



Schedule of technical Rail expertise

HKA has a broad portfolio of specialist railway experts with extensive technical, contractual and management experience in the rail industry worldwide. We provide advice at all stages of a project and are specialists in helping clients through the dispute resolution process. We operate internationally, and have technical experts spread across 40 offices in 18 countries spanning all continents. HKA has a broad portfolio of specialist railway experts with extensive technical, contractual and management experience in light rail, metro and heavy rail projects worldwide

Power & electrification (traction)
Overhead line & pantograph 25kV
DC pantograph/catenary
DC 3rd Rail 750V
DC 4-rail system underground & metro
Transformers (HV & MV)
Overhead Gantry Power
Transformer Rectifier Units (TRU's)
Earthing & bonding

Cyber security
Software control
System access
Customer interfacing (laptop/phone)
Virtual ticketing
Real-time journey monitoring

Power & switching
Track Paralleling Huts (TPH)
Lineside power
REB's, Principal Supply Point (PSP)
SCADA & PLC control
Surge arresters & interrupters
Con-rail and lineside switches
Photovoltaic and wind turbine

MEP & building services
Lineside power
LOC's
Maintenance Delivery Units (MDUs)
Regional Operating Centres (ROCs)
Stations (see below)
Rolling stock service facilities

Signalling & Telecoms (S&T)
Track circuit & block signalling
ERTMS / ETCS
Signal aspects (optics)
Semaphore
Customer Information System (CIS)
Signal boxes & ROC's

Rolling stock
Electrical Multiple Units (EMU)
25kV High speed stock
Hybrid 750VDC/25kV EMU
Diesel Multiple Units (DMU)
Freight units



Track

- Permanent way (standard & narrow gauge)
- Running rail
- Wheel / rail interface
- Switches & crossings (S&C)
- Ground conditions and geotechnical engineering

Stations

- Power
- Transformers (MV & LV)
- UPS generators
- Lighting
- Emergency lighting
- Telecoms & radio
- Fire alarm & sprinklers
- Optics
- CCTV
- CIS
- Acoustics
- PA/VA
- Building services
- Heat & vent
- Architectural and design services (heritage and listed build)
- Lifts and escalators

Structures

- Bridges
- Viaducts
- Culverts & cuttings
- Stations
- Heritage architectural expertise
- Maintenance & rolling stock service facilities
- Lineside Huts/REB's/TPH
- Tunnels & underground rail

Professional standing & recognition



Consistently ranked highly in the Global Arbitration Review (GAR) Top 100

HKA has been instructed by 86% of the GAR top 30 International Arbitration Law Firms

HKA has been instructed by 83% of the leading Contentious Construction Law Firms*

*according to Chambers & Partners



Top of the Who's Who Legal Construction Expert Witnesses analysis for six consecutive years

For further information, please contact your local HKA office or:



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