

**TRANSNET**



delivering on our commitment *to you*

*freight rail*



## **SAICE Railway and Harbour Symposium 13 & 14 October 2010**

Capacity Challenges and Skills Transfer  
D A Barnard



# Transnet Freight Rail

## Presentation Outline

- 1. The Challenge**
- 2. Addressing the Challenge**
- 3. Results to Date**
- 4. Way Forward**

# Transnet Freight Rail

## The Challenge

### 1. National Challenge

- Numbers and Needs: Allyson Lawless
- ECSA Figures: Registration Statistics 31 July 2010
  - Professional Engineers: Stable 2007 – 2010
  - Candidate Engineers: Growth of 40% 2007 – 2010
  - Professional Engineering Technicians: Growth of 37% 2007 – 2010
  - Candidate Engineering Technicians: Growth of 97% 2007 – 2010
- University Intake: Growth!!!
- JIPSA Intervention (Transnet 100/300/800 – 2012)

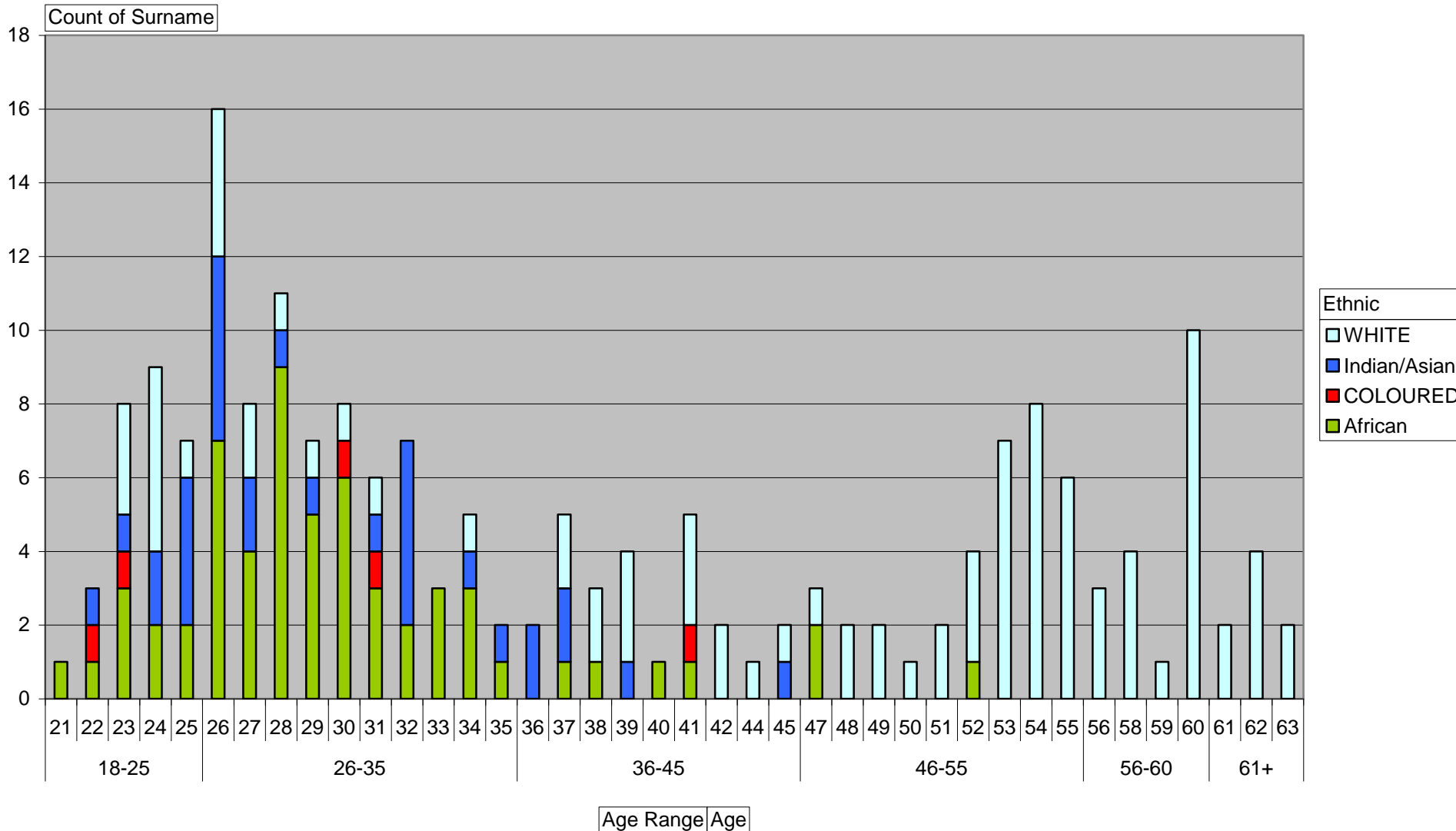
# Transnet Freight Rail

## The Challenge

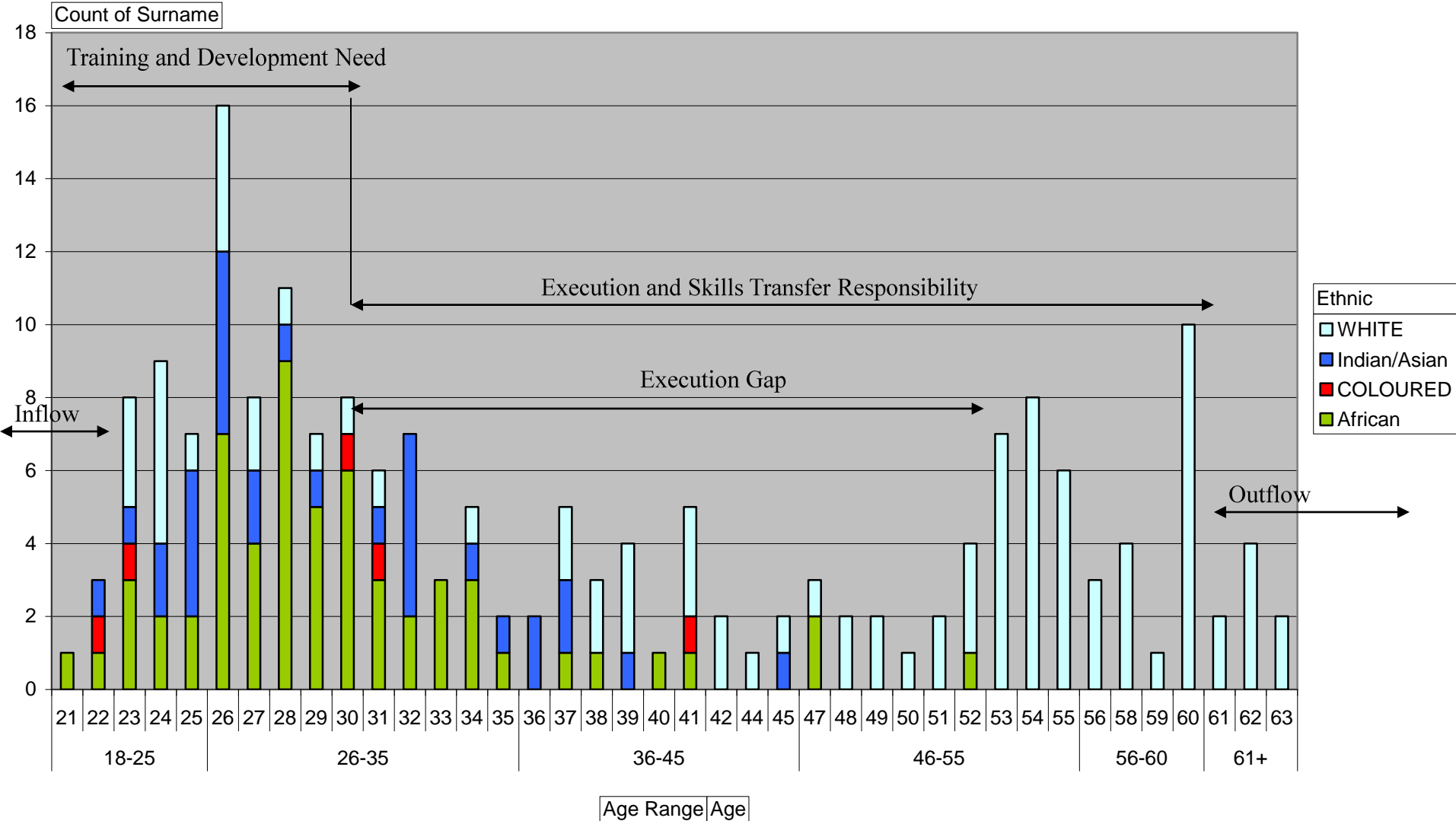
### 2. The Transnet Challenge

- Technical Skills Capacity: Gap
  - Professional Engineers Need: 450
  - Professional Engineers 2009: 188
  - Engineering Technician Need: 1350
  - Engineering Technicians 2009: 1350
- Technical Utilisation
  - Major Gaps
  - Not complying to Minimum Requirements: 35%
  - Leadership, Strategic, Innovation, Creativity, Professional Challenges
- Age profile Challenges
  - Engineers
  - Engineering Technicians
  - Artisans

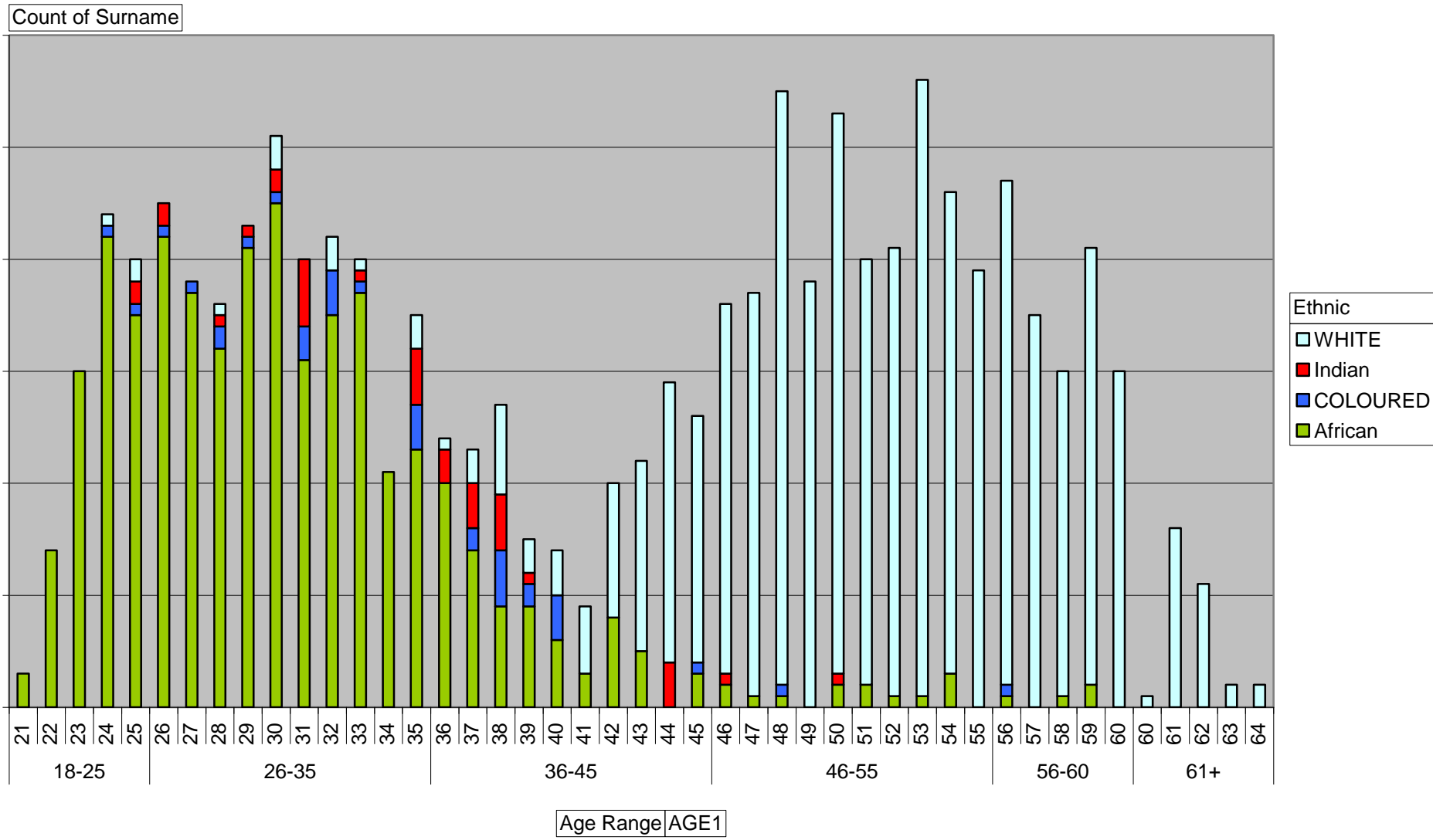
## Engineer Age Profile



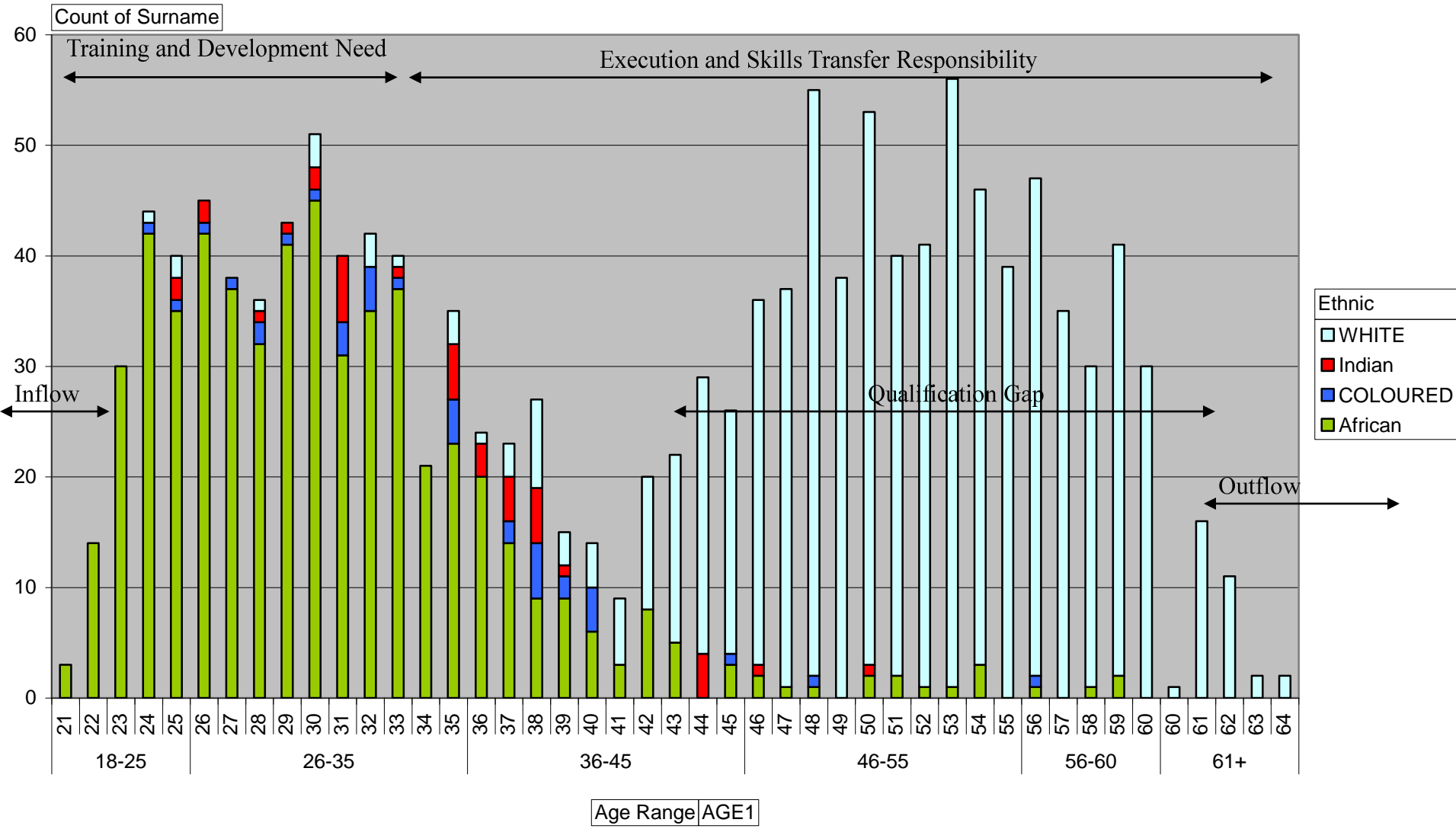
## Engineer Age Profile: In Perspective



## Technician Age Distribution

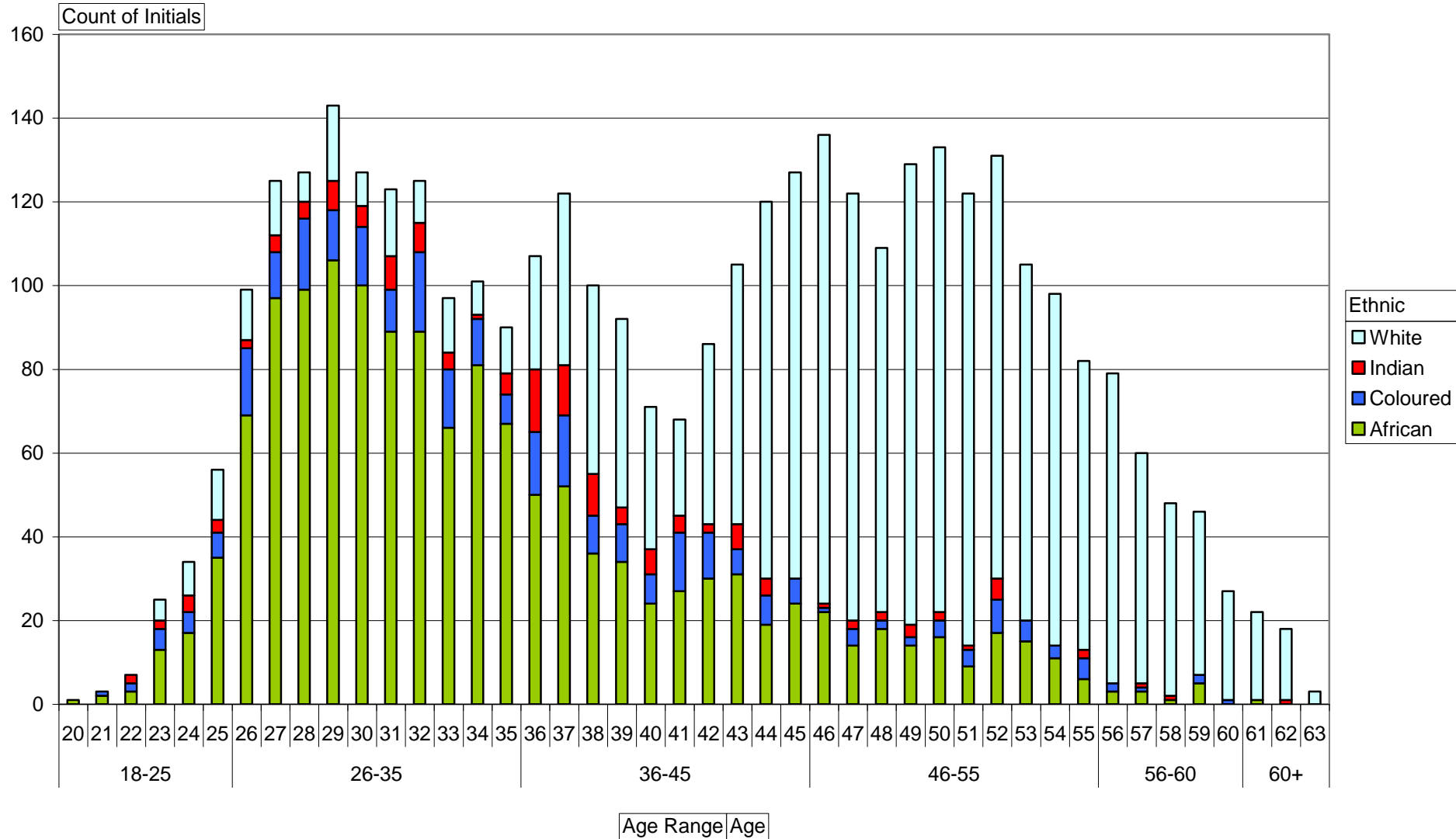


## Technician Age Distribution: In Perspective





## Artisan Age Distribution



# Transnet Freight Rail

## Addressing The Challenge

### 1. Addressing the Gap

- Employment of Qualified Engineers
  - Availability
  - All Targeting the Same Pool
  
- Investment in The Future
  - Bursaries
    - 100 Bursaries per Year for University Studies (Engineering): 2007 to 2012
    - Throughout 65% over 5 year period
    - Scale down To 60 bursaries after 2012
  - Offer Practical Training to Technician Students
    - Contracts to 300 per year
    - Selection and Release
    - Talent Management
    - First Line Management Capacity Growth

# Transnet Freight Rail

## Addressing The Challenge

### 2. Training, Development and Skills Transfer

- Trainee Program for Engineers: 24 Months
  - Proper Induction
  - Proper Placement: Win-Win
  - Training Program: ECSA Based
  - Six Monthly Assessment Company Needs and Remuneration Adjustment
  - Mentorship
    - Mentor Mentee Agreements
    - Agreements based on Training Program
    - Mentor Training
  - Dedicated Programs at Chair in Railway Engineering
    - Generic Technical / Railway Programs
    - Specialised Programs
  - In House Training Programs
    - Finance
    - Management
    - Etc
  - On The Job Training: Mentor Driven

# Transnet Freight Rail

## Addressing The Challenge

### 2. Training, Development and Skills Transfer

- Program for Future Engineering Technicians
  - Dedicated Practical Training (Pre Diploma)
    - Programs at School of Rail
      - University of Technology Prescribed
      - Future Railway or Industry Employee
  - Trainee Program for Engineering Technicians (Diploma)
    - Designed Induction
    - Targeted Placement
    - Training Program
      - 18 Month Program
      - ECSA Based
      - Company Based
      - Company Needs Based
- Six Monthly Assessment and Remuneration Adjustment
- Mentorship
- Dedicated Programs at Chair in Railway Engineering
- In House Training Programs
- On the Job Training: Mentor Driven

# Transnet Freight Rail

## Addressing The Challenge

### 3. Communication

- Old Generation vs New Generation
- Thrown in the Deep End vs Need to Know the Route
- Company Employment vs Open Employment
- Keep Communication Channels Open
- Regular Engagement Sessions and Focus Group Discussions
- Needs Adjustments and Programs
- Support Structures via Mentorship and Coaching

## Transnet Freight Rail

### Results to Date

Bursary Applications: Growth and Quality

360 Bursary Students in Pipeline

Practical Training: P1/P2: Big Demand

Steady Inflow of Trainees: Steady Inflow of Trainees

- 91 Engineers Employed (2006 – 2010)
- 541 Engineering Technicians Employed (2006 – 2010)

Technical Mentors Trained and Practising: 150

Resignations: Down

Vote of Confidence from Students

# STUDENTS HAVE VOTED FOR THEIR TOP EMPLOYERS!

*Magnet Communications*

*Annual publication Companies of the Future has arrived, and the highly anticipated release of the 2009 Magnet Student Survey results, as voted by 26 000 University students across South Africa, is now official!*

*Students studying in the field of Commerce, Science, Engineering, and Humanities & Law, have participated in Magnet's exciting annual independent research surveys. Each of the rankings below, depict who these students voted as their official "Top 30 Employers".*

ENGINEERING					
Ranking	Company	Ranking	Company	Ranking	Company
1	Eskom	11	BHPBilliton	21	Nokia
2	Sasol	12	CSIR	22	SABC
3	Anglo Platinum	13	Vodacom	23	Mercedes Benz SA (DaimlerChrysler SA)
4	Murray & Roberts	14	Grinaker-LTA	24	South African Airways (SAA)
5	Transnet	15	PetroSA	25	Toyota South Africa
6	De Beers	66	MTN	26	Volkswagen South Africa
7	Telkom	17	South African Breweries (SAB)	27	IBM South Africa
8	BMW South Africa	18	Anglo Coal	28	Kumba Iron Ore
9	Group Five	19	Microsoft South Africa	29	Coca-Cola
10	Anglo American	20	Exxaro	30	AngloGold Ashanti

## Way Forward

▪ Program to be Adjusted to Needs

▪ ECOSA Registration Drive

▪ Focus on  
- Technical Excellence  
- Technical Management Excellence

▪ Railway Knowledge Growth: UP Chair