5 Years Feedback on Asset Management Implementation for the French Largest Real Estate Owner

Asset Management Digitalisation

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Defence Infrastructure Service (SID)

Missions

An unique referent for infrastructure and energy

- **Builder**: Build and adapt defence infrastructures anywhere (mainland, overseas, abroad, external operations).
- **Manager**: Maintain and manage assets occupied by defence forces (30 million square meters of built area; 2.7 billion square meters of undeveloped surface, i.e. 40% of the French government real estate holdings).
- **Energy referent**: Purchase, advise and monitor energy consumption.
- **Advisor**: Provide assistance and expert assessments to armed forces dedicated to infrastructures (project management, master plan, planning).
Defence Infrastructure Service (SID)

New organisation with an old history

2011 - 2012

- The SID was created in 2005 with the union of three services of the ministry aiming to build the infrastructure:
  - Central Engineers' Directorate (Armée de Terre)
  - Central Air Infrastructure Directorate (Armée de l’Air)
  - Central Directorate of Maritime Properties and Works (Marine Nationale)

- The SID was reformed in 2012 in compliance with the general reorganisation of the Ministry of the Armed Forced
Asset Maintenance Management Approach

Context, objectives and organisation

- **The SID : MinArm’s real estate manager**
  - An ageing property portfolio that must be carefully taken care of
  - Multiple strategies defined to fit the property portfolio diversity (155 kinds of asset with many priorities)
  - Data consistency and liability to handle a scattered property portfolio (over 4000 sites locations)
  - Well defined and optimised strategies and processes to respect resource limitations

The SID aim’s at maintaining in condition (MC) MinArm’s portfolio :

“Maintain in operational condition our assets within the context of optimizing resources”
SIMEO’s Implementation within the SID’s Information System

Implementation of SIMEO™ application within the SID Information System (data security improvements)

Implementation in an ecosystem of interfaced and interconnected tools:

- **Knowledge bases:**
  - administrative
  - technical
  - graphical
  - project management

- **Management tools for:**
  - projects
  - maintenance

- **Decision support tools or training access tools:**
  - Risk and performance evaluation of the assets
  - Geographical Information System
The property portfolio maintenance is defined accordingly to 3 questions:

1. What budget would be required to maintain in operational condition the Ministry of the Armed Forced property holdings?
2. What resources does the ministry have (budgets and staff) and how efficient are they?
3. How to distribute resources efficiently among the different defence bases, while reducing staff dedicated to maintenance and maximising asset performances?
Process: SIMEO™ Utilisation

Real estate knowledge
(technical, regulatory, strategical aspects, etc.)

Operational planning and maintenance monitoring

Real estate performance assessment (risk, value)

Maintenance prioritization and strategic planification

Improving data reliability:
- Checking of G2D assets data
- Updating asset performance (importance, level of degradation, etc)

Prioritise and organise:
- Evaluate and justify budgets
- Improve resources distribution
- Highlight long term impact of the campaign

G2D: Référentiel domanial
GTP: Référentiel technique
SIMEO: Référentiel
Performance/Budgets
COSI: Conduite des opérations
## Results

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Average yearly Budget (EM + GER)</td>
<td>1 403 M€ including VAT</td>
<td>1 208 M€ including VAT</td>
</tr>
<tr>
<td>Budget necessary to achieve maintenance expectations</td>
<td>3 918 M€ including VAT in 2018</td>
<td>4 965 M€ including VAT in 2028</td>
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</tbody>
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### Performance (based on risks) - Evolution over 10 years -

<table>
<thead>
<tr>
<th>Property portfolio</th>
<th>48%</th>
<th>58%</th>
<th>48%</th>
<th>36%</th>
<th>48%</th>
<th>43%</th>
</tr>
</thead>
<tbody>
<tr>
<td>P0</td>
<td>54%</td>
<td>85%</td>
<td>54%</td>
<td>59%</td>
<td>54%</td>
<td>81%</td>
</tr>
<tr>
<td>P1</td>
<td>48%</td>
<td>65%</td>
<td>48%</td>
<td>52%</td>
<td>48%</td>
<td>60%</td>
</tr>
<tr>
<td>P2</td>
<td>46%</td>
<td>48%</td>
<td>46%</td>
<td>24%</td>
<td>46%</td>
<td>21%</td>
</tr>
<tr>
<td>P3</td>
<td>43%</td>
<td>40%</td>
<td>43%</td>
<td>12%</td>
<td>43%</td>
<td>20%</td>
</tr>
</tbody>
</table>

### Performance (Asset value) - Evolution of Va/Vr depending on IS over 10 years -

- P0: 54% 85%
- P1: 48% 59%
- P2: 46% 24%
- P3: 43% 12%
Results

Added-value of the results

- Data analysis of the asset portfolio:
  - Visualisation of the asset portfolio distribution (per defence base, per component, ...) and actions to improve the appreciation of the asset portfolio
  - Improvement of the Information System data reliability, especially the Land Information System (G2D)
  - Sharing of risk data at every levels

- Data analysis of the financial needs
  - Visualisation of the resources available and the requirements to maintain assets for 10 years
  - Enhanced distribution of resources based on risks (HR and costs)
  - Visualisation of the financial risks.
Results
What to improve? Data consistency, methodology and maintenance processes standardisation

- **Data consistency:**
  1. Data has to be updated and sometime requires reliability improvement
  2. Datasets filled by local entities (USID) must be simplified

- **Methodology and maintenance processes standardisation:**
  1. Communication and reporting tools still need to be developed to enhanced the processing of various requests from all levels
  2. SIMEO™ utilisation by local entities can be improved

→ Creation of 2019-2022 roadmap for continuous improvement including both methodology and Asset Management tools
2019 – 2022 Roadmap

→ Mapping of the real estate to facilitate visualisation, communication and decision making

Visualisation of every data available: quantity, condition, strategic value, risk, maintenance costs, etc.
2019 – 2022 Roadmap

→ Identification, notification and decision making of heavy maintenance operations on SIMEO™

1. Automatic identification of unacceptable risks and related opportunities for improvement
2. Simplified and collaborative notification of any requirement with heavy maintenance files (no handwritten Excel files)
3. Analysis of decision criteria to take actions and evaluation of the impact on risks and maintenance budget
2019 – 2022 Roadmap

→ Increased mobility to monitor the degradation of the Asset portfolio

Inspection Management:
- Dashboard for technical monitoring of an asset (degradation evaluation)
- Planification of inspection based on priorities

Inspection Realization:
- Automatic editing of surveillance sheets
- Completion of the surveillance sheet with tablets (online or offline)

Results valorisation:
- Decision making and short term interventions to address risks which threaten people safety
- Updating of the current property portfolio appreciation and improvement of the data reliability
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