



TENDER SUMMARY AND ADDITIONAL TENDER REQUIREMENTS

The FIA's objective is to select an exclusive supplier of the **Gearbox Cassette** (hereafter "the Gearbox") whose task it will be to ensure the production, delivery and maintenance of the Gearbox for the 2021, 2022, 2023 and 2024 seasons of the FIA Formula One World Championship (hereafter "the Championship").

All the 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 Gearbox to the competitors under the conditions referred to in the draft contract.

The FIA reserves the right to 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 supplier if no offer is finally deemed capable of being beneficial for the Championship and its 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.

Bids must be sent to the FIA Administration by e-mail to the following address:
tenderingprocedure@fia.com.

Bids which do not comply with these supply conditions will not be taken into consideration.

The FIA reserves the right to make amendments to this invitation to tender at any time and to issue a new invitation to tender.

Publication of invitation to tender:
Submission date:
Notification of decision:

18 February 2019
15 March 2019
between 15 and 30 April
2019

**FORM TO BE COMPLETED
BY TENDERER**

All Gearbox manufacturers interested in supplying the Gearboxes 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 Gearboxes 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 Gearbox 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 Gearbox, and details and identities of the subcontractors it intends to commission for such activities.
4. Pricing form stating the prices at which the Gearbox will be supplied

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

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 GEARBOX CASSETTE
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

as the "**FIA**"

ON THE ONE HAND,

AND

[•]

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

ON THE OTHER HAND.

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 from 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 supply 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.

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,

in each case that prevents a significant number of COMPETITORS from participating fully in a COMPETITION.

- 3.2 The PROVIDER represents and warrants that it is in a position to meet any liability that may arise under clause 3.1 of this CONTRACT 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.

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 GENERAL CONDITIONS 1.2, 1.3, 2, 3 and 4.1 and any of 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 to the CONTRACT.
- 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 clause 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 government-participated 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 enure 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 treated 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 address mentioned above (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 rebuttably 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

[The clauses in this special part (some of which are more informative than binding in their current wording) may be subject to significant rewording in the supply contract with the selected supplier].

1. OBJECTIVES FOR THE SUPPLY OF A COMMON GEARBOX CASSETTE

- 1.1 The aim of single source supply is to retain current levels of Formula One gear change performance for all cars at a much reduced cost to the COMPETITORS while also removing the requirement for teams to design or source their own gearboxes. The unit can be carried over between seasons so removing the need for costly continual performance development.
- 1.2 In order to retain COMPETITOR's own freedoms for suspension and for the gearbox aero surfaces, the outer housing will remain team specific (designed and produced by the COMPETITOR) with the common, self-contained gearbox cassette mounted inside.

2. OVERVIEW OF TENDER DELIVERABLES

- 2.1 This gearbox cassette will be mandated for all COMPETITORS for the 2021 season onwards.
- 2.2 The gearbox cassette will include 7 forward ratios, 1 reverse ratio and the differential/final drive in a unit that also includes its own oil system (excluding the team-provided cooler) and the hydraulics necessary for its own operation as well as some other car functions.
- 2.3 The unit is intended to replace all the functionality of a current F1 gearbox in a similar package and close to typical current weights. Details of the technical specification are given in Appendix 1 – Technical Specification.
- 2.4 New units supplied to teams or PU suppliers will be sealed and tested to ensure functionality, performance and that they are fluid-tight. Any units used at races will be sealed by the FIA and become one of the four designated race gearboxes. If problems are identified during the life of the gearbox, new parts may be substituted providing they are identical (or latest issue equivalent) parts from the selected provider. The four race gearbox cassettes will form a pool and can be used at any time during the season.

3. COMMERCIAL ARRANGEMENTS

- 3.1 The PROVIDER will enter into supply agreements with each COMPETITOR and with each PU supplier to supply gearbox cassettes and any required support. Two models are possible – a sell model or a lease model. [Tenderers are invited to provide details for the model they prefer or both].
- 3.2 [The supply agreement should include prices and conditions of supply for complete new gearbox cassettes (assembled and tested) and should also include prices for other options such as rebuild kits in the sell model or total annual support costs for the lease model. A full list of required options is in Appendix Two – Details of Supply].

4. PRICING OF THE PRODUCT

- 4.1 The price of the PRODUCT supplied pursuant to the CONTRACT shall be [€...] (as further detailed on the PRICING FORM), which amount shall be inclusive of all taxes and charges and which amount shall not be increased for any reason.

- 4.2 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.

5. DESIGN AND DEVELOPMENT OF THE GEARBOX CASSETTE

- 5.1 The unit will need to be designed in conjunction with all the existing COMPETITORS and PU suppliers to ensure it can function as well as possible in all cars and best endeavours should be made to satisfy as many COMPETITORS and PU supplier requests as practical in a unit for everyone. Clearly, the COMPETITORS that currently produce their own gearboxes will have knowledge built up that should be sought and taken account of if possible. In particular, their best design practices should be sought and a coherent set of design practice actioned during the process. The FIA will help arbitrate if any of these practices are contradictory to each other. Examples of such standards are use of circlips, o-ring design, secondary locking, fool-proof assembly, hydraulic contamination standards and so on.
- 5.2 It is anticipated that during the design and development phases, all information/communication pertaining to the unit will be circulated to all COMPETITORS, all PU suppliers, the PROVIDER, the FIA.

6. SUPPLY OF UNITS

- 6.1 The supply agreement between the FIA and the PROVIDER will mandate a minimum availability of units for each COMPETITOR and for each PU supplier along with associated latest delivery dates. Each COMPETITOR will be supplied with a minimum of 2 test units and 8 race units per season. Each PU supplier will be supplied with a minimum of 6 units during 2020 and then 4 units in each of 2021, 2022, 2023 and 2024.
- 6.2 Any supply of units above this minimum number will be at the discretion of the selected provider (dependent on capacity) but must be at the same prices as all other units and must maintain equal treatment of all.
- 6.3 Details of the supply numbers and date commitments are included in Appendix Two – Details of Supply.

7. UNIT LIFE

The life of the unit is defined by the race requirement of 4 per season. A table to translate these constraints into km per gearbox cassette based on 2018 mileages is included in Appendix Two – Details of Supply.

8. EQUALITY OF TREATMENT AND PERFORMANCE

- 8.1 It is important to treat all COMPETITORS equally in terms of support and also to ensure that the performance of all gearbox cassette units are as close to each other as practical. Individual unit pre-delivery sign-off test results along with individual delivery weights should be maintained and supplied to the FIA. Should the spread between units become a concern for the FIA, they will register that concern and expect to work together with the selected tenderer to remedy the situation.

9. UNIT SIGN OFF

Sign-off of new complete built units should include a full speed motoring test. Precise definition of the sign-off criteria will be the responsibility of the selected provider after taking account of all COMPETITORS' views and experience. Should COMPETITORS wish to add additional sign-off tests either at the selected provider or at the team's premises that can be agreed as a separate extra agreement between the two parties.

10. TECHNICAL SUPPORT

10.1 In the case of a lease deal, the selected provider will be required to maintain all resources necessary to build, service and support their units through the season. Even with a sell deal the selected provider will be expected to maintain a central factory-based engineering resource to deal with ongoing maintenance and reliability work as well as to deal with team and PU supplier liaison.

10.2 As part of the agreements between the PROVIDER and the COMPETITORS and between the PROVIDER and the PU suppliers, technical support will be provided. The level of that support should be as agreed in each of the agreements, but the expectation is that there will be at least one support engineer for each PU type. These engineers should expect to be involved in the dyno testing of the units and in the development of operation (including the gearshifts) so there should be at least one for each PU supplier.

10.3 It is anticipated that there will always be a trackside presence at every race or test event. The work done will vary depending on the basis of the deal – it will be minimal for a sell deal (with team's own technicians able to work on the gearbox cassettes) but more substantial if the boxes remain sealed in a lease deal. These options should be defined and the share of cost identified within the supply agreements. Additional trackside support for teams will be as agreed between the selected provider and the teams, but the tender should include the anticipated costs of such optional support.

11. UNIT INSPECTION, SERVICING, MAINTENANCE AND TREATMENT OF FAILURES

11.1 Gearbox cassette units are provided to the team or PU supplier as a tested, sealed unit. In the "sell model", as soon as they are sold, the Gearbox cassette units become the responsibility of the COMPETITOR or PU supplier responsible to maintain them to the PROVIDER's specifications. It is expected that monitoring of the units' condition will be carried out by the COMPETITORS to include analysis of data, analysis of oil and visual inspection (it is recommended that borescope access is provided where practical). For designated race gearboxes, evidence of potential issues may be provided to the FIA along with a request to carry out remedial action and where agreed by the FIA, replacement parts may be fitted, providing these parts are identical or are an up-issue of the same part. At any time, the FIA may require a race gearbox to be stripped to prove that only unmodified, genuine and identified parts are being used. The PROVIDER and the COMPETITORS must work closely together to identify the causes of any failures/issues with the unit. This should include shared access to each other's data and shared access to the unit strip process, whether this is at the team or at the selected provider premises.

11.2 In the lease model, it is expected that all monitoring of the units' condition will be carried out by the PROVIDER's support personnel and any work necessary would be carried out by the

PROVIDER. Financial responsibility for any such work would rest with the PROVIDER unless they can demonstrate that the unit had been run outside their specified operating conditions and that such excursions could have caused the issue to occur.

11.3 In either model, if a unit or a component fails, the PROVIDER should work with best endeavours to identify and then mitigate the root cause of the issue. If the issue was one of manufacture, appropriate action should be taken to replace it and any other parts at risk FOC. Irrespective of root cause, for all failures, a failure report should be generated and circulated to the FIA, F1, teams and PU suppliers.

12. OVERALL TIMING TO END OF 2020

A notional timing chart is shown below to cover the time from the release of the technical specification and the invitation to tender through to the end of 2020:

	2019												2020											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tech spec + Invitation to tender – 15/02/19																								
Tender submission by 15/03/19																								
Final decision 15-30/04/19																								
Detail design																								
Detail design reviews (FIA, teams)																								
FIA design approval – 30/08/19																								
Prototype manufacture/assembly/rig test																								
Prototype sign off – 15/01/20																								
Manufacture/build for Powertrain dyno tests																								
Powertrain dyno development – gearshifts etc																								
Powertrain approval – 24/08/20																								
Design integration into 2021 car design																								
Manufacture/sign-off 2021 car test/race units																								
Test/race – 2021 onwards																								

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 Right 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 **ASN** means a national automobile club or other national body recognised by the FIA as sole holder of sporting power in a country.
- 1.2 **CHAMPIONSHIP** means the 2021, 2022, 2023 and 2024 FIA Formula One World Championship.
- 1.3 **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.
- 1.4 **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.
- 1.5 **COMPETITORS** means the racing teams that have been accepted by the FIA to take part in the CHAMPIONSHIP.
- 1.6 **CONTRACT** means the GENERAL CONDITIONS, the SPECIAL CONDITIONS and the DEFINITIONS.
- 1.7 **DEFINITIONS** means the definitions set out in this Part 3 of the CONTRACT.
- 1.8 **DRIVER** means a person driving a car in the CHAMPIONSHIP for a COMPETITOR.
- 1.9 **FIA** means the Fédération Internationale de l'Automobile.
- 1.10 **FIA ENGINEER** means the technician appointed by the FIA to carry out all technical checks and controls and to grant the necessary approval prior to the starting up of production.
- 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) the Code of Ethics;
 - (e) The Judicial and Disciplinary Rules;
 - (f) 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 **ORGANISER** means a person who has entered into an organisation agreement with the FIA and the applicable ASN in respect of a COMPETITION.
- 1.16 **PRINCIPLES OF SPORTING EQUALITY** means the equal treatment by the PROVIDER of all COMPETITORS with respect to:
- (a) anything which may affect the performance of the PRODUCT;
 - (b) the terms on 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.
- 1.17 **PRODUCT** means Gearbox Cassette, as such word is described in the SPORTING REGULATIONS and TECHNICAL REGULATIONS.
- 1.18 **PROMOTER** means a person who has been appointed by the COMMERCIAL RIGHTS HOLDER to promote a COMPETITION.
- 1.19 **PROVIDER** means [•].
- 1.20 **PRODUCTION SITE** means the factory that will produce the PRODUCT supplied pursuant to the CONTRACT.
- 1.21 **SPECIAL CONDITIONS** means the provisions contained in Part 2 of the CONTRACT.
- 1.22 **SPORTING REGULATIONS** means the Sporting Regulations applicable to the CHAMPIONSHIP as published and amended by the FIA from time to time.
- 1.23 **SUPPLY AGREEMENT** (Appendix [•]) 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.
- 1.24 **TECHNICAL REGULATIONS** means the Technical Regulations applicable to the CHAMPIONSHIP as published and amended by the FIA from time to time.

APPENDIX 1: TECHNICAL SPECIFICATIONS

1. Regulations

The gearbox cassette must be compliant with any relevant technical and sporting regulations. It is anticipated that the selected provider will work alongside the FIA from the start of the project to ensure a common understanding of the letter and the intent of the regulations and to ensure that any subsequent changes are consistent with the project as it progresses.

2. Layout

It is anticipated that the layout will be similar to current F1 gearbox/final drive assemblies. The exact layout definition will be part of the selected provider's responsibility but it should be as close as practical to something all teams are happy with. It is believed that both single barrel and dual barrel arrangements are currently in use but it will be for the selected provider to select the layout they believe is best. Once the design is fixed and approved, it will be up to the teams and the power unit suppliers to make their parts physically fit with the gearbox cassette through specifications supplied by the selected provider. Note that the heights of the input shaft and the output shafts will be defined by regulation and therefore fixed.

The oil system for the unit comprising whatever tank, pumps and scavenging system deemed necessary will be included. The entire gearbox cassette oil system should be self-contained with the exception of an outlet and an inlet to and from the team's gearbox oil cooler.

3. Packaging and weight

Other than conforming to regulations (including any restricted areas necessary for the 2021 aero package - TBD), every team will push on packaging, wanting minimum length, width and height and every team will push on weight and centre of gravity. It is anticipated that significant effort should be applied to achieving a minimum size and weight for the unit, but it is also acknowledged that there are some factors that will make this difficult: Firstly, we need to achieve excellent reliability in the face of a life requirement of around 5000km. Secondly, there will be an average input speed increase of around 14% from today. Thirdly, there should be some power increase for 2021 relative to today, not just because of natural development, but also because of a 30kW increase in the MGUK output. Finally, with the removal of competition, it is anticipated that some of the most complex machining saving the last few grams can be replaced with more cost effective machining. Despite these negative factors, best endeavours should still be applied to optimise these conflicting requirements, but as a guide, it is anticipated that the gearbox cassette will be around 1.5kg heavier than an equivalent cassette-style F1 gearbox today.

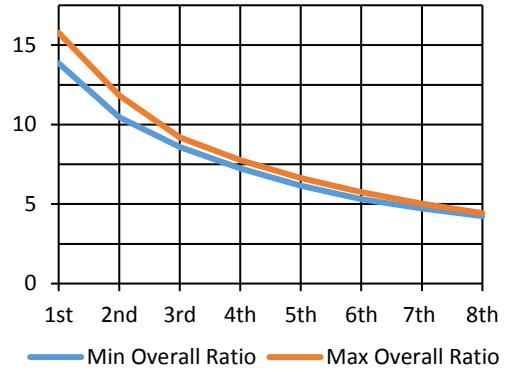
4. Operation

The important metrics for operation will be the achievement of zero-torque-drop upshifts alongside safe and repeatable downshifts with minimal upset to the car. A target of zero missed shifts must be in place and any missed shifts that do occur should be investigated and action taken to remedy the issue. The unit should support the appropriate shift strategies available in the SECU code. Those strategies not supported by the new unit should be removed by the FIA from the SECU.

5. Ratios

Gear ratios will be fixed across the field. The ratios should be chosen so as to minimise the sum of differences to optimum for each power unit supplier, taking into account the change from 8 gears to 7 gears, potential increases in 2021 of engine speed and tyre rolling radius. As an initial guide, the following values represent maximum and minimum overall ratios across the field in 2018:

Overall Ratios (including bevel & FD)	Minimum overall ratio	Maximum overall ratio
First gear	13.854	15.771
Second gear	10.451	11.829
Third gear	8.584	9.200
Fourth gear	7.230	7.763
Fifth gear	6.148	6.644
Sixth gear	5.300	5.750
Seventh gear	4.732	5.018
Eighth gear	4.240	4.423



6. Individual parts identification and record keeping

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

7. Gearbox oil

Because of the effect gearbox oil can have on the operation and reliability of the gearbox cassette unit, there needs to be a different treatment of it for the sell model and for the lease model.

For the sell model, the selected provider will specify limits for allowable gearbox oil properties and permitted operating conditions and will also identify the commercially-available gearbox oil used for its initial approval and internal running of the gearbox cassettes. Teams and PU suppliers may either use the specified oil or they can use their own equivalent oils.

For the lease model, the selected provider will again specify limits for allowable gearbox oil properties and permitted operating conditions and provide details of the commercially-available approved oil. If a team wishes to use an alternative gearbox oil, they must provide details of the oil's properties and then a sufficient quantity of oil to allow the selected provider to approve the oil. The selected tenderer should specify the cost for such an approval in the tender document.

Irrespective of which oil a team chooses to run, it will be responsible for the transport of the oil to events.

8. Efficiency

High overall efficiency should be a further target in the design – both to maximise power to the wheels and to minimise the amount of gearbox oil cooling required. Furthermore, whatever efficiency level is achieved, an additional target is to make efficiency levels as consistent as possible across all units produced so all the gearbox cassettes have as close a performance level to each other as possible.

9. Differential

In line with current practice, it is anticipated that the differential will be a multi-plate, hydraulically controlled differential. Again, best endeavours should be made to accommodate as many of the teams' requests as possible.

10. Torque Sensor

A torque sensor, selected in conjunction with the FIA will be fitted to the front of the gearbox cassette. It is anticipated that this will be a non-contacting, magnetic sensor similar to the sensors currently used.

11. Mounting loads

Once fixed, the mounting of the gearbox cassette unit within the bespoke team gearbox casing/rear chassis will obviously be the same for all casings. In terms of load capacity, these mountings need to allow for the gearbox cassette running load reactions. Sufficient compliance should be built into the mounts that only insignificant (and therefore safe) proportions of any suspension, aero or crash test loads are transferred into the gearbox cassette casing from these sources.

12. Starter

Provision should be made to allow the engine to be started with a starter as is current common practice.

13. Hydraulics

The intention is that hydraulics that are typically gearbox mounted now will remain gearbox mounted and be supplied with each gearbox cassette. This means each cassette will come with a complete and tested hydraulic gearshift and differential adjustment system. The hydraulic manifold, including servo valves for clutch control and any active aero control (such as DRS) should be part of the detail spec agreed with all the teams and should be included with each cassette. Given the price, life and serviceability of servo valves, it is not expected that every new gearbox cassette is supplied with a full suite of new servo valves so in the sell model, a price should be included in the tender document for supply of the unit less servo valves. For the lease model, any ongoing servo valve supply options (team to look after or selected provider to look after) should be included amongst the pricing options. In principle, when a gearbox cassette is fitted to a car, the aim should be to connect up feed and return to the pump and to the cooler, connect up any engine-mounted hydraulics necessary and any active aero and the hydraulics should be ready to go.

14. Sensors and data stream

The selected provider will be expected to include sensors used to monitor the unit's performance and health as well as to provide data to ensure the unit is always operated within the defined operating parameter envelope. This may include measurements of torques/loads, temperatures and pressures or any other parameter deemed necessary. The team/PU supplier should also be given access to this data. Other team or PU data that the selected provider reasonably requires should be requested from the team or PU supplier and access to the data should not be unreasonably withheld. A list of the initial data required would form part of the supply agreements, but this should be flexible moving forwards with best endeavours being made on both sides to provide what is needed by the other.

15. Interfaces and supply perimeter

Mounting: the mounting features in the gearbox cassette will obviously be common across all units. To accommodate team-specific requirements, all studs or other fasteners should be provided by the team. Fitting torques into the gearbox cassette will be defined by the selected provider.

Input shaft: a team-specific input shaft will connect the engine-mounted clutch to the input of the gearbox cassette, which will provide the team with the ability to tune the torsional behaviour of their complete transmission system. The gearbox cassette end of the shaft will be defined by the selected

provider and will include an appropriate spline drive and a short portion of shaft used for the FIA-defined torque sensor. Forward of the torque sensor portion, the design of the input shaft will be free

Outputs: although all teams will be free to design their own driveshafts, it is anticipated that as part of the 2021 technical regulations, the design of the driveshaft inner will be prescribed. The selected provider will be included in the detail definition of this interface, but in principle the gearbox cassette responsibility will end at the output flanges to the driveshafts.

Oil and hydraulic connections: in common with other features, the selected provider will work with teams to find the best compromise in terms of connection positions and details, but will in the end be responsible for defining all fluid connections. The principle of the split of responsibility should seek to minimise the possibility of damage or excessive wear to the main housings during routine fitting and use.

Electrical connections: the selected provider should provide the gearbox cassette side of all the connectors needed as well as all internal looms. It is likely that teams will want to include some of their wiring within these internal looms. Definition of this should be agreed in the early stages of the design together with precise definition of connector types and locations. A reasonable assumption for the amount of team wiring including should be factored into the supply agreements put forward in the tender process.

An assumed detailed supply perimeter should form part of the tender submission. Variations to this as a result of the collaboration with teams and PU suppliers during the early design process should be made where necessary and a supply agreement price adjustment should be made based on any additional costs incurred.

A detailed table of the supply perimeter based on principles above will be produced before the final team supply agreements are made.

APPENDIX 2 – DETAILS OF SUPPLY

1. Unit deliveries to Power Unit suppliers and teams

As shown in the proposed timing chart in section 5 of this document, design and internal testing and approval of the gearbox cassette will take place through 2019. The first external deliveries will be a unit to each PU supplier at the end of week 4 of 2020 for initial development. Further units should be delivered to each PU supplier according to the schedule in the table below. Deliveries to teams are also shown in the table to cover tests and races, starting with the first test gearboxes in week 48 of the preceding season. In addition, one gearbox casing should be provided to each team to allow for 2021 crash testing. These casings do not need to be fully machined but must be structurally representative. It is assumed that teams will use one of their used gearbox casings for subsequent seasons.

These form the basis of the supply agreement in terms of quantities and delivery dates (shown in blue).

Contracted minimum deliveries and latest delivery dates	2020	2021	2022	2023	2024
Units per Power Unit Supplier					
Units for initial powertrain development	4				
Notional delivery weeks	4, 10, 16, 22				
Units for ongoing powertrain development	2	4	4	4	4
Notional delivery weeks	28, 34	8, 16, 32, 44	8, 16, 32, 44	8, 16, 32, 44	8, 16, 32, 44
Units per 2-car Team					
Track test units	1	2	2	2	1
Notional delivery weeks	48	4, 48	4, 48	4, 48	4
Race units		8	8	8	8
Notional delivery weeks		2, 8, 16, 24	2, 8, 16, 24	2, 8, 16, 24	2, 8, 16, 24
Crash test dummy casings	1				
Notional delivery weeks	48				

2. Overall gearbox cassette unit numbers required

Based on 10 teams and 4 PU suppliers the overall numbers of gearbox cassettes expected to be supplied over the period 2020 to 2024 will be as shown in the table below.

Cumulative km per box based on average km	1120	3988	689	1395	2129	2870	3568	4221	1157	643	1311	1987	2745	3485	4142	698	1419	2104	2179	2858	3577	4338	744	1293	1914	2621	3319	4052	3133	
	units delivered and at team							notional test unit use							notional															
	race unit use																													

* Value of 814km used which is average of 21 real races used for 3 notional new races

** Max km for any one team for (T1+T2) is 4883km and for (T3+T4+T5) is 4025km

4. Pricing

The tender should include prices, confirmation of delivery schedules and payment timing details for either a sell model or a lease model or both for the following where applicable:

- The supply of gearbox cassettes for a two-car team per season. This should include options for supply with or without new servo valves
- An explanation of non-recurring engineering, tooling and development prices and whether they are charged once or amortised
- The ongoing price for shared track support in either model
- For the sell model, the optional price for a dedicated track support person
- The content and price for a rebuild kit (see also below)
- The expected individual prices of commonly-used individual replacement parts
- The price of additional complete gearbox cassettes
- The price of an in-house provider gearbox cassette rebuild and test
- Expected prices associated with the provision of legacy support described below
- All other options described in the following track support section as appropriate

Track Support, condition monitoring, replacement of parts and rebuilds

Condition monitoring, replacement of suspect or damaged parts and rebuilding of gearboxes needs to be carried out in either the sell model or the lease model and prices should be included in the tender for whichever option is covered by the tender (or both). It is expected that responsibilities under each model would fall as follows:

Activity	Sell Model	Lease Model
Condition monitoring	Team responsibility with provider advice	Provider
Breaking gearbox seals – race only	Team under FIA supervision	Provider under FIA supervision
Breaking gearbox seals - other time	Team	Provider
Decision to replace parts	Team	Provider
Decision to replace parts	Team	Provider

Financial responsibility for work/parts	Team	Provider *
Carrying track spare parts pool	Team	Provider
Trackside technician support	Team + 1 or 2 from provider	Provider
Carrying spare gearbox units	Team	Team
Manufacturing defect batch recovery	Provider	Provider
Typical rebuilds	Team **	Provider ***

*Unless the Provider can show the unit has been operated outside Operational Limits. In this case, the financial responsibility falls to the team

** The provider should lay out the contents and price for a rebuild kit

*** The provider should define the contents and prices for a typical rebuild

5. Track support logistics

Teams will be responsible for transportation of their own gearboxes to and between events. In the lease model, the provider would be expected to carry any spare parts and at-track servicing equipment necessary. In the sell model, to prevent every team keeping and transporting their own spare parts, which as a whole must be less efficient than sharing a common parts pool, the selected provider should propose the provision of a centrally-held spare parts service that teams can subscribe to.

6. Intellectual Property

The FIA remains the owner of the intellectual property rights in the technical specifications provided by the FIA to the selected provider.

Final design IP will remain the property of the selected provider but they will be required to provide detailed CAD models (and drawings where appropriate) as required for installation purposes and to allow informed rebuilds to be carried out by the teams.

The selected provider will also be required to provide detailed documentation to cover rebuild and operation of the gearbox cassette and a specification of its operational envelope.

The selected provider shall grant a perpetual licence to the teams and the FIA for the use of the models, drawings, documentation and other information referred to above, including for the purpose of the regulations. For the avoidance of doubt, proprietary processes and other manufacturing process information is not included in this disclosure.

7. 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 Right Holder of the CHAMPIONSHIP for the grant of this right.

8. Additional agreements with teams or Power unit suppliers

In addition to the standard supply agreements, the selected 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, as those parties may agree. However, any such arrangements must not compromise the principles of sporting equality or be contrary to the supply agreement 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.

9. Legacy running

Provision should be made to facilitate running of 2021, 2022, 2023 and 2024 cars in the future as part of teams' legacy programmes or future historic F1 car running. This will entail providing sufficient documentation to allow third parties to operate cars with the gearbox cassette in a safe manner. The selected 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.

10. Business Continuity Protection

By definition, the selected provider will be the only source of gearbox cassettes for the entire F1 grid. To protect the series from any scenario when supply cannot be maintained (for example, business failure or serious factory damage), all design and production information necessary to allow production to be continued elsewhere should be lodged with the FIA (and the selected provider and/or any liquidator, administrator or other insolvency practitioner acting on the selected provider's behalf, shall sign all such documents and do all such acts as are necessary to facilitate the transfer of this information to the FIA). This information will be kept secret and assuming it is never needed, it will be destroyed at the end of the contract period.

11. Consultation and Approval

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