	9.73	101.9	89.9
Feb 2025	6.05	5.95	6.17	6.10	9.73	9.61	9.99	9.85	102.7	91.0
Mar 2025	6.10	6.00	6.16	6.08	9.85	9.70	10.42	10.17	102.4	94.0
Apr 2025	6.08	5.83	6.16	5.98	10.17	10.05	10.62	10.53	100.7	97.3
May 2025	5.98	5.72	6.04	5.87	10.53	10.47	10.99	10.82	98.8	100.0
Jun 2025	5.87	5.75	6.19	6.03	10.82	10.76	11.18	11.08	101.5	102.4
Jul 2025	6.03	5.87	6.09	5.94	11.08	10.59	11.31	10.82	100.0	100.0
Aug 2025	5.94	5.78	6.05	5.96	10.82	10.76	11.14	11.03	100.3	101.9
Sep 2025	5.96	5.90	6.14	5.98	11.03	10.73	11.19	10.80	100.7	99.8
Oct 2025	5.98	5.85	6.06	5.94	10.80	10.68	11.16	11.03	100.0	101.9
Nov 2025	5.94	5.87	6.13	6.04	11.03	10.97	11.41	11.31	101.7	104.5
Dec 2025	6.04	5.95	6.18	6.15	11.31	11.07	11.64	11.54	103.5	106.7
Jan 2026	6.15	6.03	6.51	6.35	11.54	11.31	11.76	11.43	106.9	105.6
Feb 2026	6.35	6.30	6.57	6.46	11.43	11.34	11.75	11.52	108.8	106.5
Mar 2026	6.46	6.35	6.51	6.44	11.52	11.23	11.76	11.48	108.4	106.1
Apr 2026	6.44	6.27	6.69	6.66	11.48	11.00	11.62	11.25	112.1	104.0
May 2026	6.66	6.49	6.80	6.68	11.25	11.02	11.65	11.55	112.5	106.7
Jun 2026	6.68	6.54	7.12	6.93	11.55	11.34	12.00	11.93	116.7	110.3
Jul 2026	6.93	6.74	7.29	7.15	11.93	11.49	12.13	11.70	120.4	108.1
Aug 2026	7.15	6.94	7.22	7.16	11.70	11.55	12.27	12.07	120.5	111.6
Sep 2026	7.16	7.02	7.24	7.12	12.07	11.75	12.23	11.85	119.9	109.5

Escalation since baseline	**+19.9%**	**+9.5%**
Range last 6 months	6.27–7.29	11.00–12.27

Duplex steel 1.4462 bar, monthly range (EUR/kg)



Aluminium 7075-T7351 plate, monthly range (EUR/kg)



Risk categories	Risk status	EAC methods	Trend
Technical	Open	CPI method	^
Schedule	Mitigating	CPI × SPI method	->
Supply chain	Closed	Remaining work at budget	v
Commercial		Bottom-up (scenario)	
Certification			