Page 1

The new BMW X5, the new BMW X6.



Contents.

Model variants at launch 2
Vehicle concept and design. Fresh updates enhance visual authority and presence
Interior and equipment. Modern premium ambience with digital cockpit
Drive systems, transmissions and BMW xDrive. Serene driving pleasure thanks to across-the-board electrification with 48V mild hybrid technology and innovative plug-in hybrid drive system. 15
Driving dynamics and chassis technology. Sporting versatility meets generous long-distance comfort
Driver assistance systems. New systems for automated driving and parking
Display and control/operation system, connectivity. BMW Curved Display and latest-generation BMW iDrive

Page 2

The new BMW X5, the new BMW X6. Model variants at launch.



BMW X5 xDrive50e:

Six-cylinder in-line petrol engine, plug-in hybrid system with electric synchronous motor, eight-speed Steptronic Sport transmission, BMW xDrive.

Drive system overall:

Max. system output: 360 kW/490 hp (incl. temporary boost).

System torque: 700 Nm (516 lb-ft)*.

BMW TwinPower Turbo engine:

Capacity: 2,998 cc.

Nominal power: 230 kW/313 hp at 5,000 – 6,500 rpm. Nominal torque: 450 Nm (332 lb-ft) at 1,750 – 4,700 rpm.

Electric motor:

Nominal power: 145 kW/197 hp.

Max. torque at the transmission input: 450 Nm (332 lb-ft).

Performance / Consumption / Emissions:

Acceleration [0 - 100 km/h (62 mph)]: 4.8 seconds.

Top speed: 250 km/h (155 mph).

Top speed, electric: 140 km/h (87 mph).

Electric range in WLTP cycle: 94 – 110 km (58 – 62 miles).

Petrol consumption, combined in WLTP cycle: 1.1 – 0.8 I/100 km

(256.8 - 353.1 mpg imp).

Petrol consumption, combined in NEDC cycle: - .

Electric power consumption, combined in WLTP cycle:

27.0 - 22.9 kWh/100 km.

Electric power consumption, combined in NEDC cycle: – .

 CO_2 emissions from petrol, combined in WLTP cycle: 26 – 18 g/km.

CO₂ emissions from petrol, combined in NEDC cycle: – .

Exhaust standard: Euro 6d.

BMW X5 xDrive40i:

Six-cylinder in-line petrol engine, 48V mild hybrid technology, eight-speed Steptronic Sport transmission, BMW xDrive.

Drive system overall:

Output: 280 kW/380 hp, torque: 540 Nm (398 lb-ft)*.

BMW TwinPower Turbo engine:

Capacity: 2,998 cc.

Nominal power: 280 kW/380 hp at 5,200 – 6,250 rpm. Nominal torque: 520 Nm (383 lb-ft) at 1,850 – 5,000 rpm.

Electric motor:

Nominal power: 9 kW/12 hp.

Nominal torque: 200 Nm (147 lb-ft).

Performance / Consumption / Emissions:

Acceleration [0 - 100 km/h (62 mph)]: 5.4 seconds.

Top speed: 250 km/h (155 mph).

Fuel consumption, combined in WLTP cycle: 9.9 – 8.5 I/100 km

(28.5 - 33.2 mpg imp).

Fuel consumption, combined in NEDC cycle: - .

CO₂ emissions, combined in WLTP cycle: 224 – 193 g/km.

CO₂ emissions, combined in NEDC cycle: – .

Exhaust standard: Euro 6d.

BMW X5 M60i xDrive:

V8 petrol engine, 48V mild hybrid technology,

eight-speed Steptronic Sport transmission, BMW xDrive.

Drive system overall:

Output: 390 kW/530 hp, torque: 750 Nm (553 lb-ft).

BMW TwinPower Turbo engine:

Capacity: 4,395 cc.

Nominal power: 390 kW/530 hp at 5,500 – 6,000 rpm. Nominal torque: 750 Nm (553 lb-ft) at 1,800 – 4,600 rpm.

Electric motor:

Nominal power: 9 kW/12 hp.

Nominal torque: 200 Nm (147 lb-ft).

Performance / Consumption / Emissions:

Acceleration [0 - 100 km/h (62 mph)]: 4.3 seconds.

Top speed: 250 km/h (155 mph).

Fuel consumption, combined in WLTP cycle: 12.5 – 11.5 I/100 km

(22.6 - 24.6 mpg imp).

Fuel consumption, combined in NEDC cycle: - .

CO₂ emissions, combined in WLTP cycle: 283 – 261 g/km.

CO₂ emissions, combined in NEDC cycle: – .

Exhaust standard: Euro 6d.

BMW X5 xDrive30d:

Six-cylinder in-line diesel engine, 48V mild hybrid technology, eight-speed Steptronic Sport transmission, BMW xDrive.

Drive system overall:

Output: 219 kW/298 hp, torque: 670 Nm (494 lb-ft)*.

BMW TwinPower Turbo engine:

Capacity: 2,993 cc.

Nominal power: 210 kW/286 hp at 4,000 rpm.

Nominal torque: 650 Nm (479 lb-ft) at 1,500 – 2,500 rpm.

Electric motor:

Nominal power: 9 kW/12 hp.

Nominal torque: 200 Nm (147 lb-ft).

Performance / Consumption / Emissions:

Acceleration [0 - 100 km/h (62 mph)]: 6.1 seconds.

Top speed: 233 km/h (145 mph).

Fuel consumption, combined in WLTP cycle: 8.2 – 7.1 I/100 km

(34.5 - 39.8 mpg imp).

Fuel consumption, combined in NEDC cycle: - .

CO₂ emissions, combined in WLTP cycle: 215 – 186 g/km.

CO₂ emissions, combined in NEDC cycle: – .

Exhaust standard: Euro 6d.

BMW X6 xDrive40i:

Six-cylinder in-line petrol engine, 48V mild hybrid technology, eight-speed Steptronic Sport transmission, BMW xDrive.

Drive system overall:

Output: 280 kW/380 hp, torque: 540 Nm (398 lb-ft)*.

BMW TwinPower Turbo engine:

Capacity: 2,998 cc.

Nominal power: 280 kW/380 hp at 5,200 – 6,250 rpm. Nominal torque: 520 Nm (383 lb-ft) at 1,850 – 5,000 rpm.

Electric motor:

Nominal power: 9 kW/12 hp.

Nominal torque: 200 Nm (147 lb-ft).

Performance / Consumption / Emissions:

Acceleration [0 - 100 km/h (62 mph)]: 5.4 seconds.

Top speed: 250 km/h (155 mph).

Fuel consumption, combined in WLTP cycle: 9.6 – 8.5 I/100 km

(29.4 - 33.2 mpg imp).

Fuel consumption, combined in NEDC cycle: - .

CO₂ emissions, combined in WLTP cycle: 218 – 192 g/km.

CO₂ emissions, combined in NEDC cycle: – .

Exhaust standard: Euro 6d.

BMW X6 M60i xDrive:

V8 petrol engine, 48V mild hybrid technology, eight-speed Steptronic Sport transmission, BMW xDrive.

Drive system overall:

Output: 390 kW/530 hp, torque: 750 Nm (553 lb-ft).

BMW TwinPower Turbo engine:

Capacity: 4,395 cc.

Nominal power: 390 kW/530 hp at 5,500 – 6,000 rpm. Nominal torque: 750 Nm (553 lb-ft) at 1,800 – 4,600 rpm.

Electric motor:

Nominal power: 9 kW/12 hp.

Nominal torque: 200 Nm (147 lb-ft).

Performance / Consumption / Emissions:

Acceleration [0 - 100 km/h (62 mph)]: 4.3 seconds.

Top speed: 250 km/h (155 mph).

Fuel consumption, combined in WLTP cycle: 12.3 – 11.4 l/100 km

(23.0 - 24.8 mpg imp).

Fuel consumption, combined in NEDC cycle: – .

CO₂ emissions, combined in WLTP cycle: 279 – 258 g/km.

CO₂ emissions, combined in NEDC cycle: – .

Exhaust standard: Euro 6d.

BMW X6 xDrive30d:

Six-cylinder in-line diesel engine, 48V mild hybrid technology, eight-speed Steptronic Sport transmission, BMW xDrive.

Drive system overall:

Output: 219 kW/298 hp, torque: 670 Nm (494 lb-ft)*.

02/2023 Page 6

BMW TwinPower Turbo engine:

Capacity: 2,993 cc.

Nominal power: 210 kW/286 hp at 4,000 rpm.

Nominal torque: 650 Nm (479 lb-ft) at 1,500 – 2,500 rpm.

Electric motor:

Nominal power: 9 kW/12 hp.

Nominal torque: 200 Nm (147 lb-ft).

Performance / Consumption / Emissions:

Acceleration [0 - 100 km/h (62 mph)]: 6.1 seconds.

Top speed: 233 km/h (145 mph).

Fuel consumption, combined in WLTP cycle: 7.9 – 7.0 I/100 km (35.8 –

40.4 mpg imp).

Fuel consumption, combined in NEDC cycle: - .

CO₂ emissions, combined in WLTP cycle: 208 – 184 g/km.

CO₂ emissions, combined in NEDC cycle: – .

Exhaust standard: Euro 6d.

All figures relating to performance, fuel/electric power consumption and emissions are provisional.

All of the stated model variants, equipment features, technical data and fuel/electric power consumption and emissions figures relate to the offering in the German market. These may vary for other markets. Dimensions and measurements refer to vehicles with basic configuration in Germany. These may vary depending on the wheel/tyre size and items of optional equipment selected.

The fuel consumption, CO_2 emissions, electric power consumption and electric range figures are determined according to the European Regulation (EC) 715/2007 in the version applicable. The figures refer to a vehicle with basic configuration in Germany and the range shown considers the different sizes of the selected wheels/tyres and the selected items of optional equipment.

All values were calculated based on the new WLTP test cycle. WLTP values are taken as the basis for determining vehicle-related taxes or other duties based (at least inter alia) on CO_2 emissions as well as eligibility for any applicable vehicle-specific subsidies. Further information on the WLTP and NEDC measurement procedures can also be found at www.bmw.de/wltp.

Further information on official fuel consumption figures and specific CO_2 emission values of new passenger cars is included in the following guideline: 'Leitfaden über den Kraftstoffverbrauch, die CO_2 -Emissionen und den Stromverbrauch neuer Personenkraftwagen' (Guide to the fuel economy, CO_2 emissions and electric power consumption of new passenger cars), which can be obtained free of charge from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at https://www.dat.de/co2.

^{*} Developed by the combination of the combustion engine (stated nominal figure) and the electric motor (up to stated nominal figure).

Page 7

Vehicle concept and design.

Fresh updates enhance visual authority and presence.



Targeted design modifications, an expanded standard equipment roster, across-the-board electrification and clear progress in digital technology mark out the next stage in development of the successful BMW model pairing in the luxury Sports Activity Vehicle and Sports Activity Coupé segments. The smoothly assured character exuded by the new BMW X5 in every situation is now emphasised by particularly robust design features and the optional illuminated BMW kidney Iconic Glow. The extravagant dynamism of the new BMW X6, meanwhile, is underscored by features including the now standard M Sport package. The line-up of power units has undergone a comprehensive overhaul, leading to a significant increase in the electric range of the BMW X5 xDrive50e with plug-in hybrid drive system and the introduction of 48V mild hybrid technology across all other models. Also pointing the way into the future are the new systems for automated driving and parking, plus the latestgeneration iDrive control/operation system with BMW Curved Display and BMW Operating System 8.

These extensive modifications represent all the ingredients required to strengthen the position of the BMW X5 as the global market leader in its segment and underpin the leading status of the BMW X6 ahead of competitors from other premium German manufacturers. Both models are built at BMW Group Plant Spartanburg. The competence centre for BMW X models in the US state of South Carolina also hosts production of the BMW X3, the BMW X4, the super-luxurious BMW X7 and the BMW XM – the first electrified high-performance model from BMW M GmbH. Added to which, since 2022 a market-specific variant of the BMW X5 has been rolling off the assembly line at the Dadong plant in China operated by the BMW Brilliance Automotive Ltd. joint venture based in Shenyang. Alongside the USA and Canada, the most important sales regions for the new BMW X5 and new BMW X6 include China and other Asian markets, Germany, the Middle East and Australia. Their worldwide market launch will get underway in April 2023.

The new BMW X5: slim headlights, illuminated BMW kidney grille. With its distinctive Sports Activity Vehicle proportions and pared-back surface treatment, the BMW X5 represents a clear example of elegant

presence, powerful assurance and broad-based functionality at work.

02/2023 Page 8

The new edition of the car comes as standard with the design features of xLine specification, shining an even more vivid spotlight on its modern and robust character profile. Alternatively, customers can select an M Sport package from the options list. This contains design elements that reference the model's sporting instincts and take on a model-specific form for the range-topping BMW X5 M60i xDrive.

All model variants adopt the new design for the signature BMW headlights and BMW kidney grille. The outline of the new headlight units is 35 millimetres narrower. Its arrow-shaped daytime driving light elements point outwards and also serve as turn signal indicators. On cars featuring the optional matrix LED headlights with adaptive control and BMW Selective Beam non-dazzling high beam, M Shadowline lights with black inlays can also be specified.

The prominent BMW kidney grille has a surround and bars in Pearl-effect Chrome. And the BMW kidney Iconic Glow can be specified for the first time as an option for the BMW X5 xDrive50e, BMW X5 xDrive40i and BMW X5 xDrive30d. Its cascade lighting ensures the cars have an extremely striking and brand-typical appearance both when standing still and while on the move. The illumination is activated when one of the doors is opened and can be switched on or off manually by the driver via the iDrive menu.

The BMW kidney grille is now bordered by clearly sculpted surfaces which bring a modern appeal to the front end. Vertical air curtains positioned to the outer edges emphasise the width of the car. The lower air intake has a horizontal decorative trim detail in Pearl-effect Chrome and triangular apertures in its outer areas.

Newly designed air breathers, LED rear lights with X motif.

The air breathers in the front side panels of the BMW X5 also have a modern and eye-catching design. They sport a dynamically curving element at the front (finished in Pearl-effect Chrome as standard or in Black if the M Sport package is specified and on the BMW X5 M60i xDrive), and three horizontal blades at their trailing edge. The BMW X5 xDrive50e also has "electrified by i" badging here and the BMW X5 M60i xDrive features its model designation.

The new BMW X5 now comes as standard with not only roof rails in Satin Aluminium but also Exterior Line Satin Aluminium trim. At the rear of the Sports Activity Vehicle, underride protection in Glacier Silver and new geometry for the outer areas of the rear apron bring extra touches

of quality. In addition, the likewise newly designed rear lights turn heads during the daylight hours as well as in the dark. At night, the striking contours of the sculptural fibre-optic light guide elements for the rear lights and brake lights can be seen particularly clearly. The L shape familiar from other BMW models is reflected horizontally, creating a visually powerful, consistently illuminated and unmistakable X motif within the rear lights. Pulsating turn signal indicators at the rear of the new BMW X5 round off the impressive light show.

The new BMW X6: expressive front end with large air intakes.

The BMW X6 was the founder member of the Sports Activity Coupé segment and in its third model generation it continues to epitomise extravagant sporting lustre and forceful visual presence. The long, swooping roofline and crisply painted lines generate a dynamically stretched silhouette.

The new BMW X6 again features slim headlight units with arrow-shaped daytime driving light elements, which can be specified optionally as M Shadowline lights. As before, the BMW kidney Iconic Glow is offered for the BMW X6 xDrive40i and BMW X6 xDrive30d. The dynamic character of the new BMW X6 is highlighted even more intently with the now standard M Sport package. Playing a key role here is the octagonal frontend signature below the BMW kidney grille, with its striking side apertures and generous use of black surfaces. Like the clearly moulded and three-dimensional front apron, with its outward-rising lines, it underscores the car's width and brawny stature.

Powerful rear with slim lights extending well into the tailgate.

M-specific side skirts and M High-gloss Shadowline trim reflect the agile character of the new BMW X6. The athletically taut surfacing of the flanks and the car's muscular shoulders transition smoothly into its equally powerful rear end design. The rear apron has an insert in Dark Shadow, while the exhaust tailpipe trims are trapezoidal in shape.

Another unmissable design feature of the Sports Activity Coupé is the slim rear lights that reach far into the tailgate. Their light signature is shaped by the familiar L shape of the rear light and brake light bars.

Flagship models with distinctive design features.

The new BMW X5 can be ordered with the M Sport package as an option to bring an extra sense of exclusive dynamism to proceedings. The new BMW X6 does likewise, fitted as it is with the M Sport package as standard. Also playing their part here are the front apron with M-specific

02/2023 Page 10

design, the roof rails in Black high-gloss, M High-gloss Shadowline trim, plus the rear apron with an inlay in Dark Shadow and trapezoidal exhaust tailpipe trims.

The two range-topping models – the BMW X5 M60i xDrive and BMW X6 M60i xDrive – also take to the stage with bespoke design cues. Features including double bars and an M logo for the BMW kidney grille, M exterior mirror caps in Black high-gloss and exhaust tailpipe trim in the hallmark M quad-pipe style point to the standout performance attributes of the eight-cylinder models. The new BMW X6 M60i xDrive also has a rear spoiler in Black high-gloss.

An M Sport package Pro is now offered for all model variants and injects the dynamic aura of the new BMW X5 and new BMW X6 with extra exclusivity. It features a kidney grille surround in matt Black, exhaust tailpipe trim in Black Chrome, and M Shadowline lights. Also included in the M Sport package Pro are an M Sport braking system with red brake callipers, an M Sport exhaust system (standard in the eight-cylinder models, not available for the BMW X5 xDrive50e) and M seat belts.

In addition, the new and visually powerful exterior paint shades M Marina Bay Blue metallic and M Isle of Man Green metallic are available exclusively for the BMW X5 M60i xDrive and BMW X6 M60i xDrive respectively. Meanwhile, all model variants of the new BMW X5 and new BMW X6 can be ordered with a choice of one solid and seven metallic colours, plus a selection of four BMW Individual paint finishes. Blue Ridge Mountain metallic, Brooklyn Grey metallic, Skyscraper Grey metallic and Frozen Pure Grey metallic are new additions to the colour range.

Customers can also choose from around 40 BMW Individual special paintwork shades for their new BMW X5 and new BMW X6. These include metallic variants such as Atlantis and Velvet Blue, as well as solid or matt finishes. These exclusive paint options are applied by hand in a meticulous process and the spectrum of colours is being expanded all the time.

Page 11

Interior and equipment.

Modern premium ambience with digital cockpit.



Digital technology is the guiding force behind the advances brought to the interior of the new BMW X5 and new BMW X6. The integration of BMW Operating System 8 and the latest generation of the iDrive control/operation system also heralds the arrival of the BMW Curved Display in the Sports Activity Vehicle and Sports Activity Coupé. The innovative cockpit and associated updates to the instrument panel bring a particularly progressive feel to the modern premium ambience.

The raised seating position in the new BMW X5 and new BMW X6 ensures both cars offer authoritative driving pleasure and an outstanding view over the road. Climb into the rear compartment of the two models and their very distinct characters come to the fore. The new BMW X5 combines outstanding travelling comfort over long distances with a high level of versatility. The BMW X5 xDrive40i and BMW X5 xDrive30d can be specified with a third row of seats as an option. The capacity of the load compartment can be expanded from 650 litres to a maximum 1,870 litres (BMW X5 xDrive50e: 500 – 1,720 litres). A two-section split tailgate enables easy loading of items into the boot. Rear-seat passengers also enjoy excellent long-distance comfort in the new BMW X6. With all five seats occupied, the boot still offers 580 litres of load capacity behind the high-opening tailgate. The Sports Activity Coupé also has a 40:20:40 split/folding rear-seat backrest, which allows the load compartment to be expanded to 1,530 litres.

Fully digital BMW Curved Display with intuitive touch control.

The fully digital BMW Curved Display is at the heart of the interior redesign for the new BMW X5 and new BMW X6. It is made up of a 12.3-inch information display behind the steering wheel and a control display with a screen diagonal of 14.9 inches – both located behind a single glass surface. The touch control functionality of the BMW control display has brought about a significant reduction in the number of buttons and controls in favour of digital control for numerous functions.

The automatic climate control system is now also operated via the BMW Curved Display. Controls for setting the desired temperature on the driver and front passenger side are shown permanently, while airflow, air distribution and the seat heating function can be controlled by calling up

the climate control menu. If the optional four-zone automatic climate control system is specified, the passengers in the rear can adjust the temperature and ventilation via a separate control panel. A standard nanoparticle filter keeps the air inside the vehicle free of virus-sized particles and allergens.

Instrument panel now as standard with Sensafin surfacing and highly effective light bar.

The newly designed instrument panel serves as the perfect stage for the BMW Curved Display. Its horizontal structure emphasises the width of the cabin, while the surfacing in leather-like Sensafin (now standard), with its aesthetic and haptic qualities, draws further attention to the optimised premium character of the interior. The central air vents in the new BMW X5 and new BMW X6 are extremely slim and integrated into the instrument panel almost out of sight. Adding an extra touch of elegance and quality is the broad, smoothly curving trim element in standard fine wood or Fineline Black metal effect for the new BMW X5 M60i xDrive and BMW X6 M60i xDrive models.

Another new feature is the ambient light bar with crystalline surface structure and highly effective LED backlighting integrated below the trim element in the front passenger area. The relevant model lettering - "X5" or "X6" - is added to the light bar's graphic; in the two flagship models it displays the M logo.

The ambient light bar is a striking addition to the also standard ambient lighting package. The light distribution, brightness and colour for the interior illumination can be configured via the iDrive menu. In its latest incarnation, the ambient lighting invites the user to choose from a selection of 15 colours. The light bar now steers the brightening of the interior illumination as the driver approaches the car – and the dimming from back to front in a flowing movement when they lock it – to even more impressive effect. Added to which, it also signals an incoming telephone call with a dynamic chaser light. The ambient lighting system's range of functions also includes the Welcome Light Carpet – which projects an eye-catching image onto the ground just outside the doors when the doors are unlocked or opened – and pulsating light signals that appear on the inner panelling of an open door when the engine is running.

Control panel in the centre console with new selector lever.

Additional touch-sensitive surfaces mark out the new version of the control panel on the centre console. It is home to the iDrive Controller,

02/2023 Page 13

the Start/Stop button and the buttons activating the electric parking brake, the settings for the optional air suspension and the optional offroad modes. Also found here are the Driving Experience Control buttons and the newly designed gear selector lever.

Exclusive glass applications for selected controls can be specified with the Crafted Clarity option. This both visually and haptically appealing design enhancement adorns the selector lever, the Start/Stop button and the iDrive Controller.

Standard: sport seats in new Sensafin trim.

The standard sport seats in the new BMW X5 and new BMW X6 offer outstanding lateral support through dynamically taken corners. They are heated, feature lumbar support and offer electric adjustment options for the seat height, seat angle, backrest angle and backrest width – including a memory function on the driver's side. Cushioned knee pads on the sides of the centre console bring additional sporting appeal to the interior of the BMW X6.

The seat surfaces in standard Sensafin trim can be ordered in a choice of four colours. With their high-quality, vegan material properties, bold quilting and decorative perforation, they offer enhanced seating comfort. BMW Individual Merino extended leather upholstery and BMW Individual full Merino leather upholstery in four and three colour variants respectively are included on the options list. Also available as an option for the driver and front passenger are comfort seats with fully electric adjustment. These can be specified as an option with active seat ventilation and a massage function.

Expanded standard specification, high-quality options.

The equipment features of the xLine model line for the new BMW X5 and the M Sport package for the new BMW X6 treat the standard product substance of the two models to a significant upgrade. Also part of their standard equipment rosters, alongside the electric steering column adjustment, the 2.5-zone automatic climate control system and electrically folding exterior mirrors, are a hi-fi speaker system and a DAB digital radio tuner.

The newly composed Climate Pack further increases the feeling of wellbeing in all seats. It includes seat heating for the outer rear seats and a Heat Comfort package, which brings heating for the steering wheel and the driver/front passenger armrests in the doors and centre console. The

02/2023 Page 14

"thermo" function for the cup holders arranged foremost in the centre console keeps drinks containers cool or warm as required.

Another option available for both models is the panoramic glass sunroof with electric operation for the opening front section and interior roller blind. The likewise optional Sky Lounge panoramic glass sunroof, meanwhile, generates a very special and exclusive aura when darkness falls, with LED light spreading evenly across the glass surfaces to illuminate more than 15,000 graphic patterns and generate a display reminiscent of a starlit sky. The colour scheme for this light show is based on the ambient lighting setting selected.

With its 16 speakers and 415-watt amplifier, the optional Harman Kardon surround sound system further enhances the on-board acoustic experience. Meanwhile, the optional Bowers & Wilkins Diamond Surround Sound System with 20 speakers and 1,500-watt amplifier lays on a particularly sumptuous listening experience. A digital seven-channel amplifier and additional sound sources in the roof area generate an absorbingly clear and multi-layered 3D sound experience for people in all seats.

One USB-A and two USB-C ports are fitted in the first row of seats in the new BMW X5 and new BMW X6 and four USB-C ports in the second row. In addition, the newly designed Travel & Comfort System is available to set up a personalised entertainment programme in the rear. Passengers in the second row can use the quick connectors fitted to the driver's and front passenger seat backrests to attach multifunction holders from the Original BMW Accessories range. These allow tablets and other personal devices to be fixed easily in place, providing the screens for the passengers' choice of entertainment.

Page 15

Drive systems, transmissions and BMW xDrive.



Serene driving pleasure thanks to across-the-board electrification with 48V mild hybrid technology and innovative plug-in hybrid drive system.

A comprehensively updated range of engines with electrification as standard enables the new BMW X5 and BMW X6 to deliver driving pleasure with notably greater poise, assurance and efficiency. All the petrol and diesel units available for the new editions of the Sports Activity Vehicle and Sports Activity Coupé come with 48V mild hybrid technology, while the new BMW X5 can additionally be ordered in a plug-in hybrid version. The new BMW X5 xDrive50e is equipped with an extensively upgraded combustion engine and BMW eDrive technology that endows it with notably sharper performance while significantly expanding the windows of opportunity for pure-electric driving pleasure.

The new BMW X5 and BMW X6 will both be launched with a choice of V8 petrol engine, six-cylinder in-line petrol unit and straight-six diesel. A further six-cylinder in-line diesel engine is expected to be added to the portfolio of both models in summer 2023. All the engines now team up with the latest-generation eight-speed Steptronic Sport transmission and send their power to the road via the BMW xDrive intelligent all-wheel-drive system.

More power, more electric range: BMW X5 xDrive50e with new plugin hybrid drive system.

A straight-six petrol engine joins forces with an electric drive unit in the new BMW X5 xDrive50e to enhance dynamic prowess and efficiency in signature BMW style and to greater effect than ever. Its plug-in hybrid drive system generates system output of 360 kW/490 hp (including temporary boost effect) – an increase of 70 kW/96 hp over the outgoing model – and combined torque of 700 Nm / 516 lb-ft (+100 Nm / 74 lb-ft).

The combustion engine and electric motor play an equal role in bringing significant extra punch and verve to proceedings. The latest incarnation of the 3.0-litre straight-six engine with BMW TwinPower Turbo technology uses the Miller cycle, enabling the opening time of the intake valves to be shortened. This power unit also features redesigned combustion chambers and intake ports, a new dual injection system, an ignition system with active coil and a cylinder head with integrated exhaust manifold. The VANOS variable camshaft timing now works

02/2023 Page 16

electrically. The petrol engine's nominal output of 230 kW/313 hp represents an increase of 20 kW/27 hp on the unit it replaces, with torque peaking at 450 Nm (332 lb-ft).

The electric motor integrated into the eight-speed Steptronic Sport transmission on the new BMW X5 xDrive50e boasts a substantial increase in power output and a BMW-patented innovation for boosting torque delivery. With a power density in excess of 5.0 kW/kg, the new synchronous motor produces a nominal output of 145 kW/197 hp (+62 kW/84 hp) while the upper limit of its rev range has been raised to 11,500 rpm. A pre-gearing stage is additionally used to increase the effective torque produced by the electric motor to a maximum 450 Nm (332 lb-ft) at the transmission input for the motor. In this way, the compact electric motor is able to provide the sort of torque boost that could normally only be achieved using a far larger and heavier unit. The improved build-up of power resulting from the pre-gearing stage between the electric motor's rotor and the transmission's input shaft makes a clear difference both when accelerating off the line and when putting in a guick burst of speed. The new BMW X5 xDrive50e needs just 4.8 seconds to race to 100 km/h (62 mph) from rest.

The motor draws its energy from a high-voltage lithium-ion battery integrated into the underbody area, which is a product of fifth-generation BMW eDrive technology. The battery can store 25.7 kWh of usable energy, an increase of almost 25 per cent compared with the preceding generation. A new Combined Charging Unit supports both single-phase and three-phase charging, doubling the maximum AC charging rate to 7.4 kW. Together with the electric motor's excellent efficiency and the system of intelligent energy management, including adaptive recuperation, this results in an electric range of 94 – 110 kilometres (58 – 68 miles) in the WLTP cycle.

Latest-generation 48V mild hybrid technology for all petrol and diesel engines.

Electrification in the form of 48V mild hybrid technology serves to enhance the effortless power delivery in all other variants of the new BMW X5 and BMW X6 too, while also increasing their efficiency. All combustion engines in the range are now combined with a new eight-speed Steptronic Sport transmission housing an electric motor in its compact housing. This generates an output boost of up to 9 kW/12 hp and 200 Nm (147 lb-ft) of torque, helping the engine to deliver a smooth, dynamic drive along with high efficiency. What is more, the mild hybrid system can additionally be used for driving purely on electric power at

02/2023 Page 17

very low speeds in the BMW X5 xDrive40i and BMW X6 xDrive40i models. The electric motor has the additional effect of enabling smoother operation of both the Automatic Start/Stop function and the coasting function that comes into play when the Driving Experience Control mode ECO PRO is selected.

The energy required for the electric power boost is stored in a 48V battery located in the engine compartment. It is charged extremely efficiently during overrun and braking phases by means of adaptive recuperation and also feeds the regenerated energy to the vehicle's electrical system.

New V8 for the two BMW M models.

The range-topping BMW X5 M60i xDrive and BMW X6 M60i xDrive models are both powered by a newly developed V8 petrol engine. The 4.4-litre power unit can trace its genes back to engines used in renowned BMW M and racing machines and utilises the thermodynamic benefits of a cross-bank exhaust manifold, bank-symmetrical turbochargers and external engine oil cooling. In addition, a reinforced crankshaft drive, further developed turbocharging with a blow-off valve, a new oil pump and a weight-minimised oil sump all play their part in increasing the engine's efficiency. The engine teams up with the 48V mild hybrid technology to also produce noticeably superior response and power delivery under acceleration.

The drive system in the duo of BMW M models generates maximum output of 390 kW/530 hp and peak torque of 750 Nm (553 lb-ft). It propels the new BMW X5 M60i xDrive and new BMW X6 M60i xDrive from 0 to 100 km/h (62 mph) in 4.3 seconds. Here, the vivacious power development of the V8 engine is accompanied by an emotionally rich soundtrack from the standard-fitted M Sport exhaust system.

More power, lower emissions: new six-cylinder in-line petrol engine for the BMW X5 xDrive40i and BMW X6 xDrive40i.

The power unit under the bonnet of the new BMW X5 xDrive40i and BMW X6 xDrive40i is part of a new generation of six-cylinder in-line engines, as is the engine in the BMW X5 xDrive50e plug-in hybrid. The 3.0-litre unit's maximum output of 280 kW/380 hp in these two models is up by 35 kW/47 hp compared with the figure for their predecessors, while peak torque rises by 70 Nm (52 lb-ft) to 520 Nm (383 lb-ft) – and can be boosted to as much as 540 Nm (398 lb-ft) with the input of the mild hybrid system. It enables both the new BMW X5 xDrive40i and new

Page 18

BMW X6 xDrive40i to sprint from 0 to 100 km/h (62 mph) in 5.4 seconds.

This version of the new straight-six engine also benefits from extensive innovations affecting the combustion process, camshaft control, injection, ignition system and exhaust gas routing. Plus, the unit in the BMW X5 xDrive40i and BMW X6 xDrive40i features the most recent version of VALVETRONIC fully variable valve control. Its switchable rocker arms on the exhaust side allow gas exchange to be interrupted if required, thereby reducing the engine's frictional torque on the overrun by around two thirds. This results in more intense harvesting of braking energy. The upgraded VALVETRONIC system also paves the way for purely electric driving at extremely low speeds.

BMW X5 xDrive30d and BMW X6 xDrive30d with updated six-cylinder in-line diesel engine.

Detail upgrades to the six-cylinder in-line diesel engine in the new BMW X5 xDrive30d and BMW X6 xDrive30d have also yielded improvements to its fuel economy and emissions. Steel pistons instead of aluminium items enable higher combustion pressures, while the effectiveness of the oil separation process has also been enhanced. The new common-rail direct injection system now works with solenoid valve injectors, which deliver up to 12 injections per power stroke with maximum pressure of 2,500 bar.

These innovations combine with the 48V mild hybrid technology to produce even sharper power delivery. The drive system develops a maximum 219 kW/298 hp and peak torque of 670 Nm (494 lb-ft), which translates into a 0 to 100 km/h (62 mph) acceleration time of 6.1 seconds for both the new BMW X5 xDrive30d and new BMW X6 xDrive30d.

Standard in all model variants: new eight-speed Steptronic Sport transmission with Launch Control and Sprint function.

The latest-generation eight-speed Steptronic Sport transmission fitted as standard in all model variants of the new BMW X5 and BMW X6 comes with a host of innovations over and above the electric motor integrated into its housing. For example, the unit's internal efficiency, vibration damping and isolation from rotational irregularities have all been optimised. The shift timing is perfectly in tune with the interplay between combustion engine and electric motor. A new electric transmission oil pump and a system of torsion dampers serve to increase not just efficiency, but also shift smoothness and driving comfort. And

02/2023 Page 19

the shift characteristics are now adapted to the Driving Experience Control switch setting. The transmission automatically switches from the D setting to S when SPORT mode is activated.

As well as gearshift paddles on the steering wheel, the eight-speed Steptronic Sport transmission also adds a Launch Control function for powering off the line with optimal traction and maximum dynamic flair. In the eight-cylinder models and all other variants specified with the M Sport package, drivers will also be able to make use of the Sprint function when a quick burst of speed is the order of the day. Here, the transmission automatically shifts into the lowest usable gear when the driver pulls the left-hand shift paddle for at least one second. At the same time, all of the powertrain and chassis systems are switched to their sportiest settings and the mild hybrid system's electric boost effect is also activated.

BMW xDrive with rear-wheel-drive bias.

BMW xDrive intelligent all-wheel drive maximises traction, agility and directional stability on any surface in all new BMW X5 and BMW X6 model variants. It uses an electronically controlled multi-plate clutch in the transfer case interlinked with the powertrain and chassis systems to distribute power between the front and rear wheels as required for the situation at hand.

The rear-biased approach preferred by the xDrive system for its fully variable power distribution further underscores the sporty driving attributes of both models. In the new BMW X5 M60i xDrive and BMW X6 M60i xDrive, this set-up and the standard-fitted M Sport differential at the rear axle work together to deliver the type of performance experience customers expect from a BMW when pushing the dynamic limits.

Page 20

Driving dynamics and chassis technology. Sporting versatility meets generous long-distance comfort.



The chassis technology in the new BMW X5 and BMW X6 has been tuned precisely to the performance characteristics of their upgraded power units. Allowance has also been made for the changes in weight distribution resulting from the inclusion of 48V mild hybrid technology and the additions to standard specification. This has included fitting reinforced anti-roll bars at the front and rear axles of the Sports Activity Vehicle and Sports Activity Coupé. As a result, the new BMW X5 and BMW X6 are able to deliver their signature blend of sporting versatility and excellent long-distance comfort to even more resounding effect.

The double-wishbone front axle / five-link rear axle design ensures precise wheel guidance, impressive straight-line stability and outstanding roll stabilisation through corners. At the same time, the effect of lateral forces on the dampers is minimised, further increasing driving comfort. The chassis on the BMW X5 M60i xDrive and BMW X6 M60i xDrive models comes with M-specific kinematic and elastokinematic properties. Extra-stiff upper mounts for the front axle control arms and the increased front wheel camber combine with bespoke spring and damper characteristics to endow the two BMW M models with sharper agility and cornering dynamics first and foremost, while also enhancing their steering precision.

Optional chassis systems in newly structured packages.

All model variants in the new BMW X5 and BMW X6 ranges come equipped with adaptive suspension as standard. The adaptive M suspension fitted as standard on the BMW M models and straight-six BMW X6 variants results in a noticeably firmer connection to the body. Electronically controlled dampers are on hand in both cases to refine handling dynamics as well as primary ride comfort. Electromagnetically adjustable hydraulic valves allow the compression and rebound settings to be adapted in unison to suit the driving situation. The dampers respond adaptively both to road surface conditions and to driving style. The driver can use the Driving Experience Control switch to choose between a comfort-focused mode and a stiffer damper setting aimed at more sporting response.

02/2023 Page 21

The availability of specially composed chassis packages allows targeted enhancement of the vehicles' agility and comfort. The adaptive two-axle air suspension with automatic self-levelling available as an option employs an electrically driven compressor with pressure reservoir to maintain the optimum ride height at all speeds, regardless of how much load is being carried. The result is comfortable, assured handling. The ride height is reduced automatically and through two stages. When the car's speed passes 138 km/h (86 mph), the body is lowered by 10 millimetres. And it drops by 20 millimetres when 200 km/h (124 mph) is reached – or at any speed in the Driving Experience Control mode SPORT.

Ride height adjustment at the touch of a button or by smartphone.

For off-road driving, the vehicle body can be raised by 20 or 40 millimetres (depending on vehicle speed) at the press of a button. It is also possible to lower the vehicle by up to 40 millimetres when stationary, making it easier to load items inside. This function can be activated from the driver's seat using a button built into the tailgate or, for the first time, via the My BMW App on a smartphone.

The xOffroad package offered as an additional option for straight-six versions of the new BMW X5 and BMW X6 comprises adaptive two-axle air suspension along with the M Sport differential. A button on the centre console can be used to activate four driving modes: xSnow, xSand, xGravel and xRocks. Selecting the appropriate mode adjusts the settings for the xDrive system, accelerator response, transmission control and the DSC system's corrective inputs accordingly, together with the ride height. The xOffroad package also integrates special readouts into the BMW Curved Display and adds robust underguard elements.

Integral Active Steering for greater agility, comfort and manoeuvrability.

Integral Active Steering – standard on the eight-cylinder representatives of the new BMW X5 and BMW X6 and an option for all other variants – has a beneficial effect on the cars' agility, driving comfort and manoeuvrability. The Servotronic power assistance at the front axle is supplemented by a variable steering ratio on models fitted with this optional extra. The Electric Power Steering for the front wheels also benefits from the updated control software in the new BMW X5 and BMW X6 as well as an optimised design for the housing and joints.

With Integral Active Steering, the rear wheels are turned in either the same direction as or the opposite direction to the front wheels,

depending on road speed. This results in exceptionally dynamic cornering abilities and supremely assured lane changes at high speeds. What is more, the rear wheels can now be turned by up to three degrees almost until the car is at a standstill, reducing its turning circle when manoeuvring into and out of parking spaces.

Adaptive M suspension Professional with active roll stabilisation.

Another option available for all variants of the new BMW X5 and new BMW X6 – with the exception of the BMW X5 xDrive50e – is the adaptive M suspension Professional. This package of technologies comprises not just M-specific dampers, Integral Active Steering and the M Sport differential, but also an active roll stabilisation system, whose electric swivel motors enable remarkably swift and precise compensation of body roll when powering through corners. This improves agility, directional accuracy and handling precision, as well as facilitating dynamic steering response thanks to the system's ability to smooth out roll more effectively.

The anti-roll bars between the wheels are disconnected, reducing the amount of body roll caused by surface imperfections on one side of the vehicle. This has the effect of decreasing the lateral acceleration forces and the obtrusive side-to-side head movements they cause.

Integrated braking system, light-alloy wheels up to 22 inches in size.

The new editions of the BMW X5 and BMW X6 are fitted as standard with an integrated braking system capable of generating a degree of stopping power that is matched exactly to the driver's inputs, while also producing consistent pedal feel. This system brings together the brake activation, brake booster and braking control functions within a compact module. The required brake pressure is triggered using an electric actuator, meaning braking requests from the driver assistance systems are likewise translated into extremely short stopping distances for improved active safety.

Standard equipment also comprises 19-inch light-alloy wheels for the new BMW X5 and 20-inch M light-alloy items for the new BMW X6. The BMW X5 M60i xDrive and BMW X6 M60i xDrive models, meanwhile, leave the factory as standard on 21-inch M light-alloy wheels. Available options include M and BMW Individual light-alloy wheels up to 22-inch format. The new BMW X5 and BMW X6 come with a digital tyre diagnosis function as standard with all wheel variants.

Page 23

Driver assistance systems.

New systems for automated driving and parking.



Comfort and safety in the new BMW X5 and BMW X6 are elevated to another new level by a significantly expanded selection of standard and optional driver assistance systems. These automated driving and parking systems support the driver or lighten their workload in a wide variety of situations. They do so by processing camera images as well as the data gathered by ultrasonic and radar sensors to monitor the vehicle's surroundings, to warn of potential hazards, and to minimise the risk of an accident with corrective braking or steering inputs. In addition to this, an advanced system of sensors and intelligent vehicle control also enables greater automated manoeuvring capabilities.

The standard front-collision warning system is now also capable of detecting oncoming traffic when turning left (in countries where vehicles drive on the right) as well as pedestrians or cyclists when turning right. The Evasion Assistant and Crossroads Warning likewise form part of the standard equipment roster for the new BMW X5 and BMW X6.

The Lane Change Warning system – one of the components of the optional Driving Assistant – now also includes active lane return, while the package's rear crossing traffic warning feature has likewise been upgraded by the addition of braking and exit warning functions. If the Driving Assistant is specified, Lane Departure Warning now also reacts to oncoming traffic when there is a potential risk of collision.

Driving Assistant Professional delivers a broad-based experience of automated driving.

The optional Driving Assistant Professional opens the door to an extensive automated driving experience with a combination of Active Cruise Control with Stop&Go function and the Steering and Lane Control Assistant. With automatic Speed Limit Assist, traffic light recognition , route speed control and Active Navigation also included , speed and steering movements in the new BMW X5 and BMW X6 can be adapted with remarkable precision to the current traffic situation, the distance to vehicles ahead, speed limits, overtaking restrictions, traffic light signals and the nature of the route being followed. Corrective steering inputs help the driver to keep the vehicle in the lane detected by the system or change lane when necessary. The

02/2023 Page 24

system's hands-on-wheel detection is very sensitive and recognises contact even when only a few fingers briefly touch the wheel. The Emergency Stop Assistant and Active Lane Change and Merging Assistant can now likewise be found in the extended repertoire of Driving Assistant Professional functions.

Parking Assistant Professional: enter and exit spaces by smartphone.

Drivers also benefit from even greater assistance when parking and manoeuvring. Standard specification includes the Reversing Assist Camera. And the Parking Assistant also fitted as standard in the new BMW X5 and BMW X6 has been extended to include drive-off monitoring and the Trailer Assistant. The Parking Assistant helps the driver to select and park in spaces either parallel or perpendicular to the road. Instead of just using other vehicles as a guide for doing this, the system is now also able to take its bearings from any road markings and the kerb. As well as the necessary steering inputs, it is able to carry out the acceleration, braking and gear changes required for the manoeuvre both when entering and exiting spaces.

The standard Reversing Assistant offers the option of automated reversing in confined spaces or situations where the driver does not have a clear view, such as multi-storey car parks or the driveways of properties. To do this, it stores the steering movements for any section the car has just driven forward through at no more than 36 km/h (22 mph). The system is then able to reverse the vehicle for distances of up to 50 metres by steering it back along the same line.

On models fitted with the optional Parking Assistant Professional, the Reversing Assistant is able to store steering movements for distances of up to 200 metres and then reproduce them in reverse. Added to which, the functionality of the Reversing Assist Camera now also includes a panorama view for the vehicle on the control display. Selecting this option greatly expands the automated parking abilities of the new BMW X5 and BMW X6 too. For instance, drivers also have the ability to control manoeuvres into and out of particularly tight parking spaces from outside the vehicle using the My BMW App on their smartphone (available for Apple iPhones with operating system iOS 16.2 or later).

02/2023 Page 25

In addition to this, the Manoeuvre Assistant now included in the Parking Assistant Professional package is able to store far more complex manoeuvres using GPS data and the trajectory data from steering movements, and subsequently perform them as an automated routine. As many as ten manoeuvres at different locations, covering a distance of up to 200 metres each and a combined total of 600 metres, can be recorded. When the vehicle next arrives at a memorised starting point, the Manoeuvre Assistant will be able to carry out all the tasks required to complete the manoeuvre, controlling the accelerator, brakes and steering as well as changing gear to move forward or reverse. If necessary, the car can switch between the two directions of travel repeatedly while carrying out all the gear changes and steering inputs, for example when negotiating its way through a parking garage with little space and sharp corners. While the automated manoeuvre is in progress, the driver can focus on monitoring the vehicle's surroundings.

Drivers have the choice of controlling both the automated parking functionality and the Manoeuvre Assistant's actions either from inside the vehicle or remotely using their Apple iPhone. It is also possible to quickly switch between the two modes, meaning that once an automated parking or general manoeuvre has commenced, it can be halted at any time and then resumed again from inside the car using its control/operation system or from outside using a smartphone.

The BMW Drive Recorder is another feature of Parking Assistant Professional and uses the driver assistance systems' cameras to record video images all around the vehicle, so these can be stored and later either played back on the control display when the vehicle is stationary or exported via the USB interface. If the vehicle is stolen, the anti-theft recorder sends a message to the customer's smartphone. The customer can then access and store the videos recorded by the cameras at the front and rear of the new BMW X5 or BMW X6 and on the exterior mirrors.

Page 26

Display and control/operation system, connectivity.



BMW Curved Display and latest-generation BMW iDrive.

The new BMW X5 and new BMW X6 also treat their occupants to the latest-generation BMW iDrive multi-sensory vehicle experience via the standard-fit BMW Live Cockpit Plus. Based on BMW Operating System 8 and boasting new-generation software along with exceptionally powerful connectivity and data processing, it takes the interaction between the driver and vehicle into the digital future. The new BMW iDrive system offers more ways for drivers to enjoy easy, intuitive, multimodal control of vehicle, navigation, infotainment and communication functions and also to use digital services.

The user experience is underpinned by the seamless interaction between the touchscreen BMW Curved Display, the voice control, the iDrive Controller and the multifunction buttons on the steering wheel. If the optional BMW Live Cockpit Professional is specified, the display and control/operation system is upgraded to include the latest version of the BMW head-up display, which offers a larger display area, enhanced graphics and additional content. The user experience can also be expanded to include BMW gesture control as an option.

Fully digital BMW Curved Display with state-of-the-art graphics.

The BMW Curved Display in the new BMW X5 and the new BMW X6 is formed by a 12.3-inch information display and a control display with a screen diagonal of 14.9 inches. The screens are housed together behind a curved glass surface so they merge into a single, fully digital, high-resolution unit. With its ergonomic driver-centric positioning, the BMW Curved Display makes the already intuitive touch control even more user-friendly. At the same time, the front passenger is also in an ideal position to view the displays and operate the system by either touch or voice control.

The BMW Curved Display's state-of-the-art graphics and the control/operation system's menu structure have been designed with a smartphone-style appearance. The clearly structured arrangement of widgets on the control display's home screen provides a simple overview of the menu options and can be configured by the driver as desired. Frequently used functions are given a particularly prominent position.

02/2023 Page 27

Natural dialogue with the BMW Intelligent Personal Assistant.

The new generation of BMW iDrive also sees the BMW Intelligent Personal Assistant gain additional skills. Naturally formulated spoken instructions can now be used to adjust the air conditioning, open a window or operate the panoramic glass roof, for instance. Various functions of the driver assistance systems in the new BMW X5 and BMW X6 can likewise be voice controlled. An instant text display also now indicates the command that has just been understood and processed by the voice assistant. The BMW Intelligent Personal Assistant is additionally capable of recognising user behaviour and proactively making suggestions to the driver on how the vehicle can best be used.

When the BMW Intelligent Personal Assistant is in use, new graphics appear in the displays to emphasise the system's interactive character. The graphic "turns" towards the speaker, thereby visualising how the system is listening attentively to what is being said.

Fast, accurate, informative: the BMW Maps navigation system.

The cloud-based BMW Maps navigation system forms part of the standard BMW Live Cockpit Plus. The latest version of the system offers significantly enhanced performance and excellent accuracy along with a simplified method of destination entry. BMW Maps enables extremely fast route calculation, carried out dynamically and based on precise real-time traffic data transmitted at short intervals.

The arrival time is calculated using an anticipatory method which factors in the usual traffic levels along the entire route. With Connected Parking, BMW Maps is also able to provide assistance when searching for a parking space close to the final destination. The adaptive navigation system now recognises places that are driven to frequently and proactively notifies the driver if the traffic on the memorised route is much busier than normal.

Precision navigating with Augmented View in the information display.

The new Augmented View function included as part of the optional BMW Live Cockpit Professional enables exceptionally accurate guidance while driving by supplementing the navigation system's map view. For this purpose, a live video stream from the driver's perspective can be shown on either the control or information display in the new BMW X5 and BMW X6 and augmented by supplementary information that matches the context. When dealing with confusing junctions, for instance, an

animated directional arrow is integrated into the video image to help the driver take the best turn-off for the planned route.

Welcome Scenario with lighting effect and personal greeting.

The engaging user experience starts before the driver has even reached the vehicle thanks to a newly devised Welcome Scenario. Ultrawideband (UWB) radio technology allows precision location pinpointing between the vehicle and the key or compatible smartphone.

Once the distance to the vehicle drops below three metres, the perfectly coordinated welcome sequence commences. It starts with an orchestrated lighting effect using the exterior and interior lights, including the light carpet. The vehicle then automatically unlocks when the driver is about 1.5 metres away. Once inside, the BMW Curved Display shows a choreographed start-up animation with a personal greeting, along with handy suggestions and information. In addition to this, the BMW ID settings are loaded and the smartphone connected.

BMW Digital Key Plus: a full-functionality car key.

The Comfort Access feature offered as standard virtually worldwide also includes the BMW Digital Key Plus. This enables customers to lock and unlock their new BMW X5 or BMW X6 via security-enhanced ultrawideband (UWB) radio technology from a compatible smartphone running either the iOS. A conventional car key is rendered superfluous. Simply approaching the car or walking away triggers the unlocking or locking process; there is no need for the customer to even remove their smartphone from their pocket.

The BMW Digital Key Plus can be set up using the My BMW App. The car owner can also share it – and therefore access to the vehicle – with up to five other users who have a smartphone with either iOS or Android.

Emotionally engaging drive sound, even in locally emission-free driving mode: BMW IconicSounds Electric for the BMW X5 xDrive50e.

The BMW X5 xDrive50e plug-in hybrid model continues to offer an emotionally rich sound experience in pure-electric mode. With BMW IconicSounds Electric included as standard, the joy of driving while generating zero local emissions is accompanied by a special sound design inside the car that provides authentic feedback to every movement of the accelerator pedal.

The car's soundtrack was developed as part of a collaboration between the BMW Group and film score composer Hans Zimmer. Different

versions of the model-specific drive sound are created depending on the mode selected with the Driving Experience Control switch. Pressing the start/stop button additionally triggers an inspiring acoustic tone that signals the car is ready to drive.

Innovative functions for fully electric driving and user-friendly charging with the BMW X5 xDrive50e.

The BMW eDrive Zone function included as standard in the BMW X5 xDrive50e can automatically initiate the switch to the pure-electric driving mode when entering city centres, thereby making the most of the plug-in hybrid drive's potential for providing locally emission-free mobility. This function is already available in 138 European cities, where vehicles can recognise the designated zones with the help of geofencing technology and GPS.

The new BMW X5 xDrive50e is supplied to customers in Europe complete with a BMW Charging Card, a charging cable (mode 3) for use at public charging stations and the Flexible Fast Charger. As well as a third-generation BMW Wallbox, a Smart Wallbox is also offered for home charging in cooperation with expert partners as part of the BMW Charging package of services. In Europe alone, BMW Charging provides access – with a one-off registration – to more than 305,000 public charging points run by around 1,000 charging infrastructure operators. The key benefit of the BMW Charging offering for public charging stations is the attractive kilowatt hour tariffs, which are set for each country.

The BMW Charging range of services has now also been integrated into the My BMW App. For example, the user can now control charging of the car's high-voltage battery remotely by smartphone. Their preferred departure time can be entered to display the charge level the battery is expected to have reached by that point. And if the vehicle is plugged into the mains supply, charging can be started or halted at any time from the My BMW App, regardless of the charge level.

Streaming on the control display.

The new BMW X5 and BMW X6 will allow the driver and front passenger to watch video-on-demand services on the control display. As well as the video portal YouTube, both models also enable access to the Bundesliga in-car app as part of a pilot application. This app provides selected ondemand and live content from the current season in Germany's top football league. Vehicle occupants can therefore enjoy a diverse

programme of in-car entertainment while they wait for the high-voltage battery in the BMW $X5 \times Drive 50e$ to recharge.

Starting with YouTube and the Bundesliga in-car app, the range of available services is set to expand continually as the BMW Group adds further third-party apps. The optional Personal eSIM in the vehicle has to be activated for video streaming.

Optimum connectivity with 5G and Personal eSIM.

If the customer selects the optional Personal eSIM (standard in Europe), it will be integrated into the vehicle alongside the Vehicle SIM, with the DSDA (Dual SIM Dual Active) capability allowing both SIMs to be active simultaneously. The Personal eSIM allows the customer to use the communications and connectivity functions covered by their mobile contract from their car with ease – even in situations where they don't have their smartphone with them.

This essentially turns the BMW X5 or BMW X6 into another digital and connected device. Mobile reception for both data and phone calls is significantly improved by the vehicle's own 5G antenna system. What is more, the Personal eSIM is not linked to just one car, but the user's BMW ID – meaning it can be transferred to other BMW vehicles with Personal eSIM functionality. The Personal eSIM also opens up access to a WiFi hotspot in the car by up to ten devices at any one time.

Personalisation using the BMW ID and My BMW App.

The user experience for BMW X5 and BMW X6 customers is increasingly personalised thanks to their BMW ID. This can now be used for securely storing even more personalised settings and transferring them between vehicles. A PIN code can be created or the BMW ID associated with a particular key to prevent other vehicle users from accessing personal data. After initial registration in the car, it is automatically added to the My BMW App.

The My BMW App acts as a universal digital interface, providing information on the vehicle's status and available range at any time. And it enables remote operation of functions such as vehicle locating, locking and unlocking the doors and monitoring the car's immediate vicinity. Meanwhile, the Remote 3D View function gives drivers the ability to call up a three-dimensional live image of their vehicle and its immediate vicinity on their smartphone. They can select various different views of the car and its surroundings.

In addition, the My BMW App enables customers to book service appointments, send destination addresses from their smartphone to the car's navigation system and initiate BMW ConnectedDrive Upgrades. And it can also be used to control the charging process for the high-voltage battery of the BMW X5 xDrive50e. The My Trips function sends data and analysis on journeys covered, fuel/electric power consumption and average speeds to the user's smartphone. Up to seven users in total can link the same vehicle to the My BMW App and their personal BMW ID.

Paying parking charges directly from the vehicle.

Drivers of the new BMW X5 or new BMW X6 now also have the option to settle parking charges directly from their car using their BMW ID or BMW ConnectedDrive Account. The new parking fee payment function, which is also integrated in the My BMW App, will initially be available in Germany and Austria, before being rolled out across other European countries over the course of 2023.

When the vehicle enters a parking zone, it automatically detects if the service is available and displays the payment function if the parking zone is covered by one of the connected providers. If charging by the minute is possible here, the parking duration is automatically ended when the customer leaves the car park.

Smartphone integration with wireless WiFi connection.

Standard specification for the new BMW X5 and BMW X6 includes optimised smartphone integration via Apple CarPlay® and Android Auto $^{\mathsf{TM}}$, allowing customers to access numerous digital entertainment and communication services. The wireless WiFi connection between smartphone and vehicle enables the services to be integrated directly into the car's display/operation system. Information from the apps can be viewed both in the control display and – in a cleverly presented way – in the instrument display or optional head-up display.

Remote Software Upgrades for over-the-air updates.

The BMW Group is one of the key players in the field of over-the-air function upgrades. By 2020 it was carrying out the largest upgrade campaigns of any European carmaker. The Remote Software Upgrades function keeps the new BMW X5 and BMW X6 up to date with the latest software.

The upgrades can include a variety of different content. For example, customers benefit from free-of-charge quality improvements over the air.

02/2023 Page 32

Depending on the country, model, specification and vehicle condition, customers may also be provided with additional new functions or improvements to existing functions free of charge.