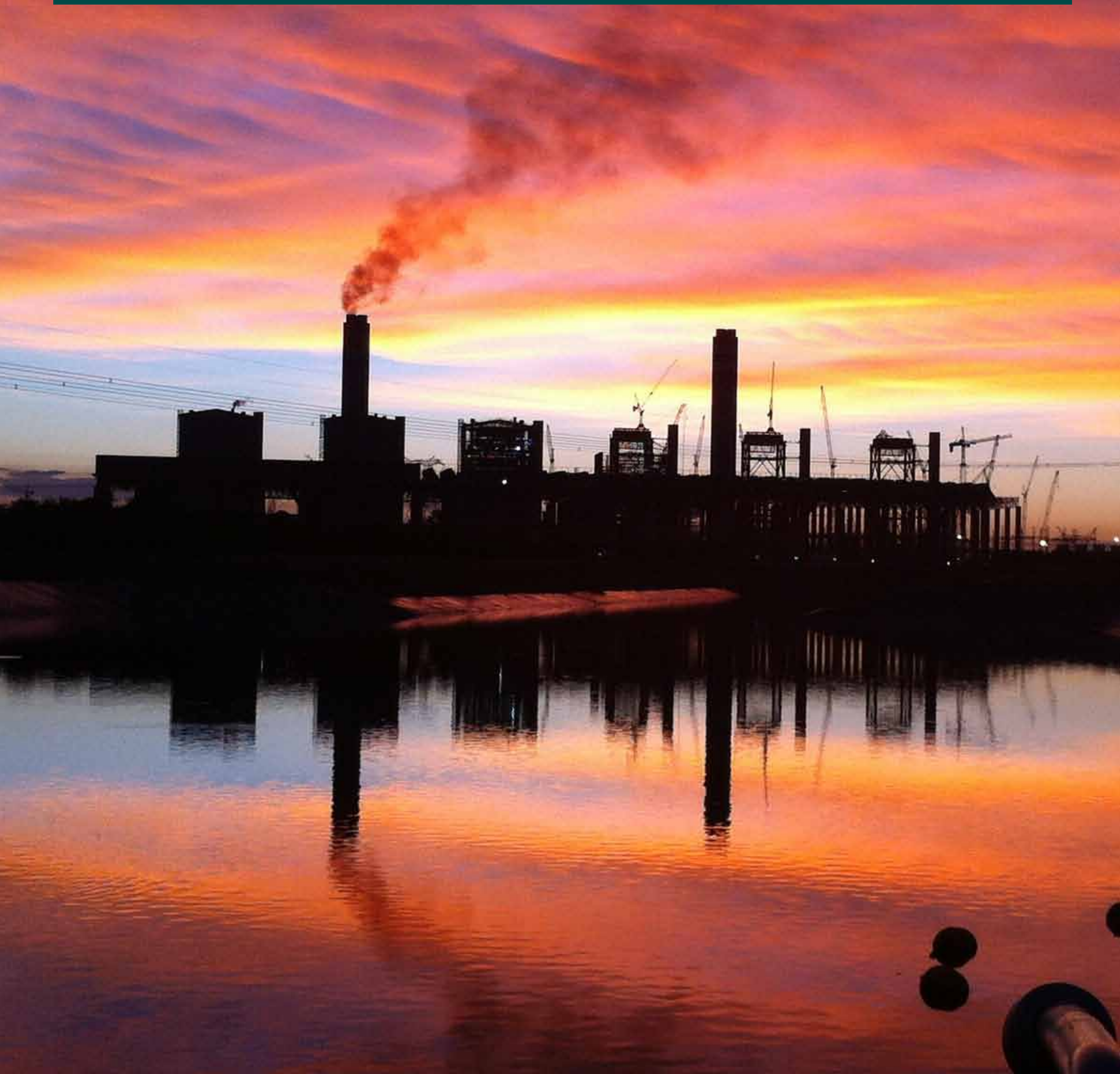
2016/2017

TECHNICAL REPORT
SUBMISSION FOR THE DIVISION OF REVENUE

FINANCIAL AND FISCAL COMMISSION

For an Equitable Sharing of National Revenue



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For an Equitable Sharing of National Revenue

Technical Report: Submission for the Division of Revenue 2016/2017

September 2015

ISBN: 978-0-621-43720-1
RP174/2015

2nd Floor, Montrose Place, Bekker Street,
Waterfall Park, Vorna Valley, Midrand, South Africa
Private Bag X69, Halfway House 1685
Tel: 086 1315 710, Fax: +27 (0) 11 207 2344
www.ffc.co.za

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ACRONYMS

2SLS	Two-Stage Least Squares
AsgiSA	Accelerated and Shared Growth Initiative
BAU	Business As Usual
BLAs	Black Local Authorities
BNG	Breaking New Ground
CECD	Centre for Early Childhood Development
CFO	Chief Financial Officer
CGE	Computable General Equilibrium
CIO	Chief Information Officer
CoGTA	Department of Cooperative Governance and Traditional Affairs
CPW	Community Works Programme
CSIR	Council for Scientific and Industrial Research
DBE	Department of Basic Education
DEA	Data Envelope Analysis
DHIS	District Health Information System
DoC	Department of Communications
DoE	Department of Energy
DoH	Department of Health
DPSA	Department of Public Service and Administration
DPW	Department of Public Works
DSD	Department of Social Development
DST	Department of Science and Technology
DTI	Department of Trade and Industry
DTPS	Department of Telecommunications and Postal Services
ECD	Early Childhood Development
EIG	Education Infrastructure Grant
EPWP	Expanded Public Works Programme
FBS	Free Basic Services
FE	Fixed Effects
FFC	Financial and Fiscal Commission

FIZ	Free Internet Zones
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution
GFCF	Gross Fixed Capital Formation
GHS	General Household Survey
GVA	Gross Value Added
HFRG	Health Facilities Revitalisation Grant
ICASA	Independent Communications Authority of South Africa
ICT	Information and Communication Technology
IDP	Integrated Development Plan
IGR	Intergovernmental Relations
IGFR	Intergovernmental Fiscal Relations
INEP	Integrated National Electrification Programme
IUDF	Integrated Urban Development Framework
LSM	Learner Support Material
MEC	Member of the Executive Council
MIG	Municipal Infrastructure Grant
MPAC	Municipal Public Accounts Committees
MTEF	Medium Term Expenditure Framework
NDA	National Development Agency
NDP	National Development Plan
NGO	Non-government Organisation
NGP	New Growth Path
NHG	National Health Grant
NHI	National Health Insurance
NPC	National Planning Commission
NPNC	Non-Personnel, Non-Capital
NPO	Non-Profit Organisation
NSNP	National School Nutrition Programme

OCPO	Office of the Chief Procurement Officer
OECD	Organisation for Economic Co-operation and Development
PES	Provincial Equitable Share
PGDP	Provincial Growth and Development Plan
PICC	Presidential Infrastructure Coordinating Commission
PMG	Parliamentary Monitoring Group
PPP	Public-Private Partnership
RDP	Reconstruction and Development Programme
RE	Random Effects
RHIG	Rural Household Infrastructure Grant
SALGA	South African Local Government Association
SARB	South African Reserve Bank
SCM	Supply Chain Management
SFA	Stochastic Frontier Analysis
SIBG	School Infrastructure Backlogs Grant
SIC	Standard Industrial Classification
SIPs	Strategic Integrated Projects
SITA	State Information Technology Agency
SLA	Service Level Agreement
SMEs	Small and Medium Enterprises
SOEs	State-Owned Enterprises
Stats SA	Statistics South Africa
TIMSS	Trends in International Maths and Science Survey
USDG	Urban Settlement Development Grant
WLA	White Local Authorities
WTP	Willingness to Pay

FOREWORD

The Financial and Fiscal Commission (the Commission) provides independent, impartial advice and recommendations on intergovernmental fiscal relations (IGFR), including the technical design and evaluation of provincial and local fiscal and economic policy. Established in 1994 by the interim Constitution of South Africa, the Commission provides all organs of state with information to help them make informed decisions on matters that affect, or are related to, the management of finances. In this respect, one of the Commission's main objectives is to help inform the following year's budget by making recommendations on the division of revenue among the three spheres of government and to support government's policy-making on IGFR. This is done by annually submitting to Parliament an advisory document summarising the recommendations that the Executive should take into account when crafting the following year's budget. The Submission for the Division of Revenue is made in terms of Sections 214(2) and 229(5) of the Constitution (1996), Section 9 of the Intergovernmental Fiscal Relations Act (No. 97 of 1999) and the Financial and Fiscal Commission Act (No. 99 of 1997), which is the national legislation in terms of which the Commission must function. On 29 May 2015, the Commission tabled at Parliament its Annual Submission for the 2016/17 Division of Revenue. This volume of technical chapters is published as a companion document to the Annual Submission.

The theme of this year's Submission is the IGFR challenges associated with public infrastructure. Long-term planning and financing challenges, and the lack of a long-term strategic vision have resulted in inadequate investment in skills, infrastructure and innovation. This has led to longstanding structural weaknesses in the economy which are affecting growth. In line with the National Development Plan (NDP), government seeks to kick-start economic growth through investing in public infrastructure, which is an important strategic responsibility shared across different spheres and sectors of government. This shared responsibility makes managing public infrastructure financing and implementation complex and requires substantial and competent coordination. Subnational governments also need to be able to work collaboratively in designing and implementing investment projects. There is a pressing need to get the administration and delivery of public infrastructure right because of its importance for national development and regional performance.

The idea that governments should invest in public infrastructure, to support production and trade (and thus growth and development), is well established. The argument for public investment rests on the belief that resources allocated to investment translate into an equivalent value of public capital stock, which benefits the private sector and affects overall growth by lowering the cost of production or distribution. During the post-war years (1950s and 1960s), the economic models underlying the five-year plans and industrialisation strategies relied heavily on high levels of public investment. However, South Africa has certain challenges that hinder the effective use of resources for development. South Africa faces shortages in economic and social infrastructure, and the government is expected to be the main player in closing these deficits, through enabling public policy, complemented by private investment and innovation. Investment – in (capital) equipment and in new (technological and managerial) ideas – is a crucial engine of growth. Investing in capital allows firms to incorporate new technologies and to reorganise production processes according to global best practices. Therefore, fostering a supportive environment for investment and innovation is central to having a dynamic and productive economy.

Public infrastructure has the power to boost national development and regional performance but must be better managed. In a time of uncertain future economic prospects and tight fiscal conditions, the aim should be to achieve the highest value for money and the greatest growth impact from spending public money. Given the fiscal constraints that limit the overall level of public investment, efficiency needs to be maximised through better economic growth and management of investment spending. Improving the quality of governance can help, especially through coordinating investments and building capacity within subnational governments. The focus needs to be not only on the macro-level but also on the meso-, sectoral and municipal levels.

The Submission explores ways of addressing the challenges that may prevent South Africa from reaping the rewards of public investment. Structural reform requires public investment and private sector involvement in education to provide a skilled labour force, to match supply and demand in the labour markets, and to raise productivity. This reform also calls for immense infrastructure upgrading to provide reliable and affordable power, roads, telecommunication, transport and logistics – all very relevant for enhancing competitiveness and revitalising the economy. In addition to addressing these gaps and challenges, lessons from successful high-impact policies in the Submission provide examples of how inclusive infrastructure-led growth can be achieved. Examples of high-impact policies include promoting early childhood development (ECD) infrastructure and intervening to raise public sector productivity; enhancing governance and accountability at all levels, but in particular for municipalities; capitalising on the emerging knowledge economy and information communication technologies (ICT) sector to overcome productivity challenges in the public sector; and introducing programmes to enhance the performance of indirect conditional grants.

The Technical Report contains seven chapters:

Chapter 1 outlines and addresses IGFR problems associated with public infrastructure management. It examines five aspects relating to public infrastructure: the type of infrastructure (economic and/or social infrastructure); ways of funding the infrastructure and the impact on growth and jobs; the spheres responsible for the various types of infrastructure, especially the role of subnational governments; reasons for infrastructure investment not delivering economic growth and jobs, given the present configuration; and the conditions required for success. It highlights the specific (economic, institutional and financing) problems that continue to beset public infrastructure and which are discussed in the rest of the Submission. The final section of the chapter provides recommendations that set the context underlying the more detailed recommendations outlined in the rest of this Submission.

Chapter 2 discusses the impact of public capital spending on economic growth, taking into account the strong interdependence of national, provincial and local government, and differences across municipalities. It first examines the impact on labour productivity of private and public capital spending on socio-economic infrastructure (such as roads, electricity, and water and sanitation). The results provide fairly strong evidence that public capital has a significant negative effect, whereas private sector activities have a strongly positive effect on labour productivity. This suggests that infrastructure investments by local government are subject to diminishing marginal returns, indicating inefficiencies in the use and allocation of resources. Under South Africa's current economic policy of increasing public capital expenditure, municipal responsibilities for infrastructure investment are set to rise. Therefore, more attention needs to be paid to innovative ways of enhancing local capacity to properly plan for, allocate finance to and implement key capital projects. The chapter also examines the effects of capital spending on municipal economic growth. The results indicate that where the municipal capital is spent is important for growth. Spending on electricity, water and sanitation, as well as repairs and maintenance, enhances growth, while spending on housing and roads infrastructure has a negative effect on regional output. With municipal responsibilities for infrastructure investment set to rise under South Africa's current economic policy of increasing public capital expenditure, the results suggest that municipal capital spending on water and sanitation, as well as electricity, can spur local economic development. Improving the management of asset registers and maintaining existing infrastructure (to extend the useful life of infrastructure assets) could also benefit long-term economic growth across the country's municipalities.

Chapter 3 reviews direct and indirect conditional grants as well as ways of improving the financing of capital investments. Indirect grants are increasingly being used to fund key infrastructures, but no guiding principles or criteria are in place for establishing or rescheduling direct and indirect conditional grants. This chapter considers the funding and performance of selected direct and indirect infrastructure grants related to education, health, electrification and sanitation. The study analyses the grant budgets and expenditure, and compares the infrastructure delivery targets with actual delivery. The results found that direct grants outperform indirect grants, and that the sanitation indirect grants' performance is low. The chapter makes recommendations on the appropriate mix of conditional grants and on some guiding principles for the scheduling of conditional grants.

Chapter 4 looks at accountability in infrastructure delivery at the local government level. The government has embarked on a massive infrastructure delivery programme, which must be founded on sound accountability arrangements. When accountability fails, many things can go wrong, e.g. public funds are misappropriated or stolen, public officials routinely demand bribes, public contracts are unfairly awarded, and public services are poorly delivered or not delivered at all. This chapter evaluates accountability arrangements against the backdrop of the proliferation of indirect infrastructure grants and the under-spending of these grants, diagnoses accountability problems related to infrastructure delivery and funding, and makes recommendations for strengthening accountability mechanisms within the local government sphere. The study is based on secondary data and the case studies of nine municipalities, (Mangaung, Waterberg, Westonaria, Sol Plaatje, Ramotshere, Mbizana, Newcastle, Stellenbosch and Bushbuckridge) identified by means of stratified random sampling. The results suggest that the proliferation of indirect grants distorts accountability arrangements. Furthermore, most municipalities may have well-established accountability structures but lack capacity and skilled personnel to execute their accountability role proficiently. The support structures also have insufficient human, financial and research resources. The chapter provides recommendations on these issues.

Chapter 5 considers fiscal arrangements for financing early childhood development (ECD) infrastructure. South Africa has been at the forefront of developing programmes and policies to meet its constitutional obligations towards children's rights. Despite the robust legislation and policies, ECD remains highly inaccessible, inequitable, and insufficiently resourced. The lack of adequate infrastructure, in particular, exacerbates accessibility problems among poor children. Public funding for constructing and maintaining ECD infrastructure is limited, unstructured and highly fragmented. The three spheres of government are concurrently responsible for ECD, but none of them has an identifiable, standing budget line item or programme for ECD infrastructure. The fragmentation and lack of funding is attributable, in part, to policy ambiguities and poor coordination among the departments of social development and cooperative governance and traditional affairs, and municipalities. Without a well-coordinated and integrated national ECD infrastructure programme, piecemeal interventions will continue to distort the distribution of funding and reinforce inequities.

Chapter 6 looks at public sector productivity and how to improve it. Secondary education is used as a case study to examine public sector productivity. With the economy growing slowly and tax revenues under pressure, public service productivity is in the spotlight, especially sectors such as education that consume a large share of government funds. The chapter evaluates the extent to which productivity in secondary education can be improved. The weak association between public funds spent and secondary education outputs suggests that non-monetary determinants of productivity or education expenditures are being used inefficiently. Environmental factors, such as the income of households, teacher commitment, socio-economic status of households and school size, all affect efficiency scores. More specifically, simply increasing resources to public schools will not necessarily improve school outcomes. What is needed is to focus more broadly on understanding productivity in the public sector, the measurement of productivity, and internal and external factors that influence productivity.

Chapter 7 is on improving government operations through information and communication technologies. Shifting to an eGovernment approach has the potential to improve and expand service delivery, as well as to help overcome the spatial divisions that persist in South Africa. The chapter explores the key barriers that prevent departments/municipalities from treating investment in information and communication technologies (ICT) as a strategic enabler for improved service delivery and efficiency. The methodology entailed a review of key policies and literature, as well as interviews with selected stakeholders. The study found that, despite the progress made by government, the ICT goals in the National Development Plan (NDP) are unlikely to be met within the given timeframes, as certain areas first need some attention. These relate to simplifying the policy environment and ensuring that implementation is closely aligned to policy goals and objectives. Such issues need to be addressed before focusing on whether ICT is underfunded or not given sufficient prioritisation, as funding should follow function in an effective intergovernmental system.

Ramos Mabugu, Research and Recommendations Programme Director

ABOUT THE AUTHORS

Ramos Mabugu is Director of the Research and Recommendations Programme at the Commission and a Fellow at the University of Stellenbosch, South Africa. He has published on topics related to applied economics, public finance, tax policy, and intergovernmental fiscal relations. Most of his economic modelling work is on the application of computable general equilibrium (CGE) models, social accounting matrix (SAM) methods, input-output methods, and macroeconomic models. In collaboration with colleagues, Ramos has pioneered the first applications of CGE microsimulation (static and dynamic) in two Southern African countries. He has taught and supervised at postgraduate level at the University of Zimbabwe and the University of Pretoria, South Africa. While at the University of Pretoria, Ramos was instrumental in setting up a collaborative environmental economics MSc and PhD training programme. He has served as a consultant for many organisations and was an external examiner for several universities. Ramos has also taught economic modelling courses at the Ecological and Environmental Economics Programme at the Abdus Salam International Centre for Theoretical Physics (ICTP) in Italy. In 2003/04, Ramos gave technical advice at the Centre for International Forestry Research (CIFOR), Indonesia, and Sida, Sweden. In 2006 he was awarded the visiting fellowship award from Curtin University in Australia, in recognition of his contributions to intergovernmental fiscal relations modelling. He earned his PhD in economics from the University of Gothenburg, Sweden.

Hammed Amusa is Programme Manager of the Commission's Macroeconomics and Public Finance Unit. He holds a PhD in Economics from Northern Illinois University in the USA. His work at the Commission focuses mainly on using quantitative tools to understand the impacts of public finance policies, especially those related to intergovernmental fiscal relations. Hammed's research interests are in understanding the political economy of resource redistribution, and the impact of public policies.

Mkhululi Ncube is Programme Manager of the Commission's Local Government Unit. He holds a PhD in Economics from the University of Gothenburg, Sweden. Mkhululi has also lectured at various universities in and outside South Africa. His present research interests are climate change and fiscal policies, local government budget analysis and gender budgeting. He is passionate about local economic development issues and sustainable resource utilisation in urban spaces. He enjoys reading widely, and his interests include history and playing golf.

Ghalieb Dawood is Programme Manager of the Commission's Provincial Budget Analysis Unit. He holds an MSc in Economics from the University of Cape Town and is a qualified adult education specialist. His work focuses mainly on budget analysis, division of revenue and fiscal frameworks, provincial sector priorities and costing. Ghalieb's current research interests are in the areas of food security, public transport systems, the public sector wage bill, and productivity analysis. Prior to joining the Commission, he was a Programme Manager at the Applied Fiscal Research Centre and has worked as an independent consultant, focusing mainly on public finance, institutional development, monitoring and evaluation, costing, intergovernmental fiscal relations, budget analysis, governance and oversight.

Sasha Peters is Programme Manager of the Commission's National Budget Analysis Unit. She has an MPhil in Public Policy from the University of Cape Town. Her focus areas are budget analysis, electricity, municipal debt, service delivery arrangements and local government capacity in South Africa. Previously, Sasha was employed at the Presidency and within IDASA's Budget Infor¬mation Services, where her focus was mainly on the social sector and the departments of education, health and social development.

Eddie Rakabe is Programme Manager of the Commission's Fiscal Policy Unit. He holds a Master's in Economics Policy and Development from the University of Johannesburg. His focus areas are intergovernmental grants design, public expenditure efficiency, and miscellaneous provincial and local government fiscal framework issues. Eddie is also part of the Research Project on Employment, Income Distribution and Inclusive Growth (REDI3x3) (managed by SALDRU), where he publishes occasionally on aspects related to low-income markets, second economy activities and inclusive growth. Before joining the Commission in 2007, Eddie worked at the National Treasury as a policy analyst in the local government Finance Policy unit and senior economist in the provincial policy unit. In 2004 Eddie received an award in the postgraduate category of the Nedbank/Budget speech competition for a paper on Black Economic Empowerment.

Sabelo Mtantato is a Senior Researcher within the Commission's Policy Unit. He holds a Master's in Economics from the University of KwaZulu-Natal. He focuses mainly on intergovernmental fiscal relations issues in a number of areas, including human settlements and land-use planning and management. He has also worked on various research projects related to public transport and roads infrastructure. Before joining the Commission, Sabelo worked in the Public Finance division of the National Treasury and the Mergers and Acquisition division at the Competition Commission.

Tertia Smit is currently the Enterprise and Public Sector Business Unit Manager at BMI-TechKnowledge, a research and consultancy company. She has a BSc (Hons) from the University of the Witwatersrand and has also completed an Advanced Management Programme through Manchester Business School (MBS AMP), offered by the Foundation for Professional Development (FPD) in South Africa. Her areas of specialisation are in market sizing and forecasting of the ICT sector in South Africa, with a special interest in eGovernment and eServices, and how to use technology to empower citizens and close the digital divide in underserviced areas.

Penny Smith holds a first-class honours degree in economics from the University of Natal (Pietermaritzburg) and a postgraduate diploma in library and information science from the University of the Witwatersrand. She has 26 years' experience as an ICT secondary research analyst, having been associated with BMI-TechKnowledge since its inception. Penny's previous business experience in economics, business library consultancy and consumer research has laid the foundation for a comprehensive knowledge of secondary research sources and techniques, and in particular the in-depth interrogation of South African statistical and government data. Penny has acted as a contributing analyst on many BMI-T reports; recent work includes the economic impact of broadband, studies on e-skilling and e-education, on the ICT Policy Review for the Department of Communications, both the original and updated e-Readiness e-Barometers for the PNC on ISAD, and BMI-T's reports on ICT in government. Penny has compiled the desk research component of BMI-T's annual vertical sector reports, sourcing both statistics and narrative data on the uptake of ICTs in the sectors of industry in South Africa and globally. For many years she provided the economic and political overviews for each African country in BMI-T's annual Communications Handbook.

Zanele Tullock is a Senior Researcher within the Commission's Local Government Unit. She holds a Master's degree in Public and Development Management (cum laude) from the University of Witwatersrand and an MBA (Finance and Entrepreneurship) from the University of Pretoria's Gordon Institute of Business Science (GIBS). Her work at the Commission focuses mainly on local government accountability, fiscal decentralisation, local government budget analysis and governance and economic development. Zanele's research interests are in the areas of development finance, micro-finance, local economic development, and infrastructural development.