



INVITATION TO TENDER FOR SOLE SUPPLY CONTRACT
TENDER SUMMARY AND ADDITIONAL TENDER REQUIREMENTS

The FIA's objective is to select an exclusive supplier of **certain brake system components, comprising brake-by wire technology, callipers and master cylinder** (hereinafter "the Brake system") whose task shall be to ensure the production, delivery and maintenance of the Brake system for the 2021, 2022, 2023 and 2024 seasons of the FIA Formula One World Championship (hereinafter "the Championship").

All tenderers are invited to complete the technical form attached and to provide all relevant technical and financial documents demonstrating that they are capable of supplying the Brake System to the competitors under the conditions referred to in the attached draft contract.

The FIA reserves the right to:

- make amendments to this invitation to tender at any time and to issue a new invitation to tender,
- request any additional information from, and to organise meetings with, tenderers who have submitted the most interesting bids.

The FIA reserves the right not to select any exclusive supplier if no offer is deemed capable of being beneficial for the Championship and its competitors (for example, if the tendering procedure does not allow any cost savings for the competitors).

Should a tenderer be selected, it will be invited to enter into a contract with the FIA that will establish the terms of the tenderer's appointment as exclusive supplier. The exclusive supplier will supply the products directly to the competitors (not to the FIA) under terms and conditions to be agreed.

For reasons related to the regulatory stability of the FIA Formula One World Championship, the FIA may decide at its absolute discretion that the exclusive supply contract will also include the 2025 season. Tenderers are therefore required to submit two different bids; a first one, which will cover the 2021, 2022, 2023 and 2024 seasons of the Championship, and a second one, which will cover the 2021, 2022, 2023, 2024 and 2025 seasons of the Championship. The draft contract attached to this invitation to tender refers only to the first scenario, but the rights and obligations would remain substantially the same in the event of a contract that includes the 2025 season.

Bids must be submitted in accordance with the FIA's "Invitation to Tender for sole supply contract - tendering instructions" available on the FIA's website: www.fia.com, **apart from Article 1.1.8 and Article 3 of the same, which will not apply to the present invitation to tender.**

Bids must be sent to the FIA Administration by e-mail to the following address: tenderingprocedure@fia.com. Bids which do not comply with this supply conditions will not be taken into consideration.

Publication of invitation to tender:	25 April 2019
Submission date:	22 May 2019
Notification of decision:	14 June 2019

FORM TO BE COMPLETED

BY TENDERER

(The documentation is to be sent to tenderingprocedure@fia.com with each page initialled).

All Brake system manufacturers interested in supplying the Brake system in the 2021, 2022, 2023 and 2024 FIA Formula One World Championship are required to complete Parts 1 and 3 of this form, and to provide all relevant documentation containing the information listed in Part 2.

Part 1

We, the undersigned:

Name of tenderer:

.....
.....

Registered Office of tenderer:

.....
.....

Company Number of tenderer:

.....
.....

Contact Person responsible for tender and contact details:

.....
.....

are prepared to supply a Brake system respecting all the conditions set out in the draft contract below in the 2021, 2022, 2023 and 2024 FIA Formula One World Championship.

Part 2

1. Description of the tenderer's experience.
2. Detailed technical description setting out all the relevant qualities and specifications of the Brake System the tenderer proposes to supply, together with evidence that the product would be in compliance with the requirements.
3. List of the activities that the tenderer would intend to subcontract within the context of the supply of the Brake system, and details and identities of the subcontractors it intends to commission for such activities.
4. Pricing form stating the prices at which the Brake System will be supplied.

Part 3

Provided that our tender is selected by the FIA, we undertake to enter into a contract with the FIA under, substantially, the terms and conditions stated in the present document, as well as to comply with all sporting, technical and any other regulations applicable to the Championship.

Name:

Title:

Company:

In:

On:

Signature:

DRAFT CONTRACT FOR SUPPLYING THE BRAKE SYSTEM
IN THE 2021, 2022, 2023 AND 2024
FIA FORMULA ONE WORLD CHAMPIONSHIP

BETWEEN

THE FEDERATION INTERNATIONALE DE L'AUTOMOBILE (FIA)

Place de la Concorde 8

75008 Paris

France

hereinafter referred to as the "**FIA**"

ON THE ONE HAND,

AND

[•]

hereinafter referred to as the "**PROVIDER**"

ON THE OTHER HAND,

Hereinafter together referred to as "**the PARTIES**".

PART 1 – GENERAL CONDITIONS

RECITALS

- (A) The FIA is the sole body governing international motor sport and is recognised by its members as the sole authority having the sporting power with the right to organise international FIA championships, including the CHAMPIONSHIP.
- (B) The FIA has an absolute obligation conferred on it by its members to safeguard its authority over all safety, sporting, technical and disciplinary matters relating to the CHAMPIONSHIP, as well as traditional values.
- (C) The FIA is responsible for the publication of the GOVERNING RULES.
- (D) The FIA has determined that the interests of the CHAMPIONSHIP require that a single supplier of the PRODUCT should be appointed for a limited term.
- (E) It is intended that the FIA and the PROVIDER will enter into this CONTRACT, pursuant to which the PROVIDER will be appointed as the sole supplier of PRODUCT to the CHAMPIONSHIP for the term set out herein.

1. APPOINTMENT AND SUPPLY

- 1.1 The FIA hereby appoints the PROVIDER to be the exclusive supplier of the PRODUCT to the COMPETITORS for the CHAMPIONSHIP and the PROVIDER hereby accepts this appointment and agrees to supply the PRODUCT to the COMPETITORS for the CHAMPIONSHIP, in accordance with the terms of this CONTRACT.
- 1.2 Following its appointment, the PROVIDER shall enter into a SUPPLY AGREEMENT with each COMPETITOR setting out the terms upon which the PRODUCT shall be supplied.
- 1.3 The PRODUCT that is supplied by the PROVIDER to the COMPETITORS shall be compliant with the TECHNICAL REGULATIONS and the technical specifications.

2. RELATIONS BETWEEN THE PROVIDER AND THE COMPETITORS

- 2.1 The PROVIDER shall treat all COMPETITORS in accordance with the PRINCIPLES OF SPORTING EQUALITY.
- 2.2 The PROVIDER shall supply the PRODUCT to all COMPETITORS on equivalent terms. It shall enter into a standard SUPPLY AGREEMENT with each COMPETITOR.
- 2.3 All SUPPLY AGREEMENTS shall be fully compliant with the PRINCIPLES OF SPORTING EQUALITY, the CONTRACT, the SPORTING REGULATIONS and the TECHNICAL REGULATIONS.
- 2.4 If requested by the FIA, the PROVIDER shall provide a copy of each SUPPLY AGREEMENT in order to demonstrate that the PRINCIPLES OF SPORTING EQUALITY are maintained. With respect to the

FIA, the PROVIDER hereby waives and confirms that it shall not assert or seek to rely on any confidentiality provision in any SUPPLY AGREEMENT or other agreement relevant to the supply of the PRODUCT to prevent the FIA from reviewing relevant agreements or carrying out its regulatory functions (including ensuring that the PRINCIPLES OF SPORTING EQUALITY are maintained).

- 2.5 The FIA may request amendments to a SUPPLY AGREEMENT if it considers that the SUPPLY AGREEMENT is not consistent or compatible with, or is otherwise contrary to, the PRINCIPLES OF SPORTING EQUALITY. For the avoidance of doubt, the PROVIDER's obligation to abide by the PRINCIPLES OF SPORTING EQUALITY shall not be limited or otherwise affected by the FIA's review of a SUPPLY AGREEMENT and/or a request for an amendment to be made.
- 2.6 In the event of uncertainty regarding whether any action taken or proposed to be taken by the PROVIDER may breach the PRINCIPLES OF SPORTING EQUALITY, the PROVIDER shall request guidance from the FIA, which shall make a determination in this regard. Where such a determination is made by the FIA, the PROVIDER's actions in complying with that determination shall be deemed to be in compliance with the PROVIDER's obligation in GENERAL CONDITION 2.1 to treat all COMPETITORS in accordance with the PRINCIPLES OF SPORTING EQUALITY.
- 2.7 Each SUPPLY AGREEMENT shall include a clause permitting the COMPETITOR and/or PROVIDER to terminate the SUPPLY AGREEMENT without a penalty of any kind in the event of expiry or early termination of the CONTRACT.

3. LIABILITY

- 3.1 Without prejudice to the other rights set out in the CONTRACT, the PROVIDER shall indemnify and hold harmless the INDEMNIFIED PERSONS from and against all reasonably foreseeable losses incurred by the INDEMNIFIED PERSONS as a direct result of the PROVIDER's:
 - (a) failure to supply the PRODUCT of the requisite quantity;
 - (b) failure to supply the PRODUCT of the requisite quality or type; and
 - (c) negligence in the supply of the PRODUCT,
- 3.2 The PROVIDER represents and warrants that it is in a position to meet any liability that may arise under GENERAL CONDITION 3.1, and hereby covenants for the benefit of each INDEMNIFIED PERSON to maintain such position for the period of time during which the PROVIDER may be liable.
- 3.3 Notwithstanding GENERAL CONDITIONS 3.1 and 3.2 above, the PROVIDER that enters into a CONTRACT will produce an attestation certifying that an insurance policy has been contracted in its name with a top-ranking international insurance company for covering its liability as PROVIDER for any and all action which might be taken to obtain compensation for prejudice caused by a manufacturing defect affecting the PRODUCT used pursuant to the CONTRACT.

4. WARRANTIES

- 4.1 The PROVIDER represents and warrants that it has full power and authority to enter into and fully perform its obligations under the CONTRACT, and the provisions of the CONTRACT, when executed, will constitute valid and binding obligations on the PROVIDER in accordance with its terms. The PROVIDER also represents and warrants that it has full power and authority to enter into and fully perform its obligations under the SUPPLY AGREEMENTS when executed.
- 4.2 The FIA represents and warrants that it has full power and authority to enter into and fully perform its obligations under the CONTRACT, and the provisions of the CONTRACT, when executed, will constitute valid and binding obligations on the FIA in accordance with its terms.

5. TERMINATION

- 5.1 Notwithstanding any other provision hereof, either party may terminate the CONTRACT with immediate effect by written notice to the other if any of the following events occur:
- (a) the other party has committed a material breach of the CONTRACT which is not capable of remedy or, if remediable, has not remedied it within 30 days of the non-breaching party's written notice requiring the default to be remedied (for the avoidance of doubt, a breach by the PROVIDER of any of the GENERAL CONDITIONS 1.2, 1.3, 2, 3 and 4.1 and any of the SPECIAL CONDITIONS is acknowledged by the PARTIES to be a material breach);
 - (b) steps (including any steps analogous to those following) have been taken to wind up the other party or to place the other party into administration or to have a receiver appointed over any of its assets, other than as part of a scheme of solvent reconstruction or amalgamation; or
 - (c) the other party shall cease or threaten to cease carrying on business or the other party shall make any composition or arrangement with its creditors or become subject to any other insolvency process or proceeding (other than as part of a scheme of solvent reconstruction or amalgamation) or have all or any of its assets or undertakings seized by a government or governmental agency or authority (including any acts analogous to the above).

6. GOVERNING RULES

- 6.1 The GOVERNING RULES constitute the legal, administrative and technical framework of the CHAMPIONSHIP and the conditions set forth therein shall have binding force and prevail among the PARTIES.
- 6.2 The CONTRACT shall in principle be interpreted in a manner that gives effect to the provisions of the GOVERNING RULES, the intention of the PARTIES being to construe the provisions of the CONTRACT in the context of the more general framework of the GOVERNING RULES.
- 6.3 The PROVIDER acknowledges that the technical specifications and GOVERNING RULES are subject to amendment from time to time. The PROVIDER will be responsible (at its own cost) for all research and development associated with the manufacture of the PRODUCT, including the making of any changes to the PRODUCT to be supplied pursuant to the CONTRACT that may be necessitated by any amendment to the technical specifications or the GOVERNING RULES.

6.4 The PROVIDER acknowledges that the FIA may take decisions regarding the supply of the PRODUCT, this CONTRACT and any obligations accruing from the GOVERNING RULES through whatever structure it deems appropriate, including through its disciplinary structures. The PROVIDER shall not challenge the competence of the disciplinary body acting in accordance with the GOVERNING RULES.

7. GOVERNING LAW AND LANGUAGE

7.1 The language that shall prevail for the interpretation of the CONTRACT shall be English and the CONTRACT and all documents connected with the CONTRACT shall be written in English. In the event of any conflict between the language of the CONTRACT and any translation thereof, the language of the CONTRACT shall prevail. In the event of any conflict between the language of any document connected with the CONTRACT and any translation thereof, the language of the document connected with the CONTRACT shall prevail.

7.2 The governing law of the CONTRACT shall be French law.

7.3 The Tribunal de Grande Instance de Paris, France, shall have sole jurisdiction to settle any dispute that may arise between the FIA and the PROVIDER in connection with the CONTRACT, subject at all times to the provisions of GENERAL CONDITION 6.4.

7.4 The PROVIDER undertakes to strictly respect the Statutes and Code of Ethics of the FIA as well as the GOVERNING RULES. The PROVIDER hereby agrees to be subject to the internal judicial and disciplinary bodies of the FIA.

7.5 Each party undertakes to the other party that in the exercise of its rights and performance of its obligations under this CONTRACT, it shall comply with all applicable laws, including without limitation all applicable laws relating to anti-corruption measures. In particular, and in accordance with such laws, each party undertakes to abstain (and to cause its directors, employees and officers to abstain) from corruptly, directly or indirectly, offering, promising, giving, paying or accepting any Public Official's request for a gift, or authorising anyone to give or pay, directly or indirectly, any sums, other benefits or advantages or anything of value to or for a Public Official.

For the purpose of this clause:

"Public Official" shall mean (i) anyone who performs public functions in a legislative, judicial or administrative capacity; (ii) anyone acting in an official capacity for or on behalf of a Public Body; (iii) anyone in charge of providing a public service; or (iv) any other person, individual or entity at the suggestion, request or instruction or for the benefit of any of the persons or entities referred to in (i) to (iii) above; and

"Public Body" shall mean (i) a supranational, national, regional or local government, (ii) an agency, department or instrumentality of a supranational, national, regional or (partially) government-owned company, and/or (iv) a public international organisation.

8. GENERAL

- 8.1 Nothing in the CONTRACT guarantees or shall be construed as guaranteeing the solvency of a COMPETITOR. The FIA is not responsible for ensuring that the COMPETITORS satisfy the terms of the SUPPLY AGREEMENTS and the FIA shall not be liable for a failure by any COMPETITOR to satisfy the terms of a SUPPLY AGREEMENT.
- 8.2 No delay or omission or failure to exercise any right or remedy provided herein shall be deemed to be a waiver thereof.
- 8.3 The CONTRACT shall be binding on and ensure to the benefit of the PARTIES and their respective successors and permitted assigns. The PROVIDER shall not be entitled to assign or sub contract its rights or obligations under the CONTRACT in whole or in part without the prior written consent of the FIA.
- 8.4 Any notice to be given under the CONTRACT shall be given in writing delivered to the other party by any one or more of the following methods:
- (a) personal delivery to one of its corporate officers, in which case notice shall be deemed as having been given at the time of such personal delivery;
 - (b) first class registered post or courier delivery service (such as DHL or UPS) to the above- mentioned address (or such other address as may be notified to the other party in writing from time to time), in which case notice shall be treated as having been given on the date of actual receipt at that address (or on the next local business day if delivered on a local non business day or after 4.00 p.m. local time on a local business day), which shall rebutably be presumed to be the second local business day after posting.
- 8.5 Any variations of the CONTRACT shall be ineffective, unless agreed in writing and signed by the PARTIES.
- 8.6 If any term, provision or condition of the CONTRACT is held by a court of competent jurisdiction to be invalid, void or unenforceable, such invalidity, voidness or unenforceability shall not invalidate the remainder of the CONTRACT, all of which shall remain in full force and effect.
- 8.7 The CONTRACT may be executed in any number of counterparts (whether original or facsimile counterparts) and upon due execution of all such counterparts by all parties, each counterpart shall be deemed to be an original hereof.
- 8.8 GENERAL CONDITIONS 3, 7 and 8 shall survive expiry or termination of the CONTRACT for any reason (but shall terminate at the time expressly provided in the relevant GENERAL CONDITION, if any).

PART 2 – SPECIAL CONDITIONS

[Some parts of these Special Conditions are more informative than binding in their current wording. They will be subject to significant rewording in the supply contract with the selected supplier].

1 OBJECTIVES FOR THE SUPPLY OF COMMON BRAKE HYDRAULICS

The aim of single source supply is to retain current levels of Formula One braking performance for all cars at a much reduced cost for the COMPETITORS, while also removing the requirement for COMPETITORS to design or source their own brake hydraulics. The components can be carried over between seasons, thus removing the need for costly continual performance development. Weight is still important, but given that the last few grammes of material weight saving are usually disproportionately expensive, it is anticipated that there will be a small weight increase over typical contemporary components.

2 SAFETY

The entire braking system is safety critical, and all analysis, design and development should be approached with this in mind. Detailed analysis of the peak loads should be provided to the FIA at least one week before the final design review. A full FMEA (Failure Mode and Effects Analysis) should be provided at the same time. An updated FMEA that takes into account the results of physical testing should be made available to the FIA and all COMPETITORS before the end of 2020.

3 OVERVIEW OF TENDER DELIVERABLES

- 3.1 The brake hydraulics system consists of front and rear brake callipers, a master cylinder and a brake-by-wire system (BBW). These components are to be used in conjunction with COMPETITORS' specific brake lines and hoses and reservoirs. They will also be used in conjunction with brake discs and pads that will also be single source, of fixed design and subject to a separate invitation to tender.
- 3.2 It is envisaged that the brake hydraulics system comprises a tandem master cylinder and a separate BBW system. The PROVIDER should propose a solution based on this configuration. However, the PROVIDER is free to offer additional alternative solutions as part of its tender, if it believes that its alternative configuration has a better combination of performance and price.
- 3.3 The brake hydraulic systems must be nominally identical for all COMPETITORS. The PROVIDER shall guarantee that all brake hydraulics systems are of equal size, weight and performance irrespective of which COMPETITOR is supplied.
- 3.4 A base quantity for each of the assemblies supplied will be in accordance with **Appendix II**. This will cover quantities and delivery dates expected to be used for track testing and races. The PROVIDER will ensure that there are enough components to supply at least base quantities to all COMPETITORS by the dates defined.

- 3.5 COMPETITORS may purchase additional quantities of any part of the brake hydraulic system, but the PROVIDER may only supply additional quantities once the supply of base quantities within the defined delivery schedule is guaranteed for all COMPETITORS.
- 3.6 The PROVIDER will provide technical support to all COMPETITORS. Details of the support requirements are provided for in SPECIAL CONDITION 10.

4 SUPPLY AGREEMENTS

- 4.1 The PROVIDER will enter into supply agreements with each COMPETITOR to supply brake hydraulic systems and the required support.
- 4.2 Such supply agreements should include prices and conditions of supply for each of the components along with the technical support associated with the supply.

5 PRICING OF THE PRODUCT

- 5.1 The price of each PRODUCT supplied pursuant to the CONTRACT shall be as further detailed in Article 4 of **Appendix II** and shall be quoted in euros. The stated price should be inclusive of all taxes and charges and shall not be increased for any reason.
- 5.2 VAT (value added tax) shall not be charged to those COMPETITORS that are exempt from VAT and that have supplied proof of such exemption to the PROVIDER.

6 DESIGN AND DEVELOPMENT OF THE BRAKE HYDRAULIC SYSTEM

- 6.1 The brake hydraulic system will need to be designed in conjunction with the FIA, the selected provider of brake discs and pads and all of the current COMPETITORS to ensure they will provide the necessary performance and will fit within the surrounding components' constraints. The operating envelope will also be explicitly agreed and will become part of the final overall specification. The FIA will arbitrate should the PROVIDER feel any of the COMPETITORS' requests are either unreasonable or incompatible with the best overall operation of the braking system, or incompatible with the objective of the supply agreement defined by this document.
- 6.2 All COMPETITORS should be invited to provide examples of their own best practices relating to any of the components covered by this tender. This input should be considered and included in either the design or the testing where the PROVIDER deems an improvement may be made. The FIA can, if required, be consulted to arbitrate if there are conflicting practices.
- 6.3 The PROVIDER will be responsible for specifying the hydraulic fluid used for all of its development testing and used in any production assembly. COMPETITORS may use their own fluid, but it should reach or exceed properties defined by the PROVIDER, including compatibility with seals.
- 6.4 Appropriate development testing of the brake hydraulic system will be undertaken by the PROVIDER to include confirmation of the required performance as specified in **Appendix I** and

lifetime as specified in SPECIAL CONDITION 8. Test results for the final specification of the brake hydraulic system should be shared with the FIA and all COMPETITORS. The exact specification (including tolerances) of all components should also be provided to the FIA, along with certified samples for the purpose of confirming there has been no change in specification in the future.

7 SUPPLY OF COMPONENTS

- 7.1 Components should be supplied as described in SPECIAL CONDITION 3.5. Dates and prices refer to availability ex-works from the PROVIDER. COMPETITORS will be responsible for transportation costs and any delays arising from their preferred method of delivery.
- 7.2 For components supplied as complete assemblies, testing should be carried out and documented as detailed in Article 3.6 of **Appendix I**.
- 7.3 Hydraulic fluid: - as provided for in SPECIAL CONDITION 6.3, the PROVIDER is responsible for defining a standard hydraulic fluid, and should supply it if requested. COMPETITORS may also buy it directly from the fluid manufacturer, or use their own specification of fluid (providing it matches or exceeds a fluid specification defined by the PROVIDER, including seal compatibility).

8 PRODUCT LIFETIME

The target lifetime of the principle components is one complete season of racing. However, it is understood that for callipers in particular, their exposure to temperatures outside their specified operating conditions will reduce that lifetime and potentially end it prematurely. It would be permissible to define a component package that might include items such as seals to allow servicing where required. As provided for in SPECIAL CONDITION 6.1, limits for all parameters contributing to the lifetime of the components will form part of the final FIA-approved specification.

9 EQUALITY OF TREATMENT AND PERFORMANCE

- 9.1 All COMPETITORS shall be equally treated in terms of supply and support. All components should be individually serial-numbered and their key dimensions and weights should be recorded.
- 9.2 Selection of which components go to which COMPETITOR must also be equitable as described in Article 2 of **Appendix II**.

10 TECHNICAL SUPPORT

- 10.1 Technical support for all COMPETITORS should cover factory-based design, development and analysis activities and trackside support. The tender should put forward a proposed level of support, along with the associated prices.

Note: Friction provider refers to the single supplier of brake discs and pads, which is being selected through a parallel tender process.

- 12.2 Once the PROVIDER has been appointed, a more detailed schedule should be produced and agreed with the FIA. The FIA will monitor the project against the agreed schedule and any significant delays will require a recovery plan to be produced and actioned.

13 ASSOCIATION RIGHTS

The PROVIDER shall have no right to refer to itself or authorise any third party to refer to the PROVIDER (whether in marketing/promotional materials, on websites/social media platforms or otherwise) as a supplier or service provider (or similar) to the CHAMPIONSHIP or the Formula 1™ brand (or otherwise imply the same) without first entering into a separate written agreement with the Commercial Rights Holder of the CHAMPIONSHIP for the grant of this right.

PART 3 – DEFINITIONS

The following terms shall be understood to have the following meanings for the purposes of the "CONTRACT".

- 1.1 **CHAMPIONSHIP** means the 2021, 2022, 2023 and 2024 FIA Formula One World Championship.
- 1.2 **COMMERCIAL RIGHTS HOLDER** means the entity holding the commercial rights in the CHAMPIONSHIP, being Formula One World Championship Limited, a company incorporated under the laws of England with registered number 04174493.
- 1.3 **COMPETITION** (referred to as EVENT in the FIA Formula One World Championship Regulations) means any race forming part of the CHAMPIONSHIP and entered on the International Sporting Calendar of the FIA. A COMPETITION is deemed to commence at the scheduled time for scrutineering and sporting checks and includes all practice, qualifying and the race itself and ends at the expiry of the deadline for the lodging of a protest under the terms of the International Sporting Code.
- 1.4 **COMPETITORS** means the racing teams that have been accepted by the FIA to take part in the CHAMPIONSHIP.
- 1.5 **CONTRACT** means the GENERAL CONDITIONS, the SPECIAL CONDITIONS and the DEFINITIONS.
- 1.6 **DEFINITIONS** means the definitions set out in this Part 3 of the CONTRACT.
- 1.7 **DRIVER** means a person driving a car in the CHAMPIONSHIP for a COMPETITOR.
- 1.8 **FIA** means the Fédération Internationale de l'Automobile.
- 1.9 **FIA ENGINEER** means the technician appointed by the FIA to carry out all technical checks and controls and grant the necessary approval prior to the starting up of production.
- 1.10 **FINANCIAL REGULATIONS** means any Financial Regulations applicable to the CHAMPIONSHIP, as published and amended by the FIA from time to time.
- 1.11 **GENERAL CONDITIONS** means the provisions contained in Part 1 of the CONTRACT.
- 1.12 **GOVERNING RULES** means:
 - (a) the International Sporting Code and the Appendices thereto;
 - (b) the SPORTING REGULATIONS;
 - (c) the TECHNICAL REGULATIONS;
 - (d) Any FINANCIAL REGULATIONS;
 - (e) the Code of Ethics;
 - (f) The Judicial and Disciplinary Rules;
 - (g) Any other regulations applicable to the CHAMPIONSHIP.

- 1.13 **INDEMNIFIED PERSONS** means the FIA, the COMMERCIAL RIGHTS HOLDER and each of its affiliates, each of the COMPETITORS, each of the DRIVERS, each of the PROMOTERS, each of the ORGANISERS and each ASN together with, in each case, their respective directors, officers and employees.
- 1.14 **OFFICIAL TESTING** means tests as defined in and authorised by Article 22 of the SPORTING REGULATIONS.
- 1.15 **PRINCIPLES OF SPORTING EQUALITY** means the equal treatment by the PROVIDER of all COMPETITORS with respect to:
- (a) anything that may affect the performance of the PRODUCT;
 - (b) the terms under which the PRODUCT is supplied;
 - (c) the support, access and information made available to COMPETITORS in relation to the PRODUCT; and
 - (d) any other matter which affects or may have an effect, however minor, on sporting performance.
- 1.16 **PRODUCT** means Brake system, as such word is described in the SPORTING REGULATIONS and TECHNICAL REGULATIONS.
- 1.17 **PROVIDER** means [•].
- 1.18 **PRODUCTION SITE** means the factory that will produce the PRODUCT supplied pursuant to the CONTRACT.
- 1.19 **SPECIAL CONDITIONS** means the provisions contained in Part 2 of the CONTRACT.
- 1.20 **SPORTING REGULATIONS** means the Sporting Regulations applicable to the CHAMPIONSHIP as published and amended by the FIA from time to time.
- 1.21 **SUPPLY AGREEMENT** means any agreement, and all amendments thereto, between the PROVIDER and a COMPETITOR pursuant to which the PROVIDER shall supply the PRODUCT to the COMPETITOR.
- 1.22 **TECHNICAL REGULATIONS** means the Technical Regulations applicable to the CHAMPIONSHIP as published and amended by the FIA from time to time.

APPENDIX I

TECHNICAL SPECIFICATIONS

1 REGULATIONS

- 1.1 The brake callipers, tandem master cylinder and BBW assembly must be compliant with any relevant technical and sporting regulations. It is anticipated that the PROVIDER will work alongside the FIA from the start of the project to ensure a common understanding of both the letter and the intent of the regulations and to ensure that any subsequent changes are consistent with the project as it progresses.

2 DESIGN AND DEVELOPMENT PROCESS

- 2.1 It is expected that the design of the brake callipers, master cylinder and BBW unit for 2021 will be developments of components currently in use, modified to take into account anticipated changes to the car and also taking into account the FIA's overall objectives to provide significant cost savings for the COMPETITORS.

Changes to the car will include changes to mass, drag, downforce and power, alongside a move to 18-inch wheels and corresponding new tyre sizes. In addition, the rest of the braking system (discs and pads) will be provided by a single entity through a tender process in parallel to this one. Clearly, close liaison and early cooperation with the providers of the rest of the braking system will be expected and will be crucial.

Finally, to capture technical input from all COMPETITORS, it is expected that early liaison with every COMPETITOR will take place. The PROVIDER will be ultimately responsible for the design of the brake callipers, master cylinders and BBW units, but best endeavours should be made to fulfil as many reasonable requests from COMPETITORS as practical. If any of these conflict with each other, the FIA will arbitrate.

- 2.2 During the notional design period (mid-June to early September 2019) it is anticipated that there will be an early review meeting (notionally on 16 July 2019) and a final review meeting (notionally on 10 July 2019) at which the PROVIDER and the provider of the brake friction components (discs and pads) will meet with the FIA and all the COMPETITORS for a formal design review. The early review should be to ensure that the direction for the detail designs is understood by the FIA and all the COMPETITORS. The FIA should also give their approval of the proposed direction. The final review meeting will again be with the PROVIDER of the brake friction package, the FIA and all the COMPETITORS. A detailed review of the complete system as designed should be presented. It is expected that the majority of the COMPETITORS will approve the system design, but the FIA will have the final say on approval or otherwise. Whilst it is strongly anticipated that approval will be given at this review meeting, if this is not the case, the PROVIDER will work with the FIA to formulate and deliver a revised action plan taking into account the issues arising and the practical constraints of delivering components for racing in 2021.

- 2.3 Testing and development of the callipers, the tandem master cylinder and the BBW unit discs and pads will be the responsibility of the PROVIDER. Testing and development of the braking system as a whole will be the joint responsibility of the PROVIDER and the provider of the friction materials package.

Calliper, master cylinder and BBW unit development testing will all be at the PROVIDER'S discretion but should have a target end date of the end of December 2019. System integration testing and system characterisation should start by early January 2020 and should be completed by the end of June 2020, targeting a full system test sign-off on or before 10 July 2020. It is anticipated that the formal sign-off will take place at the third (and last) meeting between the PROVIDER, the provider of the brake friction package, the FIA and all the COMPETITORS. The FIA has the final authority to give this approval.

- 2.4 COMPETITORS should not be supplied any components prior to this final approval. Once final approval has been obtained, pre-production parts may be supplied to COMPETITORS for their own testing purposes providing that;

(a) all COMPETITORS are offered the same quantities and delivery dates of pre-production parts.

(b) it does not impact on the ability to deliver production parts to the agreed schedule.

The tender should include pricing of pre-production parts, the anticipated maximum quantities available for each COMPETITOR and the corresponding earliest delivery dates.

3 COMPONENT CONSTRAINTS

- 3.1 As described in Article 2.1 of this Appendix, it is expected that the design of the callipers, tandem master cylinder and BBW unit for 2021 will be developments of components currently in use with modifications to take into account anticipated changes to the car and also taking into account the FIA's overall objectives to provide significant cost savings for the COMPETITORS with only minimal increases in weight. Without competing COMPETITORS pushing for their own specific priorities, it should be possible to employ intelligent cost-efficient and weight-efficient design throughout.

- 3.2 Front and Rear Callipers: – Aluminium Lithium alloys should be avoided and replaced with 2618 or equivalent aluminium alloys for all callipers. However, if the PROVIDER has alternative views, then they should be included in the tender as an option. In 2021, the wheel size will increase from a nominal 13" to a nominal 18" diameter. The intention is to use some of the newly-created space to increase the size of the front disc to between 320mm and 330mm diameter, thus leaving a larger gap between the brakes and the inside of the wheel rim than is currently the practice. For the calliper design, this gives the opportunity to take advantage of the extra radial space to create a more efficient bridge section to give increased stiffness for reduced weight.

Provision should be made for the fitment of brake wear LVDTs and thermocouples to measure calliper temperature.

- 3.3 Tandem master cylinder: - Almost certainly, F1 car packaging constraints provide for little modification from current practice in the overall design of the master cylinder. Small savings in machining costs may be achievable at the expense of the last few grammes of weight saving, but that would be at the discretion of the PROVIDER. Preferred working diameters and strokes may be slightly different from COMPETITOR to COMPETITOR, but the PROVIDER should use best endeavours to produce a workable compromise for as many COMPETITORS as possible although again, the FIA will be in a position to arbitrate where necessary. Evidently, the PROVIDER should ensure that their master cylinder functions well with the other parts of the whole braking system – analytically during the design phase and physically during the test and development phases.
- 3.4 Brake-By-Wire Unit: - There are potentially slightly fewer absolute space constraints for the BBW unit compared to the master cylinder, but packaging will still be very important and potentially COMPETITOR-dependent. However, a common system for every COMPETITOR means some compromises will be inevitable. As with the master cylinder, best endeavours should be made to produce a workable compromise for as many COMPETITORS as possible although again, the FIA will be in a position to arbitrate where necessary. Clearly, the PROVIDER should ensure that their BBW unit functions well with the other parts of the whole braking system – analytically during the design phase and physically during the test and development phases.

The servo valve specification should follow best practice and clearly all component and system development testing should be done using this type of valve. Supply of the production BBW units may be with or without a servo valve fitted (with prices quoted for both scenarios).

- 3.5 Hydraulic connections between the parts of the system will be COMPETITOR-specific and provided by the COMPETITORS for the cars. However, the PROVIDER will be responsible for defining the connections on all their units and for precisely defining the supply perimeter (defining what will be supplied with the callipers, master cylinders and BBW units and where COMPETITOR responsibility for supply starts). As with the designs of the callipers, master cylinder and BBW unit, best endeavours should be made to produce a workable compromise for as many COMPETITORS as possible although as before, the FIA will be in a position to arbitrate where necessary. Development testing of all the units will need to be done, and the PROVIDER should ensure that their rig test hoses and hard lines are representative of the COMPETITOR's solutions where this is needed.
- 3.6 All components supplied as complete assemblies should be tested with results documented and supplied with the components. The testing should be carried out to include any necessary bedding-in, and full leak testing and performance characterisation where appropriate. Assembled and tested units must be supplied with appropriate blanking seals to maintain their cleanliness.

4 INDIVIDUAL PARTS IDENTIFICATION AND RECORD-KEEPING

- 4.1 All parts should be marked with part identification and a serial number. Material and manufacturing batch information should be maintained for all parts to aid in failure analysis and other parts monitoring.

- 4.2 Only parts from the PROVIDER may be used on the cars. Parts must be unmodified and be identifiable with part marking and serial numbering. From time-to-time, the PROVIDER may be asked to assist the FIA to ensure parts are genuine and unmodified.

APPENDIX II

DETAILS OF SUPPLY

1. MINIMUM DELIVERIES AND LATEST DELIVERY DATES

1.1 Pre-production parts for COMPETITORS rig testing/characterisation

As shown in SPECIAL CONDITION 12, although COMPETITORS will be involved in the design of the braking system during mid-2019, it is proposed not to supply any components, even pre-production specification, until full system sign-off on 10 July 2020. Once signed off and the specification has been fixed, the PROVIDER may sell up to three sets of pre-production parts to COMPETITORS who want to carry out their own rig testing or characterisation testing. They may be similar or identical to production parts if that is practical, or may be close relatives of the production parts – whatever is practical for the PROVIDER. These parts cannot be used on cars.

1.2 Production Parts

The first two sets of production parts should be produced for each COMPETITOR by the end of October 2020. Subsequent mandated delivery times for every COMPETITOR should be in line with the following table:

Minimum deliveries per two-car COMPETITOR

Latest Delivery Dates	Front Caliper Car Sets	Rear Caliper Car Sets	Tandem Master Cylinders	Brake- By-Wire Units
31/10/20	2	2	2	2
6 weeks before Test 1	2	2	2	2
6 weeks before Race 1	2	2	2	2
Optional – as agreed with COMPETITOR	Extra sets	Extra sets	Extra sets	Extra sets

Extra sets may be supplied to COMPETITORS, but only after the mandated latest delivery dates have been met for every COMPETITOR.

For whatever reason, a COMPETITOR can choose not to buy as many parts as shown in the table above. This should not create an issue with the PROVIDER left with unusable stock at the end of the year, because the contract is for a four-year period with no changes, so parts will carry over to the following season.

If the minimum sets of assemblies as shown in the table above are supplied for the first season and then four new sets are bought in each of the 2022, 2023 and 2024 seasons, that equates to a quantity of;

2020 – 2 sets x 10 = 20 sets

2021 – 4 sets x 10 = 40 sets

2022 – 4 sets x 10 = 40 sets

2023 – 4 sets x 10 = 40 sets

2024 – 4 sets x 10 = 40 sets

Total = 180 sets.

In addition to this anticipated minimum, many COMPETITORS may choose to buy more, so the numbers are likely to be higher than these minimums. However, whatever the actual usage, carry over should protect against unusable stock and by the final year of the contract, patterns of use will be much clearer.

A supply schedule of service kits should be discussed during the liaison with COMPETITORS in 2019 in order to reach an agreed supply/delivery date schedule for each individual COMPETITOR. The PROVIDER should ensure that these parts are delivered by the agreed dates for each COMPETITOR ahead of any later additional orders.

2 EQUITY OF SUPPLY

- 2.1 There should be no differences between any of the parts supplied, but to ensure absolute equity of supply amongst COMPETITORS, as orders are processed, parts should be supplied sequentially in terms of batches and then randomly within each batch. The PROVIDER should provide details of how their shipping process will be configured to ensure this happens.

3 SERVICING

- 3.1 The COMPETITORS may choose to do their own servicing. However, the PROVIDER should be capable of carrying out servicing of each of their components for the COMPETITORS if requested. The corresponding prices are listed in the following article.

4 PRICING

- 4.1 The PROVIDER should include the following prices:
- A pair of front brake calipers (built and tested or un-built)
 - A pair of rear brake calipers (built and tested or un-built)
 - A front brake caliper service kit
 - A rear brake caliper service kit
 - Separate prices for all brake caliper individual components

- Prices for pre-production parts where available (ref. **Appendix I**, Article 2.4)
 - A complete tandem brake master cylinder assembly (built and tested or un-built)
 - A tandem brake master cylinder service kit
 - Separate prices for all brake caliper individual components
 - Prices for pre-production parts where available (ref. **Appendix I**, Article 2.4)
 - A complete BBW assembly including new servo valve (built and tested or un-built)
 - A complete BBW assembly without servo valve (built and tested with slave servo valve or un-built)
 - A BBW assembly service kit
 - Separate prices for all BBW individual components
 - A price for hydraulic fluid supplied through the PROVIDER
 - Prices for the PROVIDER to carry out servicing on each of the parts included in this tender – labour and parts (parts should be the same as the service kit prices above)
 - Prices for pre-production parts where available (ref. **Appendix I**, Article 2.4)
 - The price of the standard engineering support and track support package (please specify exactly what this covers, and whether this is paid separately or if amortised into piece prices)
 - The price of extra dedicated support requested by a COMPETITOR (on a per-day basis)
- 4.2 The PROVIDER should give a breakdown of non-recurring costs and how they are being dealt with in terms of pricing (separate payment or amortised into piece prices).
- 4.3 The PROVIDER should give a breakdown of payment terms and timing associated with all parts of the contract.

5 INFORMATION EXCHANGE AND INTELLECTUAL PROPERTY

- 5.1 The FIA remains the owner of the intellectual property rights in the technical specifications provided by the FIA to the selected provider.
- 5.2 As the supplier for all COMPETITORS, care must be taken to respect individual COMPETITORS' confidentiality and all COMPETITORS must be treated equally. However, information regarding safety or reliability should be shared with the FIA and all COMPETITORS simultaneously, ensuring that no COMPETITOR-specific confidential information is included.
- 5.3 The final design specification and associated operating parameters will remain the intellectual property of the PROVIDER. However, they will be expected to provide detailed CAD models (and

drawings where appropriate) to the FIA and all COMPETITORS as required to support their reasonable analytical modelling and for installation purposes.

- 5.4 The PROVIDER shall grant a perpetual license to the COMPETITORS and the FIA for the use of the models, drawings, documentation and other information referred to above. However, for the avoidance of doubt, proprietary processes and other manufacturing process information is not included in this disclosure.

6 SUPPLY AGREEMENTS

- 6.1 The PROVIDER should enter into a common supply agreement with each COMPETITOR. This should cover the parts and services detailed in this tender document to be provided, the prices associated with those services and the associated terms and conditions. This must be the same for all COMPETITORS.
- 6.2 In addition to the standard supply agreements, the PROVIDER shall be free to enter into separate agreements with COMPETITORS, containing such commercial terms, including in relation to advertising, publicity and other promotional arrangements that those parties may agree. However, any such arrangements must not compromise the principles of sporting equality, or be contrary to the supply agreements entered into with all COMPETITORS. In particular, the conclusion of any supplemental arrangement must in no way confer any sporting advantage upon one competitor over another.

7 LEGACY RUNNING

- 7.1 Provision should be made to facilitate running of 2021, 2022, 2023 and 2024 cars in the future as part of COMPETITORS' legacy programmes or future historic F1 car running. This will entail ensuring there is sufficient documentation (independent of current personnel) to allow third parties to operate cars with the PROVIDER'S braking components in a safe manner. The PROVIDER should agree to make best endeavours to provide such services and spare parts to allow these activities to continue, either through their own company or through a supported sub-contractor.

8 BUSINESS CONTINUITY PROTECTION

- 8.1 By definition, the PROVIDER will be the only source of brake system components for the entire F1 grid. To protect the series from any scenario when supply cannot be maintained (for example serious factory damage or business failure), the PROVIDER should indicate what contingency plans it can make to avoid such a scenario.

In the case of serious factory damage for example, the PROVIDER should detail what arrangements could be made, such as using alternative factories to produce the same components and how the stock level will be maintained to cover the gap in manufacturing. This should not necessarily provide full service cover, but should be enough for racing to continue.

In the case of potential business failure, early dialogue with the FIA will be expected in order to formulate a plan to keep cars racing. All design and production information necessary to allow production to be continued elsewhere should be lodged with the FIA. The PROVIDER and/or any liquidator, administrator or other insolvency practitioner acting on the PROVIDER'S behalf, shall sign all such documents and do such acts as are necessary to facilitate use of this information by the FIA in order to secure ongoing supply for Formula One. This information will be kept secret and assuming it is never needed, will be destroyed at the end of the contract period.

9 CONSULTATION AND APPROVAL

The PROVIDER shall regularly consult and cooperate with the FIA throughout the contract period. Furthermore, all designs, specifications and other deliverables developed by the PROVIDER as part of this project must be approved in writing by the FIA