

Economic Growth

4. THE NIPP: INCREASING ECONOMIC GROWTH

South Africa's National Industrial Participation Programme does not operate in isolation from its overall economic strategies. In two respects in particular, the NIPP goes well beyond leveraging economic growth and employment, important though that is.

In February 2001 President Mbeki announced an integrated action plan that focused on addressing the microeconomic bottlenecks impeding growth in the South African economy. This followed in the wake of the successful readjustment of the macroeconomic management of the South African economy since 1994, with strict monetary and fiscal disciplines rewarded by 2000 with budget deficits below 3%, lower and predictable interest rates and firm controls on state debt. As a result, the South African economy, almost alone among developing economies, was able to weather the storms of the international economy, such as the financial upheavals that swept world markets in 1998 with such devastating effects on the "dragon" economies of the Far East.

With macroeconomic fundamentals firmly in place, microeconomic constraints could now be the focus of attention. The emphasis is on strengthening the efficiency of the economy, driven by the private sector but directed by decisive coordinated interventions. In this latter regard, the NIPP plays a strategically critical role. The vision of the future that microeconomic reform is directed at is:

- A geographic spread of social and productive investment;
- An integrated manufacturing economy capable of high degrees of value added;
- An extensive ICT and logistics system capable of speed and flexibility;
- A high degree of knowledge and technology capacity;
- Greater diversity of enterprise type and size;
- Skilled, informed and adaptable citizens;
- An efficient, strong and responsive state structure.

In addition to this, South Africa's strong growth in manufactured exports enables attention to be given to export sectors that both meet the above criteria and bring with them added spin-offs boosting the development of a South African economy well suited to the demands of the 21st century.

The following sectors have thus been selected for their employment potential in wider value chains, for their integration into global production systems, for their potential for beneficiation and for the strengthening of existing competitive advantages:

- Clothing and textiles;
- Auto, auto components and transport;
- Agro-processing;
- Mining, metals and minerals beneficiation;
- Chemicals and biotechnology;
- Crafts;
- Information and communication technology.

As will be seen from this report, the NIPP presents South Africa with a strategically vital opportunity to target precisely those sectors in areas where normal commercial considerations might present risk profiles that initially deter private sector investment. The NIPP, in sum, allows government to go where no private business has gone before, diversifying both South Africa's industrial base and its access to lucrative new markets abroad.

Much of this thinking is encapsulated in **the dti's** Integrated Manufacturing Strategy (IMS), launched for public debate this year. The IMS specifically identifies a key role for the NIPP to leverage investment in targeted sectors. It builds on and expands the Macroeconomic Reform Strategy. It is in this light that the review of NIPP activities should be regarded.

SPECIAL FEATURES

4.1 Special Features of the NIPP

In the past year alone, the NIPP has approved more than 134 projects, which have now commenced or are in the development phase. Full details of these are attached in the appendices at the end of this document.

A significant number of these projects arose from strategic partnership agreements (SPAs), i.e. pro-active arrangements that serve to encourage international companies to identify opportunities prior to obligations being incurred and bank credits for any future obligation that may arise.

Total obligations arising from state purchases since 1996 are in excess of US\$14 billion worth of IP credits (fourteen billion US dollars) with a significant amount of the obligation arising from the SDP purchases. However, almost all the projects undertaken are in the non-defence industries. The exception is those projects whose application is in both the non-defence and the defence industries. The obligations need to be discharged over a period of 7 years with the exception of the BAE/SAAB obligation, which must be discharged over 11 years. BAE/SAAB have established a local company, South African National Industrial Participation (SANIP), to manage their offset programme. Other significant obligations arise from purchases made by Telkom and South African Airways, with the rest based on purchases by other government departments and state-owned enterprises (SOEs), such as Eskom, Transnet, Soeker, etc.

While foreign direct investment is one of the main NIPP objectives, market access for South African value-added products in global markets is an important consideration. As such, with the SPAs and SDP agreements greater emphasis was placed on export promotion. Binding agreements for the placement of work and the purchase of locally produced, value-added goods have been signed for most projects between obligors and their international partners on the one hand and domestic firms on the other. These products encompass electronics components, heavy-duty trucks, communications products, beneficiated materials, etc. Thales, a French-based obligor is sourcing solar panels from a manufacturing company in Cape Town, which exports 90% of its output, with 70 new jobs created as a result of the off-take agreement. NIPP projects seek to support both the dti's Integrated Manufacturing Strategy and the government's Microeconomic Reform Strategy. Thus, the intention is to promote projects that strike the right balance between high technology high-skilled sectors and low-tech low-skilled sectors but with high employment generation. The projects cover a range of sectors encompassing telecommunications, information technology, aerospace, tourism, mining beneficiation, shipbuilding, etc.

An important contribution of the NIPP in the local economy is to support provincial governments in their efforts to attract investments for identified projects. GSC Ferrostaal, one of the major obligors, has finalised engineering and feasibility studies for projects that will be located at Coega Industrial Development Zone in the Eastern Cape. In Gauteng Province the IPS has held discussions with The Innovation Hub, one of the Blue IQ initiatives, to investigate ways of leveraging industrial participation to attract international companies to the hub. In Mpumalanga Province forestry and sawmills are being upgraded, developing a new improved range of wood products for export. The following paragraphs discuss the projects approved and implemented or in the process of being implemented in the various sectors in different provinces under the NIPP programme, and which in turn form an essential element of the IMS.

4.2 The Information and Communications Technology (ICT) Sector



Towers - Wireless Communication Equipment made in South Africa for export sales

In the information and communications technology sector, there are currently in excess of 15 companies with obligations through purchases mainly by Telkom of the telecommunications and information technology products and services. The obligors are involved in a range of projects to promote the development of the local industry. For ICT purchases, the size of the obligations are usually less than US\$10 million, with the exception of a few companies who supply telecommunications or networking equipment. Recent purchases by Transtel and Esi-Tel (Eskom telecoms subsidiary) of the next generation telecommunications equipment have increased the size of the obligations arising out of ICT purchases. Local industry has benefited through a range of initiatives, including collaboration with multinationals on research and development activities, investment in the manufacture of value-added products and subcontracting of work by multinational companies.

ICT SECTOR

Examining projects in detail produces some interesting insights. Siemens, which has long-term contracts with Telkom, is discharging its obligations in a software development centre project in Pretoria, thus developing software modules for Siemens' electronic switching exchanges worldwide. Another project undertaken by Siemens is the local manufacture of main distribution frame (MDF) connector strips. Ericsson projects also reinforce the knowledge-intensive value-added thrusts of the NIPP. These initiatives include collaboration with small businesses in machining, chemical processing and packaging in support of the manufacture for export markets of mechanical access module magazines for microwave equipment. There is also substantial software development configuration work for Ericsson telecommunications equipment in Africa, including GSM systems.



Satellite Dishes - Wireless Communication Equipment made in South Africa

Other projects in the ICT sector include the manufacture of optical and copper cables for export markets, subcontracting R&D services and engineering work normally done by multinational companies in Africa to domestic companies, manufacture of digitally enhanced cordless telephone (DECT) system components and IT programming for export markets. New projects that have recently been evaluated include investment by a major multinational company, thus forming a joint venture for professional IT services and the refurbishment of personal computers for export, a project with high potential for job creation.

4.3 The Transport Sector

Unlike other sectors, not many companies with Industrial Participation obligation have been involved in the transport sector. General Electric, which has a Strategic Partnership Agreement with **the dti** is one of the companies with Industrial Participation projects in this sector. Its projects include the sourcing of locally produced locomotive truck frames for its US subsidiaries and subcontracting a local company for the refurbishment of used locomotives (see Selected General electric Projects). Alstom is outsourcing the design of railway signalling systems to local company for use in Alstom's international customers. In addition, Alstom is also manufacturing parts of the railway stock for export markets.

The current Spoornet tender for the supply and refurbishment of main line locomotives should help efforts to develop the transport sector. The IPS is looking at leveraging this purchase by encouraging international companies like General Motors, Bombardier Transportation etc. to identify opportunities to expand the development and manufacturing base of this sector.

4.4 The Aerospace Sector

The South African aerospace industry has its historical roots in the defence industry, which has over the last decade dwindled considerable. Moreover, the industry has not kept up to date with global trends and technological advancements. The industry has been left with outdated capital equipment and surplus unskilled or semi-skilled labour workforce. This necessitates a situation for players in the industry to use the existing capabilities (e.g. high volume, low tech manufacturing) to establish a foothold in the international arena whilst progressively moving towards high tech, development kind of environment.

The Industrial Participation obligations arising out of both the Strategic Defence Package and the South African Airways procurements has provided the impetus for local companies to develop their technological processes and products and to access previously untapped markets. The **dti** has recently signed a co-operation agreement (Strategic Partnership Agreement) with International Aero Engines AG that will increase co-operation between IAE and local companies in the areas of technology and skills transfer, licensing and collaboration activities and research and development.

The purchase by South African Airways of a fleet of Boeing aircraft in 2000 resulted in many opportunities for the development of the local transport and aerospace sector. Boeing, for example, has relocated some of its machining operations for the manufacture of aircraft components to local companies and has committed to providing aircraft maintenance work to a local company. Technology collaboration with local research companies, like CSIR, forms part of the fulfilment of the obligation.

AUTOMOTIVE SECTOR

Rolls Royce, the supplier of engines to the Hawk programme and to the SAA aircraft, is subcontracting the manufacture of gearbox components to Turbomeca Africa, formerly Denel Aviation Airmotive. These are destined for RR's Tay engines worldwide and Turbomeca will start producing fully assembled gearboxes towards the end of 2003. Turbomeca Africa will also supply gearbox parts to General electric engines.

Through the recently concluded contract for the supply of a fleet of aircraft to SAA by Airbus, the aerospace industry will benefit further with approved projects including the development of a non-destructive testing centre in conjunction with French multinationals, opportunities for local companies to supply aircraft components to Airbus and to be involved in the development of the A400M transport aircraft scheduled to be released in 2006. Discussions for one local high-tech company to supply components to the A380 aircraft due for release in 2006 are at an advanced stage.

4.5 The Automotive Sector

The Motor Industry Development Programme (MIDP) introduced by **the dti** has helped to propel the South African automotive industry into becoming one of the most competitive industries in the world. While this has had significant benefits for the vehicle manufacturers, the IPS is seeking to maximise the gains by promoting downstream



Dunlop tyre factory

manufacturers for the Original Equipment Manufacturers (OEM) market. Volvo, in support of BAE/SAAB, has relocated the production of catalytic converters for its 5-cylinder Turbo and V40 models from Sweden to Port Elizabeth and Garankuwa respectively. BAE/SAAB is also involved in two other automotive projects, the aluminium cylinder heads and fuel injection systems. GFC Thyssen is involved in the facilitation of exports of automotive car components and other value-added products.

4.6 The Metals and Minerals' Beneficiation Industry

South Africa's mining industry has previously been characterised by the export of raw materials and importation of finished products. Through the NIPP, this process looks set to be changed as the number of projects under way or under consideration have focused on the beneficiation of our raw materials. For example, in a joint venture with local partners, BAE/SAAB has provided part of the funding for the gold beneficiation project in Virginia in the Free State. Augusta is involved in a joint venture facility for the manufacture of gold chains for the local and export markets, a project that has created 115 new jobs. The technology transfer from Italy and productivity improvements brought about have improved the competitiveness of these products and exports have exceeded projections contained in the initial business plan.

Thyssen, part of the German Frigate Consortium, has invested in a high technology aluminium tube plant in Pietermaritzburg and a new ferrochrome plant in Rustenburg that will produce solely for a Thyssen subsidiary, TK Met for the next five years. These projects relate very closely to its core business of metals and minerals and the local companies are able to benefit from the technology know-how and innovation of German companies.

The Industrial Participation Control Committee has recently approved a project for a new facility for the production of ferrovanadium (used in hardening steel) by Japanese-based Mitsui and Nippon Denko (under the SPA), in conjunction with a local company in Witbank, Mpumalanga, a project with a potential for 50 new jobs. A silicone smelter off-take agreement with General Electric for a local company in Polokwane, Limpopo and a facility partly funded by Rolls Royce for the manufacture of water hydraulic breakers and rock drills for exports are some of the projects approved and in operation. Another obligor, Thales, is also involved in the silicone smelter project through technology transfer and training that has transformed a marginal smelter in the Limpopo Province into a thriving business.

Other materials beneficiation projects include investment in the facilities for the production of stainless steel containers, steel precision strips and conveying pipes by Ferrostaal. These projects inject vital capital and technical know-how into one of South Africa's existing areas of strength, its steel industry. Engineering services with project management training will be provided for historically disadvantaged individuals to build and operate Ferrostaal projects elsewhere in Africa.

4.7 The Pharmaceutical Sector

Medical research in South Africa is being stimulated by the NIPP project in this sector. Created in 2000 through NIPP funding, Triclinium is a specialist company that manages medical research projects. This involves setting up clinical trials, overseeing in-process quality control and coordinating data collection. Clinical trials must be completed before any new medicine can be registered and marketed.

OTHER SECTORS

In its first two years, Triclinium implemented 12 projects for local and multinational pharmaceutical companies, in fields as diverse as diabetes, depression and vaccination to prevent childhood infections. Their clients also include NGOs and research foundations primarily concerned with developing new remedies and vaccines for endemic diseases like HIV/AIDS and tuberculosis.

Triclinium so far employs 25 permanent and contract staff based throughout the country. Trials have been conducted in 83 clinical sites and 24 laboratories, involving 94 doctors and 138 nurses treating 4 700 patients. The estimated foreign earnings of this research exceed R18 million. South Africa's high standard of medical practice and ethics (all trials are subject to rigorous review before approval by the Medicines Control Council and Independent Ethics Committees) make research in this country internationally attractive in terms of both protection of patients and scientific credibility of data.

4.8 The Tourism, Clothing, Textiles and Agro-Processing Sectors

While some NIPP projects benefit the local industry in terms of investment, increased exports and technology transfer, they do not always result in increased job creation, especially for low-skilled labour, where there is widespread unemployment. This has required the IPS to support projects in high employment generation sectors like tourism, clothing and textiles and agro-processing.

In the tourism sector, BAE/SAAB, through its connections with the Nordic countries, is spearheading an initiative to promote package tourism in Port Elizabeth in the Eastern Cape. This project involves an investment to upgrade facilities and arranging with tourist operators in Sweden to promote Port Elizabeth as an attractive tourism destination and to arrange packaged group tours. In the textiles and clothing sector, Agusta has invested in a spinning, dyeing and knitting facility in Port Elizabeth, resulting in 62 new jobs.

4.9 Other Sectors

Other projects undertaken through the NIPP in various other sectors include export promotion of locally manufactured power transformers for the ABB Group worldwide (part of the Swiss-based Investor Group together with SAAB) and an investment by BAE/SAAB in the production for local and export markets of a new product that efficiently deals with tree stumps left after alien vegetation eradication campaigns. Other environmental related projects are the establishment by Thales of a medical waste management facility and waste bin manufacturing plants using advanced injection-moulding techniques for export to Japan, Australia and Mexico. This project brought together a black economic empowerment company, Evertrade, and a Nasdaq listed company, Steri-Cycle.

Project Areas in South Africa

GAUTENG

Carbon Fibre Wheels
Novamoda
Stainless Steel Pipes
Engineering Services
Metal Pressing of House Panels
Joint Venture DSU / Dispack
ABB Procurement
African Satellite Launch
Atlas Copco
Industrial Business Park
IT Fund
IT Programme
Kolbenco Management Buy-In
NEI Africa Ltd
SAAB/BAE SYSTEMS Export
Smart Card Manufacturing
Soya Protein Manufacturing
Swedish Match Investment SA Tobacco Sector
Technology Transfer (Clause 2.8)
Plastic Recycling
Catalytic Converters
Catalytic Converters
Aluminium Wheels
Export of Telephone booth to Oman
Triclinium Clinical Research Organisation

Railway Signalling System
F3 Motors
Railway Rolling Stock
Reid and Mitchell
CSIR R&D. Thermal Spray Coatings
AL Steel Sourcing
Flame Electrical-Investment
Ampaglas Polycarbonate Roofsheeting, GE Lexan Brand
Subcontracting by GE Power Systems
GE Branded Appliances
MTU Johannesburg Workshop
MDF9120 Connector Strips
Software Development Centre
Subcontracting of Engineering and R&D work
Microwave Minilink
Regional Hub Activities
Export of Copper and Optic Fibre Cables
Aeronautical and Component Manufacturing
Compressed Air Vehicle Airtank
Aircraft Maintenance and Modification Work
Manufacture of Aircraft Components
Research and Development Collaboration
Tay Gearbox
Service Centre for Radio Products
Bell Equipment - Articulated Dump Trucks
Hall Longmore -Pipes

LIMPOPO

Upgrade of Silicon Smelters
Investment into densification plant

FREE STATE

Gold Beneficiation
Machine Tool Manufacturing
SARM Gold Chain
Swedish Match Investment SA Tobacco Sector

NORTH WEST

Swedish Match Investment SA Tobacco Sector
Export of Telecommunication Cables
Ferrochrome

NORTHERN CAPE

Silicon Smelter Upgrading (furnace 1,2,3)
Silicon Fume Densification
Ferrochrome
Vermiculite Beneficiation & Manufacturing
SOURCING - CU SI & Chemicals

WESTERN CAPE

Winecorp SA
Tenesa-Solar Panel
Electrolux
NEI Africa Ltd
Platinum Jewellery
Filk Gold Chains
Ecoplug Tree Plugs
Baygen Power
GE Seaco
Atlantis Foundries
Evertrade Medical-Containers
Evertrade Medical-Waste Treatment
Local build and export of tug boats
The Biovac Institute - Vaccine Manufacturing
Stainless Steel Precision Strip
Platinum Jewellery
Swedish Match Investment SA Tobacco Sector
TGA Automotive Forge
Purchase & Export of Ship related spare parts.
The Biovac Institute - Vaccine Manufacturing
Agricultural and Floricultural Production & Products

EASTERN CAPE

Pechiney-Aluminium Smelter
Cold Rolling Mill
Reefer Cooling Containers
Condom Manufacturing
Agricultural and Floricultural Production & Products
Tank Containers
Brewery
Amlac Oil Refinery
Aspen Pharmacare Pharmaceuticals
Batteries Export
Bel-Mec High Pressure Die Casting
Motorcycle Manufacturing
Package Tourism
Visteon Air Fuel Charge Systems Manu
Volvo
Cape Mohair
Leather Seats, tannery, expansion
Leather Trim Covers
Natural Fibre

MPUMALANGA

Global Forest Products
Stainless Steel Columbus

KZN

Coke Calciner
Tyresafe
Aluminium Tubes
AECI BioProducts
Biological Control Agents
Carbon Manufacturing from Wood
Dunlop Africa Ltd
Elgin Brown and Hamer
Hivex
Smart Structural Health Monitoring System
Universal Diesel Economiser
Sourcing of bearings
GreenHeat

