

# Initiatives for Aeronautics RTD in Poland

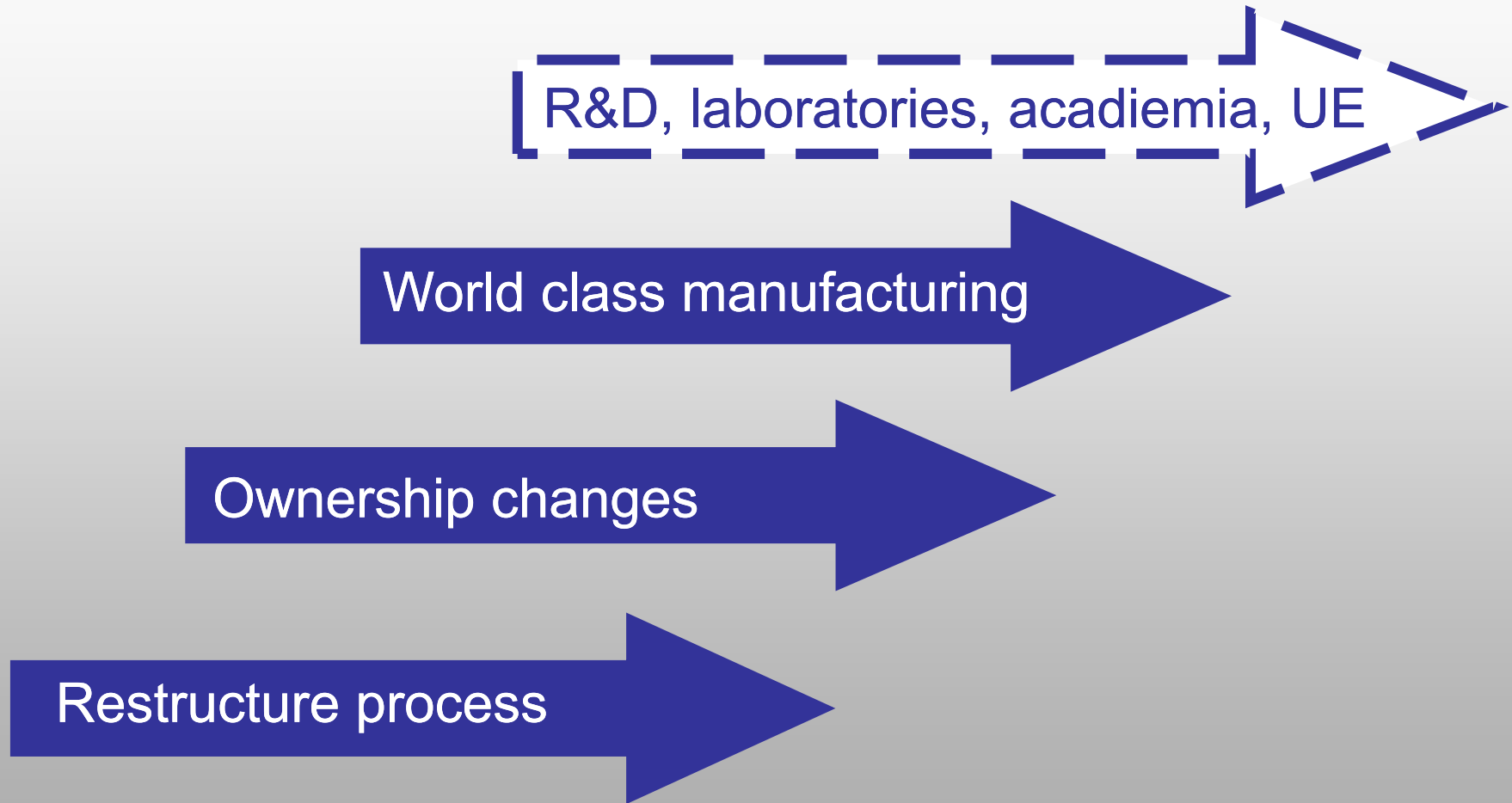
Transformation & Innovation in industry

AERODAYS 2011

Robert Haligowski – Association of Polish Aeronautical Industry

WSK „PZL-Rzeszów” SA

# Effective Sector Strategy



# Transformation of Aerospace industry – in the past...



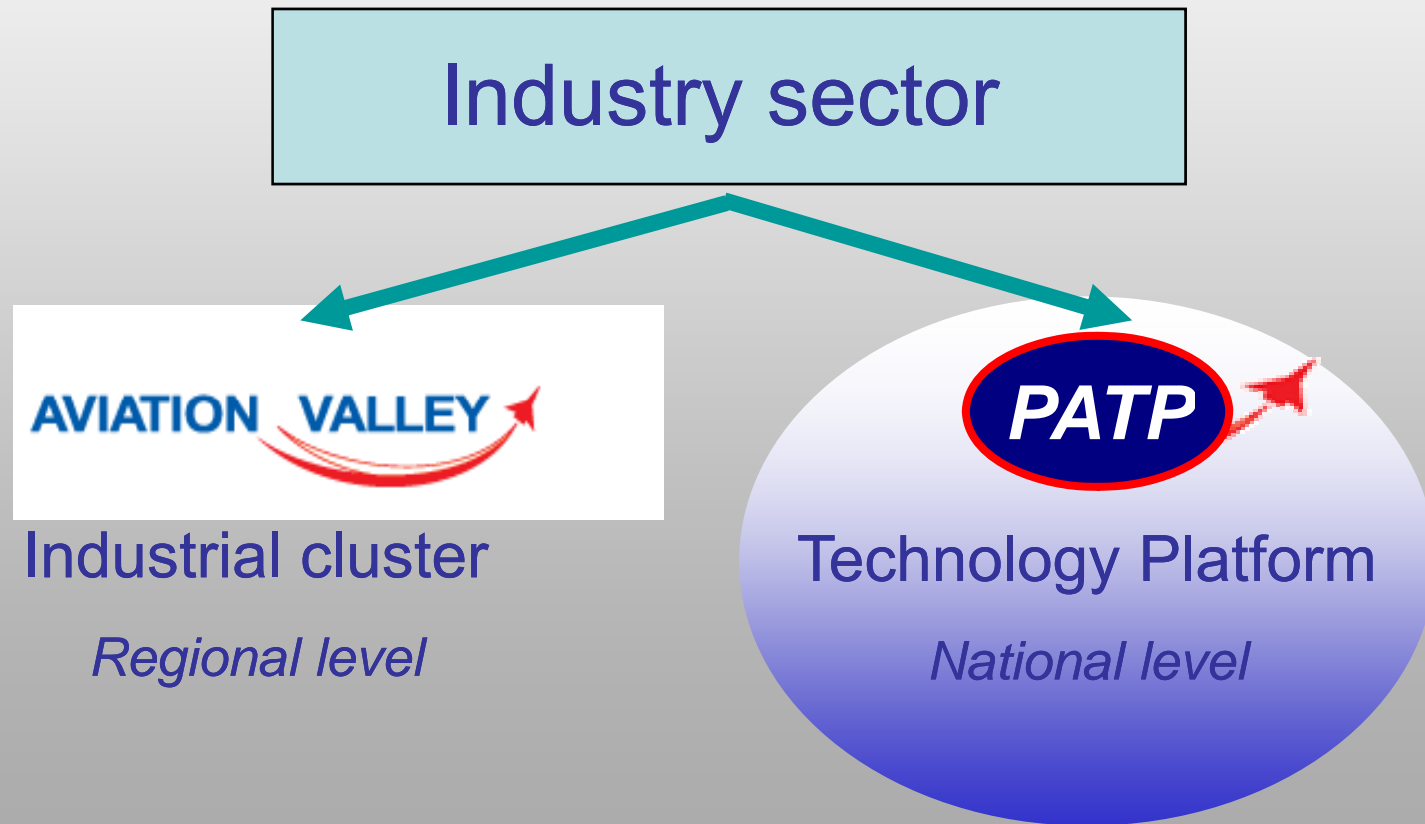
*Government owned, under invested sector.*

# Transformation of Aerospace industry – today ...



*World class technology & organization level*

# Two ways of innovative industry sector integration



# Innovative industry cluster

- Regional concentration of industrial sector
- Innovative character of sector
- Clear leadership, with vision and passion, able to consequent action.
- Cooperation based on professional approach, loyalty and respect
- Regional government support
- Strong research/academic base

# Aviation Valley – innovative cluster



	2003	Today
Members	18	86
Employment	9 000	23 000
Sales	250M€	1,5 B\$



# Modern manufacturing base in AV

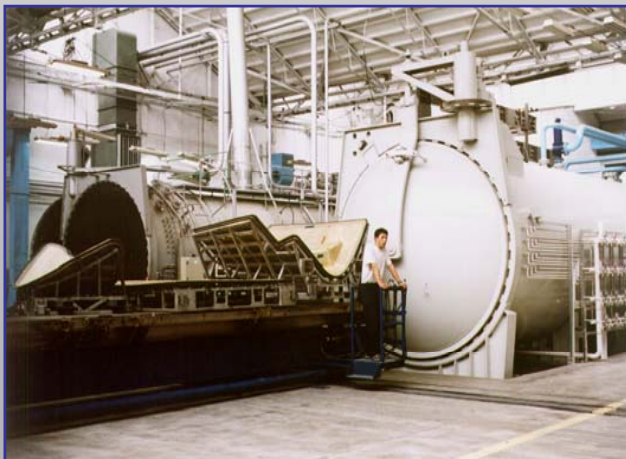
WSK PZL Rzeszów / Pratt Whitney



PZL Mielec / Sikorsky



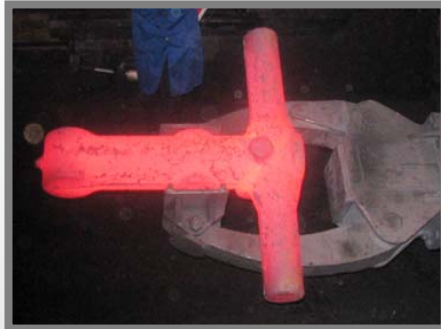
PZL Świdnik / AgustaWestland



Hispano Suiza Polska / Safran



# Development of local supply chain



Forging - Ladish Stalowa Wola



Bushing

Ultratech - family business ,



Landing gear

Goodrich Krosno



Powerplant and aircraft subsystems for Polish F-16 assembled in WSK „PZL-Rzeszów” and Goodrich Krosno

# AV activity

## Education



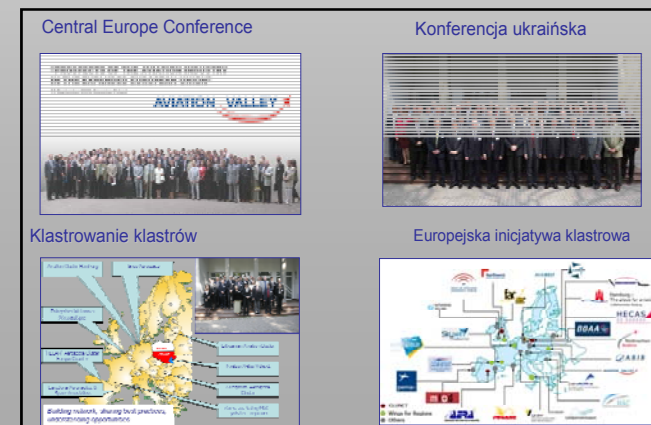
## Promotion



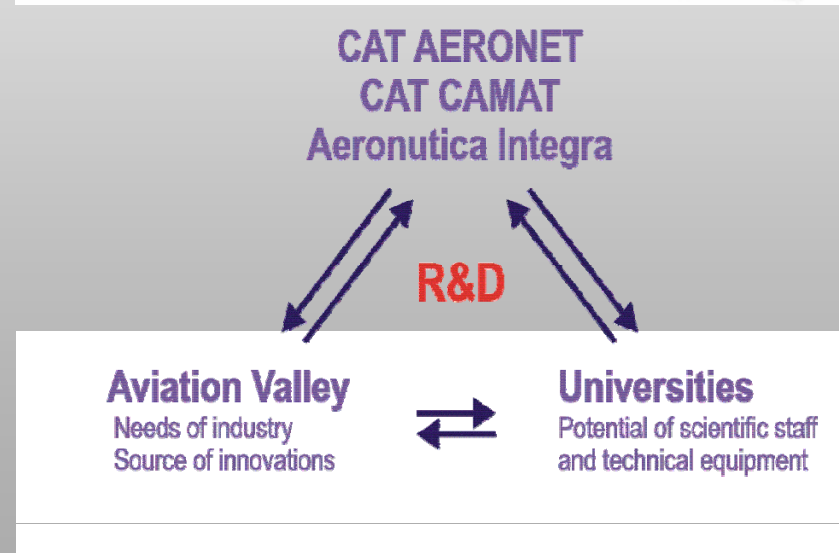
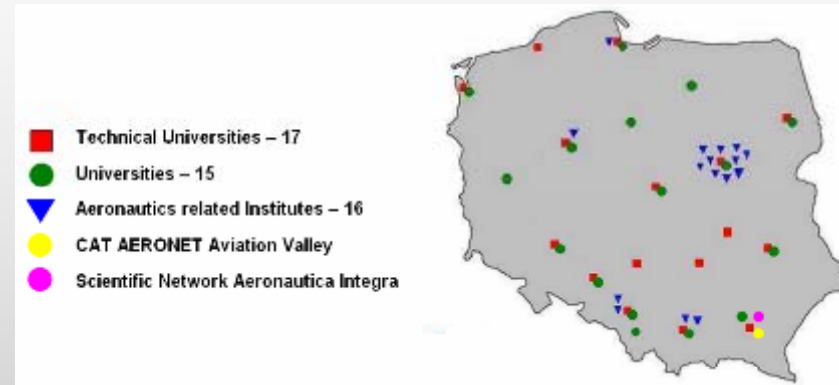
## Investmant



## EU links



# Research capabilities

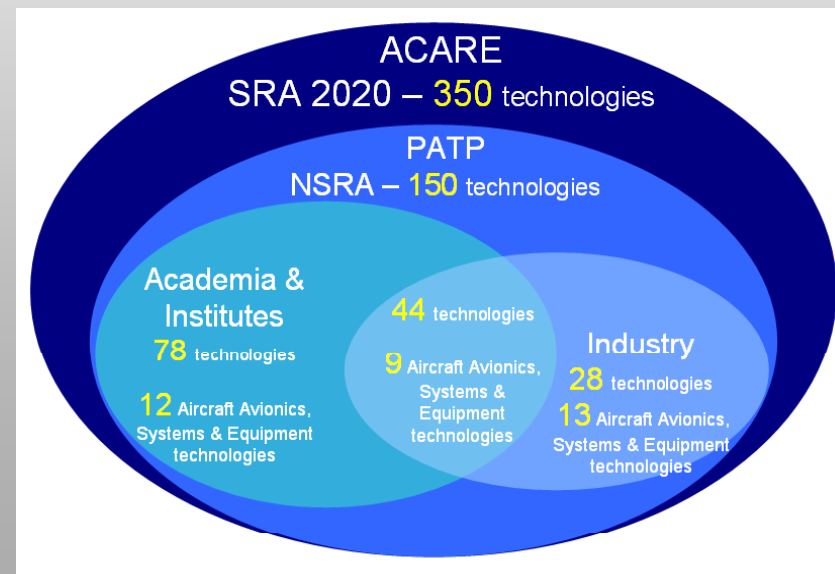


# Technology Platform - PATP

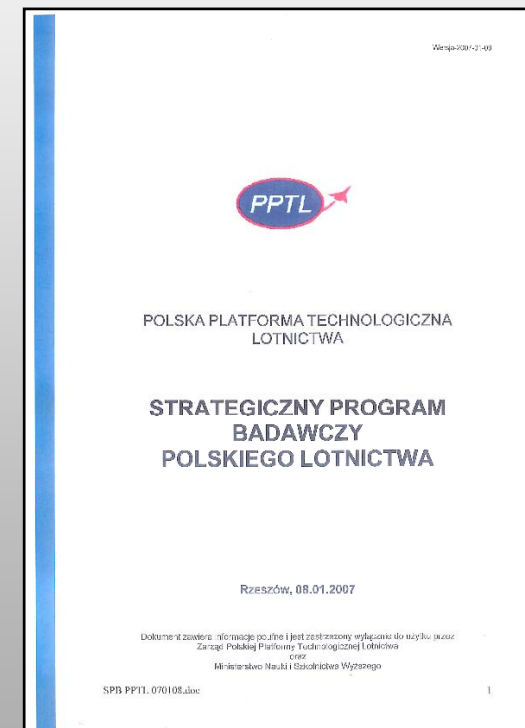
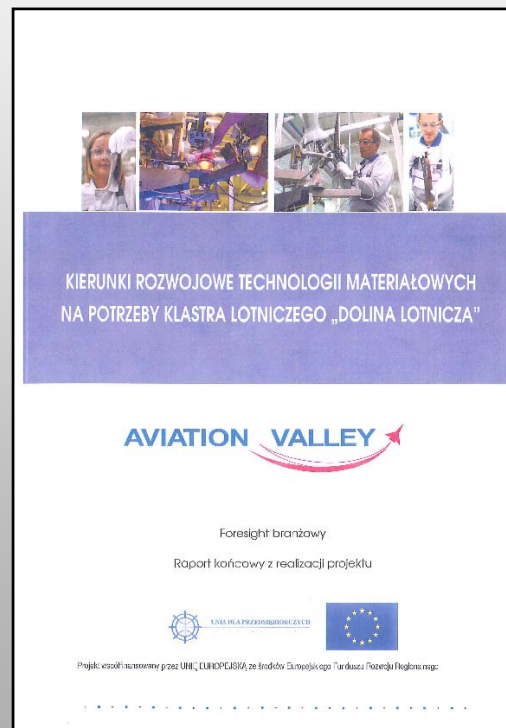
- National initiative
- Industry plays a key role
- Platform is to group major stakeholders of the sector or develop the horizontal area of technology
- Interface with EU platforms

# Main objective of technology platform

- Integration of key partners from industry and research establishment representing sector
- Definition of the sector technology development vision
- Preparation in the process of strategic research agenda for sector:
  - National level
  - EU level
- Active participation in EU platforms
- Create input to Execution of EU SRA
- Mobilize and stimulate private - public funding/initiatives



# National Strategic Research Program for Aeronautics



# R&D support structure



*Coordination*



*Sector R&D vision*



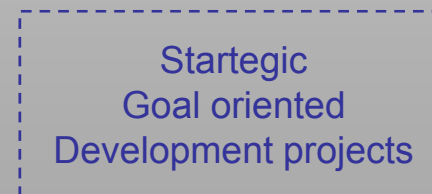
*National R&D vision*



Level 1 & 2



*Execution*



# Government support / R&D

- Material Laboratory, Technical University of Rzeszow
  - 8 M €, Ministry of Science
- Key national project „Modern materials for Aerospace Industry”
  - 26 € USD of EU Structural Funds
  - 7 Technical Universities, 340 scientists
- Strategic project „Single crystal and DS.”
  - 6 M €, Ministry of Science
  - 4 technical Universities and OEM
- Strategic project „Thermal barriers”
  - 4 M €, Ministry of Science
  - 8 Technical Universities and OEM
- New technology support, Ministry of Science
  - 20 on going projects, 6 M USD / year



# Conclusions

- APAI acts as a partner of governmental agencies to define most effective and transparent framework to support innovation and R&D for high-tech industry
- APAI creates „Polish way” towards innovative economy using/defining best practices
- National public-private funding available for sectors with self-organizing ability (industrial cluster or platform)
  - R&D projects with high industrial participation
  - Investment Projects to improve R&D infrastructure

Thank you