



Thales Transportation "At your service"

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Thales Transportation Systems



- More than 100 transport customers worldwide
- 7,000 people specialised in transportation activities
- Thales provides its systems and services to main line rail, urban transport and road operators
- A global market approach and a worldwide presence
- A unique positioning in mission-critical turnkey systems strengthened by long-term partnerships
- A **comprehensive portfolio of solutions** based on open architectures

Get the most out of your infrastructure

A worldwide footprint





Customers request after-sales services

- For transportation electronic systems on signalling, communication, supervision and ticketing
- Improved and longer performance of asset base
- Safety and Security based
- Service packages with performance based services agreements





Long term customer commitment

- Full local services delivery supported by dedicated competence and integration centres
- Financial strength and stability



Customer intimacy

- Trust, dedication and partnership is our credo
- Local teams adhering to your safety and security processes

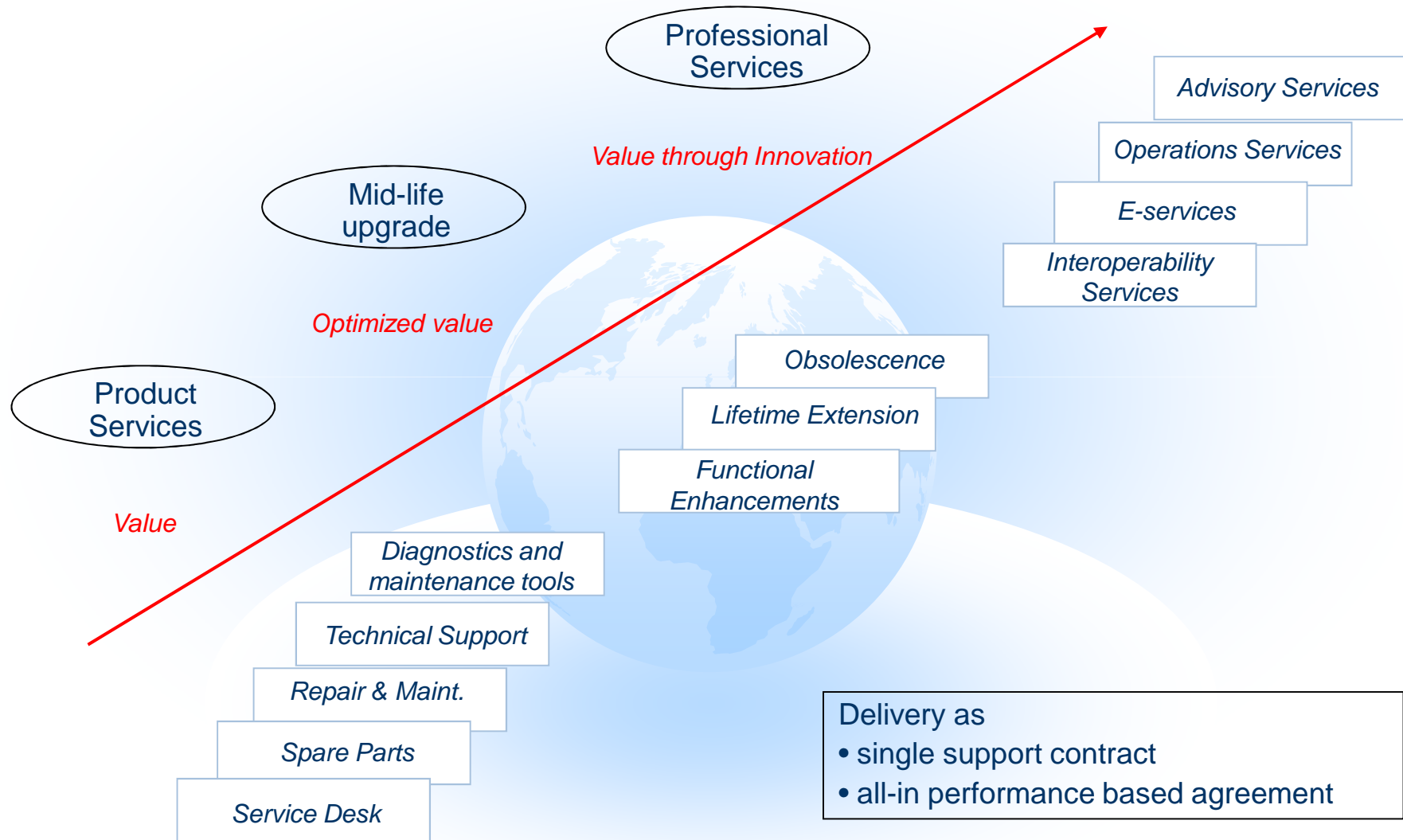
When Thales delivers services, they become part of the safety organisation of the customer



We care about your success

- As a one-stop-shop customer services provider for transportation systems that are key for your operations
- Assistance and support throughout the lifetime of your systems
- Tailored Services Packages based on our leadership position
- Experience through our large existing Customer Reference base

“At your service” Value Offering





- More than **55 transport customers** worldwide
- **850 people** specialized in **transportation** customer services
- Providing after-sales customer services to **mainline rail, urban transport, road operators, prime contractors** and to **transport administrations**





We care about your success

- Contracts that reduce your risk and increase predictability of your operational costs
- Direct access to experts
- Worldwide customer services support close to you
- Safety & security expertise guaranteed

Customer references: services contracts



- High speed lines in Spain
Full maintenance
- London Underground in UK
Operations & Maintenance
- Vancouver Sky Train in Canada
Expert support and audits
- Oslo Urban Transport in Norway
Maintenance, evolution and interoperability
services

We are able to develop better tailor made services

High Speed Lines in Spain



> Customer challenge

ADIF infra rail operator Spain

- Full service contracts for 5 HSL covering 1300+ km
- Maintaining signalling, telecom, auxiliary, CCTV, energy, airco etc. for both Thales and 3rd party suppliers
- Performance based Service Level Agreement

> Thales answer

- Deployed 300 persons geographically spread team in Spain
- Full service range
- Uninterrupted service delivery with 5 year contracts since 1992

> ADIF main benefits

- No need to train & deploy expert services staff and focus on core business
- Guarantee of alignment with latest technology
- Through SLA with Thales create performance guarantee with their clients (e.g. Renfe - train operator)

London Underground in UK



Customer challenge

- Single communications system and services operating across all underground lines
- Replace and maintain the ageing, life-expired systems



Thales solution

- Design, build, test & commission of new underground-wide network with CCTV
- Operate & maintain legacy telecom & new digital radio
- Network operations & whole-life service management
- Service Level Agreement
- Multiple support contracts with 3rd parties



Main benefits

- 24x7 expert assistance
- Preventative & reactive maintenance for better availability
- Operational efficiencies through central control centre
- Improved passenger & staff safety and security through fully integrated communications



Key dates:

- Awarded 20 year contract November 1999
- In service since 2006

Vancouver SkyTrain in Canada



> Customer challenges

- British Columbia Rapid Transit Corporation (BCRTC) is responsible for Operation and Maintenance of the Vancouver SkyTrain.
- To maximize system availability, O&M staff have the need for 24x7 expert assistance + supplemental scheduled maintenance

> Thales answer

- 24/7 on-call technical support with guaranteed response times
- Regular site visits to assist with preventive maintenance
- Annual site visits for reviews and audits

> Main benefits

- 24x7 expert assistance
- Assistance with preventive maintenance
- Regular monitoring to ensure system and parts availability.



Key dates:

- Awarded in 1986 with annual renewals.



Customer challenges

- Paper ticketing replacement with contact-less cards
- Centralized Multimodal system (Bus-Tram-Boat-Metro) and interoperable (in Akershus and the city of Oslo)

Thales answer

- Maintenance of the Ticketing System (2009 – 2018)
- Evolutions of the Ticketing System (2008-2011)
 - regional interoperability (with others suppliers and operators)
 - interoperability opening towards National
 - Evolution / Optimization of the fares

Main benefits

- One single media for the traveller
- Reduction of fraud
- Optimized fares for travellers
- Reduction of operation costs for Ruter
- National Interoperability



Key dates:

- Contract System signature in September, 2003
- March 2009 : Maintenance Contract 5 years with tacit renewal for 5 years

THALES

Thanks for your attention!



**We are
“At your service”**