

ISLE OF MAN TT RACES

SIDECAR SUSTAINABILITY



TECHNICAL AND SPORTING DIRECTION

CONTROLLED RETURN AND STABILISATION PACKAGE

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HEADLINE DIRECTION

Sidecars will return at TT 2027 through a practical, measurable and enforceable package designed to reduce performance, strengthen technical assurance and provide a controlled basis for the future of the class.

1. Controlled Return

The TT 2027 proposition is a **controlled return** of Sidecar racing, rather than a restoration of the class in its previous form.

The immediate package is intended to deliver a slower and more tightly controlled formula while retaining the two-person skill, engineering character and spectacle that distinguish Sidecar racing at the TT.

The return will remain subject to completion of the technical, sporting, medical, operational and governance work required to demonstrate readiness for TT 2027.

2. Sporting Commitment and Race Format

The TT intends to make a **three-year commitment to Sidecar racing from 2027 to 2029**, providing competitors and constructors with greater certainty while the revised formula is introduced and evaluated.

Two Sidecar races will be scheduled in each of the three years. For TT 2027, both races will be held over **two laps** as a transitional measure intended as a transitional measure providing a more conservative race format during the first year of the new package.

Race distances for 2028 and 2029 will be determined after reviewing the operation of the 2027 regulations, event experience and the evidence gathered from qualifying and racing.

The established TT qualifying period and Sidecar session provision will be retained for 2027. Final session arrangements, qualification criteria and contingency provisions will be confirmed in the published schedule and Supplementary Regulations.

3. Competitor Eligibility and Standards

TT 2027 will introduce stronger requirements covering **qualification, recent competitive activity, medical fitness and professional standards** for all TT competitors including Sidecar drivers and passengers.

Eligibility will place greater emphasis on relevant current experience and demonstrated readiness for the demands of the Mountain Course. The framework will remain

compatible with the wider competitor pathway wherever reasonably practicable and will avoid unnecessary TT-only barriers to participation.

Enhanced medical and fitness assessment will also be introduced for TT competitors aged 50 and over, with the level of assessment increasing progressively with age. The exact thresholds, evidence and procedures will be confirmed within the 2027 medical and sporting requirements.

Full entry standards, qualification requirements, recent-activity criteria and competitor conduct provisions will be confirmed within the 2027 Supplementary Regulations.

4. Engine and Control Electronics

For TT 2027, Sidecar engine and control electronics regulations will move to align with the **British Sportbike technical regulations**.

This will introduce a recognised, production-based engine framework, including engines derived from machines such as the **Yamaha R7, Aprilia RS660 and Kawasaki Ninja 650**, together with other eligible engines defined within the British Sportbike regulations.

Control electronics will also move to the **Mectronik ECU platform** used within British Sportbike, with approved maps and associated controls forming part of the new TT regulations.

The change is intended to provide a clearer, more controlled and sustainable engine and electronics framework while reducing the scope for unrestricted performance development.

The framework will also allow Balance of Performance measures to be used to establish performance equivalence between eligible engine configurations. This represents a significant change from the existing formula, where differences in engine development and investment can result in substantial performance variation across the field.

The objective is that outright engine performance should be much more closely matched across eligible machinery, reducing the advantage available through increasingly expensive engine development and placing greater emphasis on preparation, reliability, chassis performance and the performance of the driver and passenger.

The change also recognises the changing production motorcycle market, with the traditional 600cc inline four-cylinder supersport platform becoming increasingly limited in terms of current production machinery and manufacturer development. Moving towards the Sportbike framework is therefore intended to provide a more sustainable long-term engine platform for the class.

Full engine eligibility, permitted modifications, electronic configuration and compliance requirements will be confirmed within the 2027 TT Sidecar Technical Regulations.

5. Chassis and Structural Components

The existing range of eligible Sidecar chassis designs will continue to be permitted, subject to revised **structural, inspection and approval requirements**.

The regulations will introduce clearer requirements covering chassis construction, identification, modification and repair, together with the mounting of major components and bodywork. New chassis designs, or significant alterations to existing designs, will require prior technical approval before being accepted for use at the TT.

Existing machinery will be subject to enhanced inspection, repair certification and documented technical-history requirements. This is intended to provide greater assurance over structural integrity without requiring competitors to move to a single chassis design.

Full construction standards, inspection requirements, approval procedures and provisions covering modifications and repairs will be confirmed within the 2027 TT Sidecar Technical Regulations.

6. Bodywork and Streamlining

Sidecar bodywork and streamlining regulations will be revised to introduce a **clearer and more controlled aerodynamic framework**.

The new regulations will place defined limits on the design and extent of floors, undertrays, wheel arches and other enclosed bodywork, reducing the potential for these components to generate significant aerodynamic performance and lift. Separate aerofoils, wings, fins and spoilers will be prohibited.

Bodywork will also be required to provide appropriate structural integrity, inspection access, pressure relief and access for medical and rescue personnel. Existing fairing configurations may remain eligible where they comply with the new dimensional, safety and mounting requirements.

The change is intended to reduce aerodynamic development, improve safety and simplify technical compliance without requiring competitors to adopt one prescribed or historic fairing design.

Full dimensional limits, permitted configurations, construction requirements and compliance procedures will be confirmed within the 2027 TT Sidecar Technical Regulations.

7. Weight, Containment and Machine Safety

Minimum weight and other straightforward stability controls will be reviewed as part of the TT 2027 package to support the intended performance and handling characteristics of the revised formula.

Existing requirements governing fluid containment, wheel protection, steering clearance and bodywork security will be retained and, where necessary, strengthened. Fuel, oil and cooling-system requirements will be supported by clearer inspection and compliance procedures.

Final weight limits, measurement procedures and machine-safety requirements will be confirmed within the 2027 TT Sidecar Technical Regulations following technical validation against representative machinery.

8. Technical Approval and Scrutineering

The revised formula will be supported by **enhanced pre-event approval, scrutineering and compliance verification**.

Machines will be registered against an approved technical specification covering the chassis, engine, electronics and bodywork configuration. Material changes will need to be declared and approved, with appropriate component identification, sealing, documentation or other verification used where required.

The intention is to establish objective rules that can be measured and enforced consistently before and throughout the event, while providing competitors with an accessible process for technical queries and approval before travelling to the Isle of Man.

9. Longer-Term Development

The TT 2027 package is the first stage of a longer-term programme. It will be implemented without waiting for every wider engineering question to be resolved.

From 2027 onwards, further work will examine aerodynamics, vehicle dynamics, future chassis architecture, homologated bodywork, alternative engine packages and closer alignment with the wider Sidecar sport.

The regulations will then be reviewed using technical data, incident evidence, competitor feedback, participation, affordability and the experience of the 2027 event. This will inform the detailed direction for 2028, 2029 and the next generation of the TT Sidecar formula.

FREQUENTLY ASKED QUESTIONS

1. Engine and Control Electronics

What is changing for TT 2027?

The Sidecar class will move towards an engine and control-electronics framework aligned with the British Sportbike technical approach. This will replace the current approach with a more clearly defined production-derived engine platform and controlled electronics package.

Why has the TT chosen the Sportbike engine formula?

The Sportbike approach provides an existing, established and controlled technical framework based around modern production-derived engines from a range of manufacturers. Rather than creating a completely new TT-specific engine formula, it gives the Sidecar class a platform in which engine specification and performance can be more effectively controlled and which can evolve as new production machinery becomes available.

The change also recognises the changing motorcycle market. The traditional 600cc inline four-cylinder supersport platform on which Sidecar racing has relied for many years is becoming increasingly limited in terms of current production machinery and manufacturer development. Continuing to base the long-term future of the class around that platform therefore presents challenges around availability, cost and sustainability.

Moving towards the new generation of Sportbike engines provides access to a broader range of current production-derived power units and creates a technical platform capable of evolving as the motorcycle market changes.

Why move away from the existing 600cc four-cylinder engines?

The 600cc four-cylinder engine has served Sidecar racing extremely well, but the production motorcycle market has changed significantly. Fewer manufacturers are developing new motorcycles around the traditional 600cc four-cylinder supersport format, while a new generation of middleweight engines has become increasingly important within production-based racing.

The TT therefore needs to consider not only what works today, but what provides competitors with a viable engine platform for the years ahead. The move to the Sportbike framework is intended to put the class onto a more sustainable long-term technical footing while also allowing performance to be more effectively controlled.

Which engines will be eligible?

The detailed eligibility list will be confirmed in the 2027 TT Sidecar Technical Regulations. The intended framework includes modern production-derived engines such as those associated with machines including the Yamaha R7, Aprilia RS660 and Kawasaki Ninja 650, together with other eligible engines defined within the adopted technical framework. Competitors should wait for the final regulations before making purchasing decisions.

Will Balance of Performance be used?

Yes. A key feature of the new technical direction will be the ability to use Balance of Performance measures to achieve much closer performance equivalence between the different eligible engine configurations.

This is a significant change from the existing Sidecar formula. Historically, teams with the resources to invest heavily in engine development have been able to achieve a meaningful performance advantage.

The new engine regulations, combined with controlled electronics and appropriate Balance of Performance measures, are intended to substantially reduce that opportunity.

The objective is not necessarily for every engine to behave identically, but for competitors using different eligible engines to operate within a closely controlled overall performance envelope.

This should create a more competitive and accessible formula in which success is less dependent on the ability to fund extensive engine development.

What happens to the existing 600cc four-cylinder engines?

The direction for TT 2027 is a move away from the existing 600cc formula towards the new Sportbike-derived framework. The detailed regulations will confirm final eligibility and any transition arrangements. Teams should plan on the basis that the future technical direction of the TT Sidecar class will be based around the new platform rather than continued unrestricted development of the existing 600cc formula.

Is this simply being done to make Sidecars slower?

Reducing and better controlling outright performance is an important part of the change, but it is not the only reason. The intention is to establish a more controlled, sustainable and enforceable technical platform, with clearer limits around engine development and electronics.

The key objective is not simply to make Sidecars slower; it is to make the performance envelope more controllable, both for 2027 and in future years.

Why not simply restrict the existing 600cc engines?

Restricting the existing engines could provide a short-term reduction in performance, but it would leave the underlying technical formula largely unchanged and would not address the longer-term sustainability of the engine platform.

The chosen direction is intended to do both: reduce and better control performance for the immediate future while establishing a modern and sustainable engine and electronics platform for the class going forward.

Why not introduce a horsepower limit and allow teams to build whatever engine they want?

A simple peak horsepower figure does not necessarily control the overall performance characteristics of an engine or prevent development elsewhere in the operating range. A defined engine and electronics framework provides greater control over the whole technical package rather than relying solely on a maximum dyno figure.

Could larger-capacity engines produce more torque than the existing 600s?

Different engine configurations will inevitably have different power and torque characteristics. That is why the detailed regulations and controlled electronics are important. The objective is not simply to compare engine capacity or peak horsepower, but to establish and manage an appropriate overall performance envelope for TT Sidecar racing.

Why introduce a control ECU?

A control ECU gives the Technical Director significantly greater ability to manage and verify the performance of the class consistently. Moving to the Mectronik platform will provide a common electronics framework, reducing the scope for unrestricted electronics development and allowing permitted functions, mapping and other parameters to be clearly defined and controlled through the regulations.

Importantly, it also provides another mechanism through which the performance envelope can be managed in future without necessarily requiring major mechanical changes to competitors' machines.

What control electronics will be required?

The new regulations are intended to adopt the Mectronik control-electronics approach used within the Sportbike framework. The exact ECU specification, approved configuration, maps, permitted sensors, wiring and associated requirements applicable to TT Sidecars will be confirmed in the final Technical Regulations.

Will traction control or other electronic rider aids be permitted?

The precise functionality available through the control electronics will be defined in the full Technical Regulations. Competitors should not assume that every function technically available within the ECU will necessarily be enabled for TT Sidecar use.

Is the intention to make every eligible engine perform exactly the same?

No. Different engine configurations will naturally have different characteristics. The objective is to establish an appropriate overall performance envelope while retaining the opportunity for different manufacturers and engine configurations to compete. The detailed regulations will determine how performance equivalence is managed.

Will Balance of Performance be used?

The Sportbike approach provides mechanisms for managing performance equivalence between different engine and machine configurations. The precise method to be applied to TT Sidecars will be confirmed through the detailed technical regulations and by the Technical Director.

Isn't this going to cost teams money?

Any significant change of engine formula inevitably has cost implications, and the TT organisation recognises that. Cost and practical implementation are important considerations in developing the final regulations.

The longer-term objective is to create a more sustainable production-derived platform with controlled development, rather than allowing an escalating technical development race. Publishing the direction early is intended to give teams as much preparation time as possible.

Can teams start buying engines and electronics now?

Teams can begin assessing the implications of the announced direction, but should not make purchasing decisions based solely on the headline proposal. The detailed 2027 regulations will confirm eligible engines, specifications, electronics and compliance requirements.

Can competitors comment before the regulations are finalised?

Yes. Early publication is intended to allow competitors, constructors and other stakeholders to identify genuine practical or implementation issues. Feedback will help inform the detailed regulations and the practical introduction of the new package.

Is this just a TT 2027 measure?

No. The intention is to establish a sustainable future technical direction for the Sidecar class at the TT. TT 2027 represents the first phase. The regulations can then evolve as experience and data are gathered over subsequent years.

2. Sporting Format

What is the proposed commitment to Sidecar racing at the TT?

The TT intends to make a three-year commitment to the Sidecar class covering 2027, 2028 and 2029, with two Sidecar races scheduled in each year, subject to the normal regulatory, safety and event requirements.

Why make a three-year commitment?

The changes being introduced require competitors, teams and constructors to make decisions and invest in the future of the class. A three-year commitment provides greater certainty and demonstrates that the changes are intended to establish a sustainable future for Sidecar racing at the TT rather than simply provide a one-year return.

What will the race format be for TT 2027?

The proposed TT 2027 programme provides for two Sidecar races, with both races scheduled over two laps of the TT Mountain Course.

Why are the 2027 races being reduced to two laps?

TT 2027 will be the first year of a substantially revised Sidecar package, including changes to machinery, performance and other areas. Two-lap races provide an appropriately conservative starting point for the controlled return of the class while allowing the TT organisation to gather experience and data from the new package.

Does this mean Sidecar races will always be two laps?

No. The two-lap format is proposed for TT 2027. Race distances for 2028 and 2029 can be considered following experience of the new regulations and the first year of the class's

return. The intended three-year commitment is therefore to two Sidecar races each year rather than to a fixed race distance throughout the period.

Why have two races rather than return with a single race?

The intention is to make a meaningful commitment to the class. Two races provide competitors with a worthwhile TT programme and retain Sidecar racing as a significant part of the event, while the reduced two-lap distance provides a more conservative format for the first year of the new package.

Will Sidecars have sufficient qualifying and practice time?

The detailed TT 2027 schedule will provide appropriate practice and qualifying opportunities for the class. Full session arrangements will be confirmed as part of the final event schedule.

Will there be a minimum number of entries required?

The class needs to demonstrate a viable and competitive field. For planning purposes, an initial field of at least 20 competitive outfits would represent a credible foundation for the first year of the new programme. Final entry requirements and acceptance criteria will be confirmed through the normal regulations and entry process.

Is 20 outfits enough for a TT class?

TT 2027 should be considered the first year of a reset rather than the finished product. Competitors are being asked to respond to significant technical change within a relatively short period. The immediate objective is therefore to establish a viable, competitive field and successfully deliver the new format before developing the class through 2028 and 2029.

The ambition remains to strengthen both the size and depth of the field over the three-year period.

How will the success of TT 2027 be judged?

Success will not be measured simply by comparing TT 2027 with the Sidecar class of the past. The first year should be assessed across a range of areas including entry levels, successful sporting delivery, technical performance and reliability, the effectiveness of the performance-control measures, incident data, competitor feedback and the overall presentation of the class.

The objective is to establish a credible platform from which the class can develop.

Could the sporting format change during the three-year period?

Yes. The purpose of the three-year approach is to provide greater certainty around the presence and development of the class while allowing the sporting and technical package to evolve based on evidence and experience. Changes can therefore be considered for 2028 and 2029 where appropriate.

Does a three-year commitment guarantee that Sidecars will race regardless of circumstances?

No sporting event can provide an unconditional guarantee. Sidecar racing will remain subject to the same fundamental requirements as other TT classes, including safety, regulatory, operational, weather and other event considerations. The three-year commitment represents the TT organisation's intended strategic and sporting direction for the class.

What is the longer-term ambition?

The immediate priority for 2027 is to stabilise the class and successfully establish the new package. The objective through 2028 and 2029 is then to develop and consolidate it - strengthening the field, refining the technical regulations and sporting format, and establishing a competitive and sustainable Sidecar class with a clear long-term place at the Isle of Man TT.

3. Overall Rationale

What is the overall objective of the changes?

The proposed changes are intended to address the future of the Sidecar class as a complete package rather than through a single intervention. They combine performance control, a more sustainable engine platform, controlled electronics, a conservative first-year sporting format and a period in which the class can be evaluated and developed using real TT experience and data.

The aim for 2027 is not to recreate the Sidecar class of the past immediately. It is to establish a credible, competitive and sustainable platform from which the class can develop.