DCS Markets
Favorable trends in stable markets

Market for civil aviation systems

Market for military energy systems

Market volumes

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Volumes (in M EUR)</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>318</td>
<td>+5.0%</td>
</tr>
<tr>
<td>2020</td>
<td>318</td>
<td></td>
</tr>
</tbody>
</table>

Latest trends

- Limited new business opportunities as very few new aircraft will be launched in the next decade
- But, growth potential for innovative products with proven maturity as well as for lightweight and energy efficient products
- Also, today’s duopoly in rescue hoist market offers additional business opportunities
- Increasing demand for maximum MTBF (operational readiness)
- Customer focus on reduction of energy consumption and integrated, smart energy systems for mobile platforms (tanks, IFV, ...)
- Additional business opportunity for high voltage energy systems in 8 to 10 years due to slow laser weapon introduction
- Many modernization activities for tank installed base:
  - Leopard I + II, Germany, Poland, Finland, Denmark, Greece
  - Challenger II, UK
  - Merkava IV, Israel

IFV = Infantry Fighting Vehicle
MTBF = Mean Time Between Failure

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DCS Strategy
Innovative products meet future market demands

**DCS Strategy**

DCS will

- Become a **strategic supplier in the civil aviation market for heater systems and rescue hoists** for at least two aircraft and helicopter OEMs, respectively.
- Become a **leading supplier of energy systems for military platforms** to improve their mobility, firing power, precision and fuel consumption.
- Implement **platform strategies for COTS/ MOTS**\(^1\) **products** with short delivery times, low customization costs, value adding features and low total cost of ownership.
- Actively shape the requirements for the end-user **product 3 to 5 years before series production**: through strategic partnerships with OEMs/ system integrators.
- Supply several system integrators with multiple **platforms** to balance order entry volatility.
- Guarantee supply & **overhaul capability of 30+ years**

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**New Commercial-off-the-Shelf Products (examples)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Launch Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERH</td>
<td>Q1/2019</td>
</tr>
<tr>
<td>FPH</td>
<td>Q4/2018</td>
</tr>
</tbody>
</table>

**New Military-off-the-Shelf Products (examples)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Launch Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAM 600 Amp Generator</td>
<td>Q3/2018</td>
</tr>
<tr>
<td>Patriot Hybrid</td>
<td>Q2/2018</td>
</tr>
</tbody>
</table>

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\(^1\): Commercial-off-the-Shelf/ Military-off-the-Shelf

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ERH= Electrical Rescue Hoist
FPH= Floor Panel Heated

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Floor panel heated for airframer…

… with strong USPs

Customer value:
- Mechanical robustness (especially edge and surface areas)
- Functional safety without fire or smoke emission due to positive temperature coefficient technology
- Lower weight and price than current solutions
- Uniform heat distribution
Division Defense & Civil Systems
BU Aviation – Electrical SkyHoist 800

Electrical rescue hoist with innovative technology…

… and strong USPs

Customer value:
- Reduction of life cycle costs because of lower initial purchase price and reduced maintenance costs (Modular service concept)
- Capstan technology: jerk-free movement and increased operational life
- Longer hoist-cable
- 30% more load capacity (350 kg)
- Remote control operation
New air-cooled 600 A generator provides large quantity opportunities …

- **FMTV**
  - 630 units. p.a.
  - Q4 2018

- **JLTV**
  - 2500 units p.a.
  - From 2022

- **HMMWV**
  - 1000 units. p.a.
  - From 2021

... and strong USPs

Customer value:
- High reliability due to MTBF of 6000h
- High performance in engine idle speed
- Compact design
- High efficiency: low power loss

FMTV = Family of Medium Tactical Vehicles
JLTV = Joint Light Tactical Vehicle
HMMWV = High Mobility Multipurpose Wheeled Vehicle
Air defense system – worldwide in use…

… with strong USPs

Customer value:
- Enhancement of „Operational Readiness“
- Reduction of life cycle costs by Considerable fuel savings (>50%) and mean time between failure (MTBF) 4 times better than competition
- Designed for global use, independent of local power supply
- Use of public grid power possible with integrated converter
- Optimized Human Machine Interface (HMI)
- Lower noise signature
A sharply focused DCS brand supports us in creating a stronger customer awareness for

- our competencies in power generation & energy management
- our track record of maximum reliability in aerospace & defense applications
- our commitment in 30+ years of guaranteed supply and overhaul
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