



# national treasury

Department:  
National Treasury  
REPUBLIC OF SOUTH AFRICA

TO: ACCOUNTING OFFICERS OF ALL NATIONAL DEPARTMENTS AND  
CONSTITUTIONAL INSTITUTIONS

ACCOUNTING OFFICERS OF ALL MUNICIPALITIES AND MUNICIPAL ENTITIES

ACCOUNTING AUTHORITIES OF ALL SCHEDULE 2 AND 3 PUBLIC ENTITIES

HEAD OFFICIALS OF PROVINCIAL TREASURIES

## NATIONAL TREASURY DESIGNATED SECTORS INSTRUCTION NUMBER 12 OF 2016/2017.

### INVITATION AND EVALUATION OF BIDS BASED ON A STIPULATED MINIMUM THRESHOLD OF CONVERSION PROCESSES FOR LOCAL PRODUCTION AND CONTENT FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT

#### 1 PURPOSE

- 1.1 The purpose of this instruction is to regulate the environment within which accounting officers (AOs) and accounting authorities (AAs) may procure **transformers, shunt reactors and associated equipment** which have been designated for local production and content.

#### 2 BACKGROUND

- 2.1 The Preferential Procurement Regulations, 2011 (“the regulations”) issued in terms of section 5 of the Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000) which came into effect on 7 December 2011, make provision for the Department of Trade and Industry (**the dti**) to designate sectors in line with the national development and industrial policies for local production.
- 2.2 Regulation 9 (1) of the Regulations prescribes that, in the case of designated sectors, wherein the award of bids for local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 2.3 **The dti** has designated and determined the stipulated minimum threshold for **transformers, shunt reactors and associated equipment** for local production and content.

#### 3 PRODUCT DESIGNATION

- 3.1 A transformer can be defined as a device that transforms electrical power from one circuit to another. These devices have a critical role at various phases of the electricity delivery process, as the voltage of electricity produced in power stations may not be

**INVITATION AND EVALUATION OF BIDS BASED ON A STIPULATED MINIMUM THRESHOLD OF CONVERSION PROCESSES FOR LOCAL PRODUCTION AND CONTENT FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT.**

suitable for transmission, whereas the voltage that is suitable for transmission may not be suitable for use by consumers. Table 1 categorises transformers in the classes.

**Table 1: Classes of Transformers**

Transformer Class	Power Rating, MVA (Range)	Voltage Rating, kV (Range)
Class 0	0.001 to 1	220V to 22
Class 1	1.25 to 160	11 to 132
Class 2	40 to 315	220 to 275
Class 3A	360 to 500	220 to 275
Class 3B	40 to 1000	320 to 400
Class 4	40 to 2000	>420 to 800

- 3.2 Whereas Shunt reactors are electrical devices which are intended to consume reactive power measured in volt amperes (VAr) produced by an electrical power system which leads to an increase in the system's energy efficiency. Shunt reactors are commonly used for reactive power compensation in long high-voltage transmission lines and cable systems, as well as power distribution systems. Table 2 provides the classes of shunt reactors in Mega Volt Ampere reactive (MVar) and voltage rating.

**Table 2: Classes of Shunt Reactors**

Shunt Reactor	Reactive Power Rating, MVar (Range)	Voltage Rating, kV (Range)
Class 1	$\leq 80$ MVar	11kV to 132 kV
Class 2	$>80$ MVar	132kV to 275 kV
Class 3	100MVar - 250 MVar	$>275$ kV – 420 kV
Class 4	$>100$ MVar	$>420$ kV – 765 kV

- 3.3 In this instruction, the classes are inclusive of transformers and shunt reactors.
- 3.4 Table 3 provides the stipulated minimum threshold for local content and production for transformers, shunt reactors and associated equipment categorised by classes. To ensure that the minimum local content designated is discharged on manufacturing activities, the components and conversion activities in the manufacture of transformers, shunt reactors and associated equipment are further designated and must also be included in bid invitations.

**Table 3: Minimum Local Content Thresholds on Fully-Built Units**  
**Table 3a: Minimum Local Content for Class 0**

Classes of Transformers and Shunt Reactors	Local Content Threshold
	From the Effective Date
Class 0	90%



**Table 3b: Minimum Local Content for Classes 1 and 2**

Classes of Transformers and Shunt Reactors	Local Content Threshold	
	From the Effective Date	01/01/2018
Class 1	70%	80%
Class 2	70%	80%

**Table 3c: Minimum Local Content for Classes 3 to 4**

Classes of Transformers and Shunt Reactors	Local Content Threshold		
	From the Effective Date	01/01/2018	01/01/2020
Class 3	45%	60%	80%
Class 4	10%	20%	20%

- 3.5 To ensure that the above minimum local content on the different classes is achieved on the actual manufacturing activities, it must be discharged against the following components and manufacturing processes:

**Table 4: Components and Manufacturing Process for Class 0**

Components and manufacturing processes	% local content from the Effective Date
Fabrication of the tank <sup>1</sup> and parts	100%
Fabrication of the core <sup>2</sup>	100%
Manufacture <sup>3</sup> of windings and assembly	100%
Manufacture of bushings	100%
Off-circuit tap switch	100%
Oil (i.e. blending, processing and handling)	100%
Accessories Category A: Radiators Fans Kiosks Oil conservator Breather canisters	100%
Accessories Category B: Valves Cables	70% (by the valves instruction) 90% (by the cables instruction)
Assembly and Testing	100%

<sup>1</sup> Fabrication of the tank includes cutting, welding, sand-blasting and painting processes.

<sup>2</sup> Fabrication of the core includes sizing, slitting, cutting, stacking and clamping processes.

<sup>3</sup> Manufacture of windings includes rolling, sizing and insulation.

INVITATION AND EVALUATION OF BIDS BASED ON A STIPULATED MINIMUM THRESHOLD OF CONVERSION PROCESSES FOR LOCAL PRODUCTION AND CONTENT FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT.

**Table 5: Components and Manufacturing Process for Class 1**

Components and manufacturing processes	% local content from the Effective Date	% local content from 01/01/2018
Fabrication of the tank and parts	100%	100%
Fabrication of the core	100%	100%
Manufacture of windings and assembly	50%	100% (Conductors localised)
Oil (i.e. blending, processing and handling)	100%	100%
Accessories Category A: Radiators Fans Kiosks Oil conservator Breather canisters	100%	100%
Accessories Category B: Valves Cables	70% (by the valves instruction) 90% (by the cables instruction)	
Assembly and Testing	100%	100%

**Table 6: Components and Manufacturing Process for Class 2**

Components and manufacturing processes	% local content from the Effective Date	% local content from 01/01/2018
Fabrication of the tank and parts	100%	100%
Fabrication of the core	100%	100%
Manufacture of windings and assembly	50%	100% (Conductors localised)
Oil (i.e. blending, processing and handling)	100%	100%
Accessories Category A: Radiators Fans Kiosks Oil conservator Breather canisters	100%	100%
Accessories Category B: Valves Cables	70% (by the valves instruction) 90% (by the cables instruction)	
Assembly and Testing	100%	100%



INVITATION AND EVALUATION OF BIDS BASED ON A STIPULATED MINIMUM THRESHOLD OF CONVERSION PROCESSES FOR LOCAL PRODUCTION AND CONTENT FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT.

**Table 7: Components and Manufacturing Process for Class 3**

Components and manufacturing processes	% local content from the Effective Date	% local content from 01/01/2018	% local content from 01/01/2020
Fabrication of the tank and parts	100%	100%	100%
Fabrication of the Core	-	-	100%
Windings processes	-	40% Winding conductors localised	100% Manufacture of windings and assembly inclusive of conductors localised
Oil (i.e. blending, processing and handling)	100%	100%	100%
Accessories Category A: Radiators Fans Kiosks Oil conservator Breather canisters	100%	100%	100%
Accessories Category B: Valves Cables	70% (by the valves instruction) 90% (by the cables instruction)		
Assembly and Testing	100%	100%	100%

**Table 8: Components and Manufacturing Process for Class 4**

Components and manufacturing processes	% local content from the Effective Date	% local content from 01/01/2018	% local content from 01/01/2020
Winding Conductor	-	100%	100%
Oil (i.e. blending, processing and handling)	100%	100%	100%
Accessories Category A: Radiators Fans Kiosks Oil conservator Breather canisters	100%	100%	100%
Accessories Category B: Valves Cables	70% (by the valves instruction) 90% (by the cables instruction)		

3.6 Table 3a, 3b and 3c must be read and applied in conjunction with Tables 4 to 8 to ensure that the local content requirements are discharged against the designated components and manufacturing processes.

**INVITATION AND EVALUATION OF BIDS BASED ON A STIPULATED MINIMUM THRESHOLD OF CONVERSION PROCESSES FOR LOCAL PRODUCTION AND CONTENT FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT.**

---

- 3.7 All primary steel related products: flat products (plates and coils) and long products (angles, sections and wire related products) are included in this designation and must be manufactured and sourced locally. This is to support and sustain the existing local steelmaking capacity.
- 3.8 The following primary input materials used in the manufacture of transformers, shunt reactors and associated equipment are deemed as local in this designation:
- steel products (i.e. laminated sheets, grain-oriented electrical core, amorphous core);
  - raw copper rod, sheets and twin enamelled epoxy conductor;
  - paper and boards for insulation;
  - aluminium billets and rod;
  - porcelain insulators (used in shunt reactor cores);
  - ceramics/porcelain; reinforced fibre glass and/or polymers; and
  - un-blended transformer oil.

These inputs should be imported in raw material form for further fabrication and processing in South Africa.

- 3.9 The imported input raw materials indicated in 3.8 used for the assembly and manufacture of transformers, shunt reactors and associated equipment will be deemed to have been sourced locally for the purposes of calculating local content.
- 3.10 The designated local content thresholds (on the components/conversion processes and on the overall) apply to new purchases; refurbishments, replacements and general overhauls.
- 3.11 Bidders must clearly indicate in their bids the quantities to be supplied and the level of local content for each product.
- 3.12 Organs of state may contact **the dti** in instances where the stipulated minimum threshold for local content cannot be met in order for **the dti** to verify and in consultation with the AO/AA provide directives in this regard.
- 3.13 For further information, bidders and procuring state organs may contact the Metals Fabrication, Capital and Rail Transport Equipment Unit within **the dti** at telephone 012 394 1356 or email Thandi Phele at [Tphele@thedti.gov.za](mailto:Tphele@thedti.gov.za)
- 3.14 Bid specifications for the designated products in this instruction may be may be done in collaboration with **the dti**.

**4 INVITATION OF BIDS FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT**

- 4.1 Bids in respect of transformers, shunt reactors and associated equipment (broken into classes as shown in tables 3 to 8 above) must contain a specific bidding condition which states that:
- 4.1.1 Only locally manufactured transformers, shunt reactors and associated equipment with a stipulated minimum threshold for local production and content will be considered.



**INVITATION AND EVALUATION OF BIDS BASED ON A STIPULATED MINIMUM THRESHOLD OF CONVERSION PROCESSES FOR LOCAL PRODUCTION AND CONTENT FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT.**

---

- 4.2 If the quantity; input materials; and/or components of transformers, shunt reactors and associated equipment required cannot be wholly sourced from South African (SA) based manufacturers to achieve the designated local content threshold at any particular time, bidders should request and obtain written exemption from **the dti**. Such exemption applications should be submitted and approvals should be obtained prior to the closure of the bid(s) concerned. **the dti**, in consultation with the procuring organ of state and the local industry, will consider the exemption applications on a case-by-case basis and will consider the following:
- required volumes in the particular bid;
  - available collective SA industry manufacturing capacity at that time;
  - delivery times;
  - availability of input materials and components;
  - technical considerations including operating conditions and technical compliance protocol;
  - quality and reliability;
  - materials of construction;
  - security of supply and emergencies;
  - localisation plans aimed at establishing and/or increasing local manufacturing capacity through ramping-up of capital investments in the initial phases;
  - replacements of components/conversion processes on the existing fleet (i.e. transformers procured prior to the implementation of this instruction notes) in order to honour the warranties and guarantees.
- 4.3 Bidders must clearly indicate in their bids the quantities of transformers, shunt reactors and associated equipment to be supplied and the level of local content for each product.
- 4.4 Organs of state may contact **the dti** in instances where the stipulated minimum threshold for local content cannot be met in order for **the dti** to verify and in consultation with the AO/AA provide directives in this regard.
- 4.5 For further information, bidders and procuring state organs may contact the Metals Fabrication, Capital and Rail Transport unit within **the dti** at telephone 012 394 1356 or email Thandi Phele at TPhele@thedti.gov.za.
- 4.6 AOs/AAs must stipulate in bid invitations that:
- 4.6.1 The exchange rate to be used for the calculation of local production and content must be the exchange rate published by the South African Reserve Bank (SARB) on the date of the advertisement of the bid.
- 4.7 Only the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 must be used to calculate local content.
- 4.8 The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the following formula which must be disclosed in the bid documentation:

$$LC = \left(1 - \frac{x}{y}\right) * 100$$

Where

$x$  is the imported content in Rand

$y$  is the bid price in Rand excluding value added tax (VAT)

- In the case of turnkey projects  $x$  and  $y$  will only refer to the value of the Transformers, Shunt reactors and associated equipment in the project
- Prices referred to in the determination of  $x$  must be converted to Rand (ZAR) by using the exchange rate published by the SARB on the date of advertisement of the bid.

4.9 AOs/AAs must clearly stipulate in the bid documentation that the SABS approved technical specification number SATS 1286:2011 and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)] are accessible to all potential bidders on the dti's official website [http://www.thedti.gov.za/industrial\\_development/ip.jsp](http://www.thedti.gov.za/industrial_development/ip.jsp) at no cost.

4.10 For the purpose of paragraphs 4.1, 4.2 and 4.3 above, the attached Declaration Certificates for Local Production and Content (SBD/MBD 6.2) must form part of the bid documentation. The SBD 6.2 is for use by all national and provincial departments, constitutional institutions and public entities listed in schedules 2, 3A, 3B, 3C and 3D to the Public Finance Management Act whilst the MBD 6.2 is for use by all municipalities and municipal entities to which the Municipal Finance Management Act (MFMA) apply.

4.11 AOs/AAs must stipulate in the bid documentation that:

4.11.1 the Declaration Certificate for Local Production and Content (SBD / MBD 6.2) together with the Annex C (Local Content Declaration: Summary Schedule) must be completed, duly signed and submitted by the bidder at the closing date and time of the bid; and

4.11.2 The rates of exchange quoted by the bidder in paragraph 4.1 of the Declaration Certificate will be verified for accuracy

## **5 EVALUATION OF BIDS FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT**

5.1. A two stage evaluation process may be followed to evaluate the bids received.

### **5.1.1. First stage: Evaluation in terms of the stipulated minimum threshold for local production and content**

- (a) Bids must be evaluated in terms of the minimum threshold stipulated in the bid documents.
- (b) The declaration made by the bidder in the Declaration Certificate for Local Content (SBD / MBD 6.2) and Annex C (Local Content Declaration: Summary Schedule) must be used for this purpose. If the



- bid is for more than one product, the local content percentages for each product contained in Annex C must be used.
- (c) The amendment of the stipulated minimum threshold for local production and content is not allowed.
  - (d) AOs/AAs must ensure that the **Declaration Certificate for Local Content** (SBD/MBD 6.2) and **Annex C** (Local Content Declaration: Summary Schedule) are submitted as part of the bid documentation.
  - (e) AOs/ AAs must verify the accuracy of the rates of exchange quoted by the bidder in paragraph 4.1 of the Declaration Certificate for Local Content (SBD / MBD 6.2)

#### 5.1.2. Second stage: Evaluation in terms of the 80/20 or 90/10 preference point systems

- (a) Only bids that achieve the minimum stipulated threshold for local production and content may be evaluated further. Unless otherwise exempted by the Minister of Finance, the evaluation must be done in accordance with the 80/20 or 90/10 preference point systems prescribed in Preferential Procurement Regulations, 2011.
- (b) AOs/AAs must ensure that bids for products that are designated in this instruction are awarded at prices that are market related taking into account, among others, benchmarking prices, value for money and economies of scale.
- (c) Where appropriate, prices may be negotiated with short listed or preferred bidders. Such negotiations must not prejudice any other bidders.

### 6 BENCHMARK / MARKET RELATED PRICES

- 6.1. AOs/AAs are required to ensure that reasonable or market related prices are secured for the products being procured taking into account factors such as benchmark prices, value for money and economies of scale.
- 6.2. For this purpose, AOs/AAs may approach **the dti** to assist, where possible, with benchmark prices. **The dti** will be in a position to provide price references for the different products that have been designated for local production and content.

### 7 EVALUATION OF BIDS BASED ON FUNCTIONALITY

Whenever it is deemed necessary to evaluate bids on the basis of functionality, the prescripts contained in regulation 4 of the Preferential Procurement Regulations, 2011 and paragraphs 6 and 11 of the Implementation Guide must be followed.

### 8 POST AWARD AND REPORTING REQUIREMENTS

- 8.1 Once bids are awarded, **the dti** must be:
  - 8.1.1. Notified of all the successful bidders and the value of the contracts; and

- 8.1.2. Provided with copies of the contracts, the SBD/MBD 6.2 Certificates together with the annexure C submitted by the successful bidder(s).
- 8.2. The purpose of the requirements of paragraph 7.1 above is for **the dti** among others, conduct compliance audits with a view to monitor the implementation of the industrial development strategies.
- 8.3. Contractors must not be allowed to sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 8.4. Where, after the award of a bid, contractors experience challenges in meeting the stipulated minimum threshold for local content **the dti** must be informed accordingly in order for **the dti** to verify and in consultation with the AO/AA provide directives in this regard.

## **9 CONTACT INFORMATION**

- 9.1. Any enquiries in respect of Local Production and Content and all documents to be submitted to the dti must be directed as follows:**

The Department of Trade and Industry  
Private Bag X 84  
Pretoria  
0001

For Attention:  
Dr. Tebogo Makube  
Chief Director: Industrial Procurement  
Tel: (012) 394 3927  
Fax: (012) 394 4927  
EMAIL: [TMakube@thedti.gov.za](mailto:TMakube@thedti.gov.za)

## **10 APPLICABILITY**

- 10.1. This instruction applies to all national and provincial departments, constitutional institutions, public entities listed in schedules 2 and 3 to the PFMA and municipalities and municipal entities to which the MFMA apply.

## **11 DISSEMINATION OF INFORMATION CONTAINED IN THIS INSTRUCTION**

- 11.1. Heads of provincial treasuries are requested to bring the contents of this instruction to the attention of accounting officers and supply chain management officials of their respective provincial departments.
- 11.2. Accounting officers of national and provincial departments are requested to bring the contents of this instruction to the attention of accounting authorities and the supply chain management officials of Schedule 3A and 3C public entities reporting to their respective executive authorities.



**INVITATION AND EVALUATION OF BIDS BASED ON A STIPULATED MINIMUM THRESHOLD OF CONVERSION PROCESSES FOR LOCAL PRODUCTION AND CONTENT FOR TRANSFORMERS, SHUNT REACTORS AND ASSOCIATED EQUIPMENT.**

---

11.3. Accounting officers of municipalities and municipal entities are requested to bring the contents of this instruction to the attention of the supply chain management officials of their municipalities and municipal entities.

11.4. Accounting authorities of Schedule 2, 3B and 3D public entities are requested to bring the contents of this instruction to the attention of the supply chain management officials of their public entities.

**12. NOTIFICATION TO THE AUDITOR-GENERAL**

12.1. A copy of this instruction will be forwarded to the Auditor-General for notification.

**13. REPEAL OF INSTRUCTION DATED 28 SEPTEMBER 2015**

13.1. The Instruction on invitation and evaluation of bids based on a stipulated minimum threshold of conversion processes for local production and content for transformers, shunt reactors and associated equipment dated 28 September 2015 and effective on 21 October 2015 is hereby repealed.

**14. AUTHORITY FOR THIS INSTRUCTION AND EFFECTIVE DATE**

13.1. The Minister of Finance has approved the issuance of this instruction in terms of regulation 9(2) of the regulations.

13.2. This instruction takes effect on **25 August 2016**.

  
**KENNETH BROWN**  
**CHIEF PROCUREMENT OFFICER**  
**DATE:**

29/7/2016.