

# UIC Railway Asset Management Global Conference 2017

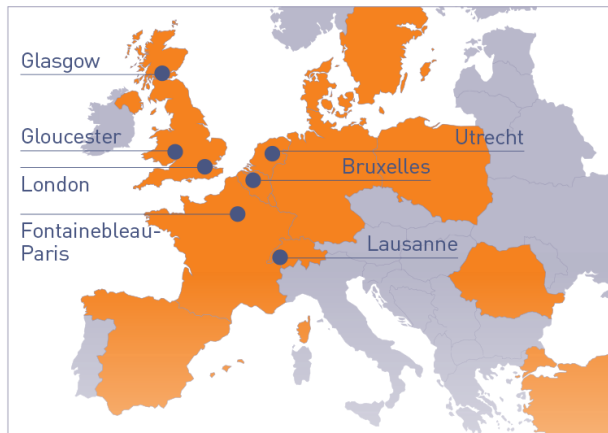
4 - 6 OCTOBER 2017  
UIC HEADQUARTERS, PARIS

## Simeo™ Platform: How to optimise maintenance and renewals for your assets

*Rémy JACQUIER, OXAND*

[www.railway-asset-management.org](http://www.railway-asset-management.org)

OVER **800 PROJECTS** THROUGHOUT THE WORLD,  
IN THE MAJOR INDUSTRY SECTORS



#### OUR SECTORS

##### ENERGY

NUCLEAR  
OIL & GAS  
HYDROELECTRICITY/  
OFFSHORE

##### TRANSPORT

RAILWAY  
PORT / WATERWAY  
AIRPORT / SPATIAL  
ROAD / HIGHWAY

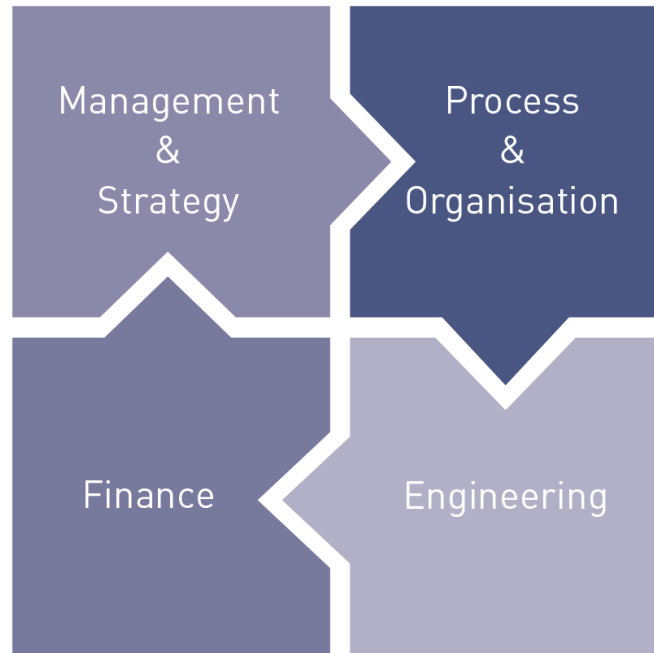
##### SPECIFIC LARGE

##### ASSETS

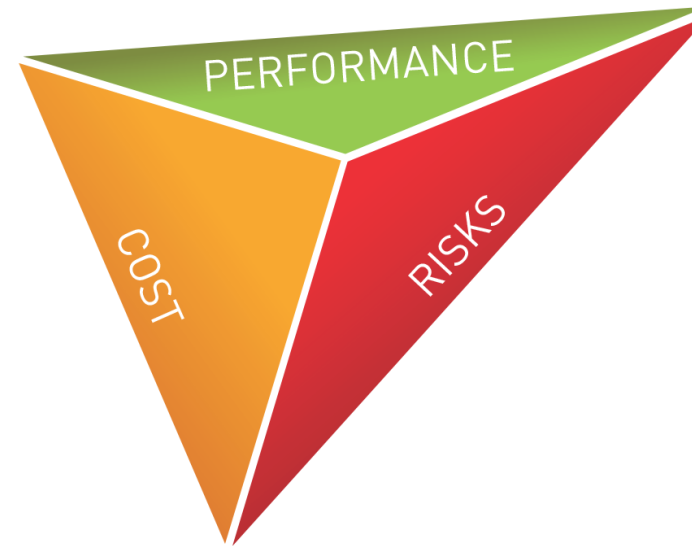
DEFENCE  
INDUSTRIES  
PUBLIC AUTHORITIES

FRANCE - UNITED KINGDOM - THE NETHERLANDS - SWITZERLAND - BELGIUM - CANADA

Our strength is to **create new value**  
from your existing asset knowledge



We connect a full set of skills  
to provide advanced solutions.



We have data, models, algorithms and  
simulators to find the right balance  
between performance, risks and costs.

Resource allocation  
**Safety**  
Residual risk  
Proactive maint

**ROI**  
Safety case  
Opportunity  
Efficiency  
Asset management  
**Compliance**

with **Simeo**™



“ **How to...**

... transform my asset **knowledge into a skill?**

... optimise my **asset value?**

... control my **business results?** ”

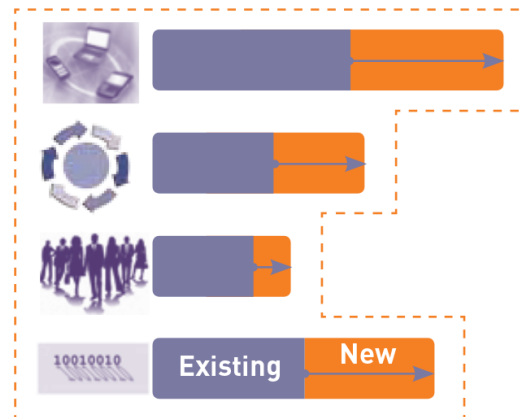
The Asset Managers, in charge of integrity, safety, performance and compliance of ageing infrastructures, are looking **for asset performance solutions like Simeo™.**

Sounds good?

**Build your own Simeo™ Solutions with us.**



Our collaborative forces will help you to  
**meet your most valuable objectives**



We assess your **existing** assets; we shape your **best value solution**; we build and test a **pilot** for your Simeo™ solution.



We **configure** our generic solution to meet your requirements and we **engage** for the **integration** of your Simeo™ solution.

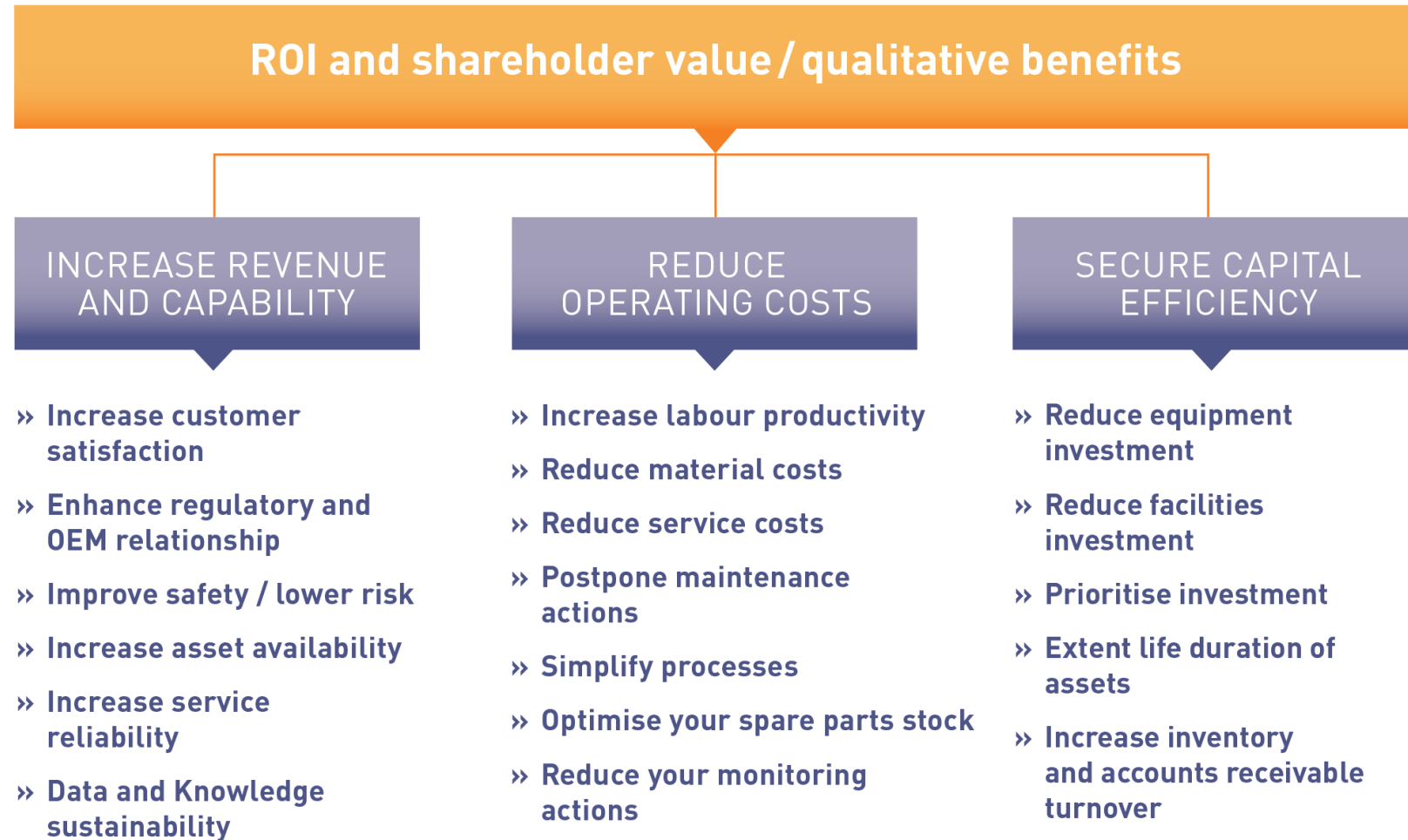


Finally, we ensure that it is **easy** for your organisation to **benefit** and get a measurable **ROI** from your Simeo™ solution.

Proof of performance Ageing assessment  
Best value Reliability  
International database System Engineering Inn  
**Optimisation**

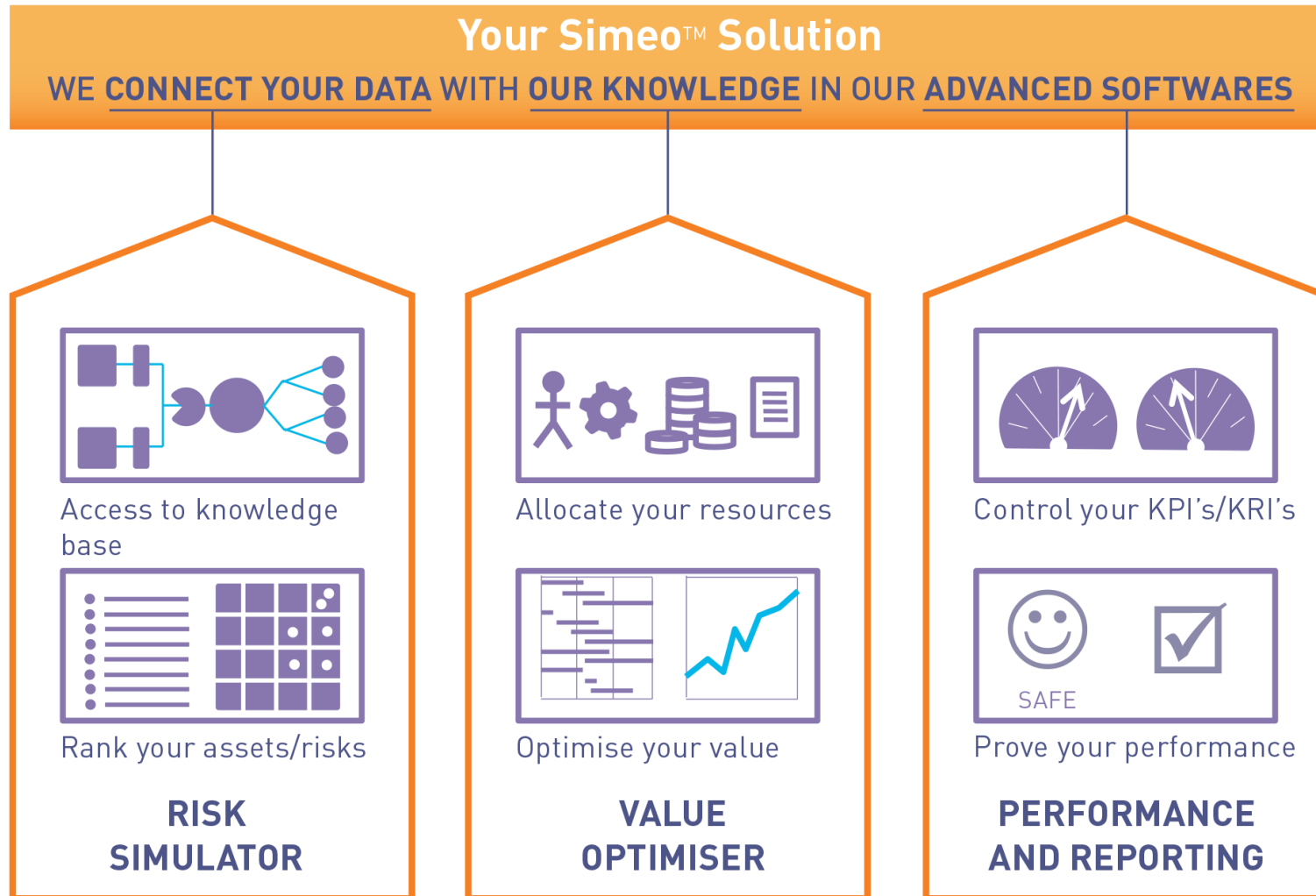
with **Simeo™**

Find your **value drivers** from the followings ...





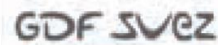
...and **make them real** with **your Simeo™ Solution**



**Savings** Knowledge Availability  
Life extension **Shareholder value**

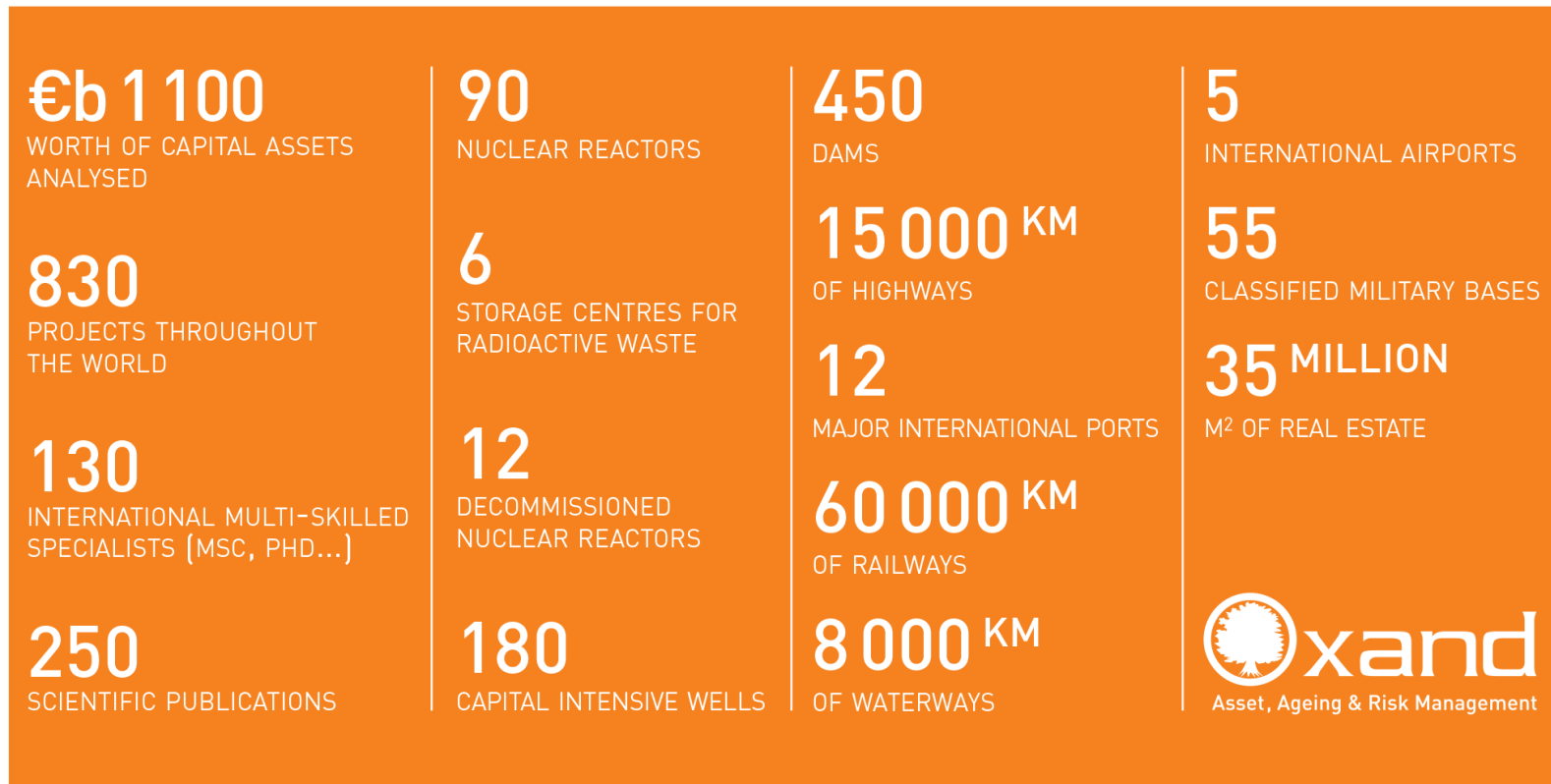
with **Simeo™**

Many asset-intensive companies trust  
**our expertise to deliver** quality and results





# Where does **your new value** come from?



Our solutions are compatible with main international standards :  
ISO 55'000 (PAS 55), ISO 31'000, ISO 15'288, EN 50'126 (RAMS), ISO 14'001.

Resource allocation  
**ROI**  
Asset management  
**Safety**  
Residual risk  
Proactive maintenance  
**Compliance**  
Efficiency

with **Simeo**™

# The **generic solutions** for your enterprise ...

SOLUTIONS	DESCRIPTION	MAIN DELIVERABLES	MAIN USERS
Assetbase Failure Assessment System	Access to our risk wisdom to challenge your risks, rank your physical assets and prioritise your mitigation action plans	Mitigation plans, Safety cases	Integrity manager, Operator, Engineer
Ageing Management System	Set up a framework for coordinating all programs and activities related to the understanding, control, monitoring and mitigation of ageing effects.	Ageing Management Plans, Safety cases	Operator, Ageing manager, Engineer
Risk-based maintenance planning	Implement a risk-informed decision approach to prioritising and planning inspection, maintenance and renewal actions (bottom-up approach)	Maintenance plans, risk maps, critical asset	Integrity manager, Operator, Engineer
Safety Management System	Provide a systematic way to identify safety hazards and control risks while maintaining assurance that these risk controls are effective	Mitigation plans, Safety cases	Operator, HSE officer
Asset Investment Management System	Generate from your asset strategy scenarios of investment plans and see the future value of your assets.	Investment plans	Asset manager, asset owner
Whole-life Cost Modeling	Use of models, algorithms and scenario generator to predict CAPEX and OPEX needs over the life cycle depending on performance expectation	Ownership cost, CAPEX/OPEX budgets	Asset manager, regulator, investor
Asset Optimiser	Perform risk quantification (Monte Carlo) to optimize intervention plan in order to fulfill business objectives and acceptance level of residual risk	Optimise action plans	Asset manager, investor
Enterprise Risk Management System	Set up risk management process and information system according to ISO 31'000 to manage all business relevant risks of your enterprise	Risk report, mitigation plan, confidence	Risk manager, CEO, top manager
Project Risk Management System	Set up risk management process and information system according to ISO 31'000 to manage all cost, planning and quality risks of your project	Risk report, mitigation plan, confidence	Project manager, project team
Project and Cost Control System	Use of risk quantification models (Monte Carlo) to aggregate project risks to control costs and schedule of investment-intensive projects	Mitigation plans, cost indicator, anticipation	Project manager, project team
Performance Management System	Set up processes which ensure that project goals are consistently being met and that proofs of performance are provided by asset owners	Proof of performance, safety cases, bills	Contractor, project leader, finance
System Engineering	Set up of processes and information system to facilitate communication and efficiency among all stakeholders during life cycle of asset systems	Processes and technology	Contractor, project manager

... configured for **specific needs** of industry

SOLUTIONS	DESCRIPTION	INDUSTRY
Wellbase Assessment System	A Failure Assessment System to insure safety and performance of off-shore and on-shore wells. Generic fault trees, assessment method, ranking of asset and actions.	Oil & Gas
Risk-based Maintenance of Ports and Airports	Asset register, ageing models and risk-based methodologies to optimise inspection, maintenance and renewal activities on Port and Airport infrastructures	Urban Infra.
Enterprise Asset Management System for Defense infrastructures	Asset register, ageing models, cost models, risk-based methodologies to allocate human and financial resources according to the performance expectation and constraints	Defense
Ageing Management System for Cables and Civil Works in nuclear power plants	Asset register, monitoring data collection, data trending, ageing prediction, controls and alert management for passive components of NPP (NUREG-1611)	Nuclear
Risk-based Maintenance for Railway infrastructures	Risk-based methodologies to rank maintenance and renewal activities for track, civil engineering, electrical and safety control assets (EN 50'126)	Railways
Whole-life Cost Modeling for Railway infrastructures	Cost models of all components of railway infrastructure to predict CAPEX and OPEX budgets at short, mid and long term ; regulation issues included.	Railways
Enterprise Risk Management System for Energy utilities	Processes and information system to manage risks and opportunities related with production of energy (according to ISO 31'000).	Renewable Oil & Gas
Performance Optimiser for Hydropower plants	Monte Carlo simulator to optimise maintenance and renewal activities regarding performance and residual risk expectations of power generation units.	Renewable
Asset Investment Management System for Electrical Grids	Life-cycle cost models and simulators to generate investment plans according to asset strategy and imposed financial, performance and risk constraints	Urban Infra.
Cost control for nuclear decommissioning projects	Risk register, Monte Carlo simulator to aggregate risks at the cost and schedule level, risk-informed decision system to define mitigation actions	Nuclear
Performance management System for Roads PPP projects	Processes and information system to help contractors in roads PPP projects to prove effective performance and provide the bills to public asset owners	Roads
System Engineering for Roads PPP projects	Processes and information system to help all stakeholders in roads PPP projects to work efficiently and to meet asset owners specifications	Roads

Proof of performance Ageing assessment plan  
Best value Reliability **Optimisation**  
International database System Engineering Innov

with **Simeo**™

Start to create **new value**  
and contact us for more information



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Build your Asset Performance Solution

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