



## FIA WTCC 2007

World Touring Car Championship

# **FIA WTCC 2007.**

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# 1. Still in pursuit of BMW and Andy Priaulx.



## **BMW enters another WTCC season as title defender.**

The FIA World Touring Car Championship (WTCC) 2007 presents a familiar picture: as BMW and Andy Priaulx (GBR) of the BMW Team UK step up to defend their titles, they are once again hoping to make their mark on this year's world championship. Since the top-class touring car championship began, BMW has managed to keep its copybook unblotted: when the race series started in 1987, it was the BMW driver Roberto Ravaglia (ITA) – currently team boss at BMW Team Italy-Spain – who won. Then, 18 years later, the relaunch of the series in 2005 saw Priaulx take WTCC victory. The year before that the Guernsey-born driver reaffirmed his exceptional talent with a European Championship title win, but he also raised the bar yet again in the WTCC 2006, when a total of five race victories earned him his second world championship title in succession.

“Successfully defending a world championship title is always an outstanding achievement”, says BMW Motorsport Director Mario Theissen. “Including his European championship title in 2004, Andy Priaulx has won three drivers’ titles in succession with BMW. That’s an impressive performance. The fact that three more BMW drivers also managed at least one victory each is clear confirmation that the BMW 320si WTCC was competitive from its first year of racing. This year we are once again the object of pursuit – but that is a challenge we will gladly take. We are aiming to end another final event in Macau celebrating – not only the driver’s title, but also the manufacturers’ title, which is top priority for BMW.”

In the WTCC manufacturers’ championships to date, BMW has had the measure of all its competitors. Back in 2005 the BMW 320i sent the Munich car producer to the top of the manufacturers’ rankings. After handing numerous BMW drivers success around the world it eventually celebrated its retirement from racing and the race debut of its successor, the BMW 320si WTCC, was eagerly awaited. The BMW 320si WTCC is a BMW Motorsport development based on the production version of the same name. A winner from the start, it took Priaulx from pole to victory in Monza in the first race of 2006, and en route to the manufacturers’ title the BMW national teams notched up ten further triumphs throughout the season.

**In the cockpit: the top three from last season and two rookies.**

As they set out on their mission to defend the championship title, the BMW national teams will be counting on a promising blend of experience and talent at the wheel of their BMW 320si WTCC cars. Once again Priaux will be heading the line-up for BMW Team UK – RBM under team boss Bart Mampaey (BEL). After conceding victory to Priaux by just one point in 2006, Jörg Müller (from Hückelhoven, Germany) will be representing BMW Team Germany – Schnitzer Motorsport. Working under the auspices of team boss Charly Lamm (from Freilassing), Müller is the only German pilot in this year's WTCC. He is currently on the team for the sixth season in succession, but has a new member of the BMW family at his side in this year's fight for world championship points: Augusto Farfus (BRA). Having ended the previous season third in the drivers' championships, the 23-year-old pilot is widely regarded as one of the biggest talents in touring car racing.

BMW Team Italy-Spain – ROAL Motorsport will also be contributing to the overall success of BMW by sending a seasoned racer and a rookie into the contest. Alessandro Zanardi (ITA), a familiar face, will be joining the line-up in a specially converted BMW 320si WTCC. After losing both legs in an accident in 2001, the 40-year old made an impressive comeback to motorsport with BMW. At the start of the 2007 season he already has two victories under his belt. His new team-mate is 23-year-old Félix Porteiro (ESP) who joins the WTCC from the GP2 series.

"In 2007 we will be offering an interesting combination of an abundance of touring car experience and some up-and-coming young talents", says Theissen, detailing the situation. "The three best placed drivers of the last season are now entering the contest for BMW. Alessandro Zanardi has also proved he has got what it takes to win and we are convinced that Félix Porteiro will settle in well to the WTCC. This constellation of drivers makes it all very exciting. Our competitors will be doing all they can to stop BMW from winning the title, but the title is exactly what we want to achieve."

**Precision work on the BMW 320si WTCC.**

In line with Super2000 race regulations the engineers from BMW Motorsport have worked on improving some details on the 2006 championship car. Enhancements include a revised transmission, the integration of new cooling components and a newly developed lambda controller. The reliability of the 275 hp engine has also been increased further, as this season it now has to survive four races.

The BMW 320si WTCC achieved tremendous success in 2006, its world championship debut year. But this has evidently not been the sole reason for its great appeal among customer teams around the world: by February of this year alone, 41 racing kits had been sold to private teams by BMW Sales Race Parts. Priced at €198,000 the kits can take privateers into the fight for victory in the WTCC and in eight national series around the world.

### **Race calendar promises top-class touring car events.**

“The World Touring Car Championship is still enjoying a rise in popularity”, says Theissen, with the two additional races on this year’s race calendar in mind. “The WTCC needs to become even more widely known and has to present itself to motorsport fans even better. The races are extremely exciting and really spectacular. We welcome the idea of competing in more races on some demanding city circuits.”

The 2007 race calendar comprises eleven venues in total. As well as two overseas locations in Curitiba (BRA) and among the crash barrier ravines of Macau (CHN), races will be hosted by a number of traditional circuits across Europe. Among those celebrating their WTCC debut this year are the city circuits of Pau (FRA) and Porto (POR). Also new on the schedule this year are Zandvoort (NLD) and Anderstorp (SWE). The former will be the venue for the start of the European leg of the tour, which scheduled for 6 May. The rest of the programme promises plenty of variety with Valencia (ESP), Brno (CZE), Oschersleben (DEU), Brands Hatch (GBR) and Monza (ITA) all putting their own demands on drivers.

### **New race format, lighter loads.**

As in previous years the WTCC will be running two races of 50 km each per race weekend. Sunday schedules are now less tight, with race one due to start at midday local time wherever possible. The lights will go green for race two at 15.30 hrs. From 2007, Race 1 will see a “rolling” start, Race 2 is started using a standing grid formation. Meanwhile a range of interesting additional events will be on the schedule to entertain spectators between races.

The WTCC programme at Oschersleben, for example, includes two Formula BMW Germany races.

In terms of race regulations, this year sees some changes. Maximum ballast weights, calculated on the basis of the drivers’ results over a weekend and on the number of points won, previously stood at 80 kg. Regulations now stipulate a new upper limit of just 60 kg to add to the cars. But even so, the World Touring Car Championship can hardly be more exciting than it was last year, when nine drivers were still in the running for the title up to the last race of the season in Macau.

### **Focus on team spirit and fitness.**

After the start of the season in Brazil the BMW national team drivers will be in Munich for a week of fitness and team-building from 18 to 23 March 2007. There they will undergo medical checks and thorough training at the BMW Backup-Center. They will also join a range of activities designed to help them develop as a team and prepare together for the season ahead. While in Munich, the driver quintet will have the opportunity to watch and help BMW Motorsport engineers and mechanics as they work on the cars. In addition, a high ropes course will provide a test of courage, giving drivers the opportunity to hone their powers of concentration at dizzying heights.

Also on the programme during the week of fitness and team-building are some useful lessons by experienced trainers, designed to help pilots maintain and improve their standards of physical fitness. Each driver will be given dietary advice and a personal training plan, as well as useful tips and ideas on keeping fit on the track and on how to prepare mentally for the races.

One particular highlight awaits the drivers at the end of the programme. Out on the race track it is normally they who demand top performance from the four-cylinder units in their BMW 320si WTCC. But the end of the week's training will see the tables turned as the BMW's Munich headquarters pushes the drivers to their limits. Known as the "BMW four-cylinder" block, the building provides the setting for a stair race in which drivers will be running up 22 storeys.

## 2. Dates and TV coverage.



<b>Date</b>	<b>Race</b>	<b>TV transmission (CET)</b>	
		<b>Race 1</b>	<b>Race 2</b>
11 March	Curitiba, Brazil	16.00 hrs	19.00 hrs
06 May	Zandvoort, Netherlands	11.45 hrs	15.15 hrs
20 May	Valencia, Spain	11.45 hrs	15.30 hrs
03 June	Pau, France	11.45 hrs	15.30 hrs
17 June	Brno, Czech Republic	11.45 hrs	15.30 hrs
08 July	Porto, Portugal	11.45 hrs	15.15 hrs
29 July	Anderstorp, Sweden	12.00 hrs	14.15 hrs
26 August	Oschersleben, Germany	11.45 hrs	15.30 hrs
23 September	Brands Hatch, UK	11.45 hrs	15.30 hrs
07 October	Monza, Italy	11.45 hrs	15.30 hrs
18 November	Macau, China	04.00 hrs	05.00 hrs

Press information on all race weekends and non-copyright photos for press purposes are available at [www.press.bmw.com](http://www.press.bmw.com)

The following reports will also be available:

Preview – Monday before the race

Qualifying report – Saturday

Race report – Sunday

Analyses and general information on the championship are available at [www.bmw-motorsport.de](http://www.bmw-motorsport.de) and at [www.fiawtcc.com](http://www.fiawtcc.com)

Detailed reports on FIA WTCC race weekends will be transmitted by the European television broadcaster EUROSPORT, which will provide live coverage of all 22 races.

The TV rights for the FIA WTCC are distributed by EUROSPORT and are available for national terrestrial broadcasters as well as international cable and satellite networks.

Contact (TV and Radio):  
EUROSPORT – Antonios Argyropoulos  
Email: antonios@eurosport.com  
Telephone: (+33) 1 40 93 85 17

EUROSPORT will broadcast the following items every race weekend:

Saturday:	Qualifying (30 minutes) News-feed, qualifying (4 minutes)
Sunday:	Race 1 (60 minutes) Race 2 (60 minutes) News-feed, race (4 minutes) WTCC Magazine (26 minutes)

BMW is also compiling detailed TV footage of the FIA WTCC 2007.  
If you are interested in this material, please contact:

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### 3. Circuits.



#### **WTCC 2007 race calendar more varied than ever.**

World class racing drivers and impressive cars are not the only things that give the World Touring Car Championships its particular edge: the fascination of the series is heightened by the eleven circuits providing the backdrop for this year's WTCC action. The race schedule for 2007 includes tried and tested Formula 1 circuits like the one in Monza, as well as spectacular city circuits like Macau, Pau and Porto.

Eagerly awaited, the opening races of the last two WTCC seasons took place in Monza. However, this year sees BMW start its title defence overseas, with the first two fixtures for 2007 set to take place in Curitiba (BRA) on 11 March. Perhaps more than anyone else it is Augusto Farfus, the new BMW works driver, who is most looking forward to the event: the inaugural race takes place on his home ground and marks his debut in the BMW 320si WTCC.

Compared with previous years, the WTCC 2007 has a number of other changes in store, with four new circuits now on the calendar for the first time. The first of them is Zandvoort (NLD), where the World Touring Car Championship begins the European leg of its tour. The WTCC will also be making its first visit to Sweden, where the seventh race weekend is set to take place in Anderstorp (SWE).

At the beginning of June the BMW national teams will be off to Pau (FRA) to see how they measure up on an urban circuit steeped in tradition. Motorsport fans in Porto (POR) also have plenty of WTCC action to look forward to, as the city's Circuito da Boavista hosts races eleven and twelve of the series. And then of course, there are the old familiars – Valencia, Brno, Oschersleben, Brands Hatch and Monza, which were among the WTCC race venues for 2006.

The race on 18 November will probably be the deciding fixture that determines whether Andy Priaulx can hang on to his world championship title for the third time in succession or whether another BMW driver will follow in his footsteps. On that day the drivers will be lining up for races 21 and 22, the final events of the season, at the Guia Circuit in Macau. As in previous seasons, the race series ends with the biggest challenge of the year.

The next few pages provide more information on the eleven circuits of the FIA WTCC 2007 season.

### **Curitiba, Race of Brazil – Races 1 and 2.**

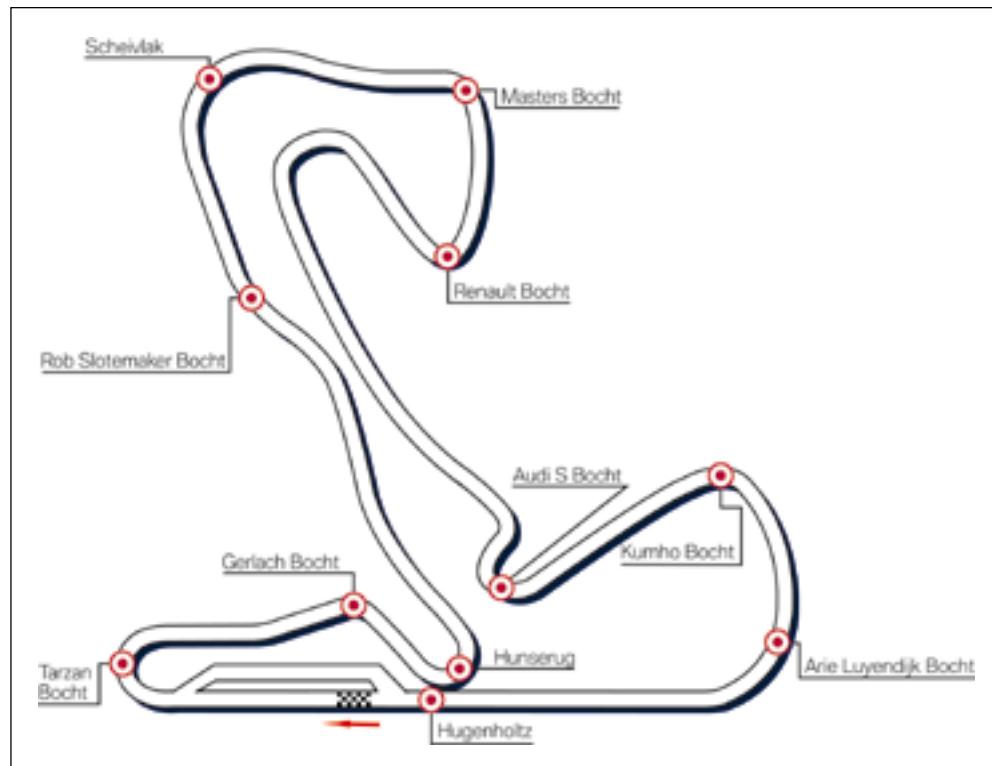


Circuit:	Autódromo Internacional de Curitiba
Lap distance:	3.695 km
Number of laps:	14 (51.73 km)
Website:	<a href="http://www.fiawtcccureitiba2006.com.br">www.fiawtcccureitiba2006.com.br</a>
Winners in 2006:	Jordi Gené (SEAT), Andy Priaulx (BMW)
Pole time 2006:	1:24.761 minutes, Augusto Farfus (Alfa Romeo)
Fastest lap 2006:	1:25.604 minutes, Jordi Gené (SEAT)

BMW works driver Augusto Farfus on Curitiba:

“Of course it is really special for me to be starting my work for BMW in my home town of all places. I am really looking forward to it. Curitiba is a fairly fast circuit, which basically suits my driving style very well. I wasn’t on pole there for nothing in 2006. The S bend in the middle section of the track presents a particular challenge. But the Esse de Baixa is less fun, because the surface there was extremely bumpy last year. All the same, I am optimistic that we will make a good go of it as we start the season.”

## **Zandvoort, Race of Netherlands – Races 3 and 4.**

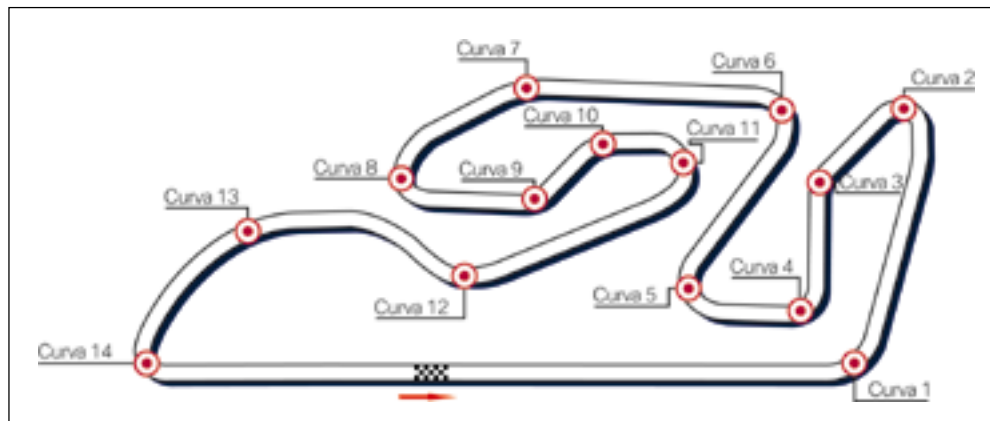


Circuit:	Circuit Park Zandvoort
Lap distance:	4.320 km
Number of laps:	12 (51.60 km)
Website:	<a href="http://www.circuit-zandvoort.nl">www.circuit-zandvoort.nl</a>
Winners 2006:	not scheduled in 2006
Pole time 2006:	not scheduled in 2006
Fastest lap 2006:	not scheduled in 2006

BMW Team UK's boss Bart Mampaey on Zandvoort:

"We know the Circuit Park Zandvoort from previous years when we tested the BMW 320i there a few times, but we have never driven the long distance version of the Zandvoort track in the new car and on Yokohama tyres. I expect the spectators in the Netherlands will give us a fantastic welcome. The circuit has good characteristics and is very demanding, so we are going to have some fabulous races there with plenty of opportunities to overtake."

## Valencia, Race of Spain – Races 5 and 6.



Circuit:	Circuit de la Comunitat Valenciana Ricardo Tormo
Lap distance:	4.005 km
Number of laps:	13 (52.07 km)
Website:	<a href="http://www.circuitvalencia.com">www.circuitvalencia.com</a>
Winners 2006:	Augusto Farfus (Alfa), Jörg Müller (BMW)
Pole time 2006:	1:44.534 minutes, Augusto Farfus (Alfa Romeo)
Fastest lap 2006:	1:45.024 minutes, Jordi Gené (SEAT)

BMW Team Italy-Spain's driver Félix Porteiro on Valencia:

"Valencia is a difficult track because there are so many different types of bends to get around. You have to keep your concentration levels up and you can't afford to make any errors. I know the circuit really well, because my home town of Castellón is just 60 km away. But a lot of other drivers also know the circuit because they do a lot of testing there. My family and many of my friends will be there to watch the race – and I want to put on a really good show for them if I can."

## **Pau, Race of France – Races 7 and 8.**

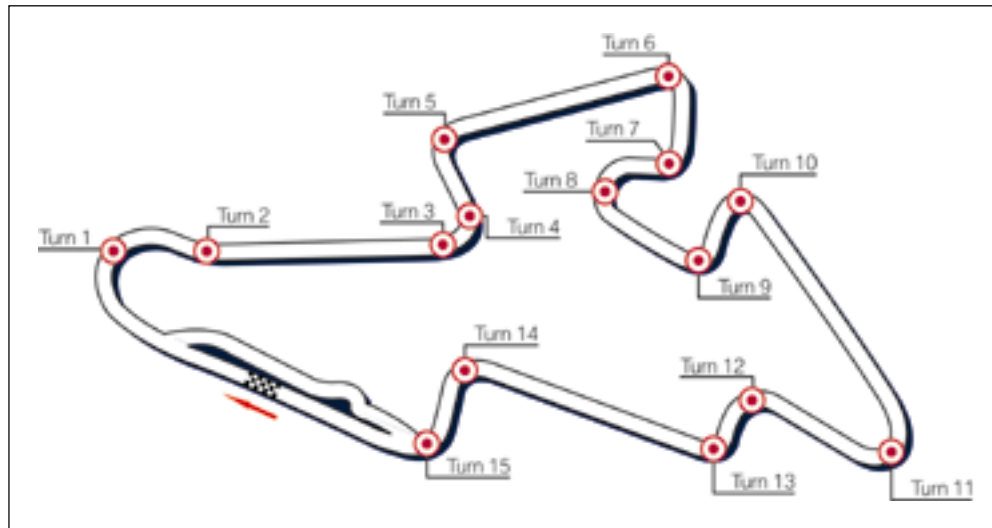


Circuit:	Circuit de Pau
Lap distance:	2.760 km
Number of laps:	19 (52.44 km)
Website:	<a href="http://www.asac-bascobearnais.asso.fr">www.asac-bascobearnais.asso.fr</a>
Winner 2006:	not scheduled in 2006
Pole time 2006:	not scheduled in 2006
Fastest lap 2006:	not scheduled in 2006

BMW Team Germany's driver Jörg Müller on Pau:

"It has been a long time since I last drove Pau. It was back in 1996, when I won the Formula 3000 race at my first go. I still remember how Kenny Bräck and I managed to lap all the other drivers. He was in second place at the time. The circuit will be good for the touring cars. It crosses kerbstones at various points, which is unusual for a city circuit, so the set-up of the brakes and suspension will be important. Apart from that it is a typical city circuit, narrow with crash barriers on each side of the track. In terms of speed it ranks somewhere between the very fast circuit in Macau and the slower one in Porto."

## **Brno, Race of Czech Republic – Races 9 and 10.**



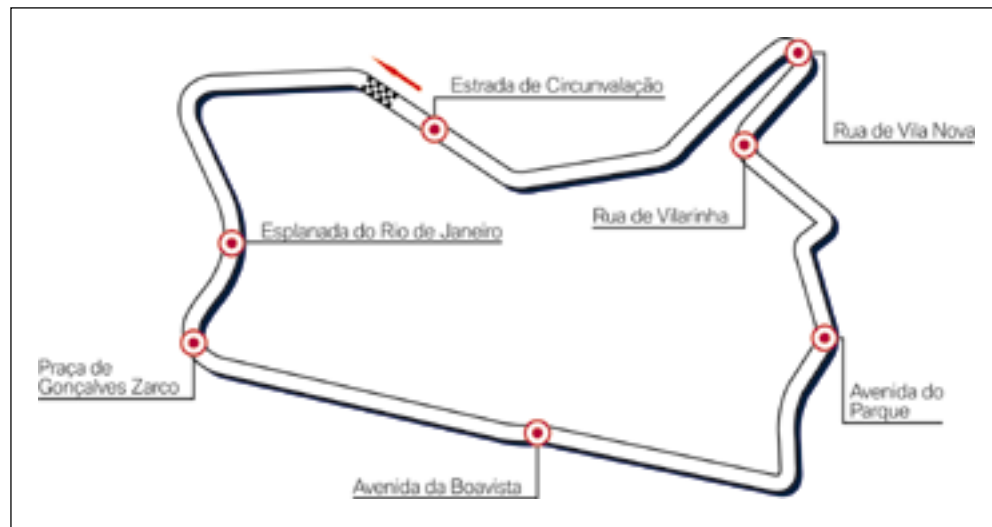
Circuit:	Automotodrom Brno
Lap distance:	5.403 km
Laps:	10 (54.03 km)
Website:	<a href="http://www.automotodrombrno.cz">www.automotodrombrno.cz</a>
Winner 2006:	Jörg Müller (BMW), Robert Huff (Chevrolet)
Pole time 2006:	2:12.286 minutes, Gabriele Tarquini (SEAT)
Fastest lap 2006:	2:13.809 minutes, Robert Huff (Chevrolet)

BMW Team Germany's driver Jörg Müller on Brno:

"Brno is probably not my favourite circuit, but it is still one of the nicest ports of call in the WTCC. I first drove there in 1988 in the Formula Ford series.

The way the circuit is set into the landscape is impressive. It has a lot of uphill and downhill stretches which are great to drive, and the surface is very level, so you can go into the race with a firmer set-up for the car. It also features a lot of opportunities to overtake."

## Porto, Race of Portugal – Races 11 and 12.

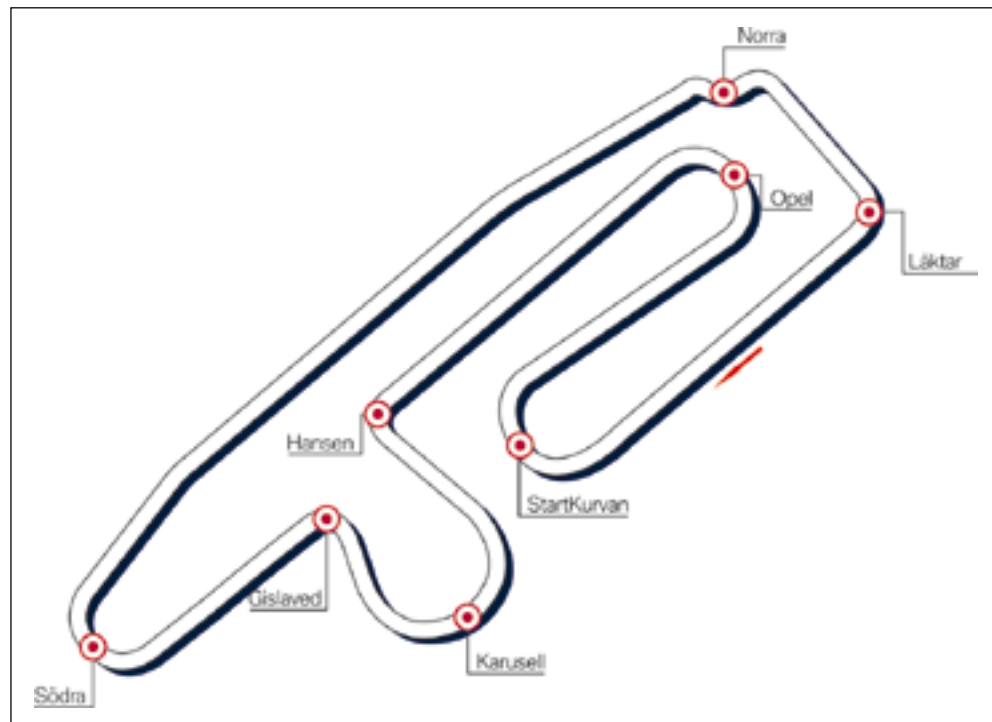


Circuit:	Circuito da Boavista
Lap distance:	4.700 km
Number of laps:	11 (51.70 km)
Website:	<a href="http://www.circuitodaboavista.com">www.circuitodaboavista.com</a>
Winner 2006:	not scheduled in 2006
Pole time 2006:	not scheduled in 2006
Fastest lap 2006:	not scheduled in 2006

Bart Mampaey, boss of BMW Team UK, on Porto:

"I am really glad that with Andy Priaulx we have one of the best city circuit drivers in the world on our team. Alongside Pau and Macau, Porto is another circuit which demands particular skill on the part of the driver, as he has to keep driving error-free even in very tight conditions. The course is the slowest of the three city tracks on the schedule this year. It has one long straight, which is Avenida da Boavista, and lots of tight bends. I am all in favour of taking motorsport straight into the heart of the big metropolises."

## **Anderstorp, Race of Sweden – Races 13 and 14.**

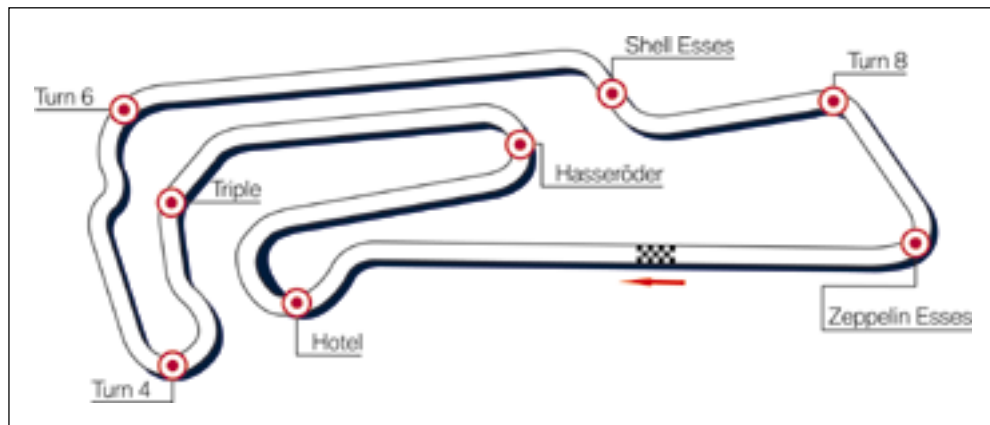


Circuit:	Scandinavian Raceway
Lap distance:	4.025 km
Number of laps:	13 (52.32 km)
Website:	<a href="http://www.scandinavianraceway.info">www.scandinavianraceway.info</a>
Winner 2006:	not scheduled in 2006
Pole time 2006:	not scheduled in 2006
Fastest lap 2006:	not scheduled in 2006

Charly Lamm, team manager for BMW Team Germany, on Anderstorp:  
“The World Touring Car Championship will be starting a Swedish race for the first time this year. For a race series to break into uncharted territory is always really special, although this circuit is not completely new to us. In 2002 Jörg Müller won a race for us in the European championship, but since then so much has changed that all the teams are really just starting from scratch. The circuit has a long tradition and hosted six Formula 1 Grand Prix in the seventies. The layout has a characteristic straight that is extremely long and a winding infield.”



## **Oschersleben, Race of Germany – Races 15 and 16.**

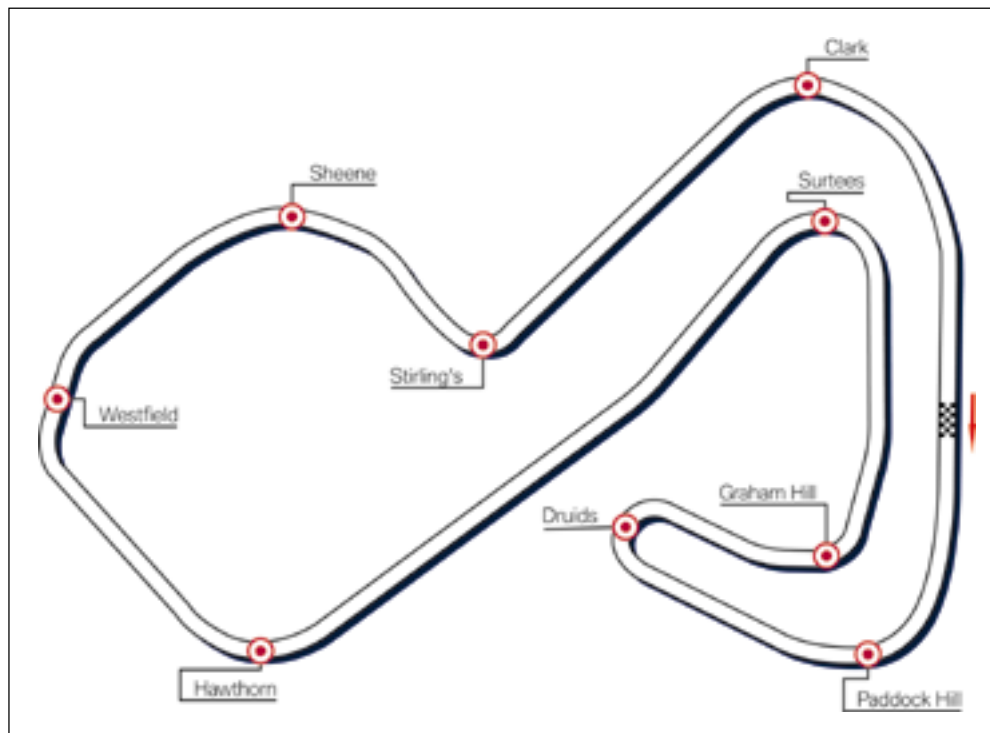


Circuit:	Motorsport Arena Oschersleben
Lap distance:	3.667 km
Number of laps:	14 (51.34 km)
Website:	<a href="http://www.motorsportarena.com">www.motorsportarena.com</a>
Winner 2006:	Andy Priaulx (BMW), Jörg Müller (BMW)
Pole time 2006:	1:35.661 minutes, Andy Priaulx (BMW)
Fastest lap 2006:	1:33.749 minutes, Augusto Farfus (Alfa Romeo)

BMW Team Germany's driver Jörg Müller on Oschersleben:

"Oschersleben is a fantastic circuit, especially for the spectators. Friends of mine who watch me race there every year say they love the way you can see right across the whole course. It is one of the slower circuits on the race calendar. Two years ago I was battling it out in some great duels with Alessandro Zanardi, who had his first win there that year. I made it to the top of the podium in 2006. Winning on home ground is just a really special feeling for any driver."

## **Brands Hatch, Race of United Kingdom – Races 17 and 18.**

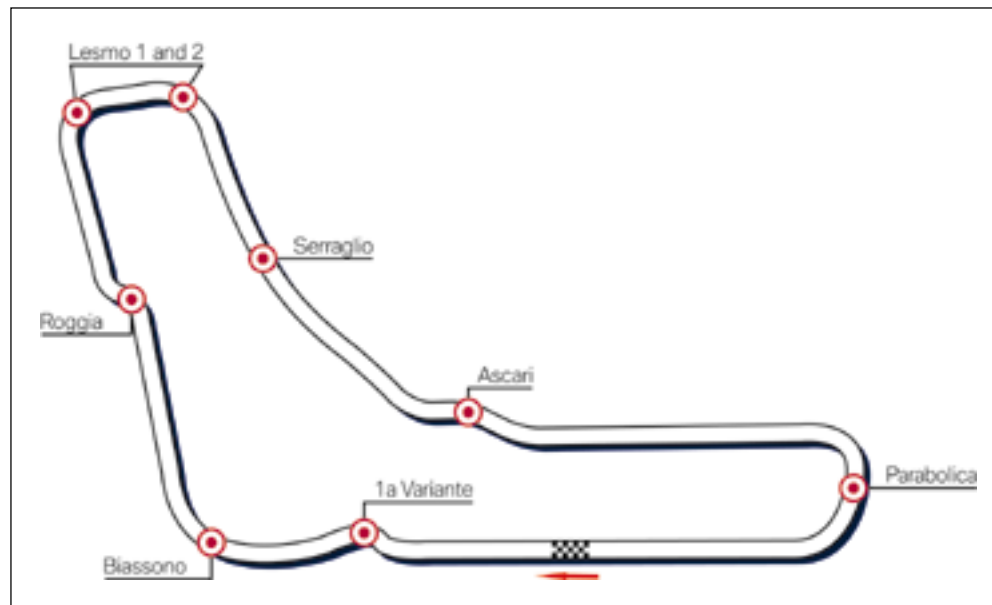


Circuit:	Brands Hatch
Lap distance:	3.703 km
Number of laps:	14 (51.84 km)
Website:	<a href="http://www.motorsportvision.co.uk">www.motorsportvision.co.uk</a>
Winner 2006:	Yvan Muller (SEAT), Alain Menü (Chevrolet)
Pole time 2006:	1:34.493 minutes, Rickard Rydell (SEAT)
Fastest lap 2006:	1:41.572 minutes, Peter Terting (SEAT)

BMW Team UK's driver Andy Priaulx on Brands Hatch:

"Brands Hatch is like a mini Nürburgring. The course is really tight and quite uneven, which means you need a very variable set-up. As a driver you have to be prepared for bends of all sorts. Trying to set the car up perfectly is a pretty complicated business, but the circuit is great to drive on. It is fast and does not have many run-off areas, which makes it all the more interesting."

## Monza, Race of Italy – Races 19 and 20.

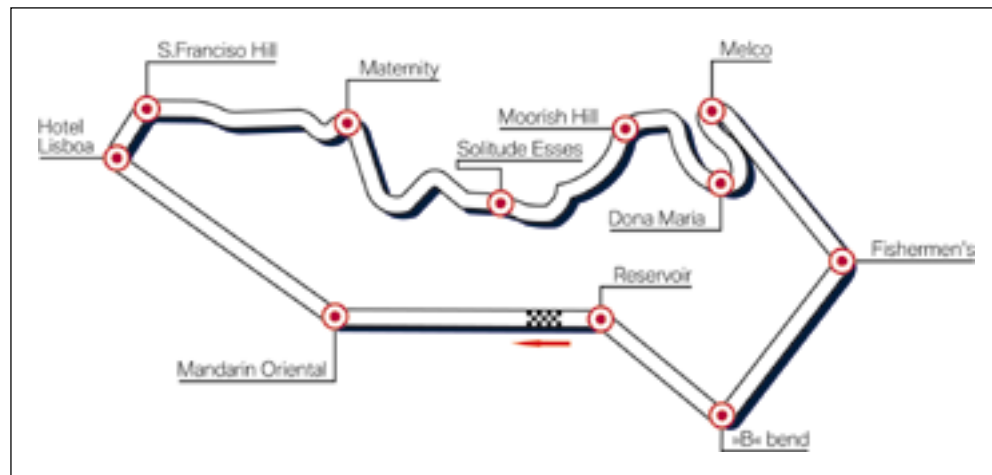


Circuit:	Autodromo Nazionale di Monza
Lap distance:	5.770 km
Number of laps:	9 (51.93 km)
Website:	<a href="http://www.monzanet.it">www.monzanet.it</a>
Winner 2006:	Andy Priaulx (BMW), Augusto Farfus (Alfa)
Pole time 2006:	2:00.254 minutes, Andy Priaulx (BMW)
Fastest lap 2006:	2:02.176 minutes, Gabriele Tarquini (SEAT)

BMW Team Italy-Spain's driver Alessandro Zanardi on Monza:

"Driving in Monza is a lot of fun – not just because it is my home circuit. The course is incredibly fast and very demanding, and it is really important to find the right braking points there. Race drivers are like fishermen who are into catching the biggest fish. For us the deciding factor is who brakes a few meters later. The thing I don't like about Monza is the fact that slipstream driving has such a big effect. A good slipstream is not easily balanced out by a driver's skills on the track."

## Macau, Race of Macau – Race 21 and 22.



Circuit:	Guia Circuit
Lap distance:	6.117 km
Number of laps:	9 (55.05 km)
Website:	<a href="http://www.macau.grandprix.gov.mo">www.macau.grandprix.gov.mo</a>
Winner 2006:	Andy Priaulx (BMW), Jörg Müller (BMW)
Pole time 2006:	2:33.318 minutes, Andy Priaulx (BMW)
Fastest lap 2006:	2:34.249 minutes, Alain Menü (Chevrolet)

BMW Team UK's driver Andy Priaulx on Macau:

"Macau is one of the fastest city circuits in the world, which is something you notice in a touring car as well. I like the character of the bends – pure acceleration. They have tight exits so it is all too easy to drive in too fast and exit with one wheel in the air. The track is also very uneven and has inclines to the side. But the thing I like most about Macau is what I call the bob run in section 2, where it gets really tight and bumpy and you find yourself moving with the car from left to right – it's a bit like being in a bob. You need a very good car and a lot of self-confidence to be quick on this circuit."



## 4. Drivers.

### **Andy Priaulx (GBR) – Car number 1.**

Throughout the history of motorsport certain drivers have shaped entire eras and proved their talent by winning a whole series of titles. In international touring car racing Andy Priaulx is certainly one of them. Following his triumph in the European Touring Car Championship 2004 the achievements of the 32-year-old were honoured with world championship titles both in 2005 and in 2006.

There are several reasons for this impressive dominance of the two-times world champion. Priaulx clearly benefits from the strength and togetherness of the BMW Team UK – RBM, which he has been representing since 2003. But the racer from the Channel Island of Guernsey is also a man of exceptional talent, which he regularly translates into excellent results out on the track. His achievements on the legendary city circuit through Macau are a testimony to his skill, and both of his world championship title wins involved him standing his ground on what has to be the most demanding circuit on the WTCC race calendar.

In the 2005 season Priaulx laid the foundation for his first World Championship title, busily scoring points in 16 of the 20 races. But in 2006 he emerged as a real winner, crossing the finishing line first in five races in his new BMW 320si WTCC – in spite of the severe ballast loads that he had to take on board. But with two World Championship titles in his pocket Priaulx's hunger for success shows no signs of abating.

### **Questions to Andy Priaulx:**

#### **After your world championship triumph in 2006 how long did it take you to change focus and concentrate your efforts on the season ahead?**

I did that just one day after the race in Macau. In motorsport there is no time to sit back and enjoy past successes for too long. In the WTCC especially the seasons almost merge into one. The last races happen in November and the next test drives are scheduled shortly afterwards, so we start thinking about the next year. Of course I was overjoyed at my success in the world championship, but I want to do everything I can to ensure it's not the last triumph in my career.

**What is it that keeps you going? In terms of touring car championships you have already achieved all there is to achieve...**

As a driver you want to win everything you possibly can. I don't just sit at the wheel of a race car for fun; I love the competition – and that is better in the WTCC than anywhere else. That's reason enough for me never to get bored. And by the way, I am not the only driver in the field who is motivated right down to the tips of his toes. We are dealing with some of the best drivers in the world here, and all of them want to win the world championship.

**Which of your titles is most important to you?**

My world championship title win last year was the most fantastic yet. When I became European Champion in 2004 I was 12 points behind the front runner right up until the final. I had been unlucky a number of times and had a few poor races as a result. In 2005 I was world champion, but ultimately I only had one victory to my name. I still don't think the critics were completely convinced, but the 2006 season was different. I was able to win five races, I was on pole three times and I regularly drove with a lot of ballast on board. I have never heard a bad word said about this title win.

**Will it be even tougher in 2007 than it was last year?**

I think in terms of excitement last season will be difficult to beat. At the final in Macau nine drivers were still in the running for the world championship title. But even so, it is not just the number of contenders fighting for the title that counts. It is a question of how fierce the competition is for victory in the individual races. In that respect it will get more and more exciting from year to year.

**Did you learn much about the new BMW 320si WTCC as the 2006 season went on?**

Yes. It's always a learning curve, especially if a car is racing its first season. The races themselves were especially revealing. You can test cars for days and days and still not know exactly where you stand. But as a race weekend progresses you are up against the other teams and manufacturers. I think we can make the BMW 320si WTCC even faster this year. We have to, because after all, our competitors will be improving, too. In 2006 the car already demonstrated what huge potential it has.

Born:	8 August 1974 in Guernsey (Channel Islands)
Residence:	Guernsey (Channel Islands)
Marital status:	Married to Joanne, one son Sebastian, one daughter Daniella
Website:	<a href="http://www.andypriaulx.com">www.andypriaulx.com</a>
1984	Kart racing in the Channel Islands
1985–1990	Motocross
1990	1 <sup>st</sup> place Motocross 250 cc Championship in the Channel Islands
1991–1995	Hillclimb racing
1995	1st place RAC MSA British Hillclimb Championship
1996	Formula Renault (selected races)
1997	British Formula 3 Championship scholarship
1998	Renault Spider Cup (selected races), one pole position 2 <sup>nd</sup> place Formula Palmer Audi Winter series
1999	1 <sup>st</sup> place Renault Spider Cup, 13 wins from pole BTCC test driver for Renault Williams, Vauxhall and Ford Awards: BARC President's Cup, Guernsey Ambassador of the Year
2000	British Formula 3 Championship for Renault UK F3 races in Macau and Korea for Manor Motorsport
2001	British Formula 3 Championship 2 <sup>nd</sup> place from pole in the F3 Super Prix in Korea 2 <sup>nd</sup> place in Vauxhall invitational drive in BTCC F3 Grand Prix in Macau
2002	5 <sup>th</sup> place British Touring Car Championship Competed in Australian long-distance Bathurst 1000 and in Queensland 500 (Holden TWR)
2003	3 <sup>rd</sup> place FIA ETCC (BMW 320i)
2004	1 <sup>st</sup> place FIA ETCC (BMW 320i), BMW Team Great Britain 2 <sup>nd</sup> place Macau Grand Prix – Guia Race 24 Hour Race Spa-Francorchamps (BMW M3 GTR)
2005	1 <sup>st</sup> place FIA WTCC (BMW 320i), BMW Team UK 1 <sup>st</sup> place 24 Hour Race Nürburgring (BMW M3 GTR) Formula 1 tests with BMW WilliamsF1 Team
2006	1 <sup>st</sup> place FIA WTCC (BMW 320si), BMW Team UK

### **Jörg Müller (DEU) – Car number 2.**

Since celebrating his European Championship debut in 2002 Jörg Müller has truly left his mark on touring car racing. Twice he fought until the end for the European championship title and in 2004 he drove to victory in no less than 12 races. When the World Touring Car Championship was revived in 2005 Jörg Müller remained a guarantor for victory, making it to the top of the podium three times.

But last season things got even better. After putting up a fight right up to the last race in Macau, the amicable pilot narrowly missed the title win by just one point and had to admit defeat at the hands of Andy Priaulx. Müller, who will be racing for BMW Team Germany – Schnitzer Motorsport again this year, starts the season with a total of seven victories to his name – more than any other pilot.

The 37-year-old rounded off his successful previous season with victory in the last race in Macau – the circuit where he made history when he followed his 1993 F3 Grand Prix victory with first place in the touring car race in 2004. Only one driver before him had succeeded in both disciplines on the winding city circuit.

Müller's first driving experience in a kart at the age of 15 later developed into title wins in several major Formula race series. Working as a test driver for BMW, Arrows and Sauber he later went on to arouse plenty of attention in Formula 1. But he is also passionate about long-distance racing: he has driven the 24 Hour Race in Le Mans for BMW, Nissan and Porsche. He also celebrated victories with the BMW V12 LMR in the American Le Mans Series, where he won the GT class in America in a BMW M3 GTR in 2001. In 2004 he clinched another victory in the same car for Team BMW Motorsport in the 24 Hour Race at the Nürburgring.

### **Questions to Jörg Müller:**

#### **Which was more prevalent for you in 2006 – happiness or disappointment?**

Happiness – most definitely, right through the year but especially after the victory at the last race in Macau. I just love that circuit. Finishing the season there at the top of the podium was really special to me. I hadn't expected to be able to get so close behind Andy Priaulx in 2006. It's a shame it wasn't quite enough to get me the title, but we finished the season having achieved an overall package that should stand us in good stead in the fight for victories and the championship from the start of the season in 2007.



**For years now you have been racing successfully for BMW Team Germany under Charly Lamm. Do you have a natural affinity with the rest of the team?**

Of course there have been changes in the team over the years, but I have known the core team since 1995, when I first started racing for Schnitzer in the Super Touring Car Cup. Naturally we all know each other quite well, which is particularly helpful when you have to respond to new challenges. But even so, it is important to keep working on yourself. You mustn't slide into a routine – things can only work through communication. You have to keep putting your heads together to talk about new ideas.

**Augusto Farfus is your new team-mate for 2007. Does that increase your motivation?**

Except for the language we will be speaking, nothing much is changing for me really. BMW has exchanged a very good driver for a very good driver. In the last few years I have always had to work really hard to beat my team-mate, and that is not about to change with Augusto. But my real aim for this year is to get ahead of Andy.

**What will be your strategy for achieving that?**

I have often spoken to Andy about that myself and we agree that you can't really follow a particular strategy and drive a completely calculated race in the WTCC. The maxim is simply to score as many points as possible in a weekend. It would be too risky to hope for a reverse starting order and drive the first race with the aim of achieving eighth place. You can only win the title if you drive for victories.

**Nobody has won more world championship races than you. Are you proud of that fact?**

That's a nice statistic and I am really pleased with it. It shows that I am still competitive although I am 37 years old. But just like all the other drivers I have to prove myself again every year. So my aim for 2007 is to achieve more victories and to win the championship.

**What is the key to success in the WTCC?**

You can't really pinpoint just a single component. In racing everything has to fit together. The way the car, the tyres, the drivers and the mechanics interact is highly complex and whoever gets the best package together is going to be the winner. And of course you have to be lucky. The sprint races are a bitter fight and if you are in the wrong place at the wrong time you can easily find yourself out on the gravel. So there is no real recipe for success.

Born: 3 September 1969 in Kerkrade (NLD)  
Residence: Monte Carlo  
Marital status: single  
Website: [www.joerg-mueller.org](http://www.joerg-mueller.org)

1984–1987	Kart racing
1988	1 <sup>st</sup> place German Formula Ford Championship
1989	1 <sup>st</sup> place German Formula Opel Lotus Challenge
1990	1 <sup>st</sup> place Formula Ford European Championship 5 <sup>th</sup> place German Formula 3 Championship
1991	1 <sup>st</sup> place Formula 3 Grand Prix in Monaco
1992	7 <sup>th</sup> place German F3 Championship
1993	German Formula 3 Championship 1 <sup>st</sup> place F3 GP in Macau
1994	1 <sup>st</sup> place German F3 Championship
1995	BMW works driver ADAC Super Touring Car Cup
1996	1 <sup>st</sup> place Formula 3000 European Championship BMW works driver ADAC Super Touring Car Cup 1 <sup>st</sup> place 24 Hour Race Spa (BMW 318is)
1997	Formula 1 test driver for Arrows, 24 Hour Race Le Mans
1998	Formula 1 test driver for Sauber 2 <sup>nd</sup> place 24 Hour Race Le Mans (Porsche GT1)
1999	BMW works and F1 test driver: one ALMS victory, 24 Hour Race Le Mans (BMW V12 LMR)
2000	5 <sup>th</sup> place ALMS, two victories (99er BMW V12 LMR) Formula 1 test driver for Michelin
2001	1 <sup>st</sup> place GT Class ALMS, four victories (BMW M3 GTR)
2002	2 <sup>nd</sup> place FIA ETCC, (BMW 320i) BMW Team Germany
2003	2 <sup>nd</sup> place FIA ETCC, (BMW 320i) BMW Team Germany 24 Hour Race Nürburgring (BMW M3 GTR)
2004	1 <sup>st</sup> place 24 Hour Race Nürburgring (BMW M3 GTR) 1 <sup>st</sup> place Macau Grand Prix – Guia Race (BMW 320i) 4 <sup>th</sup> place FIA ETCC (BMW 320i), BMW Team Germany Class win GT2 24 Hour Race Spa (BMW M3 GTR)
2005	5 <sup>th</sup> place FIA WTCC (BMW 320i), BMW Team Germany 2 <sup>nd</sup> place 24 Hour Race Nürburgring (BMW M3 GTR)
2006	2 <sup>nd</sup> place FIA WTCC (BMW 320si), BMW Team Germany

### **Augusto Farfus (BRA) – Car number 3.**

Although just 23 years old, Augusto Farfus from Curitiba (BRA) is one of the more experienced drivers in the World Touring Car Championship. In 2004 he made his European championship debut – and has been on the up ever since. After finishing seventh in his debut year, he ended the 2005 WTCC fourth in the overall rankings. At the time he particularly impressed the experts with his race in the former Portuguese colony of Macau, where he left the narrow street circuit between the crash barriers with his first victory under his belt.

Last year the young driver proved that he is keen to soak up new experiences and that he gets stronger and stronger every race. He surprised the motorsport world by making it to the top of the podium three times. He then went into the final race as one of three drivers who could still hope to win the world championship title, the others being his current BMW team mates Andy Priaulx and Jörg Müller. In the end he finished the season in third place.

After his first successes in Motocross and kart racing Farfus, whose family owns one of the biggest restaurant chains in Brazil, took the plunge and came to Europe, where he made his debut in the 2000 Formula Renault European Championship and he won the championship title for the series one year later. He secured another championship title in the F3000 Euro series in 2003 and has since become possibly the strongest new talent in touring car racing. In 2007 the new BMW works driver wants to carry on learning as a member of the experienced Schnitzer Motorsport team.

### **Questions to Augusto Farfus:**

#### **A new team and a new car. What are you doing to prepare for the many challenges that await you in 2007?**

First of all I would like to say that I am very happy to be competing for BMW. For me, this is a fantastic chance. I am more or less starting from scratch and have to get used to my new car and my new team. But I am optimistic that I will get my bearings very soon. The Schnitzer Motorsport team gave me a fantastic reception and I was made to feel welcome from the start. I would like to carry on improving and I want to win the title for BMW as soon as possible.

#### **What does it mean to you to be driving for a team as experienced as Schnitzer Motorsport?**

Schnitzer Motorsport have already won races and titles all over the world. Their success story is very, very long. Of course that is a big responsibility for us as drivers. But I already feel very comfortable with them and I hope I can reward them for the trust they have shown in me by putting on a good performance right from the start.

**Over the years BMW cars have often been your rivals out on the track. Now you are a BMW works driver yourself. Do you have to get used to the situation yourself first?**

Not at all. As soon as you are sitting in the cockpit and the race begins, all that counts is victory. In that situation you don't think about the past. I can count myself lucky to have already had the chance to get in on the act right at the front of the WTCC. Now, as a BMW works driver, I want to take the next step. The team is fantastic and the BMW 320si WTCC won everything there is to win in 2006. I am going to do my best to ensure further successes.

**What does motorsport mean to your home country?**

Brazilians are motorsport maniacs – without a doubt. Emerson Fittipaldi, Nelson Piquet and Ayrton Senna are the big Formula 1 heroes. That's what I grew up with. Early on Sunday mornings, when they used to broadcast the races, the whole of Brazil would be sitting in front of their TVs. Football is still the most popular sport, but the other half of the Brazilian fans' hearts definitely beats for motor racing. I hope that my work will make the WTCC more popular there.

**The racing season starts in your home town, Curitiba. Does that make you nervous?**

The pressure will be on, but that doesn't really bother me much. In motorsport as a driver you are always under pressure. It will be a lot of fun starting a new chapter of my career in my home town. A lot of things will be new to me. I am going to do all I can to make sure I am up at the front with the winners from the start.

**But there are changes afoot in your personal life too...**

There are indeed. My girlfriend and I got engaged at the beginning of the year and we are planning to get married. We just don't know when or where that will be. This year I am turning 24 and I feel ready to start a family. She is a fantastic person and supports me in whatever I do.

Born: 3 September 1983 in Curitiba (BRA)  
Residence: Pontremoli (ITA)  
Marital status: single  
Website: [www.farfus.com](http://www.farfus.com)

1991 First motorsport experiences with Motocross  
as of 1992 Started kart racing.  
Raced in a range of American and Italian championships  
1999 2<sup>nd</sup> place in World Karting Championships (Formula A)  
2000 12<sup>th</sup> place European Formula Renault Championship  
2001 1<sup>st</sup> place European Formula Renault  
Championship  
2002 9<sup>th</sup> place F3000 Euro Series  
2003 1<sup>st</sup> place F3000 Euro Series  
2004 6<sup>th</sup> place ETCC (Alfa Romeo)  
2005 4<sup>th</sup> place WTCC (Alfa Romeo)  
2006 3<sup>rd</sup> place WTCC (Alfa Romeo)

### **Alessandro Zanardi (ITA) – Car number 4.**

When Alessandro Zanardi was back in the pit at the Circuit de la Comunitat in Valencia on 25 November 2006, the fans knew they were just witnessing motorsport history in the making: the Italian had returned to the wheel of a Formula 1 car for the BMW Sauber F1 Team and became the first double leg amputee racer ever to complete a Formula 1 test drive.

But this was not the first time Zanardi had redefined the limits of what is possible in motorsport. After a serious accident at Lausitzring in 2001 left him without legs, very few people would have believed that he would ever make a comeback to motorsport. But his iron will and his unprecedented zest for life enabled him to fight his way back. After joining the line-up on the starting grid at the final in Monza in 2003 he wowed the motorsport world with his performance in a specially modified BMW 320i.

Zanardi's success on home ground fed his desire for more. In 2004 he contended the whole ETCC season and in 2005 and 2006 he represented BMW Team Italy-Spain – ROAL Motorsport in the world championships. But just being there still was not enough for the driver who competed in 41 Formula 1 races. Instead he set his sights on race victories. Finally, on 28 August 2005 he caused a sensation when his performance at Oschersleben made him the first physically disabled person to win a world championship race. Last season he triumphed again in Istanbul, proving once again that he is a force to be reckoned with. Zanardi and his team have gradually managed to perfect the modifications to the car to improve its competitiveness. Experienced in the game, Zanardi accelerates with one hand and brakes using his prosthetic legs. In 2007 he is set to cause a stir in the world championship again.

### **Questions to Alessandro Zanardi:**

#### **What should we expect from you this year?**

In 2006 I didn't score significantly more points than in the year before, but my speed improved drastically – and that is what matters to me. Last season there were a number of races I could even have won with a little more luck. So for 2007 I feel very optimistic. I have to make sure I finish more races and remain a little more level-headed in my reactions, perhaps. And then hopefully a victory – or perhaps a few victories – will be possible.

**Have you managed to make any improvements to the special modifications on your car?**

We have reached a point where technical advances will only be possible if I can grow new legs. Our main focus at the moment is on making the car more comfortable for me to operate. Ideally that would enable me to drive the car even faster, especially when I am racing. I may be able to drive a little more aggressively and gain a few hundredths of a second that way.

**Looking back on it, what does your drive in the Formula 1 car mean to you?**

That was a very special moment for me and I am very grateful to BMW for making it possible. For one weekend I had a whole Formula 1 team behind me, if you like, and that was a great feeling. Of course, it wasn't my first drive in a car like that, but given my disability most people seemed to think I would take it easy. Instead I managed well with the car and was confident with it from the start. It's just a shame that the time in the cockpit flies by so quickly...

**What is your assessment of the competitive situation in the WTCC compared with Formula 1 or other series?**

Basically the problem is the same in all motorsport classes: it's a question of "How can I overtake the car in front?" In most series you normally just have your team-mate's car in front of you, provided you are racing for a good team. The same goes for Formula 1. But in the WTCC it depends even more strongly on the driver, because the regulations make all the cars much more similar. So the driver is one of the variables that can make a difference. Most WTCC drivers are very talented, so out on the track things can get very tough. The cars often make contact and the races are spectacular. In Formula 1 the difference between the strong and weak teams is much more pronounced, so as a driver you can't actually do much to balance it out.

**Félix Porteiro is your new team-mate. Is he similar to the young Alessandro Zanardi in any way?**

Félix is a very self-confident young driver. Probably considerably more self-confident than I was when I was 23. But that doesn't mean I was waving a white flag out of my window in those days. I gave my all and knew that I had the necessary talent. Félix also has a lot of talent. The fact that he drives for BMW Team Italy-Spain shows that BMW is pinning its hopes on him. When I saw him in 2006 at the European Touring Car Cup in Estoril I was impressed by his clean, error-free driving style. He is going to be a success.

Born: 23 October 1966 in Bologna (ITA)  
Residence: Padova  
Marital status: Married to Daniela, one son Niccolo  
Website: [www.alex-zanardi.com](http://www.alex-zanardi.com)

1980–1984	Kart racing
1985	1 <sup>st</sup> place Italian Kart Championship
1986	1 <sup>st</sup> place Italian Kart Championship
1987	1 <sup>st</sup> place European Kart Championship
1988	12 <sup>th</sup> place Italian Formula 3 Championship
1989	7 <sup>th</sup> place Italian Formula 3 Championship Debut race in International FIA Formula 3000 Championship in Dijon
1990	2 <sup>nd</sup> place Italian Formula 3 Championship 1 <sup>st</sup> place Le Mans Formula 3 European Cup Pole at Formula 3 Grand Prix Monaco
1991	2 <sup>nd</sup> place International FIA Formula 3000 Championship Three Formula 1 races for Jordan
1992	Formula test driver for Benetton, three GPs for Minardi
1993	Formula 1 season with Lotus
1994	Formula 1 test driver, then team driver for Lotus
1995	British Racing Production Championships (Lotus Esprit), one win in GT2 class
1996	3 <sup>rd</sup> place IndyCar World Series (Chip Ganassi Racing) Rookie of the Year
1997	1 <sup>st</sup> place CART World Series (Chip Ganassi Racing) Award: PPG Colourful Character Award
1998	1 <sup>st</sup> place CART World Series (Chip Ganassi Racing)
1999	Formula 1 season with WilliamsF1
2001	CART Championship (Mo Nunn Racing) 15 September: in a serious accident on EuroSpeedway Lausitz Zanardi loses both legs
2003	Comeback in the final round of the FIA ETCC in Monza with BMW Team Italy-Spain (BMW 320i)
2004	14 <sup>th</sup> place FIA ETCC (BMW 320i), BMW Team Italy-Spain
2005	10 <sup>th</sup> place FIA WTCC (BMW 320i), BMW Team Italy-Spain 1 <sup>st</sup> place Italian Touring Car Championship (BMW 320i)
2006	11 <sup>th</sup> place FIA WTCC (BMW 320si), BMW Team Italy-Spain



### **Félix Porteiro (ESP) – Car number 5.**

Along with Augusto Farfus, Félix Porteiro is the second newcomer to the BMW national teams. The Spaniard is set to go point-hunting for BMW Team Italy-Spain – ROAL Motorsport in what will be his first season in an international touring car championship.

The race driver from Castellón (ESP) has already proved that he has got what it takes to cause a sensation in the WTCC: together with Alessandro Zanardi he joined the line-up for the FIA European Touring Car Cup in the Portuguese town of Estoril in 2006, at the wheel of a BMW 320si WTCC. There he clocked up the best time during the training session and in the qualifying he fell just one-tenth of a second short of reaching pole position. Although racing conditions were difficult on the wet circuit, Porteiro's third place in the first race made the motorsport world prick up their ears. His performance sufficiently impressed Umberto Grano and Roberto Ravaglia, the bosses of BMW Team Italy-Spain, who then signed a contract with the 23-year-old for the 2007 season.

Before moving to the WTCC Porteiro had given impressive performances in a range of formula race series. In 2006 he joined the GP2 series, where he clocked up one pole position in Silverstone and five championship points. One year previously Porteiro had come fifth in the World Series by Renault.

### **Questions to Félix Porteiro:**

#### **What is your lasting memory of the last GP2 season?**

The GP2 was a very good experience, although I didn't have much time to get to know the numerous new circuits. The drivers in the big teams have a major advantage in that respect. Normally, when you're starting out it takes you about two years to be able to drive on the top level. But it was still great fun measuring myself against all those big names. Highlights of the season included sixth place in Monaco and pole position in Silverstone. In the World Series by Renault I did better in 2005, when I came fifth. I also won a few races. I even beat Robert Kubica, who later became Champion. And we all know where he's driving nowadays....

#### **What is it about the WTCC that appeals to you?**

Compared to the GP2, the WTCC races are more interesting. It is easier to overtake, which makes things more exciting. Other races do offer the remote chance of getting into Formula 1, but per race there are just a handful of exciting overtaking manoeuvres. I am a racer, so seeing some action in a competition is very important to me.

**Is the popularity of motorsport still increasing in Spain in the wake of Fernando Alonso's two Formula 1 World Championship titles?**

Yes, definitely. Just a few years ago nobody in Spain was particularly interested in Formula 1. Everything centred on football. But Alonso's successes have changed that. Some races even achieve higher TV audience ratings than top football league matches. That is also helpful to other Spanish drivers like me who don't do Formula 1.

**What sort of impression do you have of your new team-mate Alessandro Zanardi?**

It is great for me to be driving alongside Alessandro. He is not only an outstanding race driver, he is also a unique personality. On my very first test for BMW Team Italy-Spain he offered me help if I had any questions about the car or the series. That kind of attitude is rare among race drivers.

**What do you hope to achieve in your first year?**

It's difficult to say because I need to get more experience of racing. In general the first year is there to learn as much as possible. Of course I would have no problem at all with the idea of being one of the front runners in 2007 if I can. Estoril already went much better than expected, so maybe I can come up with a few more surprises as the WTCC season progresses.

**Which circuits are you most looking forward to?**

Valencia, of course, because it's just 60 km away from my home town of Castellón. So my family, friends and sponsors will all be at the race. I have always managed well on the circuit. It's just a shame that Valencia is the third meeting in the season, because I might not have enough experience yet to perform to my full potential. Even so, I will be very motivated.

Born: 26 August 1983 in Castellón (ESP)  
Residence: Castellón (ESP)  
Marital status: single  
Website: [www.felixporteiro.com](http://www.felixporteiro.com)

1997	2 <sup>nd</sup> place Spanish Junior Kart Championship
1998	15 <sup>th</sup> place European Junior Kart Championship
1999	4 <sup>th</sup> place Spanish Senior Kart Championship
2000	1 <sup>st</sup> place Spanish Senior Kart Championship
2001	4 <sup>th</sup> place Spanish Formula 3 Championship 2 <sup>nd</sup> place European Kart Championship
2002	19 <sup>th</sup> place Nissan World Series
2003	14 <sup>th</sup> place Nissan World Series
2004	8 <sup>th</sup> place Nissan World Series
2005	5 <sup>th</sup> place Renault World Series
2006	22 <sup>nd</sup> place GP2 Championship 3 <sup>rd</sup> place FIA European Touring Car Cup (race one)

## 5. Teams.



### **BMW Team UK – RBM.**

Andy Priaulx (GBR) – Car number 1.

Hardly any other team in Motorsport has made it to the top as fast as BMW Team UK – RBM. Under the auspices of boss Bart Mampaey, the team from the Belgian city of Mechelen with driver Andy Priaulx not only managed to win the European World Touring Car Championship title in 2004; they also proved to be the measure of all things in the World Touring Car Championship, when the last race of the season in Macau left the RBM pit resounding with jubilation.

But success doesn't come easy – it is the result of a lot of meticulous work both on and off the track. "You can't afford to sit back in motorsport", says Mampaey, explaining his philosophy. "You have to keep your eyes firmly on the future. There are so many different areas where you can improve things. Everybody on the team knows that and we are all pulling together."

For RBM efficiency is one of the main conditions of their daily work, with Mampaey making consistent efforts to improve the performance of the BMW 320si WTCC by utilising time and resources perfectly. The team also benefits from the infrastructure of the Mampaey family's own BMW dealerships, which operate under the name of JUMA. Synergies between the team and the dealerships in administration and logistics, for example, leave RBM free to concentrate on the more essential aspects of their work: getting the car out on to the race track.

The acronym JUMA stands for Julian Mampaey, father of the current RBM team boss, whose passion for motorsport has passed into the next generation. In the 70s and 80s the JUMA team built up a reputation, but unlike RBM, which is measuring up against the tough competition of today's WTCC, Julian Mampaey concentrated his effort on one single race: the 24 Hour Race at Spa-Francorchamps. The JUMA team's results for the long distance classic certainly need no apologies: from 1977 to 1984 they achieved three overall victories and five second places – all with BMW cars.

Nine years after JUMA's last race, Bart Mampaey followed in his father's footsteps. Initially his RBM team fielded cars in the Belgian BMW Compact Cup, but the Mampaey family was soon to celebrate a successful return to Spa-Francorchamps with Group N one-two in the 24 Hours Race in 1997. One year later an overall victory followed – the last for the BMW brand to date on the Ardennes rollercoaster circuit.

By this stage it was clear that Mampaey could take a team to victory. But still he decided to carry on gaining experience and widening his horizons. He went to the USA to find out more about the American Le Mans Series (ALMS) and was involved in long-distance classics like Daytona, among other things. "It was good for me to experience different ways of working", Mampaey recalls.

On his return to Belgium the race strategist set his mind to a new challenge: RBM sent a BMW 320i into the European Touring Car Championship for Belgium, with Fredrik Ekblom (SWE) at the wheel. One year later the team sported the colours of Great Britain for the first time, taking Andy Priaulx under contract as driver. "Andy and the team just fit together so well", Mampaey says. After starting out in 2003, the RBM team quickly caused a sensation, when Priaulx secured the title in Dubai in the 2004 ETCC. Subsequent world championship title wins in 2005 and 2006 were to prove that the team's success in 2004 was more than just a flash in the pan.

"We still have a lot of mechanics and team members on board who were there right at the beginning", said Mampaey, who appreciates their reliability. But he also values the idea of trying out new ways to set up the cars, and it is this mixture of teamwork, innovative power and unflagging commitment that has made RBM the benchmark for other WTCC teams.

Team manager: Bart Mampaey  
Address: E. Walschaertstraat 2A, 2800 Mechelen, Belgium  
Team members: 13  
Founded: 1995

Biggest successes:

1995–1997	BMW Compact Cup
1997	1 <sup>st</sup> and 2 <sup>nd</sup> Place Group N 24 Hour Race, Spa (BMW)
1998	1 <sup>st</sup> place 24 Hour Race Spa (BMW Fina Bastos Team)
1999	4 <sup>th</sup> place 24 Hour Race Spa (Nissan)
2002	6 <sup>th</sup> place FIA ETCC (BMW 320i)
2003	3 <sup>rd</sup> place FIA ETCC (BMW 320i)
2004	1 <sup>st</sup> place FIA ETCC (BMW 320i)
2005	1 <sup>st</sup> place FIA WTCC (BMW 320i)
2006	1 <sup>st</sup> place FIA WTCC (BMW 320si)

## **BMW Team Germany – Schnitzer Motorsport.**

Jörg Müller (DEU) – Car number 2.

Augusto Farfus (BRA) – Car number 3.

For BMW Team Germany – Schnitzer Motorsport, racing is a family affair: in the Bavarian town of Freilassing, which is home both to his team and to his BMW dealership, team owner Herbert Schnitzer takes care of the business side of things while his half-brothers Karl (a.k.a. Charly) and Dieter Lamm are responsible for race operations. Charly the strategist, who is in command in the pit, regularly sets the course for another Schnitzer victory.

The success story of Schnitzer Motorsport in the international racing arena is as long as it is illustrious. The team was founded in 1963 by the brothers Herbert and Josef Schnitzer and celebrated its debut one year later at the Hillclimb in Bad Neuenahr with a BMW 1800 TI. Its early years were marked by a string of successes until the Schnitzer family was devastated by Josef's fatal accident on the way to a race in Zolder. Since then, Herbert Schnitzer and his half-brothers have continued the success of Schnitzer Motorsport.

"Motorsport plays a fundamental role in our family", he says. "Josef and I laid the foundation for the team all those years ago and we have built it up since then. Nobody could possibly have known back then that Schnitzer Motorsport would be running for so long and have so many successes to celebrate."

Twins Charly and Dieter Lamm were already on board when Harald Ertl won the first German Race Championship in 1978. But Charly in particular developed a taste for travelling as a young student, and in 1980 he took on his first Grand Prix adventure in Macau.

"I had read about the race in the newspapers and just had to be part of it", says Charly Lamm, recalling Schnitzer Motorsport's first appearance at the traditional "Guia Race" in the former Portuguese colony. "Before us, no European team had ever managed a win in Macau. We were on the grid with a BMW 320 with Hans-Joachim Stuck as the pilot, and when I made my motorsport debut we managed a victory straight away – and that was when I decided to carry on." But that was not to be the Schnitzers' last triumph in Macau: to date, the team has managed no less than eleven victories in Macau, all in BMW cars.

Together, Schnitzer Motorsport and BMW have won almost two dozen titles around the world. The list of pilots who have driven for the family business over the years reads like a "Who's who" of motorsport and includes a total of 39 former F1 pilots – Keke Rosberg and Nelson Piquet among them.

The team also has fond memories of the first ever World Touring Car Championship back in 1987, when Roberto Ravaglia won at the wheel of a Schnitzer BMW M3. Another speciality of Lamm & Co is long-distance racing: their Schnitzer Motorsport open-topped prototype BMW V12 LMR triumphed in the classic Le Mans 24 Hour Race in 1999, and further victories and title wins at the American Le Mans Series (ALMS) followed – this time in a BMW M3 GTR. In 2004 and 2005 the same car took Team BMW Motorsport to two one-twins in two 24 Hour Races at Nürburgring. In total Schnitzer has notched up four successes in the “Green Hell”, but there have also been five BMW victories under the aegis of Lamm at the 24 Hour Race in Spa-Francorchamps.

Over the years pilots from BMW Team Germany – Schnitzer Motorsport have always been among the leaders, contending for titles in both the European Touring Car Championship, which started in 2002, and in the two World Touring Car Championships in 2005 and 2006. Since 2002 Schnitzer has clocked up 31 European and world championship victories as well as eight pole positions and 26 fastest laps. “Over the last few years we have always been among the front runners”, said Charly Lamm. “But as yet we have only ever made it to vice-champions. Of course we are highly motivated and want to be the BMW national team that ends this year right at the top.”

This year sees Jörg Müller on the team as they mount their sixth quest for the title. An experienced driver, Müller first joined the field for Schnitzer Motorsport in the mid 1990s and has since achieved countless successes with the team from Freilassing. After coming second last season, he now wants to beat title defender Andy Priaulx. Newcomer Augusto Farfus is aiming to achieve the same. The Brazilian finished the 2006 season third in the World Touring Car Championship and, aged just 23, he is bringing a fresh breeze into the team. “He also means we will have to speak more English again”, says Herbert Schnitzer. “We used to do that when we had drivers like Roberto Ravaglia or Steve Soper on the team. We were successful then – so hopefully we can do the same again this season.”



Team manager: Charly Lamm  
Address: Görlitzer Straße 2a, 83395 Freilassing, Germany  
Team members: 17  
Founded: 1963  
Website: [www.schnitzer.de](http://www.schnitzer.de)

Biggest successes:

1966	1 <sup>st</sup> place German Championships (BMW 2002 ti)
1968–1972	1 <sup>st</sup> place European Hillclimb Championships (BMW 2002 ti, BMW 2002 tii, BMW 2800 CS)
1975	1 <sup>st</sup> place Formula 2 European Championships (Martini BMW)
1976	2 <sup>nd</sup> place GT Manufacturers' World Championship (BMW 3.5 CSL)
1978	1 <sup>st</sup> place German Racing Championship (BMW 320)
1980–2004	ten victories in touring car races in Macau 'Guia Race' (BMW 320, BMW 635 CSi, BMW M3, BMW 320i)
1983, 1986, 1988	1 <sup>st</sup> place European Touring Car Championships (BMW 635 CSi, BMW M3)
1985, 1986, 1988 1990, 1995	1 <sup>st</sup> place 24 Hour Race Spa (BMW 635 CSi, BMW M3, BMW 320i)
1987	1 <sup>st</sup> place World Touring Car Championship (BMW M3)
1989, 1991	1 <sup>st</sup> place 24 Hour Race Nürburgring (BMW M3)
1989	1 <sup>st</sup> place DTM (BMW M3)
1989, 1990	1 <sup>st</sup> place Italian Touring Car Championship (BMW M3)
1993	1 <sup>st</sup> place British Touring Car Championship (BMW 318i)
1994	1 <sup>st</sup> place Asia Pacific Championship (BMW 318is)
1995	1 <sup>st</sup> place Japanese Touring Car Championship (BMW 320i)
	1 <sup>st</sup> place ADAC Super Touring Car Cup (BMW 320i)
1998	1 <sup>st</sup> place German Super Touring Car Championship (BMW 320i)
1999	1 <sup>st</sup> place 24 Hour Race Le Mans (BMW V12 LMR) 1 <sup>st</sup> place 12 Hour Race Sebring (BMW V12 LMR)
2001	1 <sup>st</sup> place GT Class ALMS (BMW M3 GTR)
2002	2 <sup>nd</sup> place FIA ETCC Team Championship (BMW 320i) 2 <sup>nd</sup> and 4 <sup>th</sup> place ETCC Drivers' Championship (Jörg & Dirk Müller)
2003	2 <sup>nd</sup> and 5 <sup>th</sup> place FIA ETCC (BMW 320i)

2004	1 <sup>st</sup> and 2nd place 24 Hour Race Nürburgring (BMW M3 GTR) 2 <sup>nd</sup> and 4 <sup>th</sup> place FIA ETCC (BMW 320i) 1 <sup>st</sup> and 2 <sup>nd</sup> place Macau GP – Guia Race (BMW 320i), Class victory GT2 und 6th place overall 24 Hour Race Spa-Francorchamps (BMW M3 GTR)
2005	1 <sup>st</sup> and 2 <sup>nd</sup> place 24 Hour Race Nürburgring (BMW M3 GTR)
	2 <sup>nd</sup> and 5 <sup>th</sup> place FIA WTCC (BMW 320i)
2006	2 <sup>nd</sup> and 6 <sup>th</sup> place FIA WTCC (BMW 320si)

### **BMW Team Italy-Spain – ROAL Motorsport.**

Alessandro Zanardi (ITA) – Car number 4.

Félix Porteiro (ESP) – Car number 5.

In 2007 BMW Team Italy-Spain – ROAL Motorsport will have a number of reasons to celebrate. In 1977, exactly 30 years ago, BMW Italy made its motorsport debut with Eddie Cheever in the cockpit for his first race. Even in those days BMW Team Italy-Spain's current project manager Umberto Grano had close connections to the BMW brand, having won the European Touring Car Championship for them in 1978, 1981 and 1982. Today Grano is up on the bridge alongside team principal Roberto Ravaglia, directing BMW Team Italy-Spain's fight for victory in the WTCC. Ravaglia himself also celebrates an anniversary this year: it has been 20 years since he won the first Touring Car Racing title.

In leading the team, both Grano and Ravaglia benefit from their own experience as successful touring car drivers. "In a way it helps to have been a racing driver yourself", Grano confirms. "But motorsport has changed enormously. Things are much more professional nowadays." Ravaglia adds, "The job of driver was basically easier for me than being the team manager. When I started out as manager I had to learn a lot and go out into uncharted territory."

BMW Team Italy-Spain are aiming high this season as they look to close the gap to the top teams of the WTCC. As they work towards their goal, they are relying on the services of ROAL Motorsport, founded in 2001 by Ravaglia and his partner Aldo Preo. "I am convinced that Roberto will take the team a long way up toward the top", says Grano. "He is one of the biggest Touring Car stars ever, and just the man for our mission."

Over the last two seasons the team has already clearly shown that it is moving in the right direction, with two race victories by Alessandro Zanardi and 135 points to their name. The 15-strong team is currently working on taking the next step towards the world championship title in 2007 and will be joining the line-up with Zanardi, who made a sensational comeback with BMW Team Italy-Spain in 2007, and Félix Porteiro.

"I think Félix will help boost the popularity of touring car racing in Spain", says Grano, hoping the contract with the former GP2 driver will have a further positive effect on the sport. Zanardi and Porteiro had previously made a fantastic team in BMW Team Italy-Spain's FIA European Touring Car Championship, so things look promising for a successful new season.

Project manager: Umberto Grano  
Team manager: Roberto Ravaglia  
Address: Via Svizzera 18, 35157 Padova, Italy  
Team members: 15  
Founded: 2001  
Website: [www.roal-motorsport.com](http://www.roal-motorsport.com)

Major successes:

2001	1 <sup>st</sup> place ESPC Drivers' Championship (Peter Kox, BMW 320i)
2002	8 <sup>th</sup> place FIA ETCC (BMW 320i)
2003	8 <sup>th</sup> and 9 <sup>th</sup> place FIA ETCC (BMW 320i)
2004	7 <sup>th</sup> and 14 <sup>th</sup> place FIA ETCC (BMW 320i)
2005	9 <sup>th</sup> and 10 <sup>th</sup> place FIA WTCC (BMW 320i)
2006	11 <sup>th</sup> and 13 <sup>th</sup> place FIA WTCC (BMW 320si)

## 6. The BMW 320si WTCC.



### **Enhancing details on the champion car.**

Since its debut season, the BMW 320si WTCC has proved to be a worthy member of the successful BMW 3 Series motorsport line-up. In 2006 it not only won Andy Priaulx his second championship title in a row, it also brought the manufacturers' championship title back to Munich for the second successive year. BMW Motorsport developed the race car in just nine months from the production BMW 320si which had celebrated victory in its very first race.

In 2007 the BMW 320si WTCC is available as a race kit. Compliant with Super2000 or Super Production regulations, the kit car is ideal for private teams looking to join the fight for the championship title. "We are continuing our tradition of customer racing", said BMW Motorsport Director Mario Theissen. "Following the great successes of its debut year, the BMW 320si WTCC has become increasingly popular among customer race teams. I am confident that it will play a major role for many years to come."

In preparation for the 2007 World Touring Car Championship the engineers from BMW Motorsport have been able to enhance several details on the BMW 320si WTCC. BMW national team drivers will be joining this year's competition with revised transmissions and front axle kinematics, new dampers and radiators, and a new transmission and rear axle cooling. The bed plate on which the pedals are mounted is now made of ultra-light carbon fibre, and the BMW P45 engine boasts increased mechanical efficiency and an optimised charge cycle. In addition, 2007 sees the deployment of the first BMW Motorsport developed Lambda Controller. Following up the initial development work, all of these enhancements provide a degree of fine tuning on a car that took centre stage from the start.

### **Cutting edge development.**

The BMW 320si WTCC is the first BMW Group race car to have been developed using the virtual tool CATIA V5 throughout. Digital car data were used to test the fit and function of parts before first trial components were even made. Meanwhile, virtual drivers provided by the 3D computer model RAMSIS helped development engineers adjust driver and drivetrain positions. These differ quite strongly in the enhanced WTCC version from those in the production BMW 320si. RAMSIS also helped in the early stages of testing for new seating and steering positions and accessibility of controls.

Engineers used computational fluid dynamics (CFD) to refine the new model's aerodynamics, and computer technology also helped optimise the chassis geometry and kinematics and find the best axle mounting points. At the same time, computerised crash tests with complex calculations simulated body shell distortions produced by exposure to extreme forces.

### **Common roots.**

The self-supporting BMW 320si WTCC body is manufactured in BMW Plant Regensburg alongside the production body shells for the BMW 1 and 3 Series. Some of its sheet metal components originate from the press shop in BMW Plant Dingolfing. Here, sheet metal measuring between 0.6 and 2.00 mm in thickness is rolled off huge coils and pressed into flat body components called blanks. These are then shaped under enormous pressure using state-of-the-art pressing tools.

Once in Regensburg, the car's 550 sheet metal components are assembled by the 971 industrial robots at the plant. More than 5,500 spot welds and a total of 52m of adhesive seams are applied, producing a complete car body weighing just 355 kg in its unpainted state. After body assembly, shells produced for customer cars make their way to the paint shop while those destined for a career in motorsport leave the series production lines and go into an adjacent hall to be converted by hand for race deployment.

### **Top priority: safety.**

For the BMW Group, passive safety is not only top priority in series production automobiles; in the BMW 320si WTCC a safety cage provides extra protection for race drivers. The steel safety cell was developed and designed using CAD engineering and simulation calculations by BMW Motorsport, which is an FIA accredited analysis centre for safety cells.

During the concept phase of the BMW 320si WTCC, a series of virtual crash tests using simulation models revealed how and where the shell distorted and whether or not the driver's survival space remained in tact on impact. For extra safety during the race, a six point safety belt system restrains drivers, strapping them firmly into their safety seats. Additional protection is provided by the HANS (head and neck support system), while crash-pads in the doors and special foams inside hollow sections of the car absorb the energy of an impact.

Constructing the safety cage is the job of the well-rehearsed team of experienced body shell specialists at BMW Plant Regensburg. Together, they channel some 200 hours of work, about 38 m of steel tubing and a range of sheet metal sections, brackets and collars into producing the cage, which is

then fitted into a special, pared down version of the production body. The race version of the body comprises only the most important components, with any unnecessary parts removed, certain sections broken through and reinforcements added.

### **Slimming down in every respect.**

In the world of motorsport, every single gram counts. The lighter the car, the easier it is for the teams to balance it out later with ballast. So when it comes to paint, the absolute minimum is used. Time spent on details of this kind is time well spent, especially in view of the fact that a production BMW 3 Series Saloon Car is covered in some 19.5 kg of coatings and paint. In series production 72 robots set to work on painting the car. But in race car production the whole operation is carried out by hand, using spray guns to apply the base, filler and top coats.

FIA WTCC race regulations stipulate that the rear-wheel drive, H-transmission BMW 320si WTCC has to weigh at least 1,140 kg including the driver. If it is lighter than permitted, the teams can compensate by weighing it down with metal ballast sheets. Where they position the sheets depends largely on the circuit profile, so the extra weight is carefully distributed across the floor, the boot or the interior of the car to give it the best possible balance on the track. As they work to find potential weight savings, the mechanics and engineers use every option that race regulations allow. Every possible excess gram of material is removed without compromising safety to enable maximum flexibility for achieving optimal weight distribution when the car goes into a race.

### **Step by step.**

Building a car is a team game in which everybody works side by side. Because of the different heights and builds of the BMW national teams' drivers, the development team decided to fit standing pedals in the foot well of the car, which is a first in BMW race car development. The new pedal arrangement enables the perfect adjustment of the distance to the seat and a better, lower centre of gravity.

The clutch pedal is generally only used when drivers pull away from standstill. During the race, however, the integral strain gauge in the BMW 320si WTCC's gear stick emits an electrical impulse as soon as the driver touches the lever. This makes the engine management system cut ignition, briefly reducing traction force slightly to enable the driver to shift gently but firmly without using the clutch. The car's large brake pedal demands a strong push from the race pilot. But pressure needs to be carefully controlled, as electronic assistance systems like ABS are not allowed under FIA regulations.

The accelerator works by transmitting an electronic signal via the throttle flap to the engine management system, which then translates it directly into performance.

### **Clear visibility without the weight.**

Conventional glass screens like the one in the predecessor model BMW 320i had certain shortcomings: they were unable to withstand the stresses and strains of normal race operations and were frequently damaged by stone chips. They would often have a racing life of just one or two races before having to be replaced. The BMW 320si WTCC features a new windscreen made of a considerably lighter special plastic called Makrolon. The new screen is much more resilient to the pressures of racing, even under harsh conditions, and it weighs 3.6 kg less than the conventional one. Worked into its surface in front of the driver is the electric screen heating, which keeps the driver's field of view clear from condensation in wet conditions.

### **The new electrical distributing centre.**

The BMW 320si WTCC is the first BMW Motorsport race car to feature CAN bus technology. The new system simplifies the transmission of electrical and control signals and enables data exchange between the different control units. It also reduces considerably the number of cables and components such as fuses, switches and plugs, and eliminates the need for relays. All of these reductions are another contribution to weight savings, and, with fewer unreliable parts, the electrical systems are much less susceptible to faults.

The central player in the BMW 320si WTCC's on-board electronics system is the new, high-performance Power400 control unit. Developed by BMW Motorsport the Power400 continually controls the electrical power distribution and all the actuators in the car, including those for the lights, windscreen wipers and electrical pumps.

Devices are switched on or off using the controls on the multi-function steering wheel. These send a signal via the CAN bus to the control unit, where a micro controller processes it to activate or deactivate the device.

The CAN bus also connects to the new ECU404 engine management unit, which now offers a wider range of functions. Developed by BMW Motorsport, the unit has a simpler user interface, which is particularly relevant for making track-side engine adjustments. Its other special features include switches and controls for the engine map as well as for individual cylinder injection and ignition and for the engine data memory system. The unit also masterminds the quick shift function with variable shift times enabling high-speed, clutch-free gear changes. It also kicks in when speed limiter on the steering wheel is activated on entering the pit lane.



### **Customised axle designs.**

Although the production BMW 320si had an extremely high-performance chassis, the WTCC version of the car needed modifications to the axles – which became one of the main focal points of development work. Engineers were faced with the task of designing the axles to include a camber setting that could be adjusted independently of any other settings parameters, such as roll centre and track. This would make the new axles easier for semi-professional teams to set up. Given the strong forces that work on the car during a race, the fixing points for the five-link axle and casing needed to be reinforced. The geometry also had to be modified to accommodate a specially developed five-way adjustable shock absorber (tension and compression stroke adjustment). In addition, the longitudinal carrier of the chassis was altered to take a spring stabiliser, and the track-width and camber were increased. The wheel carrier and bearing were carried over from the production model.

On the front axle, a reinforced control arm helps the car deal with the pressures of racing and, as in most race cars, ball joints replace the rubber mounts to keep the car on track better. Meanwhile, the reinforced stabiliser bar on the front axle reduces body roll and stops the inside wheel from lifting in extreme bends. It is connected to the spring struts by a stabiliser link fixed to the stabiliser bar via the anti-roll bar blade. The pre-tensioning of the stabiliser bar can be altered by changing the grid position of the anti-roll bar blade and adjusting the length of the stabiliser link. The car's tendency to over or understeer can also be controlled by different tube diameters and wall thicknesses of the stabiliser bar.

### **Go faster, brake later.**

A race car not only needs to accelerate fast, it also needs to brake effectively. For optimum performance, the BMW 320si WTCC uses inner-vented, perforated brake discs and four-piston aluminium brake callipers at the front. The grey cast iron discs measure 332 mm in diameter and are 32 mm thick. The car's rear brakes feature 18 mm thick full discs measuring 291 mm in diameter, and two-piston aluminium callipers. The complete braking system can slow the car from 200 km/h to standstill in a mere 4.6 seconds, requiring just 130 m braking distance to do so. The force of deceleration presses the driver into his safety belts with a force of 1.5*g*.

During the course of a race the balance of the car changes as the tyres wear down and the weight of the fuel load diminishes. To counter this development the driver can shift the braking force between the front and rear axles by means of a regulator in the cockpit. This redistributes braking capacity via the spindle connecting the two brake cylinders of the front and rear axles.

### **It's all in the dampers.**

The driving characteristics of the BMW 320si WTCC are very much determined by its springs and damper settings. Lengths and characteristics of the springs chosen depend largely on the track profile as well as on surface conditions and the amount of additional weight being carried. Ground clearance is determined by the length of the springs and has to accommodate the ballast while still complying with the minimum clearance of 80mm stipulated in the race regulations.

The tension and compression stroke on the front and rear axle shock absorbers also affect the car's driving characteristics. They are independently adjustable, with five possible settings influencing how the car handles sudden changes of direction or, kerbstones or corrugations. The electro-hydraulic assisted rack and pinion steering in the BMW 320si WTCC originates from the production model. Only the overall steering ratio has been made more direct in the race version.

### **The BMW P45 engine.**

BMW Motorsport draws on its own production competence, manufacturing core components for its high-performance Formula 1 and WTCC engines in Plant Landshut, where series engine components are also made. The crank case and cylinder head of the BMW 320si WTCC are just two of the 1,184 different components that go into its engine – but they are the two that involve the most development work and the greatest process competence.

The BMW P45 engine is designed to have a racing lifespan of about 2,500 race kilometres. If it fails to survive the minimum two weekends stipulated in the regulations, premature replacement will mean the driver drops ten positions further back on the starting grid – so precise testing certainly pays off!

### **A solid foundation.**

The 2.0-litre, four cylinder production engine of the BMW 320si (delivering 127 kW/173 hp) provided the ideal basis for developing the race unit. However, a number of modifications were needed to make a new engine achieve 202 kW/275 hp at 8,300 rpm and maximum torque of 242 Nm at 7,250 rpm with the same displacement.

Modifications included not only the different bore-stroke ratio, but also the crankshaft drive (crankshaft with reduced bearings diameters, extremely high-performance steel conrod, forged skirt pistons) and the cylinder head of the all-aluminium engine. The valve train (which includes non-variable camshafts, valves and valve springs) was thoroughly revised and the lighter

flywheel now weighs just 4.0 kg. The inner walls of the combustion chamber and the intake and exhaust ducts feature quality surface finishes, and together with the individual cylinder injection, large valves and adapted flanges they optimise the fuel/air mix. The ignition process is triggered by special spark plugs which are controlled by dedicated ignition coils with integrated boosters. In addition, a flow-optimised CFRP intake plenum with ram tubes and a single throttle flap combines with a high-performance header in the exhaust system to enable a free exchange of gases.

### **Continuity for the transmission.**

In the BMW 320si WTCC, BMW Motorsport once again offers a five-speed, dog-type, unsynchronised H-gate race transmission. This has a number of advantages compared with the sequential transmission: as well as reducing the basic weight of the car by 30 kg as per regulations, the H gate gear system is based on the production transmission, which makes it a particularly cost-effective solution that is much appreciated by racing customers.

The H-gate and the sequential transmissions now have virtually identical shift times. In the BMW 320si WTCC times were shortened mainly by the cut ignition, which makes pressing the clutch unnecessary. But the engine management system also enables variable shift times, depending on the gear level. The BMW 320si WTCC benefits from an oil/air cooler which keeps transmission oil temperatures constant. Given the average of 400 gear changes made per race, the cooler system is vital.

### **Breathe in deeply.**

Unlike the production version of the car, the BMW 320si WTCC does not have its radiator directly behind the BMW kidney grille. Instead, the engine's air intake guide is positioned there. This frontal position of the inlet cross section causes the airflow to produce a build-up of pressure, which literally forces the fresh air through the filter and into the intake plenum. This leaves the engine having to do less suction work and also fills its cylinder up better.

Given that the race engine needs less cooling than the production unit, its smaller radiator fits in the vent under the BMW kidney grille. Meanwhile, cooling for the transmission is provided by air entering through the opening in the front apron. The side air channels cool the brakes, although the need for cooling is limited, as the brakes are not normally taken to the extreme: in a sprint race on a track like Monza, for example, the WTCC drivers brake just six times per lap.

### **Special conversions for Alessandro Zanardi.**

BMW Motorsport and BMW Team Italy-Spain have specially converted the new BMW 320si WTCC to suit Alessandro Zanardi's needs. The Italian, who lost both legs in an accident in 2001, uses a lever on the steering wheel to accelerate, with a potentiometer activating an electrical servo motor on the throttle flap. The clutch works on a similar principle: when Zanardi pulls the gear lever up with two fingers a control unit activates a stepper motor which in turn moves the hydraulic master cylinder of the clutch.

Braking, however, is quite a show of strength for Zanardi, as he has to press the brake pedal in the footwell with his prosthetic legs. In spite of its power assistance, he still has to press with the force of up to 85 kg. An old hand in racing, Zanardi personally supervised the construction and conversion of his race car, joining forces with the engineers in finding the ideal cockpit solution to compensate for his disability. His second world championship victory in September 2006 in Istanbul and his numerous podium appearances are a testimony to the success of the man and his team. Zanardi himself said, "We have reached a point where technical advances will only be possible if I can grow new legs."

### **Debut victory and world championship cheers.**

Once development work on the BMW 320si WTCC was complete, the tension began to mount. In the run-up to the car's race debut in Monza the question on everybody's lips was how it would measure up against its competitors.

Right from the start the BMW 320si WTCC exceeded all expectations, with Andy Priaulx first on the starting grid and first across finish the line in the opening race of the season. And there was more to come, with the BMW national team drivers celebrating ten more victories as the season progressed. Priaulx successfully defended his drivers' title and BMW was number one again in the manufacturers' championship. A debut season could hardly be more impressive.

## 7. Technical specifications.



### Technical specifications for the BMW 320si WTCC.

#### Vehicle.

Length:	4,535 mm
Width:	1,845 mm
Height:	approx. 1,350 mm
Wheel base:	2,763 mm
Weight:	1,125 kg (including driver)
Tank capacity:	approx. 45 litres
Chassis/body:	unitary construction steel body with welded safety cell made of extremely rigid precision steel tubing; safety fuel tank in CFRP sandwich tray; pneumatic three-stamp rapid jack system
Aerodynamics:	Front apron, rear apron, rear wings, front wings and flared
Package:	rear wheel arch made of CRPF
Transmission:	single-disc carbon fibre clutch operated by a hydraulic central slave cylinder; five-speed dog-type racing transmission based on the production variant; additional air/oil cooler quick shift system with ignition cut-off controlled by shifting force; production rear axle casing with mechanical limited slip differential and additional oil/air cooler
Front axle:	double joint strut suspension with increased wheel caster angle, enlarged track width and enhanced wheel camber compared with the production version five-way adjustable shock absorbers tubular stabiliser bar

Rear axle:	five-link axle with enlarged track width and enhanced wheel camber compared with the production version five-way adjustable shock absorbers stabiliser
Front brake system:	four-piston aluminium brake callipers inner-vented grey-cast iron brake discs 332 mm in diameter and 32 mm thick
Rear brake system:	two-piston aluminium brake callipers grey-cast iron brake discs 291 mm in diameter, 18 mm thick
Steering:	rack and pinion steering with electro-hydraulic power assistance
Wheels:	aluminium rims 9 x 17 inches
Tyres:	Yokohama race tyres 240/610 R 17 (front and rear)

#### **BMW P45 engine specifications.**

Type:	four-cylinder inline
Capacity:	1,999 ccm
Bore x stroke:	86 x 86 mm
Compression:	11 : 1
Max. output:	approx. 275 hp at approx. 8,300 rpm
Max. torque:	approx. 242 Nm at approx. 7,250 rpm
Max. engine speed:	8,500 rpm (as per regulations)
Cylinder block:	aluminium cylinder block construction with "bed blade" lower section
Crankshaft:	steel crankshaft with reduced bearing diameters
Pistons:	forged skirt pistons

Conrods:	high-performance steel
Cylinder head:	aluminium DOHC (Double Over Head Camshaft) construction; four valves per cylinder
Valvetrain:	two overhead chain-driven camshafts valve actuation via rocker arms
Intake system:	single throttle valve (64 mm, as per regulations) made of CFRP with load change optimised ram tubes
Exhaust system:	header, silencer, catalytic converter
Fuel system:	single cylinder multipoint injection with one injection valve per cylinder injection pressure: 5.0 bar
Lubrication:	wet sump lubrication with optimised oil sump/oil/suction system
Cooling:	water/air cooler and oil/water heat exchanger
Flywheel:	steel, weight-optimised to 4 kg
Fuel:	standard fuel, super plus unleaded

### **Electrics/Electronics.**

Engine management:	BMW Motorsport ECU404 with two high-performance micro-processors; individual cylinder injection and ignition; BMW Motorsport Lambda controller; pit speed limiter function, quick shift function; engine data memory system
Energy management:	electric energy management and monitoring with BMW Motorsport POWER400 control unit, networking of all sensors and actuators through bus system
Wiring harness:	weight-optimised

Ignition coil:	four high-performance pencil coils with integrated ignition drivers
Spark plugs:	NGK high-performance spark plugs
Cockpit:	free programmable LCD display with integrated indicators
Steering wheel:	quick-release multi-function steering wheel with integrated display control



## 8. Format and regulations.



FIA WTCC race weekends are organised as follows:

- In Curitiba, Zandvoort, Pau, Porto and Macau drivers have one 30-minute training session on Fridays.
- On Saturdays there are two free practice sessions of 30 minutes each and a 30-minute qualifying which determines grid positions for race 1.
- Race Sundays begin with a warm-up (15 minutes).
- Race 1 begins at midday local time wherever possible throughout the season 2007. Race 2 is scheduled for 15.30 hrs. Both races cover a distance of 50 km.
- This year's new time plan has resulted in a much longer interval between the two races than last year, but teams will still have only 15 minutes to prepare their cars for the second race of the day. After that time, the Parc-Fermé regulation prohibits any more work on the cars.
- From 2007, Race 1 will see a "rolling" start, Race 2 is started using a standing grid formation.
- The outcome of the first race determines the grid positions for race two, with the top eight finishers positioned in reverse order (the winner starting from place eight, the runner-up from place seven and so on). Drivers failing to complete race one go to the back of the starting grid.

The top eight pilots in each race are awarded championship points as follows:

1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
10	8	6	5	4	3	2	1

At the end of the season the FIA WTCC awards championship titles both to the best driver and the best manufacturer. The manufacturers' classification is based on the race results of the two best drivers for each competing brand.

In 2007, each driver will enter his first WTCC race of the year with a basic handicap weight of 10 kg on board of his car. The most successful drivers of a weekend (across both races) have to take an additional handicap on board for the next race meeting. But drivers can also reduce their ballast, as loads will be distributed in 2007 according to a new key:

1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup> +
+20 kg	+15 kg	+10 kg	+10 kg	+10 kg	+5 kg	+5 kg	-15 kg	-5 kg	-10 kg

In addition to finishing positions, the amount of extra ballast to be carried is determined by the drivers' scores. For every ten points, an extra 5 kg must be taken on board (20 points = 10 kg, 30 points = 15 kg, etc.). However, with a maximum limit of 60 kg in place in 2007, the combined weight of both categories of ballast is calculated before each race weekend to ensure that drivers remain within the prescribed weight range. The new upper limit has been reduced by 20 kg compared with last year. The race weight of the car is determined by adding its prescribed minimum weight and the position-based ballast being carried.

Three categories of car are permitted in the FIA WTCC 2007:

- Touring cars with naturally aspirated engines compliant with FIA Super2000 regulations (like the BMW 320si WTCC)
- Diesel powered touring cars compliant with FIA Diesel 2000 regulations (since 2004)
- Petrol powered touring cars with naturally aspirated engines compliant with FIA Super Production regulations

Only cars of the first of these three categories are currently taking part in the WTCC.

### **Super2000 class.**

According to Super2000 regulations, only basic four-seater, four-door saloon cars measuring at least 4.2 m in length can compete. At least 2,500 units of their production versions must have been manufactured in the last twelve months and they must come from a family selling at least 25,000 units per year. Homologated as Group A cars for motorsport, they must be equipped with a FIA approved conversion kit for the WTCC (consisting of special components for the engine and the car).

Displacement is limited to 2,000 ccm while maximum rpm levels depend on engine type. Four-cylinder units are allowed up to 8,500 rpm (six-cylinders up to 9,000 rpm, five-cylinders up to 8,750 rpm). Engines must survive at least four successive races. If they are changed before time, the driver drops back ten places on the starting grid. Substitute cars (T-cars) are not permitted.

Regulations allow two different transmission types: the conventional H gear box based on Group A homologation (up to five gears) or the sequential gear box (with 6 gears).

Different powertrain concepts are balanced out via the individual minimum vehicle weights (including the driver):

- Rear wheel drive, H transmission: 1,125 kg
- Rear wheel drive, sequential gear box: 1,155 kg
- Front wheel drive, H transmission: 1,110 kg
- Front wheel driver, sequential gear box: 1,140 kg

Vehicles that fall below the minimum weight due to their design can be weighed down with ballast, which must be attached to the floor in the luggage compartment or in the cockpit of the vehicle. Ground clearance must be at least 80 mm.

Electronic driving aids of any kind (such as ABS, traction control etc.) are not permitted, although a limited slip differential is allowed, provided it operates purely mechanically.

Wheel rim dimensions are limited to 9 x 17 inches and standard Yokohama tyres are prescribed, measuring no more than 610 mm in diameter and a maximum of 250 mm in width. The number of dry tyres a driver can use for each event is limited to twelve new ones and six marked, used tyres. However, this does not apply to the first race weekend in Curitiba or to the other non-European races, where 16 slicks are permitted per driver. There is no limit on the number of wet tyres that may be used.

Safety regulations prescribe an FIA-homologated safety cage made of steel, a bucket seat, the HANS Head and Neck Support system and a full harness belt with at least five attachment points.

Regulations prohibit any kind of wireless data transmission (telemetry) between the car on the track and the team, but radio contact is allowed.

## 9. Statistics.



### WTCC facts and figures.

2005 saw the first World Touring Car Championship take place since 1987. Although motorsport had changed in the interim, with the revival of the WTCC one thing was still the same: BMW has always come away from the season celebrating a title win. This statistics section offers a range of interesting facts and figures about the FIA WTCC (as at the end of the season 2006).

### Driver statistics (since 2005).

#### World Touring Car Champions.

Year	Driver	Car
1987	Roberto Ravaglia	BMW M3
2005	Andy Priaulx	BMW 320i
2006	Andy Priaulx	BMW 320si

#### Victories.

Pos.	Driver	Manufacturer	Total
1	Jörg Müller	BMW	7
2	Andy Priaulx	BMW	6
3	Fabrizio Giovanardi	Alfa	4
	Dirk Müller	BMW	4
	Augusto Farfus	Alfa	4

#### Pole positions.

Pos.	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	7
2	Augusto Farfus	Alfa	6
3	Rickard Rydell	SEAT	4
	Gabriele Tarquini	SEAT	4

#### Fastest laps.

Pos.	Driver	Manufacturer	Total
1	Jörg Müller	BMW	6
2	Andy Priaulx	BMW	5
3	Fabrizio Giovanardi	Alfa	4
	Dirk Müller	BMW	4
	Gabriele Tarquini	SEAT	4

**Podium appearances.**

Pos.	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	17
2	Jörg Müller	BMW	12
3	Rickard Rydell	SEAT	10
	Augusto Farfus	Alfa	10

**World championship points.**

Pos.	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	174
2	Dirk Müller	BMW	140
3	Jörg Müller	BMW	131

**Races with points scored.**

Pos.	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	30
2	Dirk Müller	BMW	26
3	Rickard Rydell	SEAT	24
	Augusto Farfus	Alfa	24

**Number of races\*.**

Pos.	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	40
	Jordi Gené	SEAT	40
	Peter Terting	SEAT	40
	James Thompson	Alfa	40

\*only drivers listed here have competed in all races since 2005.

**Most laps in the lead.**

Pos.	Driver	Manufacturer	Total
1	Andy Priaulx	BMW	90
2	Jörg Müller	BMW	78
3	Augusto Farfus	Alfa	49

## **Manufacturers' statistics (since 2005).**

### **Manufacturers' championship wins.**

Year	Manufacturer	Car
2005	BMW	BMW 320i
2006	BMW	BMW 320si

### **Race victories.**

Pos.	Manufacturer	Total
1	BMW	20
2	Alfa Romeo	12
3	SEAT	6
4	Chevrolet	2

### **Pole positions.**

Pos.	Manufacturer	Total
1	Alfa Romeo	13
	SEAT	13
3	BMW	12
4	Chevrolet	2

### **Fastest laps.**

Pos.	Manufacturer	Total
1	BMW	18
2	Alfa Romeo	9
	SEAT	9
4	Chevrolet	3
5	Honda	1

### **Podium appearances.**

Pos.	Manufacturer	Total
1	BMW	30
2	SEAT	23
3	Alfa Romeo	21
4	Chevrolet	5
5	Honda	1

### **World championship points.**

Pos.	Manufacturer	Total
1	BMW	616
2	SEAT	480
3	Alfa Romeo	360
4	Chevrolet	86
5	Honda	18

## 10. Press contacts.



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