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

Rémy JACQUIER, OXAND
OVER **800 PROJECTS** THROUGHOUT THE WORLD, IN THE MAJOR INDUSTRY SECTORS
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.
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

1. Consultancy
2. Implementation
3. Assistance

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

**ROI and shareholder value / qualitative benefits**

**Increase Revenue and Capability**
- Increase customer satisfaction
- Enhance regulatory and OEM relationship
- Improve safety / lower risk
- Increase asset availability
- Increase service reliability
- Data and Knowledge sustainability

**Reduce Operating Costs**
- Increase labour productivity
- Reduce material costs
- Reduce service costs
- Postpone maintenance actions
- Simplify processes
- Optimise your spare parts stock
- Reduce your monitoring actions

**Secure Capital Efficiency**
- Reduce equipment investment
- Reduce facilities investment
- Prioritise investment
- Extent life duration of assets
- Increase inventory and accounts receivable turnover
...and make them real with your Simeo™ Solution

Your Simeo™ Solution
WE CONNECT YOUR DATA WITH OUR KNOWLEDGE IN OUR ADVANCED SOFTWARES

- **RISK SIMULATOR**
  - Access to knowledge base
  - Rank your assets/risks

- **VALUE OPTIMISER**
  - Allocate your resources
  - Optimise your value

- **PERFORMANCE AND REPORTING**
  - Control your KPI’s/KRI’s
  - Prove your performance

www.railway-asset-management.org
Many asset-intensive companies trust our expertise to deliver quality and results
Where does **your new value** come from?

<table>
<thead>
<tr>
<th><strong>€b 1 100</strong></th>
<th><strong>90</strong></th>
<th><strong>450</strong></th>
<th><strong>5</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>WORTH OF CAPITAL ASSETS ANALYSED</td>
<td>NUCLEAR REACTORS</td>
<td>DAMS</td>
<td>INTERNATIONAL AIRPORTS</td>
</tr>
<tr>
<td><strong>830</strong></td>
<td><strong>6</strong></td>
<td><strong>15 000 KM</strong></td>
<td><strong>55</strong></td>
</tr>
<tr>
<td>PROJECTS THROUGHOUT THE WORLD</td>
<td>STORAGE CENTRES FOR RADIOACTIVE WASTE</td>
<td>OF HIGHWAYS</td>
<td>CLASSIFIED MILITARY BASES</td>
</tr>
<tr>
<td><strong>130</strong></td>
<td><strong>12</strong></td>
<td><strong>60 000 KM</strong></td>
<td><strong>35 MILLION</strong></td>
</tr>
<tr>
<td>INTERNATIONAL MULTI-SKILLED SPECIALISTS (MSC, PHD...)</td>
<td>DECOMMISSIONED NUCLEAR REACTORS</td>
<td>OF RAILWAYS</td>
<td>MP² OF REAL ESTATE</td>
</tr>
<tr>
<td><strong>250</strong></td>
<td><strong>180</strong></td>
<td><strong>8 000 KM</strong></td>
<td></td>
</tr>
<tr>
<td>SCIENTIFIC PUBLICATIONS</td>
<td>CAPITAL INTENSIVE WELLS</td>
<td>OF WATERWAYS</td>
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</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>SOLUTIONS</th>
<th>DESCRIPTION</th>
<th>MAIN DELIVERABLES</th>
<th>MAIN USERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assetbase Failure Assessment System</td>
<td>Access to our risk wisdom to challenge your risks, rank your physical assets and prioritise your mitigation action plans</td>
<td>Mitigation plans, Safety cases</td>
<td>Integrity manager, Operator, Engineer</td>
</tr>
<tr>
<td>Ageing Management System</td>
<td>Set up a framework for coordinating all programs and activities related to the understanding, control, monitoring and mitigation of ageing effects.</td>
<td>Ageing Management Plans, Safety cases</td>
<td>Operator, Ageing manager, Engineer</td>
</tr>
<tr>
<td>Risk-based maintenance planning</td>
<td>Implement a risk-informed decision approach to prioritising and planning inspection, maintenance and renewal actions (bottom-up approach)</td>
<td>Maintenance plans, risk maps, critical asset</td>
<td>Integrity manager, Operator, Engineer</td>
</tr>
<tr>
<td>Safety Management System</td>
<td>Provide a systematic way to identify safety hazards and control risks while maintaining assurance that these risk controls are effective</td>
<td>Mitigation plans, Safety cases</td>
<td>Operator, HSE officer</td>
</tr>
<tr>
<td>Asset Investment Management System</td>
<td>Generate from your asset strategy scenarios of investment plans and see the future value of your assets.</td>
<td>Investment plans</td>
<td>Asset manager, asset owner</td>
</tr>
<tr>
<td>Whole-life Cost Modeling</td>
<td>Use of models, algorithms and scenario generator to predict CAPEX and OPEX needs over the life cycle depending on performance expectation</td>
<td>Ownership cost, CAPEX/OPEX budgets</td>
<td>Asset manager, regulator, investor</td>
</tr>
<tr>
<td>Asset Optimiser</td>
<td>Perform risk quantification (Monte Carlo) to optimize intervention plan in order to fulfill business objectives and acceptance level of residual risk</td>
<td>Optimise action plans</td>
<td>Asset manager, investor</td>
</tr>
<tr>
<td>Enterprise Risk Management System</td>
<td>Set up risk management process and information system according to ISO 31000 to manage all business relevant risks of your enterprise</td>
<td>Risk report, mitigation plan, confidence</td>
<td>Risk manager, CEO, top manager</td>
</tr>
<tr>
<td>Project Risk Management System</td>
<td>Set up risk management process and information system according to ISO 31000 to manage all cost, planning and quality risks of your project</td>
<td>Risk report, mitigation plan, confidence</td>
<td>Project manager, project team</td>
</tr>
<tr>
<td>Project and Cost Control System</td>
<td>Use of risk quantification models (Monte Carlo) to aggregate project risks to control costs and schedule of investment-intensive projects</td>
<td>Mitigation plans, cost indicator, anticipation</td>
<td>Project manager, project team</td>
</tr>
<tr>
<td>Performance Management System</td>
<td>Set up processes which ensure that project goals are consistently being met and that proofs of performance are provided by asset owners</td>
<td>Proof of performance, safety cases, bills</td>
<td>Contractor, project leader, finance</td>
</tr>
<tr>
<td>System Engineering</td>
<td>Set up processes and information system to facilitate communication and efficiency among all stakeholders during life cycle of asset systems</td>
<td>Processes and technology</td>
<td>Contractor, project manager</td>
</tr>
</tbody>
</table>
... configured for **specific needs** of industry

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

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