

# Interactive activities



## Website:

Visit <https://conference2017.csir.co.za> for all conference-related information.

## Social Media:

Conference delegates are encouraged to follow the CSIR on the following platforms, and to make use of the hashtag **#CSIRConf2017**



**Twitter:** @CSIR



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## Live Streaming:

Remote web viewing will be available for the plenary session on day one. This enables individuals with web access to view proceedings via the website and to comment on the session in real-time.

Access link via <https://conference2017.csir.co.za>

All other sessions will be recorded and made available as soon as possible on the conference website.

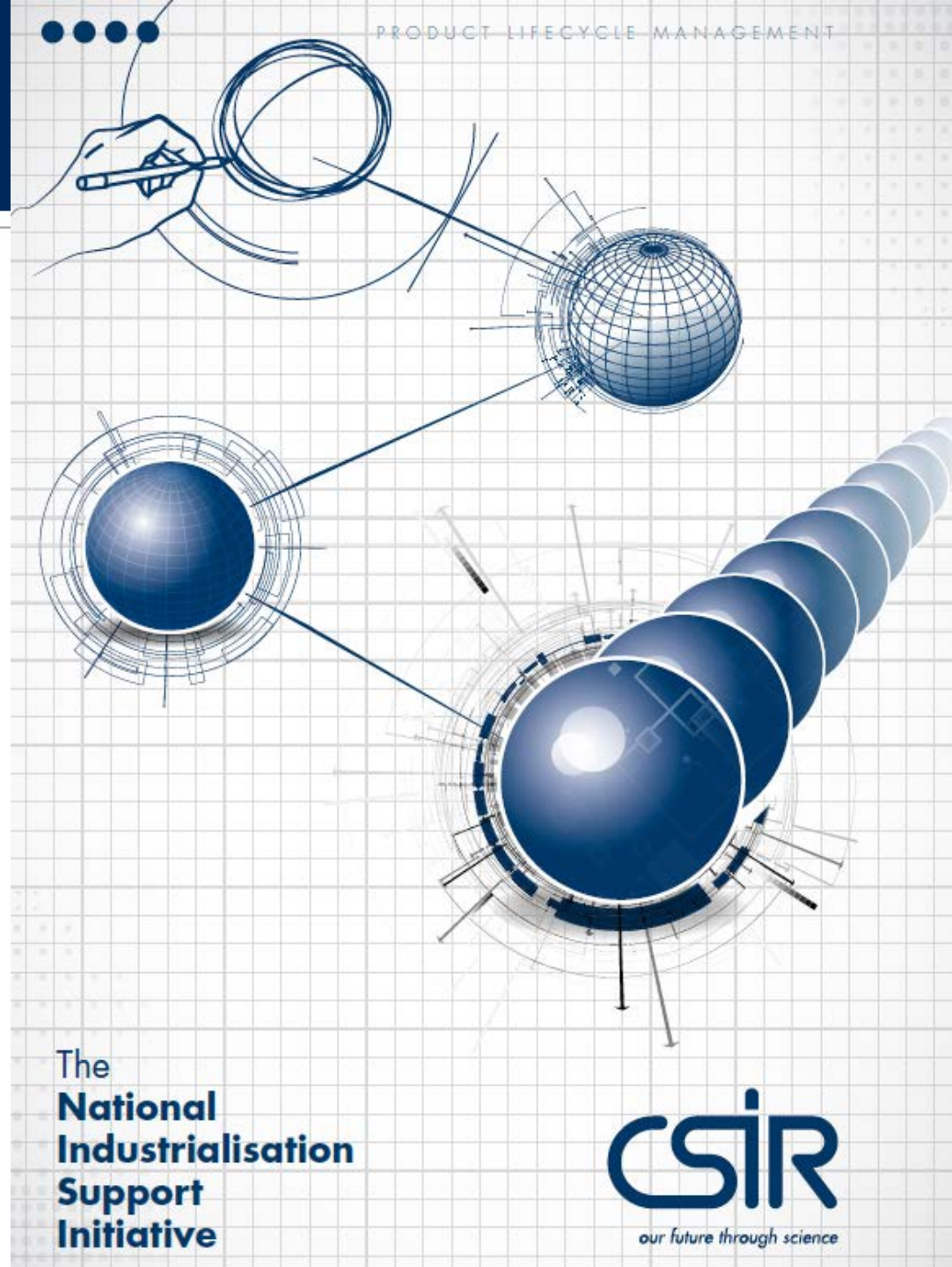
# *National Industrialisation Support Initiative (NISI)*

## **Product Lifecycle Management Centre of Technology**

Rentia Barnard

# Initiative (NISI)

- 2013 Q4 – Vision created
- 2014 Jan – DTI negotiations started
- 2017 May – Contracts signed for Siemens PLM solutions
- To follow : Dassault and PTC PLM solutions



- The dti
- Industrial Policy Action Plan (IPAP)
- 2017/2018 – 2019/2020
- Released in May

## Key Action Programmes (NIPP-related)

### 1. Product Life Cycle Management Technology Centre

#### Nature and Purpose of Intervention

Small and medium-sized enterprises (SMEs) need a variety of support measures to develop into globally competitive companies. In addition, it is important that the time from concept development of the product to commercialisation and market is shortened and development costs reduced.

As discussed above, an agreement has been reached with an obligor and the CSIR for the obligor to provide the CSIR with a Product Life Cycle Management suite at no cost to the CSIR; and the package comes with free maintenance for a period of four years.

The software package will be installed at CSIR and the obligor will train CSIR, who in turn will train and support local companies to improve their processes from product development and prototyping to manufacturing and commercialisation. The SMEs will get free access to the PLM software when they need to develop their products. The value of this investment is estimated at R108 million. This is a multi-year rolling programme that will provide initial support to 12 companies already identified - and will expand to about 2,000 companies over a seven-year period.

#### Targeted Outcomes

Globally competitive SMEs; increased exports; job creation.

#### Key Milestones

2017/18 Q1: Installation of the software.

2017/18 Q2: Training of CSIR personnel, who will then be expected to train local companies (Train-the-Trainer Programme).

2017/18 Q3-Q4 Identify individual needs and design support measures for the already identified companies.

**Lead Department/agencies:** CSIR, the dti

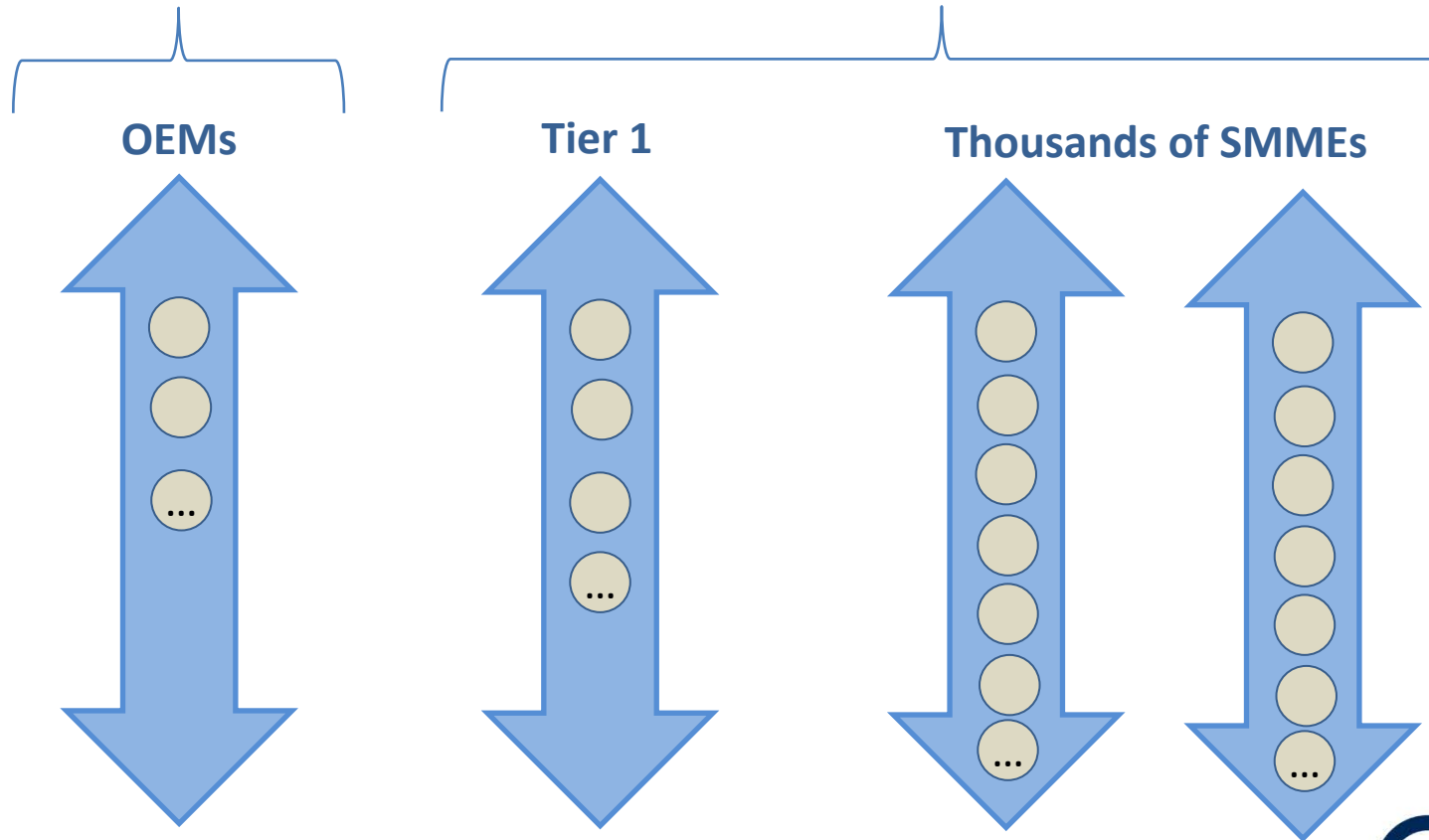
**Supporting Department/agencies:** CSIR, DST, EDD

# Collaborative Product Development

## Where are most of the value found?

20-30% of the value

70-80% of the value



**...therefore competitiveness must be organised at the industry level!**

# Identified challenges in South Africa

Deliver into global supply chains

Create our own products & OEMs

Compliance to regulations

I NEED THIS COMPONENT...



Supplier development and localisation

IP management

Be globally competitive

I CAN MAKE THAT!



Supply chain integration

Disconnected industry

OEM

SMME

# CSIR Vision - enable and connect



- 1) **Enable** SMMEs, eg regulatory compliance
- 2) Establish **Industry Collaboration Hub**
- 3) **Connect** to rest of industry (SA and World)

OEM

SMME

# Planned Offerings for Industry

- Knowledge and Skills transfer
  - Access to experts
- PLM Software solutions
  - Access to software
- Advanced Manufacturing equipment & facilities
  - Access to connected network of equipment and facilities
- Skills Development
  - Access to Learning Centre(s)
- Collaboration Hub to connect industry players
  - Products, Equipment, Facilities, Experts, etc



# PLM important building block and enabler



The CSIR hosts a Product Lifecycle Management facility where we:

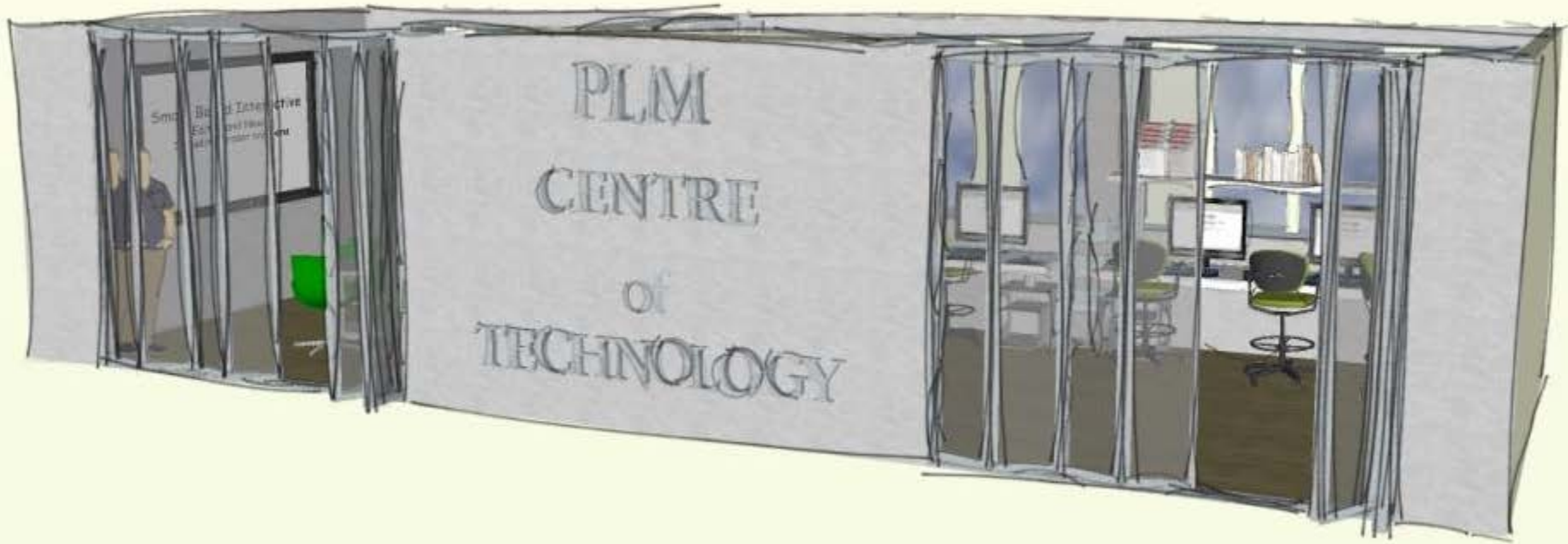
- Help you develop your product and people on our platform to experience the value of PLM.
- Provide advice and support on engineering and PLM.
- Provide training and practice-based knowledge transfer.

Bring your products and people to co-create knowledge-intensive products today and supplier development through PLM services in the cloud tomorrow.

[www.csir.co.za](http://www.csir.co.za)



# Facility – concept design





## Dreyer Engineering Works (Pty) Ltd.

Waltloo, Pretoria. [View map.](#)  
Member since December 2016

★★★★☆ 4.4  
Based on 17 reviews



### Specialises in

Design, Patterns, CNC machining, Manual machining, Fabrication, MIG, TIG and SPOT welding, Assemblies.

### Products

Commercial & military vehicle parts.

### Facilities

CNC Machine, Foundry, Welding.

Add to favourites \*

Share

"Dreyer engineering went above and beyond on a challenging project with tight dealines. I would recommend them to anyone needing any kind of casting or fabrication."



**Willem - IDEO Co.**  
13th April 2017  
Member since January 2016

[Read more testimonials](#)

Product image

Precision turning and milling

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### Contact Dreyer Engineering (Pty) Ltd.

Contact them about

- Design
- Patterns
- CNC Machining
- Fabrication
- Welding
- Assemblies

Details of your request

Send request

[Map to Dreyer Engineering \(Pty\) Ltd](#)

### About Dreyer Engineering (Pty) Ltd.

Dreyer started off in 1998 in a garage in Roodepoort supplying parts to the local bus company. The need was seen for local manufacture of parts to replace very expensive parts from agents, or parts that were difficult to find for old vehicles. Initially these parts were made by other engineering companies but eventually we took the step of moving the business to Johannesburg and starting our own engineering company. The business was later moved to Pretoria where it is now situated, where we added fabrication and the foundry to our engineering capabilities.

### Regulatory compliance



### Testimonials

"Mark and his team did an amazing job for us on a precision bearing we needed that we couldn't find locally. Saved us a huge amount of money and delivered it ahead of deadline"

# Panel Question 1

Will the implementation of PLM contribute to the competitiveness of industry sectors?

If yes, how will it contribute?

## Panel Question 2

What are the key challenges in Product Development and Manufacturing in South Africa that can be addressed through PLM and how?