

MANAGEMENT OF TRANSPORT AND HANDLING CONTRACTS

1ST TS WORKSHOP

Archamps, France

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I. Rühl / TS-IC-HM

AGENDA

1. Introduction (Mandates)
2. B-type Contracts
3. E-type Contracts
4. F-type Contracts
5. S-type Contracts
6. Conclusion(s)

MANDATE

IC-LO	LOGISTICS S. PRODON	Carry-out logistics, transport and heavy handling for accelerators & experiments.
IC-HM	HANDLING MAINTENANCE I. RUEHL	Install and maintain handling and lifting equipment.

IN TOTAL 27 CONTRACTS!!!



B-TYPE CONTRACTS

B1181/TS – PORTEMATIC (CH)

- Blanket order contract for the supply and installation of motorized doors



Contract	B1181/ST	Remarks
Adjudication Price	1'400'000 CHF	Budget envelope – no financial obligations.
Contract duration	25.01.2002 – 31.12.2004	Possible extension of two times one year.
Amendment n°	0	



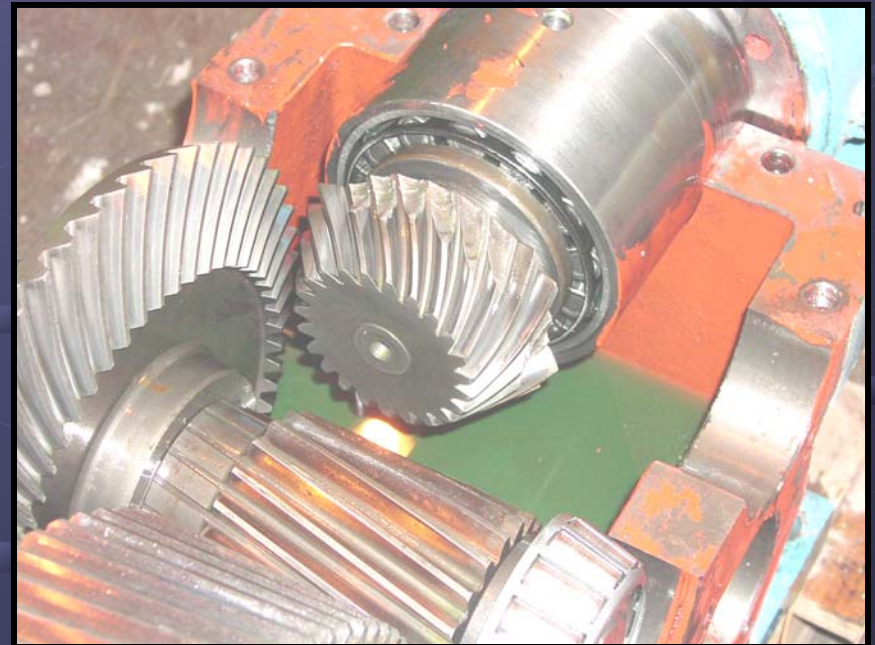
E-TYPE CONTRACTS

E072/TS – A_{MEC-SPIE} F_{ENWICK} C_{EGELEC} (NL, FR)

● Maintenance of lifting and hoisting equipment

➤ ~3500(!) EQUIPEMENT registered in MP5 database

- ✓ Cranes
- ✓ Hoists
- ✓ Palette trucks
- ✓ Forklifts, Elevators
- ✓ Lifts
- ✓ Shielded doors
- ✓ ...



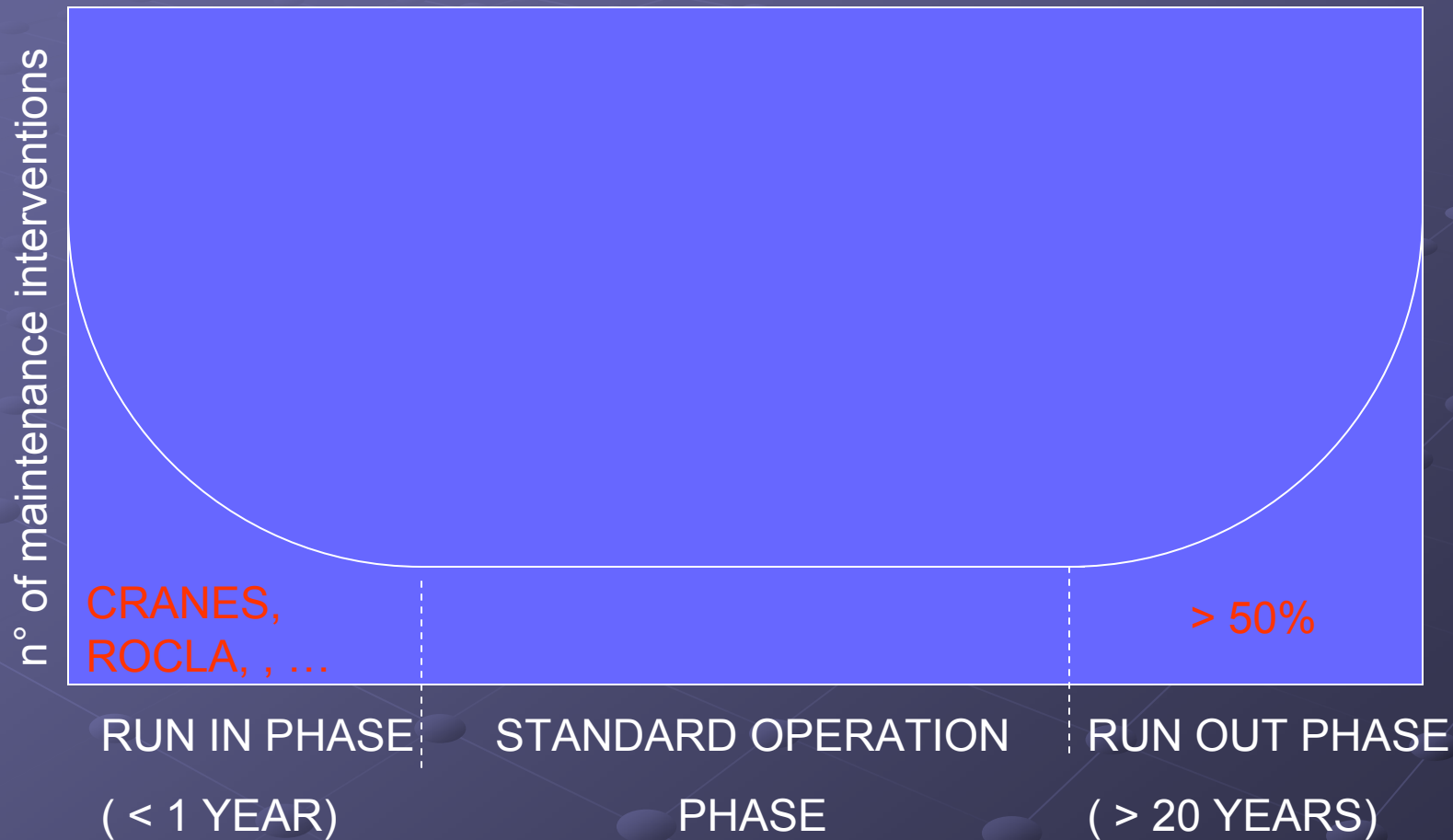
E072/TS – AFC (NL, FR)

- Dynamic maintenance plan
- Adapting and focusing on strategic important equipment
- Meets expectations in terms of qualification, flexibility, pro-activity, coordination and cooperation
- Administration to be improved

E072/TS – AFC (NL, FR)

- Increased intervention/workload due to
 - Increased maintenance frequencies due to increased equipment use
 - Prototype equipment
 - Intervention following inspection reports (SC-GS)
 - Consolidation works
 - Supplementary works such as changing switches, implementing zones for cranes, displacing hoists etc.
 - On-call service for LHC installation
 - Vandalism

E072/TS – AFC (NL, FR)



E072/TS – AFC (NL, FR)

Contract	E072/TS	Remarks
Adjudication Price	2'973'280 EUR	The important workload increase will require an increase of the budget envelope.
Contract duration	26.09.2002 – 30.09.2005	Possible extension of two times one year.
Amendment n°		
1	Change of consortium partner (Spie Trindel → Amec Spie)	0 EUR
n° of Service Orders		
2002	17	
2003	20	
2004	3	

E_/TS – Lift maintenance (CH,FR)

- **Four lift maintenance contracts for a total budget volume of ~200 kCHF are in place:**

✓ E038	AS du Léman	14 lifts
✓ E039	OTIS	7 lifts
✓ E043	AS Ascenseurs	11 lifts
✓ E403	Schindler	13 lifts

- **All four Contractors provide a fast and qualified maintenance and breakdown service.**



F-TYPE CONTRACTS

F276/TS/LHC – TAIM (ES)

- Supply and installation of 3 overhead traveling cranes



Contract	F276/TS/LHC	Remarks
Adjudication Price	257'997'220 ESP	1'550'594 EUR
Contract duration	19.11.1998 – 31.05.2003	Amendment n°3 for contract prolongation is under way
Amendment n°	2	
1	Raising of an option	150'755 EUR
2	Conversion of ESP to EUR	1'550'594 EUR
3	Contract prolongation	Under way, not yet signed.

F280/TS/LHC – ITALKRANE (IT)

- Supply and installation of 16 standard overhead traveling cranes
- Standard start up problems but now a qualified and reliable partner

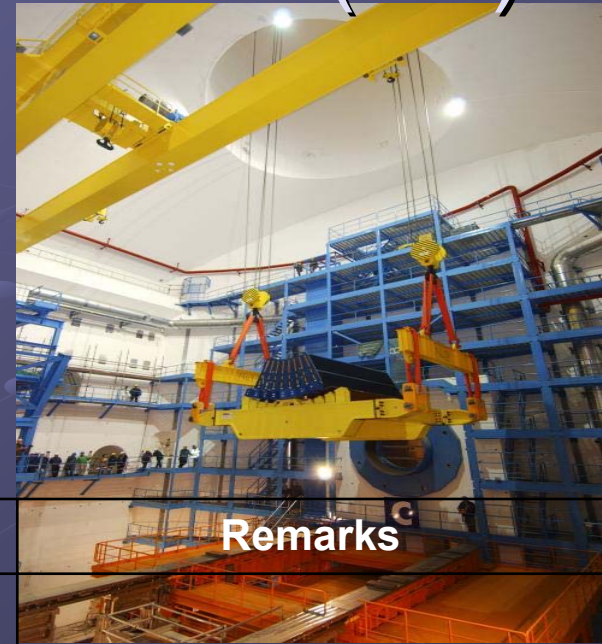


F280/TS/LHC – ITALKRANE (IT)

Contract	F280/TS/LHC	Remarks
Adjudication Price	2'740'710'960 ITL	1'415'459 EUR
Contract duration	18.02.1999 – 31.12.2004	
Amendment n°	8	186'036 EUR (13%)
1	Technical modifications	82'020'000 ITL
2	Additional crane (option)	89'380 EUR
3	Additional power feed rail	35'000 EUR
4	Supply of extra equipment	6'308 EUR
5	Supply of extra equipment	4'320 EUR
6	Conversion of ITL to EUR	1'415'459 EUR
7	Conversion of amendment n°1 from ITL to EUR	42'359 EUR
8	Supply of extra equipment	28'828 EUR
9	Supply of extra equipment	22'200 EUR

F420/TS/LHC – BRUNNHUBER (DE)

- Supply and installation of 7 non standard overhead traveling cranes



Remarks

Contract	F420/TS/LHC	Remarks
Adjudication Price	3'393'010 EUR	
Contract duration	01.08.2001 – 31.12.2004	
Amendment n°	5	31'607EUR (1%)
1	Modification of delivery schedule	0 EUR
2	Modification of payment terms	0 EUR
3	Modification of working platforms	41'550 EUR
4	Compensation for late delivery	- 9'943 EUR
5	Supply of spare parts (option)	79'140 EUR

F420/TS/LHC – BRUNNHUBER (DE)

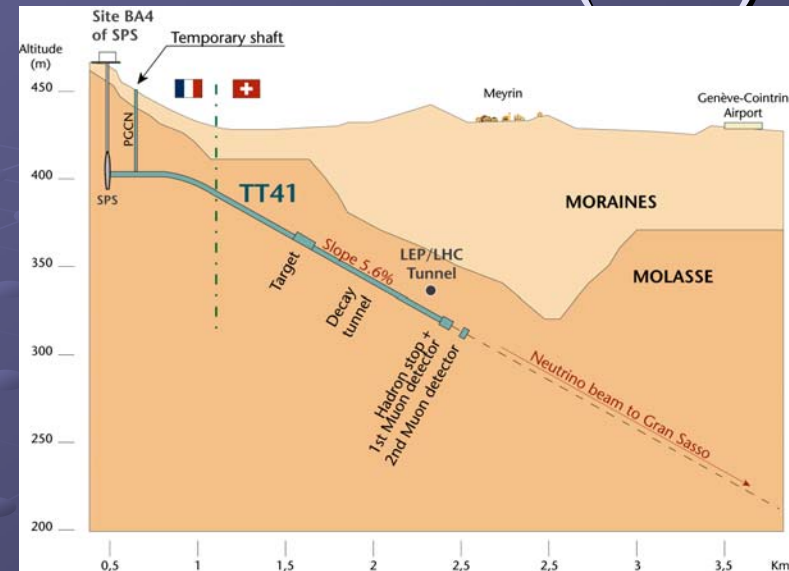
- Failed take over (BRUNNHUBER KRANBAU → PFAFF-SILBERBLAU GROUP → NORTH GERMAN INVESTEMENT GROUP → BRUNNHUBER KRANTECHNIK / KRANSERVICE).
- Contractors' workforce dropped from originally ~130 down to ~75 employees.
- Cash flow problems (risk of insolvency).
- Contractor accepted orders above production capacity.
- Contractor advanced other projects faster than CERN's projects since the payment conditions were either more favorable and/or the expected penalties more important.

F420/TS/LHC – BRUNNHUBER (DE)

- Reestablishing communication and cooperation
- Setting up new payment conditions - bank guarantees, payment delays
- Keeping up the pressure - daily contacts, regular visits
- Applying a 'Staggering' strategy
- In addition, the following compensations were applied:
 - ✓ 1% penalty of the cranes that were delayed (9'943 EUR).
 - ✓ Prolongation of one year guarantee and preventive maintenance for all seven cranes (37'960 EUR)
 - ✓ 10% reduction on the original proposed spare parts list (8'800 EUR – up to 26'375 EUR if all spare parts are ordered)

F528/TS/CNGS – BRUNNHUBER (DE)

- Supply and installation of one suspended overhead traveling cranes
- Most sophisticated crane ever built for CERN



Contract	F528/TS/CNGS	Remarks
Adjudication Price	777'642 EUR	51% supply by Italian origin
Contract duration	12.11.2003 – 31.12.2005	
Amendment n°	None	

F327/TS/LHC – ROCLA (FI)

- Supply of cryo-magnets transport vehicles at PA18



Contract	F327/TS/LHC	Remarks
Adjudication Price	1'284'200 CHF	
Contract duration	23.05.2000 – 15.11.2005	
Amendment n°	6	71'959 CHF (6 %)
1	Additional generator & guiding system	28'904 CHF
2	Modification of payment terms	0 CHF
3	Divers	0 CHF
4	Supply of spare parts (option)	110'818 CHF
5	Supply of optional third vehicle	714'688 CHF
6	Modifications to increase the maintainability and robustness	43'055 CHF

F445/TS/LHC – LIEBHERR (DE)

- Supply of an all terrain mobile crane



Contract	F420/TS/LHC	Remarks
Adjudication Price	788'983 EUR	
Contract duration	05.12.2001 – 27.02.2002	
Amendment n°		
1	Extension of warrantee period	10'650 CHF



S-TYPE CONTRACTS

S090/TS – DBS (PO, IT, FR)

- Transport and handling service for accelerators, experiments and general CERN infrastructure
- Major problems during the LEP dismantling phase as the workforce almost tripled (70 → 200)



S103/TS/LHC – VANGUARD (PL,UK)

- Transport and handling service for LHC and its Experiments



Contract	S103/ST/LHC	Remarks
Adjudication Price	13'820'000 EUR	
Contract duration	01.01.2003 – 31.12.2008	Open contract period to cover the LHC project.
Amendment n°	1	
1	Adding a new manpower qualification category	0 EUR
n° of Service Orders		
2003	142	

S103/TS/LHC – VANGUARD (PL,UK)

- Realignment of 17(!)%
- Wrong assessment of local infrastructure/resources
- Wrong assessment of advantages/ disadvantages for setting up the local office in France or Switzerland
- Inexperienced management team
- CERN did not get the experience and know-how of Pickfords-Vanguard (MS) - sub-division 'Industrial relocation' (Vanguard Industrial) was taken over by Investors - link to the Head Company was cut.

S090/TS – D_{ELATTRE} B_{ELLELI} S_{ETROVA} (FR , IT, PO)

- New qualified and motivated management team
- Recruiting qualified 'non-local' staff
- Setting up a clear work organization
- Reestablishing the confidence/cooperation with the local authorities
- Improving/optimizing the services by respecting all safety aspects
- Increasing weekly working hours and limiting the hiring of new manpower

S090/TS – DBS (PO, IT, FR)

- 8'000 transports of material
- 150'000 transports of parcels
- 2'000 extra-heavy transports
- 650 operations with CERN cranes & 70 with rented cranes
- Truck unloading
- Forklift operations
- Overhead travelling crane operations
- Construction works (quay, shielding, chicane)

S090/TS – DBS (PO, IT, FR)

	S090/TS	Remarks
Adjudication Price	22'000'000 CHF	The important workload increase will require an increase of the budget envelope.
Contract duration	01.07.2000 – 30.06.2005	Extensions of two times one year requested to cover the LHC project.
Amendment n°	7	
1	Unknown, not listed in CFU	0 CHF
2	Regularization	0 CHF
3	Extension (4 th contractual year)	0 CHF
4	Price revision	+0.197 % on hourly rates and fix costs
5	Increase from 40 to 42 h / week	+ 7% on hourly rates
6	Increase of transport insurance coverage from 200 to 500 kCHF	189'900 CHF
7	Extension (5 th contractual year)	0 EUR
8	Price revision – in preparation.	
n° of Service Orders		
2000	22	
2001	46	
2002	153	
2003	145	
2004	92	

S090/TS – DBS (PO, IT, FR)

ADDITIONAL CONTRACT PROLONGATION OF TWO YEARS RECOMMENDED IN ORDER TO COVER THE LHC INSTALLATION PERIOD.

WORKFORCE WILL INCREASE TO MORE THAN 170 EMPLOYEES AT ITS PEAK OF THE LHC CRYO-MAGNET INSTALLATION!!!

MAIN ACTORS



S. Prodon



A. Calderone



O. Böttcher

- Colleagues from FI-PS (D. Abbot, M. Jackson, C. Lara, I. Lobmaier, W. de Cat, J. Payunen ...)

CONCLUSIONS (1)

- Transport and handling service contract as well as the maintenance contract shall be adapted to the LHC installation schedule
 - Additional funding required
 - Technical sector shall be strengthened – crane specialist, work supervisors
- Coordination between SC-GS and TS-IC-HM shall be improved and/or inspection activities for lifting equipment reorganized
- Contract adjudication criteria for service contracts should be reassessed
- Payment conditions for supply contracts should also be reassessed

CONCLUSIONS (2)

- The ST management at the time understood and realized the importance to strengthen the ST-HM management team ... now the TS management should understand to strengthen the technical and supervisor team.
- Applying the correct balance of rigueur and comprehension is essential for succeeding ...
- ... but it is nevertheless not a guarantee, since there are many parameters that CERN cannot influence.
- In general, a good and valuable support from FI-PS.

MERCI

