

John Deere Guidance Systems

Guidance you can grow with



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John Deere guidance systems lead the way.

Your business is growing. So obviously, you need the advantages of advanced guidance technology. But remember: the best systems will be open, integrated and able to evolve with your requirements. After all, no two farms or equipment parks are alike.

That's why it pays to contact your John Deere dealer. He offers a full range of affordable guidance systems, from entry level units for smaller arable and livestock farms to top of the range applications for large farmers and contractors.

As a matter of fact, depending on the guidance system and signal accuracy used, you can reduce overlap by up to 95%! John Deere guidance solutions are tailored to suit your operation and comfort level. They save you time, fuel and input costs with every pass on every hectare. And, because efficiency increases with accuracy, John Deere enables you to easily upgrade from one guidance system to the next.

Want proof?

Let this brochure be your guide.



WINTER



SPRING



AUTUMN



SUMMER

Guidance solutions: all year round.

Autumn

It's time to prepare for the next season. Till, spray and seed more productively.

Winter

Analyse your recordings and plan ahead for the next season.

Spring

Fertilise, spray and mow more quickly and accurately.

Summer

Harvest more effectively and efficiently – day or night.

Advantages for arable and contract farming:

- Achieve up to 18% higher productivity when spreading fertiliser.
- Reduce overlap and tillage costs by up to 10%.
- Save up to 5% on spraying, planting and fertilising resources.
- Increase spraying accuracy and field speeds – significantly.
- In harvest, take advantage of the full header width.

Advantages for hay and forage farming:

- Spread fertiliser and slurry more accurately and efficiently.
- Reduce mowing time and costs by up to 10%.
- Unload on-the-go with complete accuracy – even when visibility is low.
- Prepare better swaths for your baler to follow more easily.

Choose the guidance accuracy you want.

With guidance technology from John Deere you can upgrade your accuracy whenever you like on a step-by-step basis – regardless of the equipment you use. It's easy. With our StarFire receivers you choose from 4 kinds of GPS signal for the ultimate in scalable performance:



EGNOS Signal*

EGNOS is a good option for operators using guidance technology for the first time. This free European differential correction signal provides basic guidance accuracy.

Advantages include:

- No licence fees, no subscriptions
- Pass-to-pass accuracy of ± 40 cm

*Note: John Deere cannot guarantee the reliability or availability of EGNOS



SF1 Signal

Our SF1 signal is the next step up the accuracy scale

Advantages include:

- No licence fees, no subscriptions
- ± 30 cm pass-to-pass accuracy

Excellent starting point for

- Tillage
- Spraying
- Grassland applications



SF2 Signal

If operations require more accuracy than SF1, choose our SF2 signal.

Advantages include:

- ± 10 cm pass-to-pass accuracy
- Flexible activation periods

Excellent for

- Tillage and harvesting
- Spraying
- Seeding and planting
- Mowing



RTK Signal

The RTK Signal provides the highest possible guidance accuracy.

Advantages include:

- ± 2 cm repeatable accuracy
- Works with your own base station or a dealer-owned RTK network
- The John Deere RTK-Extend feature maintains performance and functionality should temporary line of sight obstructions occur

Excellent for

- Planting row crops
- Bedding
- Seeding
- Strip till and drip tape
- Any controlled traffic operation

To operate at RTK level wherever you go, ask your dealer for StarFire Mobile RTK. This option is available in selected countries.

Choose the StarFire receiver for your signal needs.

The StarFire 300 receiver

This entry-level receiver is for EGNOS only and can be quickly mounted on top of your vehicle's cab. The StarFire 300 receiver is compatible with virtually all other makes of equipment using a 12V power supply – as well as any GreenStar Display. It can be used for documentation purposes. And, when combined with a GreenStar Lightbar, it provides entry-level manual steering assistance that's as easy as A-B-C.

The StarFire 3000 receiver

The all-new StarFire 3000 receiver works seamlessly with all accuracy levels (EGNOS, SF1, SF2 and RTK) and all John Deere guidance systems – from the manual steering support (Parallel Tracking) to integrated automatic steering (AutoTrac).

Improved resistance to shading

Even in shaded conditions, the StarFire 3000 keeps you right on track thanks to improved satellite availability. In addition to GPS signals, it can also use the Russian GLONASS satellites – and it's so sensitive, it even picks up satellites that are just 5 degrees above the horizon.

Activation made easy

The new StarFire 3000 makes it easy to switch to the best signal for the job. Your John Deere dealer can activate SF2, RTK or Mobile RTK 'over the air', so there's no need for you to drop by unless you want to.



The StarFire 300 receiver



The new StarFire 3000 receiver

AutoTrac faster than ever

The new StarFire 3000 acquires satellites more rapidly than previous models, allowing you to start AutoTrac faster than ever. And if you lose the signal once AutoTrac is running, your receiver reacquires the signal very quickly too.



Reliable on every terrain

John Deere terrain compensation technology with the StarFire 3000 receiver provides the capability to detect the roll, pitch and yaw of the vehicle. So the receiver can compensate accordingly to ensure true vehicle position with respect to the ground throughout the field.

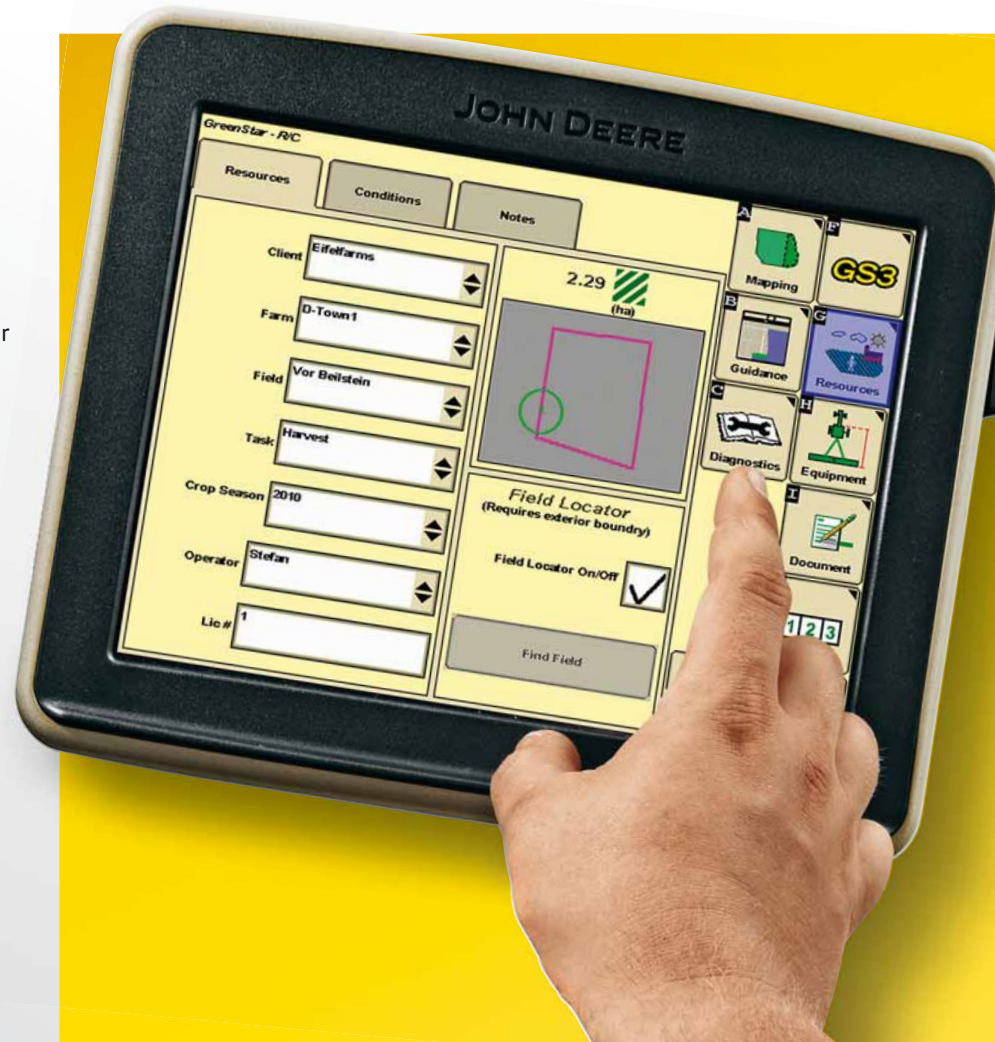
The new GreenStar 2630 Display.

Touch the future.

As your business grows, so do your challenges. That's why it makes sense to invest in a display that has the future built right in: the new GreenStar 2630 touchscreen.

This incredible full-colour display gives you full monitoring and control over all their solutions you use in your John Deere tractor, baler, combine or sprayer. It's easy to understand and use and is packed with all the power and features you need for years of high-end productivity.

From documentation and performance monitoring to guidance and advanced ISOBUS capabilities, the GreenStar 2630 sets new standards for convenience, comfort and efficiency.



**Seeing is believing.**

With its slimline design and latest touchscreen technology, the GreenStar 2360 is a pleasure to use in any conditions. Highlights include a video input, USB port for data transfer and software updates and a host of features designed to help you and your staff work more smoothly and productively.

- Guidance and Guidance Pro Modules
- Documentation
- Advanced ISOBUS capabilities
- Performance monitoring
- Brilliant 26 cm touchscreen
- USB port for data transfer
- Video enabled
- User access levels
- Standby mode for road transport or night-time use

Outstanding functionality.



Precision guidance

The GreenStar 2630 comes with Parallel Tracking manual guidance software preinstalled. The configurable homepage lets you operate in guidance mode while keeping track of your

documents, ISOBUS and the performance monitor. Need more functionality? Simply upgrade your system with AutoTrac or AutoTrac Universal 200. Or add advanced solutions like iTEC Pro, Pivot Pro, implement steering and automatic section control.



ISOBUS keeps you in control

Enjoy worry-free ISOBUS implement control and application documentation on a single display. The easy to use implement connector allows seamless plug-and-play performance with any

ISOBUS implement. The GreenStar 2630 is certified for ISOBUS 2011 and complies with ISO 11783.



Access Manager

The Access Manager provides an easy to use lockout function that lets you disable areas in the display you don't want operators to change. By defining user access level you can make sure

custom settings such as A-B lines will only be modified if you want it. So Access Manager allows for less operator error while being more productive in the field.



Documentation and data management

Display documentation provides on-screen mapping in colour. Thus you can colour code each pass on a coverage map to get a real time picture of skips and overlaps. The map

displayed reflects changes in application rates when spraying or spreading. A legend defines each colour. And yield mapping is supported on harvesting machines. The results? Informed decision making. There's less paperwork and more time to focus on what really counts.



Integrated performance monitor

The GreenStar 2630 saves you the cost of an extra performance monitor on compatible platforms. And it gives you an overview of machine performance values* such as:

- Fuel usage (l/h)
- Operational speed, productivity, engine load
- Total and average values: area, distance, time and idle time; speed and productivity



Video function

The GreenStar 2630 display comes with a video input. For back view and when operating large implements just mount a camera. The video can be viewed while operating machinery directly on the

display.

* values displayed may vary, depending on the tractor, forage harvester or combine used.

Standby mode

Need optimum visibility during road transport or night-time use? Press standby mode and the display will be dimmed but stays active in the background. At the same time receiver warning messages and warning tones are disabled – while safety relevant ISOBUS warnings will show up. And if you want to make use of your display again, it's just a touch on the screen and you're ready to operate.

The GreenStar 1800 Display

Easy to follow.

Do you farm hundreds of hectares? Do you raise livestock? Do you contract? Do you want outstanding flexibility, comprehensive guidance, realistic field views and ISOBUS implement control? Then the 7-inch full-colour GreenStar 1800 Display is for you.

Because it's tailor made for the John Deere AutoTrac Universal 200 (ATU) Steering Kit, it saves you more of what you need most: time and money. It enables you to toggle between multiple home pages to monitor more than one in-field activity. It provides control of your guidance applications including Parallel Tracking, AutoTrac and Sprayer Pro system. In addition, the GreenStar 1800 Display supports the ISOBUS virtual terminal and diagnostics.

Features: 1800 GreenStar Display.

- A scroll wheel along with check, cancel, menu and home buttons
- Ten mapped letter keys for quick one-touch operation
- Manual guidance (Parallel Tracking) and on-screen coverage map
- ISOBUS compatibility (virtual terminal)
- AutoTrac and AutoTrac Universal 200 Steering Kit
- Optional Sprayer Pro and Pivot Pro system functionality



Your advantages:

- Intuitive user interface and push-button control
- ISOBUS virtual terminal
- USB port for data transfers
- Compatible with GreenStar Lightbar, ATU 200 and AutoTrac system
- Sprayer Pro and Pivot Pro enabled
- Compatible with StarFire 300 and StarFire 3000 receivers
- Free software downloads

Lightbar: entry level manual guidance.

The GreenStar Lightbar System.

John Deere makes reaping the benefits of guidance as easy as A-B-C. Because with the GreenStar Lightbar package you get



a simple, economical parallel tracking display that increases productivity. Its 27 tracking LEDs tell you whether your machine is on course or not. So it's easy to steer left or right based on which lights are illuminated.

The GreenStar Lightbar system saves you time and operating costs.

It provides a great "view" even under low-visibility conditions (e.g. fog, dust and at night). And it can be run as a standalone unit or as a companion for either a GreenStar 1800 or 2630 display.

"Without guidance marks I was having problems orienting myself in the field. The GreenStar Lightbar solved this for me. As a matter of fact, I saw improvements on the very first day. It helped me to reduce overlapping by nearly 5%. I saved a lot on labour, fuel, fertiliser and chemicals. And now I can transfer the hardware to any of my machines."

Karl Hammerschmid, Rhineland-Palatinate (Germany),
Mixed farmer



Your guide to a productive day.

The GreenStar Lightbar system provides immediate gains in accuracy and product.

A single box solution.

All you need to get started comes ready to use in a single box. The GreenStar Lightbar teamed with the StarFire 300 receiver can be set up quickly for immediate use on all machines in your multicoloured fleet. You save time and input costs. Thus, when business grows you're ready to meet your growing guidance requirements.



StarFire 300.

- Easy to install on any machine
- Magnetic mount with mounting plate
- Receives the free EGNOS signal
- Documentation when connected to a GreenStar 2630 display



The complete package contains:

- GreenStar Lightbar with bracket
- StarFire 300 receiver with magnetic mount
- EGNOS correction
- Connection harness
- Operator manual



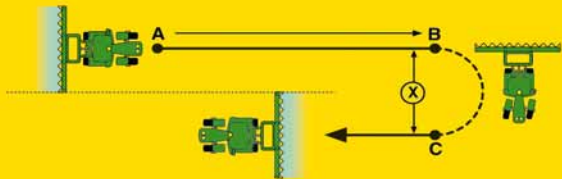
GreenStar Lightbar System.

- Straight Track
- Centre Shift
- Track width adjustments
- Easy to see
- Adjustable LED lights



Easy as A-B-C

Set up and use of GreenStar Lightbar is simple. Just push 3 buttons:



Pushing button A and B on the Lightbar defines the line/reference track.
Pushing button C determines your track width (x).
Track width can then be saved for future use (Important!)

See page 27 for an overview of all of the manual and automatic steering systems John Deere offers.

Parallel Tracking: advanced manual guidance for GreenStar displays.

Parallel Tracking is an ideal universal manual guidance solution for expanding operations, preloaded on your GreenStar display. It fits your budget. And it makes it easy to upgrade to an automatic steering system.

Simply designate the path you want to follow: The Parallel Tracking display provides visual cues and tones to help keep you on track and improve your efficiency. This saves you time, chemicals and fuel.

Advantages include:

- The ability to work in curves and straight tracks
- Faster field speeds even in low visibility conditions
- The ability to operate wider implements such as cultivators, sprayers and lime spreaders
- In base on every GreenStar display
- Additional display features (e.g. ISOBUS, SprayerPro)



Scalable accuracy for any type of field.

Parallel Tracking lets you fertilise and spray with ease even on uneven ground and slopes. Take advantage of the free SF1 signal. Or upgrade to the more accurate SF2 signal.

Guidance that grows with you.

What you need:

- GreenStar 1800 or GreenStar 2630 display
- StarFire 300 or StarFire 3000 receiver

Easy to upgrade:

To add more productivity and hands-free automatic guidance, simply attach the retrofit AutoTrac Universal 200 Steering Kit to the Parallel Tracking components you already own. Want even more precision? Upgrade your StarFire 3000 receiver to pick up the John Deere SF2 correction signal.

All-terrain accuracy all day: Parallel Tracking.



See page 27 for an overview of all of the manual and automatic steering systems John Deere offers.

The AutoTrac Universal 200 Steering Kit: one solution for your entire fleet.

Now you can take advantage of affordable, hands-free guidance regardless of the “colours” you run on your farm. The John Deere AutoTrac Universal 200 (ATU) Steering Kit operates with hundreds of equipment platforms approved by John Deere, using all levels of the StarFire receiver signal accuracy. It improves on-track line performance and line acquisition. And it lowers input costs for your combines, tractors, sprayers and forage harvesters.



Choose your level of accuracy according to your operational needs. The ATU 200 works with all GreenStar displays.

See page 27 for an overview of all the manual and automatic steering systems John Deere offers.



Hands free comfort.

Regardless of the machine you operate, the ATU 200 Steering Kit does your heavy steering for you. You're less tired and less prone to make mistakes.



The benefits of the ATU 200 Steering Kit.

Easy to install.

In less than an hour you can be up and running hands free! Want to move the system to another vehicle? No problem. AutoTrac Universal 200's sleek design and clean installation also mean fewer obstructions in the cab.

Highly productive.

Less overlap means fewer trips across the fields, less compaction and reduced time, labour and input costs. You cover more acres every day, even in dusty or low visibility conditions.

Cuts input costs.

Reduce overlap and eliminate skips. The ATU 200 steering kit puts every centimetre of your equipment to work. You save on fuel, seed, chemicals and fertiliser.

Reduces errors.

When you're tired and stressed, mistakes happen. When you operate a machine with the ATU 200 steering kit, the easy, push-button activation alleviates fatigue. You feel better at the end of a long day.

Pays for itself.

Move into a complete hands free steering system for less than you would expect. Spread that investment out over more vehicles, applications, and seasons of use. The ATU 200 steering kit will pay for itself within months.



Multi-coloured.

The AutoTrac Universal 200 steering kit is approved for more than 300 models of equipment from John Deere and competitive brands. See your dealer or visit www.StellarSupport.com for the latest information on approved platforms.

See page 27 for an overview of all of the manual and automatic steering systems John Deere offers.

Integrated AutoTrac: top-of-the-line guidance comfort.

To enjoy all the advantages that automatic guidance can offer, step up to the integrated AutoTrac system to simplify your operations. It will reduce input costs such as labour, fertiliser and fuel. It will increase efficiency as it boosts your bottom line. And it will work on the sprayers, combines and forage harvesters you rely on the most to do more.

The integrated AutoTrac system vastly reduces overlaps on bare soil without guidance marks. It enables you to master straight and curved tracks. And you can work comfortably in low visibility situations.

When paired with a StarFire 3000 receiver and a GreenStar display, the integrated AutoTrac vehicle kit provides optimum green-to-green guidance accuracy.



More acres in less time.

Large arable farmers and contractors rely on the Integrated AutoTrac Steering System to get ahead faster. Day or night.

Put the integrated AutoTrac system to work for you.

See the difference the GreenStar 2630 display makes.

This all-new monitor features a 26 cm colour touch screen display. And it is capable of running all the i-Solutions you need to make your operations more productive. From basic guidance systems and Guidance Pro modules like iTEC Pro, AutoTrac RowSense, iGuide and iSteer to documentation and advanced ISOBUS capabilities, e.g. automatic section control.



See page 27 for an overview of all of the manual and automatic steering systems John Deere offers.

Harvesting

Use Integrated AutoTrac to make faster, fuller cuts all season long.

Hay and forage farming efficiency.

Use Integrated AutoTrac to make faster, fuller cuts all season long.

AutoTrac & RTK: where superior guidance leads.

Perfect repeatability.

If high-precision farming is your business, you need the utmost in guidance accuracy: AutoTrac & RTK. Here, the RTK signal combines with the AutoTrac system to provide all the benefits of stationary measurements (e.g. the elimination of GPS drift). As a result, it is the most precise, repeatable guidance solution we offer. So, while DGPS systems are suitable to broadcast tillage, planting and pre-emergence spraying, John Deere's hands-free steering system teamed with RTK is multi-functional. It also makes easy work of applications such as listing and bedding up, row crop planting, strip tilling, ridge tilling, side-dressing and cultivating.

Hassle-free RTK.

For many operators the most convenient large-area RTK network may well be dealer run. Why? Renting a usage license at your local John Deere dealer eliminates the need to own a base station outright. The overall investment is lower. And you can forget about maintenance issues, too. And if that's not enough, farmers in many European countries can boost the flexibility of RTK by adding either of the following two options.

RTK Extend.

RTK Extend maintains the performance and full functionality of RTK even when temporary line of sight obstructions occur. If the StarFire iTC or 3000 receiver has been powered for more than one hour, it will "extend" RTK accuracy up to 15 minutes (two minutes if powered for less than one hour) following the loss of your base station signal.

StarFire Mobile RTK.

Instead of a fixed reference point on the ground, StarFire Mobile RTK uses satellite-based mobile phone technology to correct the signal on the fly. With better signal availability and almost unlimited range, contractors and owners enjoy repeatable accuracy virtually everywhere – including in scattered fields and hilly terrain. Mobile RTK is a plug-and-play option that works on any machine with a StarFire iTC or 3000 receiver. Ask your dealer for details and availability.



Precisely what you want.

AutoTrac & RTK is ideal for farming applications like planting row crops where a high level of accuracy and reduced soil compaction are needed.

How RTK works.

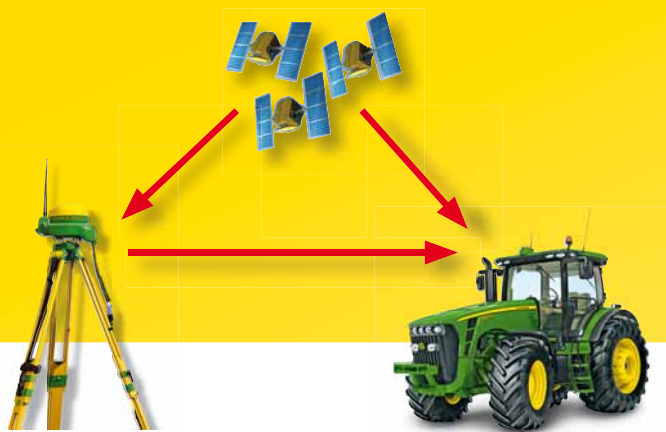
The RTK system consists of a local base station in or near the field that transmits corrections to the StarFire 3000 receiver on the RTK equipped vehicle. The base station monitors the constellation of GPS satellites and continuously calculates a position.

As the base station is not moving, errors can be calculated in real-time. These fluctuations are then sent to the vehicle via the RTK radio.

The vehicle's receiver uses this information to calculate a highly accurate, corrected position.

Precision pays.

Because AutoTrac RTK optimises your guidance performance it also optimises your return on investment.



Keep your trailed implement on track with iGuide.

Experience the highest precision standards in all your seeding, planting and tillage operations with the iGuide system. No matter what terrain you are driving on, iGuide prevents drifting, it keeps your implement on track and avoids the gaps and overlaps that affect the quality of your work.

iGuide is easy to set up on your GreenStar 2630 display. A StarFire 3000 receiver installed on the implement communicates its exact position to the tractor's AutoTrac system. The tractor then changes its path to compensate for implement drift and guides the implement to a perfect pass-to-pass result. See your John Deere dealer today to learn how to put iGuide into your operation.



Without iGuide the weight of your trailed implement causes it to drift on uneven terrain and slopes. With iGuide you stay on the straight and narrow becoming much more efficient.

Let your implement do the steering with iSteer.

If your work involves ploughing, sowing or fertilising, your yields and profits depend on how accurately you can steer down the row. Until now, however, there was no way to stop the implement on your 3-point hitch from wobbling sideways while you worked. Now iSteer* solves the problem for you automatically.

iSteer is an active implement guidance solution that fine tunes your implement's position in realtime as you move along the row. In a continuous two-step process, a sensor and a StarFire receiver on the implement monitor the exact position, then compare these data with the ideal course. If there is any deviation, hydraulics on the implement immediately move it to the left or right to compensate.

You can order iSteer in two versions – one for plough steering, the other for 3-point mounted and trailed implements. Both work straight out of the box with a GreenStar 2630 display and a StarFire 3000 receiver. And both will pay their way in no time – thanks to bigger yields, better crop quality and higher profits.

The sensors and hydraulics in iSteer are supplied by our partner SBG Innovatie in the Netherlands.



*available in selected countries

Steady as she goes.
iSteer is a great way to maximise yields and profitability.

