6th CSIR Conference

The importance of international cooperation
DEFENCE AND SPACE

Why international cooperation

Limited R&D budgets
Marginal growth

Center of gravity has changed

Global supply sourcing
Intra-African market
Increased R&T with international institutes & academia

Local Servicing of products

INCREASED GLOBALIZATION of INDUSTRIALIZATION
Airbus Global Footprint

**134,000** employees from **136** nationalities

Located across **35** countries on more than **180** sites

**31% Europe**

**69% Non-Europe**

Non-European Workforce **20%** (in 2020)

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**PHILOSOPHY OF INTERNATIONALIZATION**
Airbus Footprint in Africa

- Algiers
- Cairo
- Addis Ababa
- Abuja
- Nairobi
- Johannesburg
Agenda

– Reasoning for international cooperation

– What we do in South Africa

– What we plan on doing in South Africa

– The Environment required

– Conclusion
What we do in South Africa

- Transfer of Technology and Know-how
- Support in international bidding
- Certification as repair center

A400M

Industrial partner through life of program

Cooperative programs with academia
- Fluid sloshing dynamics - UCT
- Space Engineering – CPUT/F’SATIE
- Innovation challenge - SANSA
- AIRBUS BizLab - #africa4future

SUSTAINED, STRATEGIC MULTI-DIMENSIONAL COOPERATION
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Potential cooperative Links

- Cyber Security
- Multi-Intelligence Technology Integration Centre
- Border Safeguarding
- Space optical and radar systems
- 3D Printing
- Aeronautic R&T
- Space communication systems

- SAR imagery for SMM
- Optical imagery
- Maritime security
- Titanium powder
- 3D printing
- Elevation models
- Urban dynamics and change
- Land administration

Airbus Defence & Space
Airbus
Airbus Helicopters

COOPERATION for STIMULATION & SUPPORT of INDUSTRIALIZATION
Human Skills development

- Inclusion of SMMEs
- Certification for Service/MRO
- Direct Transfer of Technology
- Vocational training
- EU support in offering academic bursaries
- Building up high level engineering skills

Cooperative program with local industry

CSIR, ARMSCOR, SAAF

SUSTAINED DEVELOPMENT of HORIZONTAL and VERTICAL SKILL-SETS
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The Environment

Four key pillars for sustained industrialization exist

Financial institutions
Flanking Policies
Dedicated Academia
Capable Industry

Best training & education exists in SA

ABSENCE of PROJECTS WILL LEAD to IRREVERSIBLE LOSS of HUMAN SKILLS
DEFENCE AND SPACE

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INTERNATIONAL COOPERATION is IMPERATIVE

Conclusion

- A healthy defence & aerospace sector contributes to the GDP through high-tech jobs and export
- South Africa has all prerequisites to remain a top player in defence & aerospace
- CSIR in particular plays pivotal role in defining & developing first class technologies

Trusting that funding will increase again we recommend to:

- Focus on niche & key technologies and the industrialization thereof, including export
- Further develop coordination & cooperation between CSIR and industry to foster commercialization of technologies
Thank you