

## Technical brief: Network Management

### Who trusts IPL?

IPL has helped a wide range of network operators and product vendors to meet their network management challenges. Our past & present clients in this area include:

**Agilent**  
**Alcatel-Lucent**  
**BT**  
**Cable & Wireless**  
**Kingston Communications**  
**MOD**  
**Motorola**  
**News Digital Systems**  
**O<sub>2</sub>**  
**Orange**  
**Siemens**  
**Vallent (Metrica)**  
**Vodafone**



**Breadth of experience, independence and software expertise**

### Experience

Telecoms & broadcast network management systems, also called Operations Support Systems (OSS), have been a major part of IPL's practice for over 20 years. IPL can draw on a great breadth and depth of practical experience in the field.

IPL has developed turnkey **alarm management** integrators for a number of fixed, mobile and broadcast network operators and for the military.

IPL has developed **provisioning** software for a number of GSM and fixed network operators.

IPL has developed software for a number of leading **OSS products**, including Agilent's AcceSS7 and Vallent's Metrica products.

IPL has provided network management **product selection** advice to a number of network operators, and provided **product direction** advice to systems vendors.

IPL has special expertise in **digital video distribution** network management, and in particular in video stream analysis.

Above the element and network management layers, IPL has been involved in **service management** and **SLA automation** for some years, with implementation and product selection work for both fixed and mobile network operators.

### Capability

#### IPL helps clients with its expertise

IPL has provided consultancy on network management architectures, requirements definition, product selection, systems procurement and product portfolio direction to many network operators and equipment vendors. We have also trained network management systems vendors in telecommunications technologies, and lectured on network and service management topics around the world, including to the TeleManagement Forum.

#### IPL builds management solutions

IPL acts as prime contractor to specify, build and deliver complete end-to-end network solutions for network operators. We have experience with many leading management systems platforms, including NetExpert, TeMIP, OpenView and Netcool.

#### IPL develops management products

IPL has developed much of the software that powers the industry's leading network management products, including AcceSS7, Vallent and others. Product vendors select IPL as their development partner because of our strong software engineering core skills, and our richness of background knowledge of network management practice.

## Element management

Element management software development requires a strong capability both in management systems technology and in embedded software. Because of the issues of widespread field deployment of managed devices, very high software reliability is also essential. IPL's background in top quality embedded software development makes it an excellent choice for element management software.

IPL has implemented management interfaces (CMIP, SNMP, serial, ITO) in a number of telecoms and broadcast network elements, for BT, Motorola, NDS and others. We've implemented complete management stacks from the data link layer up, and we've deployed off-the-shelf management interface packages.

IPL has also specified, designed and developed a number of element management applications, including GSM BTS performance surveillance, data network configuration management, northbound interface adaptors (CMIP, CORBA), and Intelligent Network monitoring.

## Network management

The key to effective network level management is the ability to combine real-time control and alarm data with up-to-date topological data models. IPL has designed and delivered turnkey network-level alarm integrator solutions, and developed software for network configuration management systems, for a number of network operators, including GSM, wire line, cable, digital TV and military network technologies.

## Service & SLA management

IPL has a long track record in network service management. We have developed systems for service provisioning, fault management, service monitoring, KPI analysis, SLA automation and field force dispatch, for both mobile and fixed network operators. We provide independent consultancy in SLA automation software selection, and maintain close technical liaison with a number of service management automation product vendors.

## About IPL

IPL delivers software development, systems integration and consultancy services to customers who demand the highest standards of quality and dependability. We also develop leading edge testing tools which are used by software developers around the world.

Founded in 1979 and based in our wholly owned secure premises in the World Heritage City of Bath, IPL now employs around 240 staff.

IPL has revenues of ca. £25M p.a. and is the principal trading company within the IPL Group, which is owned by IPL's directors and staff. The IPL Group has always been profitable and continues to fund its growth by reinvestment of profits.

## Contact information

IPL Information Processing Limited  
Eveleigh House  
Grove Street  
Bath  
BA1 5LR

Tel: +44 (0) 1225 475000  
Fax: +44 (0) 1225 444400  
Email: sales@ipl.com

IPL 001 BRF T 32.2  
Copyright © IPL 2008  
All trademarks acknowledged

