



Technology and Innovation

**Driving success
by executing our goals**



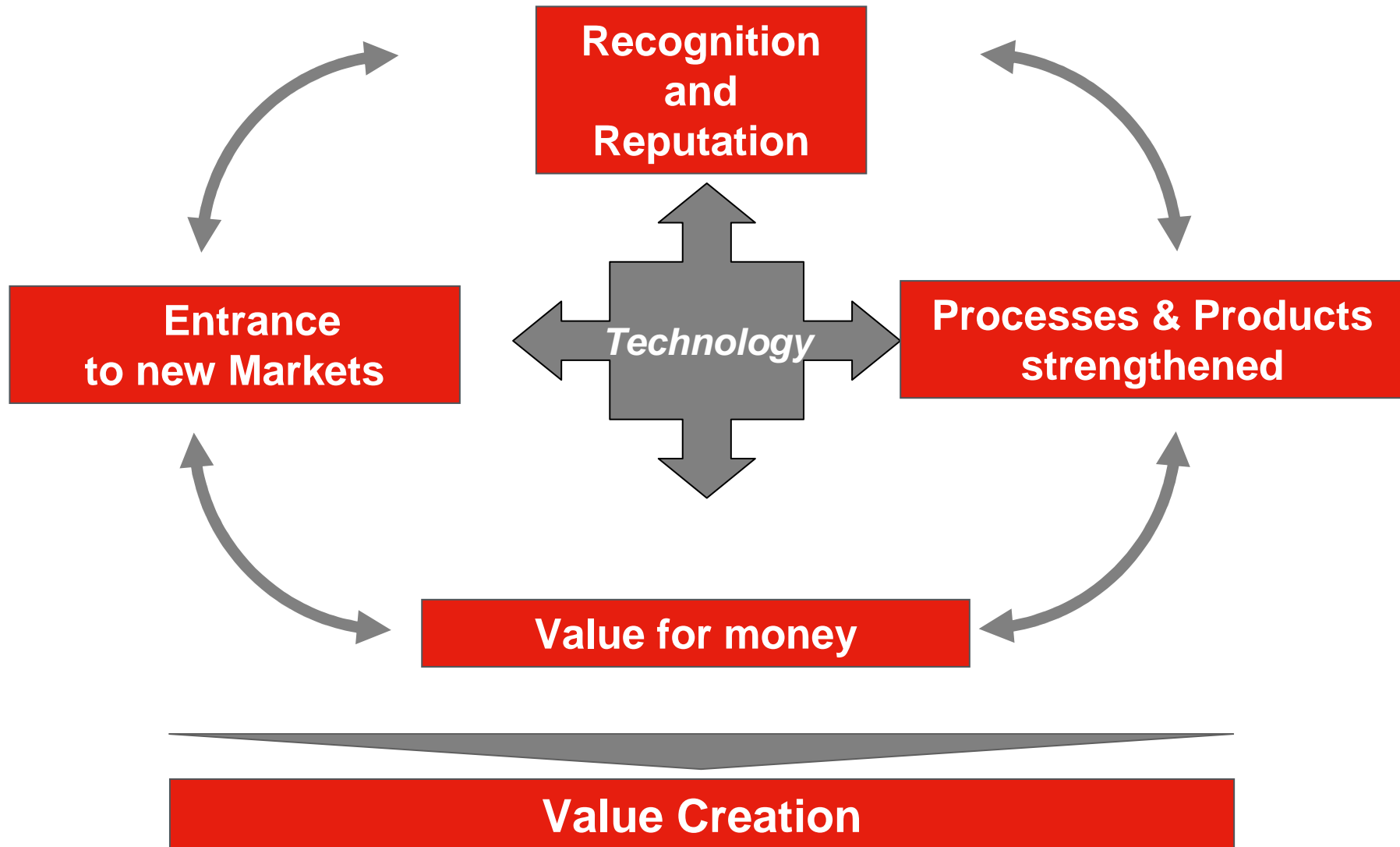


Technology Value Drivers

Pier Francesco Guarguaglini
Chairman and
Chief Executive Officer

**Driving success
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Finmeccanica invests in **strategic technologies**, anticipating proactively market needs & customer expectations, and enhancing industrial efficiency, with the objective of **improving competitive advantage**

Focus on

Industrial Processes

*key technologies improving design
and manufacturing activities*

Focus on

Products

*enabling technologies at
component and / or
integration level*

Main technologies for rotor / vertical flight

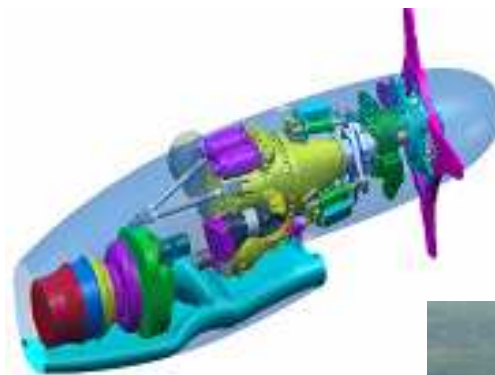


Tilt - Rotor



PROCESSES

Integrated experimental design
Concurrent engineering
Wing stress testing
Validation & Certification



Tilting Nacelle



PRODUCT

Tilting Nacelle
Flight Controls (fly-by-wire)



BA609



extending well-established leadership in helicopters
to the emerging market of new transport aviation
(i.e. vertical take-off landing versatility with high-speed horizontal flight)

Main technologies for aerostructures

Carbon Fibre Composite



PROCESS

One-piece Barrel
Co-cured Box
Co-cured Multispar
Co-bonded Stringer
Fibre Placement Panel



Co-bonded Wing Panel



One Piece Barrel



Co-bonded Fin Panel



Autoclaves



PRODUCT

Horizontal Stabiliser
Vertical Fin
Wing Movable Components
Wing Panels
Fuselage Barrel



improving competitiveness

in the continuously growing market of commercial aviation
through innovative proprietary manufacturing processes

Complex Electronic Systems for Defence & Security

PROCESS

Modular, Scalable, Open,
Service Oriented
Architecture

Software Capability
Maturity Model

3D Simulation & Modeling

Synthetic Environment



PRODUCT

Track Sensor Fusion

Real-Time Data Fusion

Software Agent (large scale
data processing) and
architecture

Geo-referenced Awareness
(shared operational picture)

Decision Support

Secure Comms

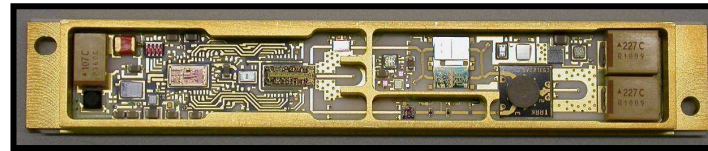
enhancing operational capabilities for:

Situation Awareness, Information Dominance & Superiority, Interoperability
to meet increasing demand for Protection & Security

AESA (Active Electronic Scanning Array)

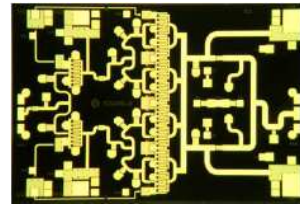
PROCESS

Gallium Arsenide Wafer
Miniaturised MMIC chipset
Advanced Ceramics for interconnection and packing
High-performant cooling



PRODUCT

Wide / Narrow Band TRM
(integrated Tx/Rx Module)
Digital Waveform Generation
Electronic Beam-forming and Scanning



Core Power MMIC

TRM



Active Antennas



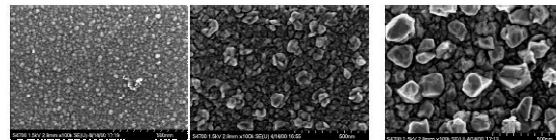
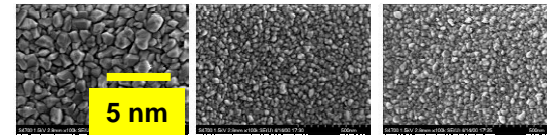
strengthening competitiveness
as unique worldwide AESA radar player
for space-borne, airborne, land and naval platforms

Ad-hoc Wireless Sensor Networks

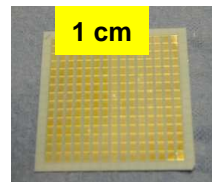
PROCESS

Nano-particles deposition through electronic beam

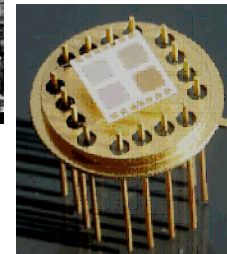
Nano-structured metal-oxide thin films array



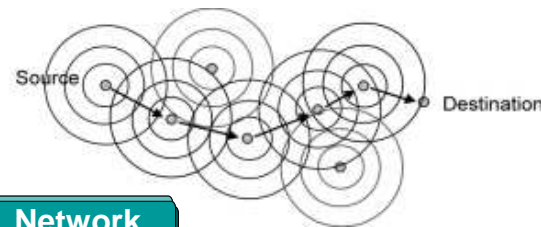
Nano-particles



Sniffer



2x2 Smart Sensor Array



Network

PRODUCT

Biological - Chemical Sniffer Array

Smart nano-sensor integrated with artificial intelligence and wireless Tx capabilities

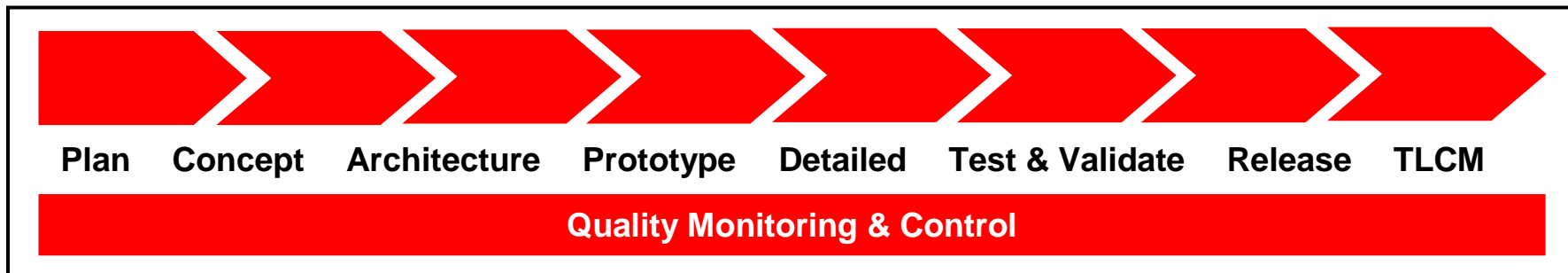
TeraHertz spectrography sensors

enabling environmental monitoring & surveillance through:
fast deployable, self-tuning, programmable and comms interoperable
sensor network

Software for value



- ❑ Software is a large part of our systems and products, enabling their functionalities and superior performance
- ❑ Most of our software is embedded, real time and safety critical
- ❑ These features require a disciplined process over the whole Life Cycle
- ❑ Reference best practice across all the Group is CMMI applied along all the **Software Life Cycle**



From Software ...

- ✓ **Open Architectures**
- ✓ **Modularity**
- ✓ **Scalability**
- ✓ **Reusability**



... To Value

- ✓ **Thoroughly testing capabilities**
- ✓ **Cost effective maintenance and upgrades**
- ✓ **Growth potential for Through Life Capabilities Insertion**



Capitalisation of Development Costs

Alessandro Pansa
Co-General Manager

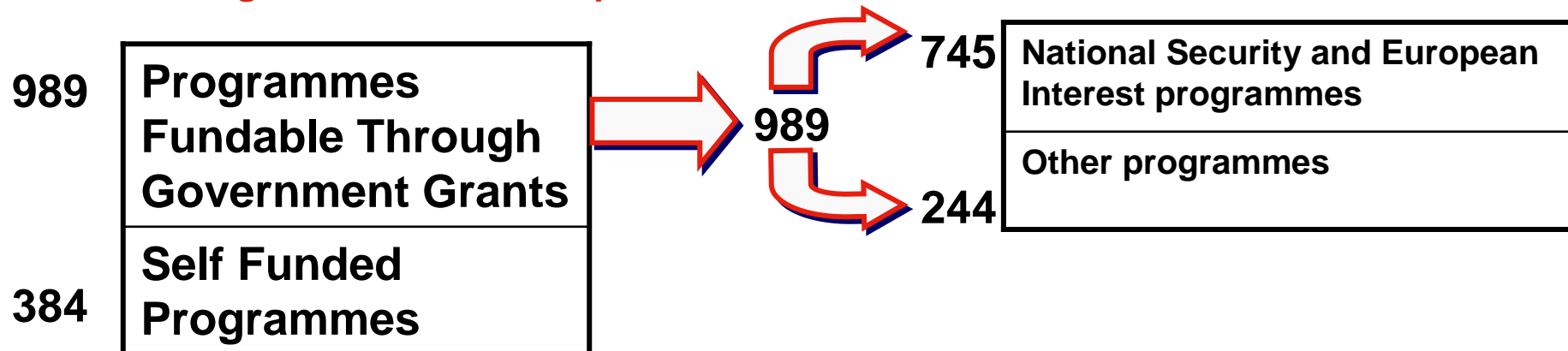
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Capitalised development costs



Development costs capitalised in intangible assets at 30 Sep 2007*



Total: €1,373 m

*All values in €m

How different development programmes are treated on our balance sheet



National Security and European Interest programmes

- These programmes (mostly military) are capitalised in intangible assets only for the annual amount which exceeds government grants and are depreciated according to our business plans.
- Royalties are paid according to number of units sold.
- The treatment of European Interest programmes could change in future.

Other Programmes

- These are primarily related to civil activities and are fully capitalised in intangible assets. The debt is recorded on the liability side of our balance sheet and will be reimbursed over a 10-15 year period according to a schedule pre-agreed with the Italian Ministry of Industry.

Self Funded Programmes

- These are entirely self funded since they are not eligible for government grant funding. They are depreciated according to the business plan related to each programme.

Development costs capitalised in Intangible Assets at 9M 2007



€ m	Fundable through government grants	Self Funded	Total
1 Jan 2007 Opening balance	693	284	977
Reclassified from inventories	-	-	-
Investments after depreciation*	300	98	398
Other movements	(4)	2	(2)
30 Sept. closing balance	989	384	1,373

R&D expensed	-	-	205
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*Investments after depreciation

€ m	Fundable through government grants	Self Funded	Total
Investments	328	121	449
Depreciation	(28)	(23)	(51)
*Investments after depreciation	300	98	398

Development costs capitalised in Intangible Assets at 3Q 2007



€ m	Fundable through government grants	Self Funded	Total
30 June 2007	895	346	1,241
Reclassified from inventories	-	-	-
Investments after depreciation*	95	38	133
Other movements	(1)	-	(1)
30 Sept. 2007 closing balance	989	384	1,373

R&D expensed	-	-	67
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*Investments after depreciation

€ m	Fundable through government grants	Self Funded	Total
Investments	105	47	152
Depreciation	(10)	(9)	(19)
*Investments after depreciation	95	38	133