

# AEROSPACE INDUSTRY SUPPORT INITIATIVE AT A GLANCE



Aerospace Industry Support Initiative

an initiative of **the dti**



**the dti**

Department:  
Trade and Industry  
REPUBLIC OF SOUTH AFRICA

**CSIR**  
*our future through science*

initiative of the **Department of Trade and Industry**, managed and hosted by the CSIR

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# AISI Vision

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To position the South African aerospace and defence-related industry as a global leader, in niche areas, whilst ensuring effective interdepartmental participation and collaboration.

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# AISI Mission

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To enhance the global competitiveness of the South African aerospace and defence industry by:

- Developing relevant industry-focused human resources and facilitate associated R&D and transfer of technology to industry;
- Providing a platform for facilitating partnerships and collaboration amongst government, industry and academia, locally and internationally;
- Identifying, developing, supporting and promoting the interests and capabilities of the South African Aerospace and Defence Industry;
- Accelerating the achievement of government strategic objectives, including growth, employment and equity.

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# Introducing the AISI

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The Integrated **dti** Aerospace Programme (IDAP) is the optimised aerospace industry support mechanism of the Department of Trade and Industry (**the dti**). IDAP consists of two aerospace initiatives, namely the Aerospace Industry Support Initiative (AISI) and the National Aerospace Centre (NAC).

IDAP aims to improve the competitiveness of the local aerospace and defence industry through focused programmes and interventions in two integrated themes, namely the 'Industrialisation theme' and the 'Skills Development theme'.

The CSIR hosts and manages the AISI, which is responsible for the industrialisation theme of IDAP. It utilises its national expertise and infrastructure to benefit local industry. The University of the Witwatersrand hosts and manages the NAC.



## IDAP Value Proposition

The value proposition of IDAP in relation to additional players in the aerospace sector is illustrated in Figure 1. IDAP assists industry in the commercialisation of technologies and products. Through this, IDAP assists industry to verify that technologies and products are

technically feasible and thus commercially viable.

The diagram below gives an indication of the national infrastructure and expertise IDAP utilises to benefit the local industry.

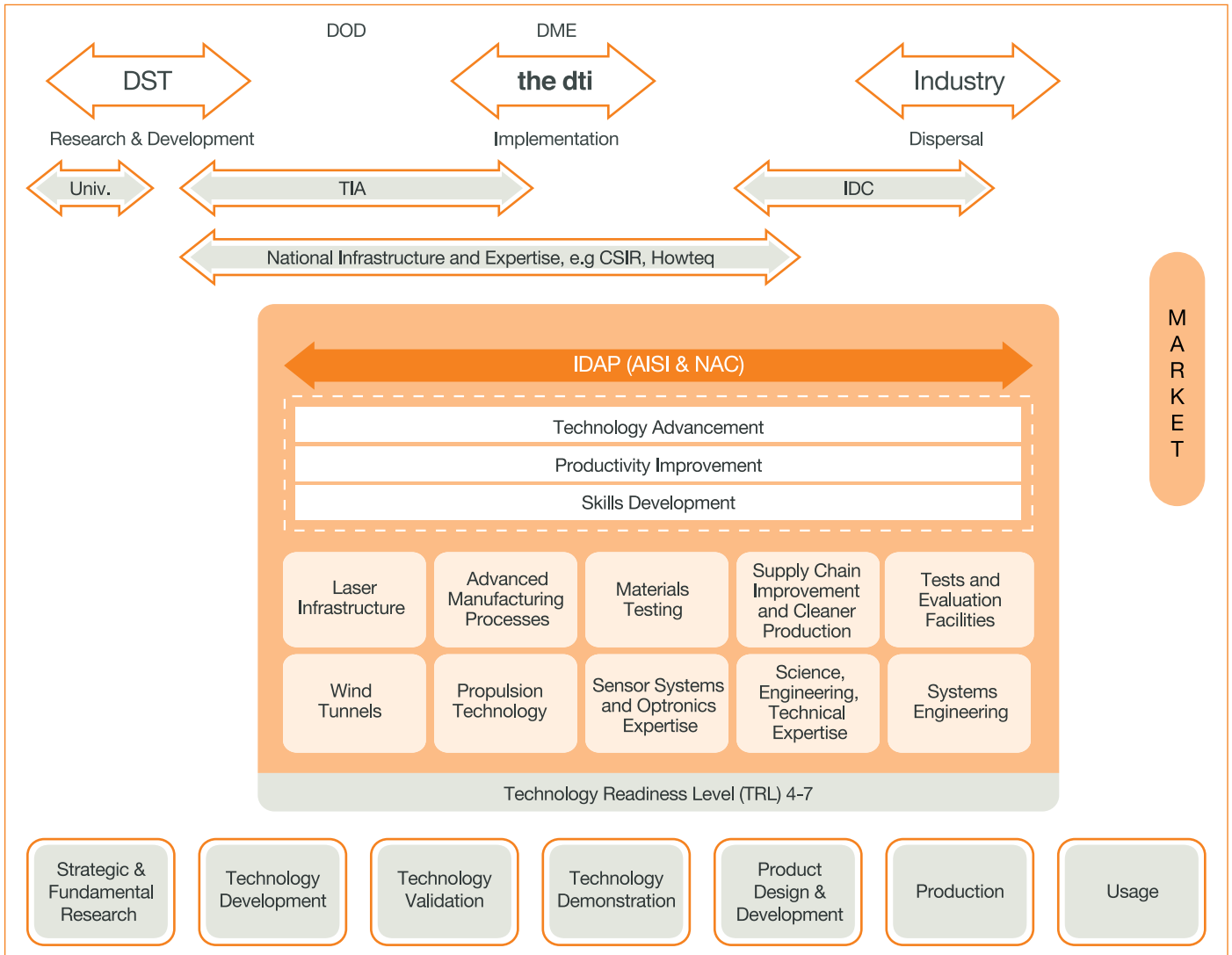


Figure 1: IDAP Value Proposition



1

R12.5  
million

Industry Support  
Investment

24

Number of Projects  
Undertaken

100<sup>2</sup>

Number of organisations  
benefiting from AISI  
projects

49

Number of SMMEs  
benefiting from AISI  
projects

<sup>1</sup> Impact information derived from data submitted by benefiting organisations and includes a sixth programme called Coordination, Promotion and Awareness, which is not described in this summary

<sup>2</sup> Numbers based on organisations benefiting from AISI support; some organisations have been supported for more than one project



The AISI's six operating programmes during 2013/2014 were:

1. Industry Development and Technology Support
2. Sector Strategic Support Initiatives
3. Supplier Development
4. Industry Focused Skills Development
5. Special Projects
6. Coordination, Promotion and Awareness



## Industry Development and Technology Support

The aim of industry development and technology support is to improve the competitiveness of the local industry through the industrialisation of technologies. This will add to the product offerings of the benefiting organisation, which in turn increases its competitiveness.

Organisations are encouraged to include industry partners when undertaking industrialisation projects under this programme, and more specifically, integrators are required to include small, medium and micro enterprises (SMMEs) to ensure technology transfer and the growth of the industry supplier base. This programme is the main focus of the AISI's interventions and accounted for 32% of investment during the financial period.

Programme Focus	Technology Advancement Support
Predominant Product Market	Aeronautics, Defence, Space, Materials, Manufacturing
% AISI Investment of Budget	32%
No. of Projects Undertaken	10
No. of Organisations Involved	29
SMME Involved	10
<b>RESULTING IMPACT ON INDUSTRY</b>	
Development of New Technologies	5
Manufacturing Processes	2 processes supported to improve competitiveness within the Aerospace Manufacturing Industry
Business Opportunity	1 SMME Established
Efficiency and Profitability	11 organisations benefited from Laser Based Manufacturing Solutions
Collaboration with Academia and Research Councils	3 Universities and 2 research councils collaborated with industry
Industry Access to National Experts and Facilities	15 Organisations directly benefiting
Project aligned to national programmes	2 Projects aligned with the requirements of the South African National Space Agency (SANSA)

## Sector Strategic Support Initiatives

The Joint Aerospace Steering Committee (JASC) was established to provide strategic guidance and positioning to the local aerospace and defence industry.

The focus of this operating programme is firstly the hosting of the JASC and its secretariat, and secondly, the hosting and implementation of JASC flagship projects. These projects are technology advancement projects with the specific aim of addressing technology gaps in strategic areas, as identified by the JASC and its subcommittees.

Programme Focus	Technology Advancement Support
Predominant Technology Stream	Avionics
Predominant Product Market	UASs and Services
% AISI Investment of Budget	16%
No. of Projects Undertaken	2
No. of Organisations Involved	14
<b>RESULTING IMPACT ON INDUSTRY</b>	
Development of New Technologies	1
Student Involvement	2
Job Retention	4
SMME Involvement	1
Collaboration with Academia and Research Councils	Future collaboration with 1 University and Research Council
Project aligned to national programmes	Alignment to national UAV activities

## Supplier Development

Supplier development aims to ensure that the supplier base participating in the economy is broadened.

It provides enabling mechanisms to assist industry to improve their competitiveness, productiveness and quality management systems.

Programme Focus	Competitiveness Improvement Support
Predominant Technology Stream	Services
Predominant Product Market	Standards, Accreditation, Quality Management Systems
% AISI Investment of Budget	16%
No. of Projects Undertaken	5
No. of Organisations Involved	41
SMME Involved	39
<b>RESULTING IMPACT ON INDUSTRY</b>	
Cost Savings and Reductions	<ul style="list-style-type: none"> <li>• Cost saving at one SMME of R 160 000.00 per annum</li> <li>• Reduction in scrap metal from 10% to 6% at one SMME</li> </ul>
Efficiency and Profitability	Full supply chain visibility through web-based procurement portal utilised by 35 suppliers and 1 OEM
Standards and Accreditation	Implementation of AS/EN 9100 (Airbus standards and requirements) at two SMMEs



## Industry Focused Skills Development

The focus of the AISI's interventions in industry focused skills development is firmly on utilising industry knowledge and technology to improve the human capital in the aerospace industry.

It also addresses **the dti's** strategic objective to "create a fair regulatory environment" by focusing projects on space regulations.

Programme Focus	AISI Organisational Support
Predominant Technology Stream	Policy and strategy support and services product stream
Predominant Focus	Materials and Manufacturing Testing and Analysis Space Regulation
% AISI Investment of Budget	7%
No. of Projects Undertaken	2
No. of Organisations Involved	14
<b>RESULTING IMPACT ON INDUSTRY</b>	
Capacity Development	3 Internship placements; 17 Trainees in Air, Space and Telecommunications Law
Scarce Skills Development	<ul style="list-style-type: none"> <li>Air, Space and Telecommunications Law</li> <li>Materials and Manufacturing Testing and Analysis</li> </ul>
Transformation	<ul style="list-style-type: none"> <li>82% of Trainees PDIs</li> <li>100% of Interns PDIs</li> </ul>
Exposure to National and International Experts	2
Alignment to National Councils and Programmes	<ul style="list-style-type: none"> <li>South African Council for Space Affairs</li> <li>Titanium Centre of Competence</li> </ul>
Project aligned to National Policies	South African context for Space Law

## Special Projects

As part of the duties of the CSIR as the host of the AISI, it is obliged to make national facilities and expertise, housed at the CSIR, available to industry. Special projects endeavour to do just this by granting industry access to infrastructure and expertise, which they would not have had access to otherwise.

Programme Focus	Technology Advancement Support
Predominant Technology Stream	Aero structures
Predominant Knowledge Stream	Aerodynamics Management Systems
% AISI Investment of Budget	3%
No. of Projects Undertaken	1
No. of Organisations Involved	2
Previously Disadvantaged Institutions Involved	1
<b>RESULTING IMPACT ON INDUSTRY</b>	
Collaboration	1 Research Council and 1 University
Scarce Skills Development	<ul style="list-style-type: none"> <li>Aero-derivative applications</li> <li>Experimental and Computational Aerodynamics</li> </ul>
Exposure to National Facilities	Aerospace Infrastructure (Wind tunnels)
Knowledge Transfer	Transfer of processes and methodology from industry to academia

### Contact Details

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