IT-4464 Bidders’ Conference Consolidation Program
Handling Engineering Group (EN-HE)

The mandate: provide transport and handling services for the technical infrastructure of CERN, accelerators and experiments. This includes the design, the tendering & procurement, the installation, the commissioning, the operation, the maintenance and decommissioning of standard industrial and custom built transport and handling equipment.

Group Leader
Ingo Rühl
EN-HE Transport and Handling Equipment

Overhead Cranes and Hoists

Lifting Beams

Working Platforms

About 5700 assets

Lifting Equipment

Electric Tractors

Special Vehicles

IT-4464 Consolidation Program
Distribution of CERN Hoisting Equipment

HM31 equipment family: ~1,500 assets

- HPR (371 - 25%)
- HPT (36 - 2%)
- HR (6 - 0%)

- Hoists
  - HPA (1,083 - 72%)

- Overhead cranes

HM32 equipment family
~2,100 assets

- HTP (732 - 33%)
- HCH (668 - 32%)
- HLV (167 - 8%)
- HTMS (28 - 1%)
- HRH (214 - 10%)
- HRTH (36 - 2%)
- HTMG (7 - 0%)
- HCS (95 - 5%)
- HDS (40 - 2%)
- HRTL (121 - 0%)

IT-4464 Consolidation Program
CERN’s crane consolidation program

• EN-HE group established in 2009 a consolidation program with the aim of renovating the park of overhead cranes.

• The main reasons justifying the consolidation program are the following:
  ✓ Poor reliability or high maintenance costs;
  ✓ Absence of safety equipment;
  ✓ Maintenance accesses not compliant with the actual standards;
  ✓ Presence of asbestos;
CERN’s crane consolidation program

• Additional reasons for the crane consolidation program are:
  ✓ Unavailability of spare parts;
  ✓ Obsolescence of electrical components;
  ✓ Adaptation of the crane operation characteristics to the new user's needs;
  ✓ Increase of the criticality of the equipment for the activity of the organisation;
CERN’s crane consolidation program

- Recurrent program
- About 80 cranes replaced or revamped since 2009
- More than 100 cranes (capacity up to 10t) part of the program in the coming years
- Yearly program adapted to CERNs’ physics strategy and highest priority activities
CERN’s crane consolidation program

Electrical refurbishment of the three cranes above Booster accelerator
CERN’s crane consolidation program

Crane replacement in ISR tunnel
CERN’s crane consolidation program

Crane replacement in metrology room