

THE BIGGEST REVOLUTION SINCE SUPER TOURING?

Derided when it was announced, the TCR concept might just be the biggest thing to happen in touring cars in 25 years. **Andrew Charman** finds out more

WHEN in mid-2014 news broke of an all-new touring car formula, to its own set of regulations and with a pyramid system progressing through national and regional series to an international championship running across the globe, the response from even the most experienced industry observers was sceptical.

Six months on and prospects for the TCR International formula, as the concept is now known, are looking more promising by the week. The International Series has unveiled a 12-round 2015 calendar, with three of its events – including the opening round – supporting Formula 1 grands prix. The series finale, meanwhile, is expected to be at the renowned November meeting in the Chinese colony of Macau, replacing the World Touring Car Championship on the programme. Meanwhile at national and regional level some five TCR series have already been announced, with another five expected to join in the next few weeks and more likely to follow.

In terms of cars, five manufacturers will definitely be represented on the grid. Three more will be announced in early February and others are showing serious interest.

So what factors have clicked to spark such an onrush of interest in an untried concept? The catalyst is a familiar name to anyone working in the touring car arena: Marcello Lotti, the enthusiastic Italian who in 2005 revived the European Touring Car

Championship and quickly transformed it into a successful world series.

Lotti parted company with World Touring Car Championship (WTCC) promoter Eurosport at the end of 2013 and is now CEO of WSC Ltd, promoter of the TCR concept. During a whistle-stop tour of countries looking to stage TCR events he dropped into the Autosport show in Birmingham, England, where Race Tech was able to hear in-depth about TCR and how it is going to work.

Lotti says that he first had the idea for TCR some six years ago, when he identified growing problems at the base level of the touring car pyramid – in some ways a similar situation to that at the time of the

creation of the Super Touring formula in 1990. However in 2008, Lotti was making headway with the European and then World Touring Car Championship, so he could not progress any of his ideas.

Fast-forward to the start of 2014, Lotti had just severed his ties with the WTCC, and was able to address a problem which he believed had become bigger year by year – the lack of an affordable touring car formula that could be adopted by national promoters. “I thought on leaving Eurosport I would improve my golf handicap,” he confesses. “My golf is now like Robin Hood, always in the trees, but I have many airmiles...”

The issue, Lotti believed, was the lack of a basic touring car formula: “There was not what the people need on the touring car scene, a basic series at national, affordable level”.

GT3 INSPIRATION

Lotti's resultant concept was originally called TC3 due to a number of similarities to the GT3 concept of customer cars being manufactured for teams to race on a ▶

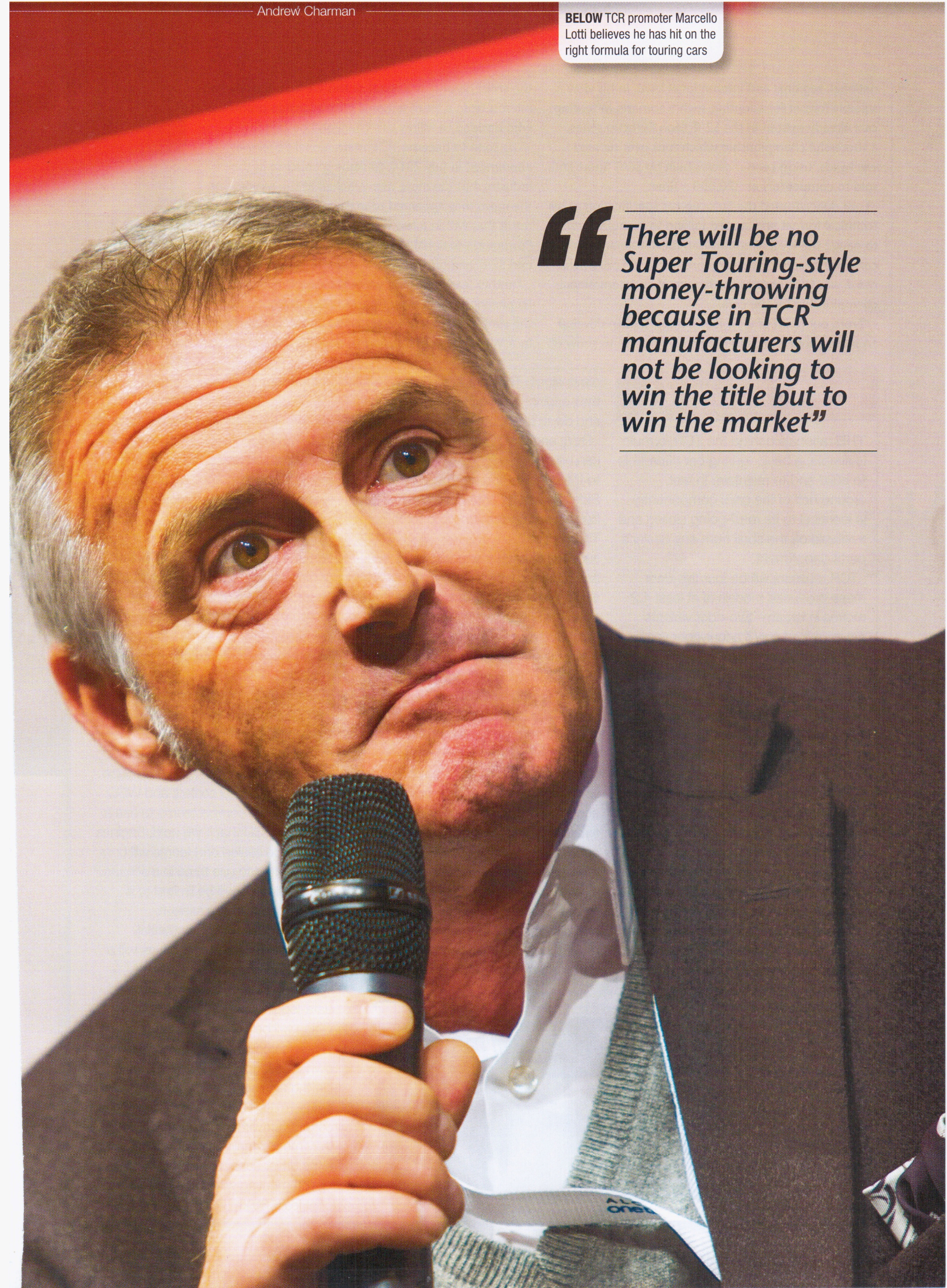


ABOVE So far only one bespoke TCR car has broken cover, the Honda Civic built by JAS

Andrew Charman

BELOW TCR promoter Marcello Lotti believes he has hit on the right formula for touring cars

“ There will be no Super Touring-style money-throwing because in TCR manufacturers will not be looking to win the title but to win the market”



national, regional and international level. In his view a suitable format for adopting such a scenario in touring cars already existed in the SEAT Leon Eurocup series, a successful championship which runs over six race weekends, using Leon racecars built by SEAT Sport and sold to competitors at €70,000 a time.

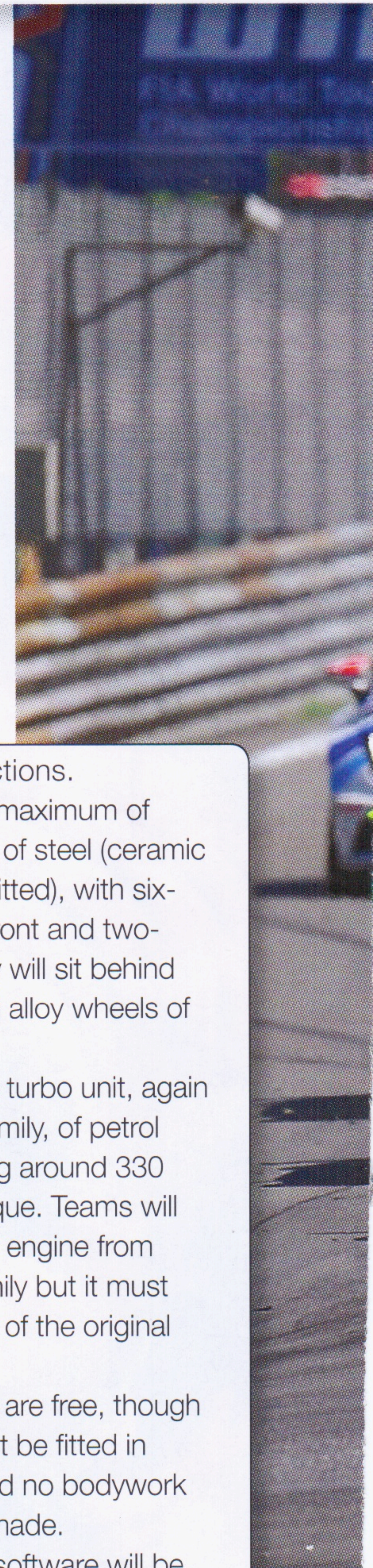
Lotti duly adopted the Eurocup car specification as his technical format and started talking to manufacturers to gauge the level of enthusiasm for developing such cars. The interest was clearly present, and Lotti's next move was to announce the launch of an international championship for the cars.

"From our point of view it was important to develop an international series to provide a platform to show off

the concept, and as a result of this we immediately had interest from a lot of national championship promoters who decided to follow this concept," he says.

The soon to become TCR International Series was announced in July 2014, to some scepticism in the industry, but the more many looked at the regulations, the more they appeared to make sense, with the result that within a few weeks an Asia regional and Portuguese national series had joined the TCR family and SEAT had offered official support to the concept.

Another 'early adopter' was UK-based Onyx Race Engineering, the former F1 and WTCC team, which at the start of 2014 had been denied an entry in the new-look WTCC by Ford refusing to homologate its car.



The TCR format

THE rationale behind the TCR formula is simple, a basic touring car affordable to build and to maintain. In fact, around half of the car's componentry is identical to its road-going sibling and available off the shelf from any dealer's parts department.

TCR racecars will be four/five-door mass-produced models of at least 4.2 metres in length – two-door variants are permitted only if a four-door version exists in the model family.

The car has to meet the FIA's Group A Touring Car homologation criteria, with much of its detailed makeup as per FIA Appendix J regulations, and it also has to be on an approved list created by TCR organiser WSC. This is to prevent various different models from particular manufacturers competing and producing great difficulty maintaining a fair balance of performance between them.

The shell is basically as the production model, and no titanium, magnesium or exotic alloys are permitted on the cars unless the production model uses them. Brackets and such like can be replaced with stiffer items but to the same

dimensions. The cars even have to retain their original door locks, hinges, handles and driver's window lifters.

Front and rear bumpers and front wings can be changed for new ones similar to the originals and approved by WSC. Side sills can be added, as can rear door bulges, arch extensions and liners.

The front splitters and rear wings will be supplied to each manufacturer by WSC and mounted as per FIA Appendix J. A single-plane rear diffuser of no more than 1650 mm width can be fitted between a point 380 mm behind the rear axle and the rear bumper, inclined at no more than 10 degrees, with a hollowed-out section for the exhaust.

Any chassis modifications will need approval from WSC. The bulkhead cannot be modified apart from to allow the gearbox linkage through, wheelarches can only be modified to accommodate the race wheels and tyres, and other areas of the shell to accommodate the exhaust.

Suspension turrets can only be strengthened without altering their layout. Suspension pickup points are free, so long as they do not require chassis modifications, with a maximum of plus or minus 20 mm

adjustment in all directions.

Brake discs will be a maximum of 380 mm diameter and of steel (ceramic materials are not permitted), with six-piston calipers at the front and two-piston at the rear. They will sit behind single-piece aluminium alloy wheels of 10 x 18 in.


The engine is a 2-litre turbo unit, again from the road-going family, of petrol or diesel and producing around 330 hp and 410 Nm of torque. Teams will be able to use another engine from the manufacturer's family but it must be fitted within 20 mm of the original mounting position.

Oil and water cooling are free, though the water radiator must be fitted in the original position and no bodywork modifications can be made.

No changes to ECU software will be permitted, the box sealed, and WSC will be able to compel teams to use a reference ECU that it will hold. Engines will also be sealed and teams will only be permitted to use three in a season. Similarly turbos will be limited to a maximum of five in a season.

Mass-production or sequential gearboxes will be permitted, as will a production limited slip differential.

All cars will carry a WSC-mandated data-logging system, the data from which will be at all times accessible to WSC scrutineers. Teams can use their own data loggers, but no telemetry. Driving aids such as traction control are not permitted unless the road-going car cannot run without them, in which case they must remain as per the original car – the driver cannot change any settings.

Each meeting will consist of two races of at least 60 km in length. 

RIGHT Onyx Race Engineering was one of the first to commit to TCR, intending to build at least 12 Ford Focus cars for the formula





SEAT

ABOVE Inspiration: the successfully revived SEAT Leon Eurocup championship provided Lotti with the basis for his TCR concept

Onyx quickly announced that it would commence a production run of between 10 and 20 Ford Focus cars for TCR. "It's clear that [TCR] can deliver exactly what it set out to deliver," said Onyx CEO Mike Earle. "It's sparked a lot of interest from major motor manufacturers, which is great because they all produce performance-orientated vehicles that can be used for the series."

Six months on Lotti finds himself at the start of 2015 steering a bandwagon which more and more promoters and brands are jumping on. Cars from SEAT, Honda, Volkswagen and Ford are expected on the first TCR International Series grid in Sepang, Malaysia at the end of March, with Opel joining in at some point during the season, its Astra OPC fitted with a kit to make it

eligible for the series.

According to Lotti three more manufacturers will announce their plans in early February. He won't offer any names but it is interesting to note that the 'eligible cars' pictured on the TCR website include the Alfa Romeo Giulietta QV and performance models from Audi, Nissan, Mercedes and Hyundai – some, like Nissan's Pulsar Nismo, yet to be launched on the road market.

WINNING THE MARKET

Mention of manufacturers, however, will have longer-term touring car observers, including this writer, thinking back to the final days of BTCC excess, when manufacturers threw millions at their teams in an elusive battle for victory, resulting ▶

Balance of Performance

EACH car model will have a technical form issued for it by WSC at the start of each season, with all its mandated figures included, and WSC will maintain a balance of performance between each competing brand over the season.

This will be achieved by altering ride height (10 mm below or 20 mm above the standard 80 mm), adding weight penalties of up to 70 kg over the target minimum weight including driver of 1,260 kg, and decreasing the diameter of the turbo air restrictor by five or 10 per cent. Lotti expects to be making changes possibly round by round in the early stages of the series but later on a three-to-four round basis.

Success ballast will also be a part of the series, plain blocks fitted in the cockpit or boot. It will be decided on a meeting-by-meeting basis, the best-performing driver at the previous meeting penalised by 30 kg, second by 20 kg and third by 10 kg. **RT**

in the championship imploding. TCR is very different, however.

The concept is a pyramid. It enables a driver if they wish to progress from national through regional and into the International series, using the same basically production car culled from performance models offered in a manufacturer's road-going range – the Honda Civic Type-R, VW Golf GTI or Focus ST, for example.

Only one model from each manufacturer will be authorised across the entire TCR spectrum and the racecars will either be developed by the manufacturers, as in the case of the SEATs produced by SEAT Sport, or authorised by the manufacturers and produced by a single constructor. The Ford Focus TCR cars are all being built by Onyx, while the Honda Civics are being built by well-known Honda competition specialist JAS.

"It has to be on one model for each brand, otherwise it will be very difficult to develop what we do," Lotti says. "If you give the regulations to individual teams and they each create their own cars, then you have 10 different cars to the rules and you cannot create a balance of performance."

TCR maintains a list of eligible cars, and to get on it a manufacturer – or constructor – has to prove to Lotti that it can build and maintain at least 10 cars, within the cost parameters. "If someone comes to me wanting to develop a car that is not in our approved list, say for example an MG, I will say yes, they can do it, so long as they can show to me that they can develop the car and produce it for customers."

He is confident that there will be no

Super Touring-style money-throwing because in TCR manufacturers will not be looking to win the title but to win the market – selling more cars and the spare components that go with them, the majority of which will be the same as on the road-going car (see panel).

"I'm confident of maintaining the cost basis – this is one of the prime points," says Lotti. "If you win the championship within our balance of performance but with a car that costs €40,000 more than all the others, you won't sell one of them – maybe one to a billionaire. If your car costs so much more it makes no sense in terms of

customer business to develop it, and this will help us keep costs in control."

He also believes that TCR can expand beyond its current profile to actually influence the direction of manufacturer motorsport programmes, and quotes the example of Renault. "The Megane competes in Renault's Trophy Series – there will be a new car in 2016, so it makes no sense to try to bring them into TCR now. But it would make sense for Renault to build its post-2016 Trophy car to our concept, as then they will be able to sell cars to race in both the Megane Trophy and TCR." ▶



Alfa Romeo

ABOVE & BELOW The Alfa Romeo Giulietta QV and Nissan's yet-to-be-launched Pulsar Nismo are seen by Lotti as perfect examples of the type of car that should be in his series



Nissan

AHEAD OF THE GAME

The TCR formula gained FIA approval at the December 2014 meeting of the motorsport governing body's World Council, the same meeting that saw the FIA approve its own regulation template for national touring car series.

A working group led by FIA Touring Car Commission president Alan Gow had spent several months studying national formulae, as detailed in Race Tech 165, before deciding on a two-tier format. The upper TCN-1 category is based upon the British Touring Car Championship's NGTC regulations, and the more production-based TCN-2 adopts the regulations of the Argentinean Turismo Nacional Championship.

Growing numbers of observers, however, feel that while the FIA has been making its study, Lotti has already done the job for it in creating TCR. Certainly national promoters seem to think so: the TCR Asia Series was


announced within weeks of its International sibling, and has been followed by series in Italy, Portugal, Benelux and perhaps remarkably the USA. Spain, Thailand, Russia, the Dominican Republic, and China are set to announce their own series in the next few weeks and there is further interest elsewhere, notably in Central America.

Some of these will run as promotional categories in their first season, others as classes in existing series – for example TCR China will at least initially be part of the Chinese Touring Car Championship. But there is growing evidence of the enthusiasm for TCR.

Lotti describes the British Touring Car Championship as "legendary" and adds that the UK does not need anything from elsewhere – there would be no sense in trying to run a TCR UK series. He doesn't comment on the suitability or otherwise of the BTCC's NGTC regulations for adoption by national series around the world, but feels TCR has no reason to feel any guilt.

"All national federations have a right to decide what they want to do at a national level; all promoters can decide what they want to follow," Lotti says. "We didn't go with a gun to national promoters saying: 'You have to follow me'. If someone outside the UK was waiting to do their own BTCC – well they had the right to do it before the FIA allowed them to.

"Our idea (for a touring car championship) was not against theirs because when we launched ours their idea was only in the mind, not on paper. We launched our idea into empty space."

It is still early days for TCR. With less than a month to go to the first planned test, at which the balance of performance criteria between the different cars will be set, only one bespoke TCR car – the JAS-built Honda Civic – has been seen in the metal. But clearly the momentum is very much with TCR. The biggest touring car revolution since Super Touring? It just might be... 

BELOW The TCR series finale could replace the World Touring Car Championship at the Chinese colony of Macau, one of the jewels in motorsport's crown

