

	Expression of Interest (EOI)/ Request for Information (RFI)	Template Identifier	240-72663051	Rev	1
		Document Identifier	N/A	Rev	N/A
		Effective Date	01 August 2016		
		Review Date	September 2022		
		EOI/RFI No.	KBG2114		

KBG2114 KIS 07072 Replacement of the Seismic Monitoring System

PART A REQUEST FOR INFORMATION(RFI)	
Description of the works/goods/services	The function of the KIS seismic monitoring system is to provide information to the operators after an earthquake so that a decision can be made on immediate and future operation of the plant. The KIS system monitors selected points on site structures and equipment to determine the magnitude of a seismic disturbance. In the event of a seismic disturbance, the system records the absolute accelerations that are experienced and indicates the g level, for later analysis of the behaviour of the structures and equipment. During normal plant operation the KIS system is in a quiescent state. When a pre-set acceleration value is detected, representative of an earthquake in progress, an alarm is sounded in the Unit 1 control room and the active (electronic) recording system is automatically triggered. A passive (mechanical) system records peak acceleration. Obsolescence is the main driving force behind the upgrade of the KIS system as the system has exceeded its end-of-life span. The OEM for the passive system, Engdahl Enterprises, has discontinued service/running business. The current system was installed in 1995. Design Change: The design requirements are based on eliminating the current obsolescence from the existing KIS system, and therefore the functionality is primarily the same as the current system. A description of the existing installation, equipment and functionality is provided in Section 3 of the attached TRS with Unique Identifier 240-163236795. Scope of Supply: The attached Technical Requirement Specification (TRS), document identifier 240-163236795, describes the client requirements with respect to this modification number 07072. It is intended to describe the functional and technical requirements for the design, supply of material, delivery, storage, removal and disposal of existing, installation, testing and commissioning of the plant change. The TRS includes, amongst others, details on: • Existing design • Problems with the existing design • Design change requirements • Quality assurance and inspection requirements • Site work requirements

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	• Commissioning and performance testing • Documentation Based on the considerations provided above; the following information is required: a) Indicative pricing with maximum local content and localisation opportunities for the following scope deliverables: • <u>Resource/ Manpower costs:</u> ○ Detail Design. The Contractor shall provide a detailed design for the KIS System at KNPS, in accordance with KNPS procedure 331-86, as well as all requirements of the applicable nuclear industry regulations (USNRC RG 1.12, IEEE 344 and ANSI/ANS 2.2). ○ Provide support for regulatory approval (resolution of regulator review comments) ○ Factory acceptance testing if required ○ Procurement and manufacturing of the associated equipment ○ The identification, dismantling and removal of the obsolete equipment to the scrap yard ○ Procurement of the associated installation hardware, including Preliminaries and General and all site costs ○ The Contractor is responsible for the successful installation of the new KIS system ○ The Contractor is responsible for the successful commissioning of the new KIS system ○ The Contractor shall supply all special tools and equipment required to perform the prescribed maintenance on the proposed KIS System. Take into account that certain testing equipment, e.g., tilting tables will be used within the controlled zone and outside of the controlled zone respectively ○ Compile and submit design documents, all revised and new documents and maintenance manuals • <u>Materials:</u> ○ Manufacturing, Procurement and supply of all material • <u>Transport and storage:</u> ○ Delivery to Koeberg Nuclear Power Station ○ Safe storage of equipment until installation b) With associated lead times for: • Equipment manufacturing lead times • Equipment delivery to Koeberg Nuclear Power Station • Installation
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	• Commissioning • Disposal of all non-contaminated removed equipment and material. • Operator and Maintenance training. • Detail Design for the KIS System at KNPS, in accordance with KNPS procedure 331-86 • Any engineering studies associated with providing the scope of works • All documents and document updates as required by this TRS		
Deadline for submission	23 November 2021	At (South African Standard Time)	10h00
Tender Office address	THE TENDER OFFICE Tender Centre Block 'E' Stores Building Brackenfell Complex Eskom Road Brackenfell (7560) Western Cape, South Africa NO FAX TENDER WILL BE ACCEPTED NO LATE TENDER WILL BE ACCEPTED <u>COVID – 19 AND LOCKDOWN: NOTICE</u> Eskom falls within the Essential Services category and notes that most suppliers will by now already have such documentation in place. Most courier services are operating. If there are any issues in this regard, it needs to be communicated to Eskom. PLEASE ALLOW TIME TO OBTAIN THE NECESSARY ACCESS DOCUMENTATION TO THE TENDER OFFICE AT THE BRACKENFELL SECURITY OFFICE TO DELIVER YOUR TENDER DOCUMENTS. NO EXCEPTIONS WILL BE MADE DUE TO DELAYS EXPERIENCES AT SECURITY TO ACCESS THE TENDER BOX. PLEASE ALLOW SUFFICIENT TIME TO ACCESS THE ESKOM, BRACKENFELL COMPLEX FOR SUBMISSION OF YOUR OFFER. THE PERSON SUBMITTING THE OFFER MUST HAVE A VALID ID BOOK PRESENT. Any documents required that are not submitted in the tender box at the deadline will be considered late. The supplier accepts that Eskom will not take responsibility for the misplacement or premature opening of the tender if the outer package is not sealed and marked as stated. Without limitation, Eskom takes no responsibility for any delays in any courier or postal system or any delays in transit within or between Eskom offices. Eskom likewise takes no responsibility for offers delivered to a location other than the tender box at the tender office stated in the tender. Proof of posting or of courier delivery will not be taken by Eskom as proof of delivery.		

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	Kindly submit AN ADDITIONAL HARD COPY OF THE ORIGINAL RFI at RFI submission deadline, please take note that the original RFI is kept at the Tender Office. Only the hard copy of the original is given to the buyer.
--	---

Eskom Holdings SOC Ltd ("Eskom") invites you to submit a:

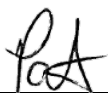
Response to this Request for information (RFI) based on the information for the works/goods/services as stated in the table below. This RFI is a stand-alone information-gathering and market-testing exercise, intended only to inform and assist Eskom's further deliberation and development of a strategy for the KIS 07072 Replacement of the Seismic Monitoring System project.

Your response to this RFI will be deemed as acceptance of Eskom's Standard Conditions of Tender and can be downloaded from www.eskom.co.za. The "Tender Data" as detailed herein shall take precedence over the Standard Conditions of Tender in the event of any ambiguity or inconsistency between the two documents.

Eskom has delegated the responsibility for this RFI to the signatory of this document, whose details can be found below.

We look forward to receipt of your response.

Yours faithfully



George Patiwe
Middle Manager (Acting)
Nuclear Commercial

Contact Person Details

Name	Designation	Signature	Date
Mr Ashwanth Ramdheen	Senior Buyer, Nuclear Commercial	A.Ramdheen	06-10-2021
Telephone number	021 552 3006	Fax and/or e-mail address	ramdhear@eskom.co.za

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PART B RESPONSE SHEET IN TERMS OF A REQUEST FOR AN EXPRESSION OF INTEREST /REQUEST FOR INFORMATION To be completed by the supplier			
To	Eskom Holdings SOC Ltd	Date	
Attention	Ashwanth Ramdheen		
Tel no		Fax no and /or e-mail address	
From		Address	
Address			
Sender			
Description of the works/goods/services	KBG2114 KIS 07072 Replacement of the Seismic Monitoring System		

Please find below our response to Eskom's questions:

No.	Question	Please indicate your response in this column
1.	Your contact name and contact details	
2.	Company registration number	
3.	Brief description of the proposed solution and previous experience on similar scope of work.	
4.	Indicative prices as per the scope in the RFI and maximum local content percentages by completing Annexure B.	
5.	Provide best estimated lead times for the following activities in line with the scope of the RFI by completing Annexure C.	
6.	Provide SCATT breakdown in accordance with pre-populated spreadsheet attached. Also, indicate the anticipated maximum local content percentages by completing Annexure D.	

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		EOI/RFI No.	KBG2114		

Yours faithfully

Name	Designation	Signature	Date
Telephone number		Fax and/or e-mail address	

ANNEXURE A: RETURNABLE - ACKNOWLEDGEMENT FORM

To	Eskom Holdings SOC Ltd	From	
Attention	Ashwanth Ramdheen	Sender	
Contact No	021 552 3006	Contact No	
E-mail address	Ramdhear@eskom.co.za	E-mail address	

RFI reference number:

Confirmation of respondents to participate in the request for information for the KIS 07072 Replacement of the Seismic Monitoring System at Koeberg Nuclear Power Station (KNPS)

We are in receipt of Eskom Holdings SOC Limited Request for Information KBG2114. We confirm the following (please mark the appropriate response).

No	Statement	Yes	No	Comments
1	We are interested in submitting a response in terms of Eskom's RFI process requirements. Refer to Annexure E			
2	We have noted the deadline for the RFI submission as detailed.			
3	We intend to submit the information in the name of the organisation listed above.			
4	We would like to receive all further information and correspondence at our e-mail address as above.			
5	We will be able to attend the presentation post RFI closing, to present information to the Eskom team and allow for a clarification. The clarification session if required by potential will be scheduled via virtual platform using Microsoft Teams. Clarifications must be sent to ramdhear@eskom.co.za			
6	We have read and understood all the above and "important notes" on Annexure E, under point 9.			

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Yours faithfully

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Annexure B: Indicative Pricing and Maximum Local Content and Localisation Opportunities

For the design, supply of material, delivery, removal and disposal of existing, installation, testing and commissioning of the plant change as per supplied Technical Requirement Specification < 240-163236795 >.

Base date of indicative pricing: _____

Scope deliverable	Indicative Price	Currency	Applicable CPA formulae and associated Indices	Local Content % (As per SCATT)
Resource/ Manpower costs				
Detail Design as stipulated in the TRS				
Any engineering studies associated with providing the scope of works				
Support of submittals to the National Nuclear Regulator for detail design approval				
Factory acceptance testing if required				
Procurement and manufacturing of the associated KIS equipment				
Procurement of the associated installation hardware, including Preliminaries and General and all site cost				
Installation of the new KIS equipment				
The identification, dismantling and removal of the obsolete equipment to the scrap yard				
Testing and commissioning of the new KIS systems				
Supply all special tools and equipment required to perform the prescribed maintenance on the proposed KIS System				
Disposal of all non-contaminated removed equipment and material.				

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Scope deliverable	Indicative Price	Currency	Applicable CPA formulae and associated Indices	Local Content % (As per SCATT)
Arrangement for disposal of all contaminated removed equipment and material				
Compile and submit design documents, all revised and new documents and maintenance manuals as required by the TRS.				
Operator and Maintenance training.				
Other				
Materials				
Manufacturing, procurement and supply of all material				
Other				
Transport				
Equipment delivery to Koeberg Nuclear Power Station				
Safe storage of equipment until installation				

Please state the applicable currency for all expenditure that will likely be invoiced in a foreign amount and state the Indicative price in the foreign amount and not South African Rands. The above indicative pricing must include project management, quality management, human performance, safety management as well as all overheads to provide the works. A cash flow also needs to be provided.

Note: The Local Content percentage (%) is to be determined after SCATT Opportunities Matrix is completed, in accordance with its requirements. See the SCATT spreadsheet and “Notes” to SCATT for further information.

Annexure C: Estimated Lead Times

For the design, supply of material, delivery, removal and disposal of existing, installation, testing and commissioning of the plant change as per supplied Technical Requirement Specification <240-163236795>.

Scope deliverable	Estimated lead time
Detail Design as stipulated in the TRS	
Any engineering studies associated with providing the scope of works	
Support of submittals to the National Nuclear Regulator for detail design approval	

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Procurement and manufacturing of the associated KIS equipment	
Factory acceptance testing if required	
Equipment delivery to Koeberg Nuclear Power Station	
Installation of the new KIS equipment	
Testing and commissioning of the new KIS systems	
Supply of specialised tools and equipment required for maintenance	
Compile and submit design documents, all revised and new documents and maintenance manuals as required by the TRS.	
Operator and Maintenance training.	
Manufacturing and supply of the associated installation hardware and all other materials associated with the installation	
<i>Any other activities important to note for the replacement of the Seismic Monitoring System</i>	

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Annexure D: SUPPLIER DEVELOPMENT LOCALISATION AND INDUSTRIALISATION (SDL&I) – Notes.

Note: The SCATT Opportunities Matrix is depicted below for explanatory purposes only. The RFI Returnable is on the attached SCATT Excel Spreadsheet (for RFI tender submission purposes).

Analysis sheet											
SD&L Process: Systems Engineering Approach Analysis											
	Area of Influence for Local Participation within the below Industry value chain										
	Quality Management Requirements										
	Project Management Oversight										
	Contract Management Oversight										
Scope of Work Elements/ Bill of Materials PER ITEM	Total Spend R		Design	Materials	Manufacture	Assembly	Testing	Construction	Installation	Commision	Operate and Maintain
	(R) foreign	(R) local									
DESIGNATION ALIGNMENT											
Resource/ Manpower costs											
Detail Design as stipulated in the TRS											
Any engineering studies associated with providing the scope of works											
Support of submittals to the National Nuclear Regulator for detail design approval											
Factory acceptance testing if required											
Procurement and manufacturing of the associated KIS equipment											
Procurement of the associated installation hardware, including Preliminaries and General and all site cost											
Installation of the new KIS equipment											
The identification, dismantling and removal of the obsolete equipment to the scrap yard											
Testing and commissioning of the new KIS systems											
Supply all special tools and equipment required to perform the prescribed maintenance on the proposed KIS System											
Disposal of all non-contaminated removed equipment and material											
Arrangement for disposal of all contaminated removed equipment and material											
Compile and submit design documents, all revised and new documents and maintenance manuals as required by the TRS											
Operator and Maintenance training											
Other											
Materials											
Manufacturing and supply of all material											
Other											
Transport											
Delivery to Koeberg Nuclear Power Station											
Safe storage of equipment until installation											

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A. Introduction

The diagram above is referred to as the SCATT (Supply Chain and Transformation Tool) Methodology that seeks to unpack user requirements (see the attached TRS) in order to address the South African (SA) government's local development and transformation requirements, which are entrenched in its legislation and policies.

B. Local content, Localisation and Industrialisation

As a concept, 'local content' is generally understood as a set of policy measures implemented by government that typically require a certain percentage of factors of production (such as labour, supplies of intermediate goods, services, knowledge and technology) used in various stages of the production process be sourced from the domestic economy.

The rationale in SA behind these policies is linked to economic and socio-political considerations. On the economic front, the primary rationale is for developing new industries and strengthening the domestic industrial base in an attempt to stimulate job creation and economic development. A secondary aim is to stimulate the development of competencies, necessary for the functionality of an industry.

Thus, local content is one of the public procurement and industrial policy instruments used by the SA government to leverage public expenditure to support industrial development and economic growth in the country. [In the South African context, local content is defined as the proportion of the total price which is not included in the imported content, provided that local manufacturing does take place within the borders of South Africa].

Given the above definitions, **local content is value added in South Africa**, using South African resources – thus the total minus the imported (foreign) content.

'**Localisation**' refers to the development of sustainable local industrial (manufacturing) capability, and '**Industrialisation**' refers to the creation of new sustainable local industrial (manufacturing) capability.

Typically, where high percentages of local content cannot be reached, the focus shifts to technology and knowledge transfer, thus creating the opportunity to develop the specific capability, and in so doing promote localisation.

C. SCATT Methodology application

With reference to Diagram 1 above (SCATT Methodology addressing local development and transformation requirements), the SCATT may be viewed as an opportunities identification methodology for local industry participation as follows:

- a. It is based on a Systems Engineering (SE) approach, within which industry operates.
A key consideration is how to link this to local industry participation (how we can involve local companies) upfront.

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- b. SCATT is utilised in order to gain insights from a localisation perspective, as well as being a complete system that provides simultaneous project management insights and information about the supplier market.
- c. Quality assurance and contract management oversight are key considerations.

D. Requirements from RFI respondent

- i. The RFI respondent completes the SCATT as part of the required RFI returnable list.
- ii. The reference to percentage local content is a reflection of the spend profile which is a financial breakdown only ($R_{\text{local}} = R_{\text{total}} - R_{\text{foreign}}$), in accordance with the cost estimates for the applicable scope of work (sow) element.
 - a. The RFI, per sow element, needs to be unpacked by the RFI respondent to the relevant level of detail, viz. to system, component and/or sub-component level (e.g., steel), as applicable. Note: This is requested, in order to determine applicability of possible 'Designated' items for Local Production and Content, in accordance with the Department of Trade, Industry and Competition's requirements.
 - b. Please cross-reference R (Foreign) and R (Local) to the applicable area of influence in the industry value chain. [These sow elements need to be indicated across the entire engineering value chain, in line with a Systems Engineering Approach for the entire requirement].
 - c. Here, the SE Approach considers the technical and local development needs, as well as the cost estimates that underpin the RFI submission.
 - d. Local industry participation is linked to the industry value chain. The money spends split (foreign vs local) is "how" the local industry fits in, as well as "where" in the value chain.
 - e. The sow is required to be detailed by the RFI tenderer in a specific way to address the "what" that the percentage (in Rand Value) local content entails.
Thus, transforming the % local content into the "what" the money will be spent on, thus giving the % local content meaning to industry, providing the measure of % local content.
 - f. RFI respondent to further indicate how local industry is to be utilised to provide required maintenance and support (see "Operate and Maintain" depicted within the Industry Value Chain).
 - g. Both R (Foreign) and R (Local) to be totalled as cost estimates.
 - h. An indication of OEM status for which systems/components.
 - i. Indicate Intellectual Property (IP) Rights application in the industry value chain.

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ATTACHMENTS

APPENDIX 1 – TRS 240-163236795 (TRS 07072)

APPENDIX 2 – SCATT opportunities matrix

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