Aerospace Industry Support Initiative

an initiative of the dtic

Call for Proposals (CFP)

Aerospace Industry Support Initiative (AISI): Industry Development and Technology Support Programme

CFP 002/19/09/2022

Date of Issue	16 September 2022
Closing Date	**14 October 2022, 16:30**
Submissions	**Submissions to be emailed to lmashoko@csir.co.za**
Queries	**AISI Technical Leader** **Tel.: (012) 841-4466** **Email: lmashoko@csir.co.za**
CSIR Business Hours	**08:00 – 16:30**
Category	**Aerospace and Defence**

1 INTRODUCTION

The purpose of this document is to outline the framework for the Call for Proposals (CFP) and submission procedures with regards to the provision of services for the AISI: Industry Development and Technology Support Programme. It serves as a guideline to potential beneficiaries interested in submitting proposals for consideration by the AISI technical review committee.

2 BACKGROUND

2.1 Aerospace Industry Support Initiative

The AISI is an initiative of the Department of Trade, Industry and Competition (**the dtic**). The AISI takes its strategic direction from government's objectives with emphasis on the aeronautic, space, defence and other sector-wide industries including marine, on:

- Technology Based Supplier Development
- Industrialisation of Technologies
- Industry Transformation; and
- Job Creation.

The AISI is hosted and managed by the CSIR and has a specific aim of industrial development and technology-based supplier development. The AISI is a fully government-funded mechanism to support the local South African aeronautics, defence, space and other sector-wide industries including marine. The AISI works with the entire South African industry, as well as with local and international aerospace Small Medium and Micro Enterprise (SMMEs) and Integrators and Sub-Systems Suppliers.

The goals of the AISI as an industry support mechanism are to:

- Increase the contribution of SMMEs in the economy.
- Significantly enhance Broad Based Black Economic Empowerment (B-BBEE).
- Raise the levels of direct investment overall, as well as in defined priority sectors.
- Increase market access opportunities for the export of South African goods and services.
- Contribute towards building skills and technology platforms.
- Improvement of the local industry competitiveness.
- Ensuring that new technologies are taken up by industry through an active process of industrialisation; and
- Enable new suppliers to enter the supply chain and develop new technologies, industries and SMMEs, in order to enable market entry and global competitiveness through access to national expertise and infrastructure.

2.2 Industry Development and Technology Support

The Industry Development and Technology Support Programme focuses on advancing the involvement of industry in sectors relating to advanced manufacturing in aeronautics, space and defence. Industry is encouraged to apply for funding to industrialise technologies to the advancement of South African niche capabilities and value propositions to support the following:

- Ensuring partnerships are established between organisations.
- Accessing national infrastructure and expertise.
- Accessing new and existing processes, products and methods to enter into the industry.
- Industrialising technologies from universities and other research institutions.
- Enhancing industry competitiveness by ensuring appropriate technology transfer interventions; and
- Integrators and Sub-Systems Suppliers are encouraged to include SMMEs as well as lower tier suppliers, to ensure the continuous transfer of knowledge, expertise, capabilities and technologies, and in doing so, broadening the industry base.

The programme is also aimed at contributing towards the transformation of the industry through prioritising the support of project applications from previously disadvantaged groups that meet the minimum functionality requirements. This is in line with Government's drive for transformation and equity. However, all companies are still eligible to apply for support under the programme.

3 INVITATION FOR PROPOSAL

The AISI realises the need to support the local industry; therefore, a Call for Proposals (CFP) is issued aimed at attracting projects that contribute towards the development of the South African aeronautics, space and defence industry, specifically focusing on:

- Supporting SMMEs and established industry in fostering new technologies; and
- Developing the local content and capability of South African entities.

The CFP is open to both local **INTEGRATORS AND SUB-SYSTEMS SUPPLIERS** as well as **SMMEs**.

Definitions:

An Integrator and Sub-Systems Supplier is a company whose products are used as components in the products of another company. The integrators and sub-systems suppliers generally work closely with the company that sells the finished product and customises designs based on that company's needs. Only integrators and sub-systems suppliers who are involved in aerospace and defence advanced manufacturing will be considered.

A manufacturing SMME is defined in accordance with the Revised Schedule 1 of the National Definition of Small Enterprise in South Africa published on 15 March 2019 by the Department of Small Business Development. According to this schedule a manufacturing SMME is defined as having less than:

- 250 full time employees; and
- R170 million annual turnover

3.1 The Evaluation Process

The call for proposals evaluation process will follow a two-phase approach as shown in Figure 1. The phases are:

1. Evaluation of Qualification, Critical and Differentiation Factors (Functionality)
2. Evaluation of Transformation Related Factors

Evaluation of Qualification and Differentiation Factors (Functionality)

- All proposals will initially be reviewed to ensure they fulfil the qualification and critical evaluation factors. If not, the project proposal will be disqualified, and the service provider will be informed thereafter.
- All projects that fulfil the qualification and critical evaluation factors will then be categorised accordingly and the project proposals will be distributed to the members of a pre-determined technical review committee.
- Each member of the technical review committee will review and score the projects using pre-approved differentiation evaluation factors.
- A technical review exercise will be undertaken in order to obtain a final score
- All projects that have a weighted score greater than or equal to 65% on the differentiation factors (functionality) will qualify for the next round of evaluation on transformation related factors.
- All organisations whose applications are eliminated at this stage will be notified.

Evaluation of Transformation Related Factors

Based on the evaluation in Phase 1, all proposals with a weighted differentiation or functionality score greater than or equal to 65% qualify for this phase of evaluation. The principle at this stage of evaluation is that all such projects have proven to be suitable for AISI support and this stage will rank them based on the transformation related characteristics of the applying organisations without taking into account the functionality scores again.

- Qualifying projects from the first phase of evaluation will be scored and the total weighted scores will be ranked from the top performing in terms of the transformation factors as shown in Table 4.
- Depending on the available budget the top performing applications in terms of the transformation factors will be awarded support first until the available budget is exhausted.
- If enough budget is available, all applications that make it to this stage will be awarded AISI support but if not; only the top performing will be supported up to the point where the budget is exhausted.

- Both successful and unsuccessful applicants from this stage will be informed of the outcome.

- The successful applicants will then be contacted for contracting and implementation process.

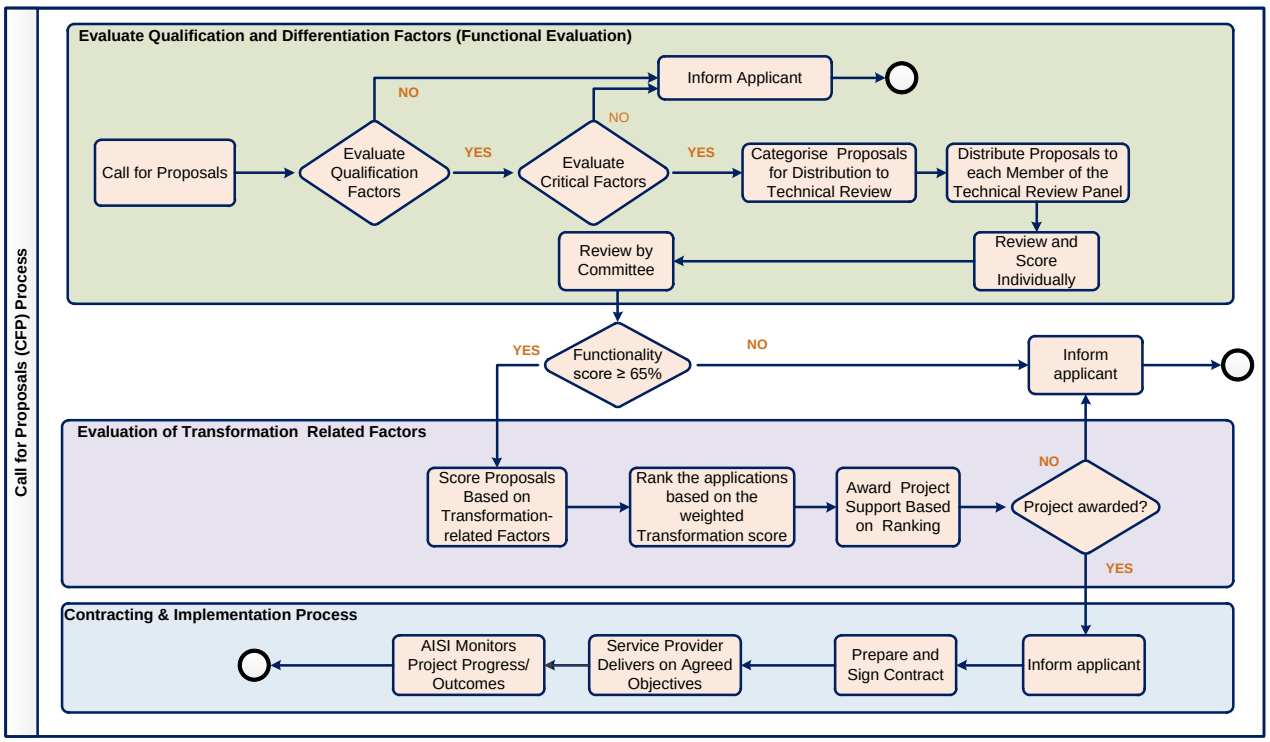

Figure 1: Call for Proposal Evaluation Process

3.2 Thematic Areas

The thematic areas selected for this Call for Proposals (CFP) are at the discretion of the AISI and are seen as those most relevant for technology advancement in the South African aeronautics, space and defence sectors. These are:

- Aerostructures including advanced manufacturing and processing.
- Space.
- Avionics.
- Propulsion and
- Surveillance and Sensor Systems

The continuation of projects previously supported by the AISI will also be considered for support. Only projects with a Technology Readiness Level (TRL)/ Manufacturing Readiness Level (MRL) value ≥ 4 (greater than or equal to four), at the start of the project, will be considered for support. **Refer to TRL and MRL definitions in Section 19 and 20 respectively.**

NOTE: The AISI **ONLY** supports Advanced Manufacturing Projects. The AISI does not support capital projects such as construction, equipment and renovation or upgrade of buildings. Marketing administrative, travel, capital and equipment costs are also not covered.

3.3 Project Budget

The total project budget requested from the AISI in the proposal being submitted may not exceed the amount specified below:

Project Budget ≤ R 1 000 000.00 (One Million South African Rand) (excl. VAT)

Any project proposals received with requested budget amounts over the above value will be disqualified. This means, a maximum of R1 000 000 (excl. VAT) is available per project from the AISI. Co-funding of projects is encouraged for SMMEs, but it is a requirement for Integrators and Sub-Systems Suppliers. The total project amount, including co-funding, from the beneficiary can therefore exceed the R1 000 000.

3.4 Project Timelines

All proposed projects must have a maximum duration of one year (12 months) but projects can be completed much earlier than that as well. All project deliverables must be completed within the specified timeframes; no extensions will be permitted.

3.5 Technology Readiness Levels

Technology development or advancement

The development or advancement of technology for application in the aerospace or defence industry. New development means the technology is not available in the industry or organisation and advancement means the technology is in existence in the industry or organisation but is being enhanced for a specific application. Only projects with a Technology Readiness Level (TRL) value ≥ 4 (greater than or equal to four) at the start of the project will be considered for support. Evidence must be provided to justify current TRL value of the technology/process/ product/capability being developed.

3.6 Manufacturing Readiness Levels

Manufacturing and processing technology development

Manufacturing and processing technology development is directed at development of manufacturing processes not currently available in the aerospace and defence industry or the organisation. Manufacturing and processing technology advancement caters for improvement of manufacturing processes technology already available in the industry or organisation. Only projects with a Manufacturing Readiness Level (MRL) value ≥ 4 (greater than or equal to Four) at

the start of the project will be considered for support. Evidence must be provided to justify current MRL value of the manufacturing process being developed.

4 PROPOSAL SPECIFICATION

All proposals are to be submitted in a format as specified in the CFP document (a template is provided under Annexure A).

5 FUNCTIONAL EVALUATION CRITERIA

5.1 Evaluation of proposals

All proposals will be evaluated by a technical review committee for functionality and transformation related factors. Based on the results of the evaluation process, the AISI will approve the awarding of the contract to successful beneficiaries. A two-phase evaluation process will be followed:

- The first phase includes qualification, critical and differentiation evaluation factors.
- The second phase includes the evaluation of transformation related factors/criteria.

Transformation factors will only be considered for proposals that achieve the minimum qualification score for functionality that is greater than or equal to 65.

5.1.1 Qualification and Critical Evaluation Factors

The assessment criteria for the evaluation of all project proposals are firstly divided into qualification (based on the service provider) and critical (based on the proposal) factors. These are shown in Table 1. For the qualification and critical factors, any NO answer immediately disqualifies the proposal.

The proposal template, which is published with this CFP (Annexure A), must be completed and submitted. The evaluation of the CFP will be based on the information provided in the proposal template and any additional documentation requested.

Table 1: Qualification and Critical evaluation factors for assessing project proposals

Qualification Evaluation Factors		
South African registered company		
Valid tax clearance certificate		

Critical Evaluation Factors		
Project within thematic area or continuation of a previously AISI supported project		
Project within the specified duration		
Is the costing for the project, correct? (All the line items adding up correctly)		
Does the project fall within the predetermined budget category?		
Technology Readiness/ Manufacturing Readiness Level value ≥ 4 at start of project		
Is the project outside of normal beneficiary operations?		
Completed proposal template		
Aeronautics/space/defence related?		
Is the application complete?		
Submission of CFP Terms of Reference (Initialed on each page)		
Project scope or Phase **NOT** previously funded by any other government department		
Applicant is **NOT** on the list of restricted (blacklisted) suppliers by the National Treasury		

Beneficiaries with existing AISI projects can apply, but award of any additional projects will be done taking into account their performance and progress on the existing project. Any delays on an existing project will negatively impact a new application. The AISI can support a maximum of two projects, per company at any point irrespective of the project budgets

5.1.2 Differentiation Evaluation Factors

The differentiation factors for the evaluation of all project proposals are shown in Table 2 and 3. Integrators and Sub-Systems Supplier applications will be evaluated using Table 2, whereas SMME applications will be evaluated using Table 3. **Please indicate if you are applying as an Integrator and Sub-Systems Supplier or SMME in the proposal template.** (Applicants are requested to pay attention to their applicable table because even though the factors considered are the same, the requirements are different between SMMEs and Integrator and Sub-Systems Suppliers)

Each differentiation factor is assigned a score (maximum 10), which is then weighted according to the importance of the factor. **Please note** that proposals with functionality / technical points of less than the pre-determined minimum overall percentage of 65% and less than 50% on any of the individual criteria will be eliminated from further evaluation.

Table 2: Differentiation Evaluation for Integrators and Sub-Systems Suppliers

Differentiation Factors: Integrators and Sub-Systems Suppliers		Score	Weight	Weighted Score
Factor	**Scoring**	**(/10)**	**(%)**	
Strategic nature and relevance of project/technology to South African aerospace and defence development **(Quote a specific government policy and describe how the proposal contributes to that)**	Project/Technology contributes to SA development by adhering to: • More than one government policy and/or strategic document (assigned score: 10) • One government policy and/or strategic document (assigned score: 5) • No government policies and/or strategic documents (assigned score: 0)		**15**	
Amount of Co-Funding (Ratio of self investment to the amount requested from AISI)	Co-investment from applicant • 75% and above of requested funds (assigned score: 10) • 50 - 74% of requested funds (assigned score: 7) • 25 – 49% of requested funds (assigned score: 5) • Less than 24% (assigned score: 0)		**15**	
Collaborative nature of project (The role of SMMEs on the project should be clearly indicated)	Involvement of (excluding organisation submitting proposal): • More than 3 organisations, minimum 2 SMMEs (assigned score: 10) • 2 – 3 organisations, minimum 1 SMME (assigned score:7) • 1 collaborator, must be an SMME (assigned score 5) • No collaboration (assigned score 0)		**10**	
Job Creation or Retention	Number of jobs potentially retained or created • More than 5 (assigned score 10) • 4 – 5 (assigned scored: 8) • 1 – 3 (assigned score: 5) • None (assigned score: 0)		**15**	

Differentiation Factors: Integrators and Sub-Systems Suppliers		Score	Weight	Weighted Score
Factor	**Scoring**	**(/10)**	**(%)**	
Industry and Human Capital Development	Submission of a plan that details how skills, knowledge transfer and technical development will be gained through the project and transferred to industry and the aerospace supplier base i.e. how will the project result in suppliers being developed on a technical level (e.g. lectures, workshops, presentations etc.) Refer to Section 3.1 and 3.3 in Annexure A (Proposal Template) • The plan successfully addresses all applicable aspects, no limitations (assigned score: 10) • The plan addresses the criterion thoroughly, but with a small number of limitations (assigned score: 8) • The plan broadly addresses the criterion, but there are significant weaknesses (assigned score: 5) • The plan fails to address the criterion and/or cannot be assessed due to missing or incomplete information (assigned score: 0)		**10**	
Quality and Feasibility	Quality and overall direction of proposal • The proposal successfully addresses all applicable aspects, no limitations (assigned score: 10) • The proposal addresses the criterion thoroughly, but with a small number of limitations (assigned score: 8) • The proposal broadly addresses the criterion, but there are significant weaknesses (assigned score: 5) • The proposal fails to address the criterion and/or cannot be assessed due to missing or incomplete information (assigned score: 0)		**10**	
	Are the objectives, methodology and budget appropriate for the proposed work and time frame? • The proposal successfully addresses all applicable aspects, no limitations (assigned score: 10) • The proposal addresses the criterion thoroughly, but with a small number of limitations (assigned score: 8) • The proposal broadly addresses the criterion, but there are significant weaknesses (assigned score: 5) • The proposal addresses the criterion to a very limited extend and there are significant weaknesses (assigned score 3) • The proposal fails to address the criterion and/or cannot be assessed due to missing or incomplete information (assigned score: 0)		**15**	

Differentiation Factors: Integrators and Sub-Systems Suppliers		Score	Weight	Weighted Score
Factor	**Scoring**	**(/10)**	**(%)**	
	Does the applicant/organisation have the relevant technical expertise and industry experience in advanced manufacturing to undertake the project: • More than 10 years (assigned score: 10) • 5 – 10 years (assigned score: 8) • Less than 5 years (assigned score: 5)		**10**	
Total			**100**	**100**

Table 3: Differentiation Evaluation for SMMEs

Differentiation Factors: SMMEs		Score	Weight	Weighted Score
Factor	**Scoring**	**(/10)**	**(%)**	
Strategic nature and relevance of project/technology to South African aerospace development. **(Quote a specific government policy and describe how the proposal contributes to that)**	Project/Technology contributes to SA development by adhering to: • More than one government policy and/or strategic document (assigned score: 10) • One government policy and/or strategic document (assigned score: 5) • No government policies and/or strategic documents (assigned score: 0)		**15**	
Favourable ratio of self-investment if not a SMME	Co-investment from applicant • 75% and above of requested funds (assigned score: 10) • 50 - 74% of requested funds (assigned score: 7) • Less than 49% of requested funds (assigned score: 5)		**10**	
Collaborative nature of project (The role of other SMMEs on the project should be clearly indicated)	Involvement of: • More than 3 organisations, minimum 1 SMME (assigned score: 10) • 2 – 3 organisations, minimum 1 SMME (assigned score:7) • 1 collaborator (assigned score 5) • No collaboration (assigned score 0)		**10**	
Job Creation and Retention	Number of jobs potentially retained or created • More than 5 (assigned score 10) • 3-5 (assigned scored: 8) • 1-2 (assigned score: 5) • None (assigned score: 0)		**15**	

Differentiation Factors: SMMEs		Score	Weight	Weighted Score
Factor	**Scoring**	**(/10)**	**(%)**	
Industry and Human Capital Development	Submission of a plan that details how skills, knowledge transfer and technical development will be gained through the project and transferred to industry and the aerospace supplier base i.e. how will the project result in suppliers being developed on a technical level (e.g. lectures, workshops, presentations etc.) Section 3.1 and 3.3 in Annexure A (Proposal Template) • The plan successfully addresses all applicable aspects, no limitations (assigned • score: 10) • The plan addresses the criterion thoroughly, but with a small number of limitations (assigned score: 8) • The plan broadly addresses the criterion, but there are significant weaknesses (assigned score: 5) • The plan fails to address the criterion and/or cannot be assessed due to missing or incomplete information (assigned score: 0)		**15**	
Quality and Feasibility	Quality and overall direction of proposal • The proposal successfully addresses all applicable aspects, no limitations (assigned score: 10) • The proposal addresses the criterion thoroughly, but with a small number of limitations (assigned score: 8) • The proposal broadly addresses the criterion, but there are significant weaknesses (assigned score: 5) • The proposal fails to address the criterion and/or cannot be assessed due to missing or incomplete information (assigned score: 0)		**10**	

Differentiation Factors: SMMEs		Score	Weight	Weighted Score
Factor	**Scoring**	**(/10)**	**(%)**	
	Are the objectives, methodology and budget appropriate for the proposed work and time frame? • The proposal successfully addresses all applicable aspects, no limitations (assigned score: 10) • The proposal addresses the criterion thoroughly, but with a small number of limitations (assigned score: 8) • The proposal broadly addresses the criterion, but there are significant weaknesses (assigned score: 5) • The proposal addresses the criterion to a very limited extend and there are significant weaknesses (assigned score 3) • The proposal fails to address the criterion and/or cannot be assessed due to missing or incomplete information (assigned score: 0)		**15**	
	Does the applicant/organisation have the relevant technical expertise and industry experience in advanced manufacturing to undertake the project • More than 10 years (assigned score: 10) • 5 – 10 years (assigned score: 8) • Less than 5 years (assigned score: 5)		**10**	
Total			**100**	**100**

5.1.3 Evaluation of Transformation Related Factors

This evaluation stage will only apply to those applications that managed to get a weighted score greater than or equal to 65% in the functionality or technical evaluation. The transformation related factors applied for the evaluation of all qualifying proposals are shown in Table 4 and they apply to both SMMEs as well as Integrators and Sub-Systems Suppliers.

Each transformation related factor is assigned a score (maximum 10), which is then weighted according to the importance of the factor.

NOTE: Obtaining a score that is less than 50% on any of the individual criteria at this stage **WILL NOT** result in elimination of the applicant from further evaluation. The outcome of the transformation related evaluation is just to rank projects.

Table 4: Transformation Related Evaluation Factors

	Transformation Factors	**Score**	**Weight**	**Weighted Score**
Factor	**Factor Description**	**(/10)**	**(%)**	
Black Ownership	Percentage of black ownership in the business (Please provide proof e.g. B-BBEE certificate. If using an affidavit, ensure this information is included) • ≥ 50% Black Ownership (assigned score 10) • 1 – 49% Black Ownership (assigned score 7) • No Black Ownership (assigned score 0)		**35**	
Black Women Ownership	Percentage of Black Women Ownership (Please provide proof e.g. B-BBEE certificate. If using an affidavit, ensure this information is included) • ≥ 30% Black Women Ownership (assigned score 10) • 1 – 29% Black Women Ownership (assigned score 7) • No Black Women Ownership (assigned score 0)		**25**	
Youth Ownership	Percentage of Youth Ownership (Please provide proof e.g. CIPC documents) In South Africa, the youth is defined as the population between 15 and 35 years. • Youth Ownership (assigned score 10) • No Youth Ownership (assigned score 0)		**10**	

	Transformation Factors	Score	Weight	Weighted Score
Factor	**Factor Description**	**(/10)**	**(%)**	
Black Economic Empowerment Level	The B-BBEE level of the company • B-BBEE Level 1-2 (assigned score 10) • B-BBEE Level 3-4 (assigned score 8) • B-BBEE Level 5-8 (assigned score 5) • B-BBEE Level Non-Compliant- Disqualified		**30**	
	Total	**/50**	**100**	**/100**

NOTE: Applications that successfully pass the evaluation process will undergo further due diligence processes before contracting for AISI support commences.

5.1.4 Guidelines and Key Points

Any South African **Integrators and Sub-Systems Suppliers** and **SMMEs** are invited to submit proposals in support of this call. Applicants are encouraged to propose projects with the support of a consortium of partners. Such partners should ideally co-fund/contribute to the project. Please note the following:

- **Submit your applications via email: lmashoko@csir.co.za**
- An organisation may submit more than one proposal but a maximum of two projects can be supported per company.
- If more than one proposal is submitted from a Group of Companies (separate companies that belong to the same group), the AISI reserves their right to limit the number of projects approved belonging to that Group of Companies subject to available funding and the requirement to support other organisations.
- The AISI will only support advanced manufacturing aerospace and defence related projects under this call for proposal.
- The AISI does not fund feasibility studies, and marketing, administrative, travel, capital and equipment costs.
- Organisations that are restricted (blacklisted) on the National Treasury Supplier Database will not be considered for support
- All enquiries must be directed to the AISI.
- More than one company will be supported through this call.
- Companies receiving support will be based on merit:
    - The AISI will nominate the applicants' whose CFPs are determined to be the most advantageous to the AISI, taking into consideration the technical suitability of the shortlisted participant.
- Complete the project proposal template and submit by the date and time specified.
- All project proposals, relevant documentation, data and information will be treated as confidential.
- The process of evaluating all proposals will be conducted in a fair and confidential manner.
- All technical experts in the review committee are also bound by an obligation of confidentiality.
- Only applications received before or on the due date will be considered for this call.
- Beneficiaries who have not completed and submitted all deliverables, as per the projects undertaken with the AISI during the previous project cycle, will not be considered for funding.
- Projects that received other government support for the same development phase or scope of work as being applied to the AISI will not be considered.
- Contracts will be entered into between the CSIR (on behalf of the AISI) and the successful institution(s) for each successful project proposal.
- Subject to the nature and scope of a project, a Project Manager from the AISI will be the primary technical contact between the AISI and the recipient.
- A payment schedule will be negotiated on a project-by-project basis.
- Local Integrators and Sub-Systems Suppliers are required to utilise local SMMEs in the proposed project.

- Provide evidence for transformation factors: black ownership, black woman ownership and youth ownership where applicable. B-BBEE documents and CIPC documents can be used.

6 ELIMINATION CRITERIA

Proposals will be eliminated under the following conditions:

- Submission after the deadline date and time.
- Incomplete Submissions.
- Proposal template not completed, signed and submitted (Annexure A).
- Declaration of Conflict of Interest not signed and submitted (Section 16).
- Declaration of Conflict of Financial Interest not signed and submitted (Section 17).
- Final Declaration not signed and submitted (Section 18);
- No B-BBEE certificate.
- Companies that have a B-BBEE level of non-compliant.
- Listed on the database of restricted suppliers (blacklisted) by the National Treasury.
- No Valid Tax Clearance Certificate; and
- No signed CFP Terms of Reference (this document), each page should be initialed and submitted with the proposal.

Successful applications will undergo further due diligence processes before contracting for AISI support commences.

7 PROGRAMME DURATION

The CFP program, as currently envisaged, incorporates the following key dates:

- Issue of tender documents:) 19 September 2022
- Last date for submission of queries: 30 September 2022
- Closing / submission date: 14 October 2022 at 16:30
- Estimated appointment date of successful tenderers: 15 November 2022
- Estimated contract duration (in months/years) ≤ 12 months/1 Year

8 SUBMISSION OF PROPOSALS

8.1 Due to the current COVID-19 pandemic, ONLY electronic copies will be accepted and must be submitted via email to Livison Mashoko - lmashoko@csir.co.za.

8.2 All CFP documents must be received no later than the stipulated closing date and time. Any CFP submitted after the stipulated time and date will be automatically disqualified.

8.3 All queries pertaining to the CFP must be forwarded for attention: Livison Mashoko - lmashoko@csir.co.za with **AISI Industry Development and Technology Support Programme** as the subject.

8.4 Proposals submitted by companies must be signed by a person or persons duly authorised.

8.5 The AISI will award the contract to qualified tenderer(s)' whose proposal(s) is determined to be the most advantageous to the AISI, taking into consideration the technical (functional) evaluation and transformation factors.

9 DEADLINE FOR SUBMISSION

Proposals must be submitted electronically by no later than the closing date of Friday, 14 October 2022 during the AISI's business hours. The AISI business hours are between 08:00 and 16:30.

Where a proposal is not received by the AISI by the due date and at the stipulated time, it will be regarded as a late submission. Late submissions will not be considered.

10 COST of CFP

Applicants are expected to fully acquaint themselves with the conditions, requirements and specifications of this CFP before submitting their CFP. Each applicant assumes all risks for resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the CFP process. The AISI is not responsible – directly or indirectly for any costs incurred by applicants in the preparation and submission of the CFP.

11 VALIDITY AND CORRECTNESS OF RESPONSES

The applicant confirms satisfaction regarding the correctness and validity of its proposal.

12 RESPONSIBILITY TO EXECUTE, AND FAILURE TO COMPLY

The successful applicant hereby accepts full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on him/her under this CFP.

The Respondent hereby offers to render all the services described in the attached document (if any) to the AISI on the terms and conditions and in accordance with the specifications stipulated in this CFP documents.

13 VERIFICATION OF DOCUMENTS

a. Applicants should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the AISI in regard to anything arising from the fact that pages are missing or duplicated.
b. Only submissions via email will be accepted.

13.1 The AISI reserves the right to:

a. Amend any CFP conditions, validity period, specifications, or extend the closing date and/or time of CFP before the closing date. All applicants, to whom the CFP documents have been issued, will be advised in writing of such amendments on time.
b. Verify any information contained in an CFP.
c. Request documentary proof regarding any CFP issue.
d. Not appoint any applicant.
e. Vary, alter, and/or amend the terms of this CFP, at any time prior to the finalisation of its adjudication hereof.
f. Cancel or withdraw this CFP at any time, without attracting any liability.
g. Cancel or withdraw from this CFP as a whole or in part without furnishing reasons and without attracting any liability; and
h. Request an applicant to do a presentation to the technical review committee subject to sufficient notice being provided to the applicant.

14 DISCLAIMERS

- The AISI has produced this CFP in good faith. However, the AISI, its agents and its servants do not warrant its accuracy or completeness. To the extent that the AISI is permitted by law, the AISI will not be liable for any claim whatsoever and howsoever arising (including, without limitation, any claim in contract, negligence or otherwise) for any incorrect or misleading information contained in this CFP due to any misinterpretation of this CFP.
- This CFP is a request for proposals only and not an offer document; answers to it must not be construed as acceptance of an offer or imply the existence of a contract between the parties.
- The AISI makes no representation, warranty, assurance, guarantee or endorsements to any applicant concerning the CFP, whether with regard to its accuracy, completeness or otherwise and the AISI shall have no liability towards the respondent or any other party in connection therewith.

15 CFP COMPLIANCE CHECK LIST

To be completed by the applicant:

- I/We hereby undertake to render services described in the attached CFP documents as and when requested to the AISI in accordance with the requirements stipulated in CFP Number: **002/19/09/2022**.
- The following documents will be deemed to form and be read and construed as part of this CFP. The documents are:
  - CFP Terms of Reference (this document)
  - The Proposal Template to the CFP
- I/We confirm that I/we have satisfied myself/ourselves as to the correctness and validity of my/our CFP proposal and that the proposal cover all the services specified in the documents.
- I/We declare that I/we have no participation in any collusive practices with any other applicant or third party regarding this or any other CFP.
- I/we confirm that I/we am duly authorised to sign this document.

NAME (PRINT): ……

CAPACITY: ……

SIGNATURE: ……

NAME OF FIRM: ……

DATE: ……

WITNESSES:

1 ……

2 ……

DATE: ……..

16 DECLARATION OF CONFLICT-OF-INTEREST FORM (APPLICANT)

This declaration of interest must be completed and submitted with the CFP. Failure to do so may result in the elimination of the Applicant's CFP.

Declaration of Interest - AISI CFP 002/19/09/2022

Are any staff members, from your company involved in this CFP process, connected or have any relationship with anyone employed by the AISI/CSIR?

Yes		No	

If yes, please state particulars:

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17 Declaration of Conflict of Financial Interest - AISI CFP 002/19/09/2022

Is the integrator or sub-systems supplier/SMME receiving support for similar interventions from any other South African government department or international organisation?

Yes		No	

If yes, please state particulars:

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18 DECLARATION

I, _____ (THE UNDERSIGNED), DULY AUTHORISED, CERTIFY THAT THE INFORMATION FURNISHED IN THIS CFP IS CORRECT. I ACCEPT THAT THE CSIR MAY TAKE APPROPRIATE ACTIONS, DEEMED NECESSARY, SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature	Date
Position	Name of applicant

19 Technology Readiness Levels (TRLs)

TRL 1 Basic principles observed and reported: Transition from scientific research to applied research. Essential characteristics and behaviours of systems and architectures. Descriptive tools are mathematical formulations or algorithms.

TRL 2 Technology concept and/or application formulated: Applied research. Theory and scientific principles are focused on specific application area to define the concept. Characteristics of the application are described. Analytical tools are developed for simulation or analysis of the application.

TRL 3 Analytical and experimental critical function and/or characteristic proof-of concept: Proof of concept validation. Active Research and Development (R&D) is initiated with analytical and laboratory studies. Demonstration of technical feasibility using breadboard or brass board implementations that are exercised with representative data.

TRL 4 Component/subsystem validation in laboratory environment: Standalone prototyping implementation and test. Integration of technology elements. Experiments with full-scale problems or data sets.

TRL 5 System/subsystem/component validation in relevant environment: Thorough testing of prototyping in representative environment. Basic technology elements integrated with reasonably realistic supporting elements. Prototyping implementations conform to target environment and interfaces.

TRL 6 System/subsystem model or prototyping demonstration in a relevant end-to-end environment (ground or space): Prototyping implementations on full-scale realistic problems. Partial integrated with existing systems. Limited documentation available. Engineering feasibility fully demonstrated in actual system application.

TRL 7 System prototyping demonstration in an operational environment (ground or space): System prototyping demonstration in operational environment. System is at or near scale of the operational system, with most functions available for demonstration and test. Well integrated with collateral and ancillary systems. Limited documentation available.

TRL 8 Actual system completed and "mission qualified" through test and demonstration in an operational environment (ground or space): End of system development. Fully integrated with operational hardware and software systems. Most user documentation, training documentation, and maintenance documentation completed. All functionality tested in simulated and operational scenarios. Verification and Validation (V&V) completed.

TRL 9 Actual system "mission proven" through successful mission operations (ground or space): Fully integrated with operational hardware/software systems. Actual system has been thoroughly demonstrated and tested in its operational environment. All documentation completed. Successful operational experience. Sustaining engineering support in place.

20 Manufacturing Readiness Level

MRL 1: Basic Manufacturing Implications Identified: The first level of manufacturing readiness includes basic research, identifying manufacturing concepts, and assessing manufacturing feasibility.

MRL 2: Manufacturing Concepts Identified: Based on the research of MRL 1, manufacturing concepts are defined, including feasibility, materials analysis, and risk assessment.

MRL 3: Manufacturing Proof of Concept Developed: Through analytical or laboratory environments, validation of manufacturing concept begins, including determining manufacturing feasibility, identifying manufacturing and key processes, and initiating producibility assessments.

MRL 4: Capability to Produce the Technology in a Laboratory Environment: Small-scale prototyping begins while conducting on-going producibility assessments as well as identifying manufacturing cost-drivers and design performance parameters.

MRL 5: Capability to Produce Prototype Components in a Production-Relevant Environment: Based on initial prototyping, the manufacturing strategy is refined, including demonstrating processes, analyzing cost-drivers, and other areas.

MRL 6: Capability to Produce a Prototype System or Subsystem in a Production-Relevant Environment: With the preliminary design completed and the majority of manufacturing processes defined, prototype development can begin. Prototype data is analysed and producibility improvement is explored.

MRL 7: Capability to Produce systems, Subsystems, or Components in a Production Representative Environment: Manufacturing design is finalized, including material specifications, updating cost models, developing manufacturing plans and quality targets, and developing production tooling and test equipment.

MRL 8: Pilot Line Capability Demonstrated; Ready to Begin Low-Rate Initial Production: A pilot line demonstration is conducted with the intended facility, materials, equipment, and skilled labor. Results are evaluated on target quality, cost, and performance.

MRL 9: Low-Rate Production Demonstrated; Capability in Place to Begin; Full-Rate Production: Manufacturing production commences with lean/Six Sigma practices in place. Production is continuously evaluated against cost, schedule, and performance goals.

MRL 10: Full-rate Production Demonstrated and Lean Production Practices: All manufacturing areas are monitored and managed at Six Sigma level. Minimal engineering or design changes are made for quality or cost improvements.

ANNEXURE A: PROPOSAL TEMPLATE (provided)

- **Proposal Template**