

# How to configure (some) EGNOS receivers for Agriculture

**ESSP SaS** 







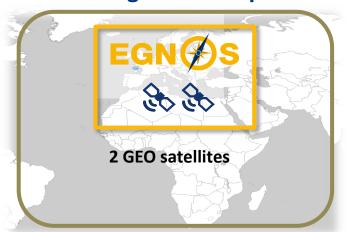




### Let's access free GPS augmentation for agriculture

## Access free GPS augmentation for agriculture: **EGNOS OS**

EGNOS signal is provided free of charge by GEO satellites available through out Europe.





A **GPS/SBAS** (or GPS/EGNOS or GPS/WAAS) **receiver is the hardware required** to access GPS and EGNOS signals.





### What is a GPS/SBAS receiver?

- A GPS/SBAS receiver is a GPS receiver enhanced with special software enabling the receiver to lock onto the EGNOS satellites and apply the EGNOS corrections to the GPS signal.
- Almost all commercial GPS receivers for agriculture include EGNOS capability.
- GPS/SBAS receivers are normally installed on top of the machinery roof and a display is installed in the cabin











### Components of a GPS/SBAS receiver



#### GPS/SBAS receiver **components**:

- 1. Display
- 2. Display mount
- 3. Reference guide
- 4. CD
- 5. GNSS antenna cable
- 6. Power bus
- 7. Power cable
- 8. Antenna
- 9. Antenna mount plate

**GPS/SBAS** receivers are integrated either in the display or the antenna. Most of the manufacturers sell the display and the antenna separately











### How to configure your GPS / SBAS receiver

## GPS/SBAS agriculture receiver manufacturers : examples





































### Receiver TOPCON AGI-4



Model: AGI-4

- EGNOS OS enabled
- NTRIP enabled
- GPS/SBAS receiver integrated in the antenna
- X30 display









## TOPCON AGI-4: **EGNOS OS configuration**

1. After startup, the X30 main *setup screen* is shown:



2. To select the EGNOS OS corrections, the user must tap **System** then **GPS** and then **Correction**:







4. Finally, users select **EGNOS**:











### Receiver AgLeader GPS6500

### Ag Leader®

#### Model: GPS6500

- EGNOS OS enabled
- NTRIP enabled
- GPS/SBAS receiver integrated in the antenna
- Incommand display













### AgLeader GPS6500: **EGNOS OS configuration**

1. After startup, the Incommand *homescreen* layout is shown:



2. To start the EGNOS OS setup, the user must tap:



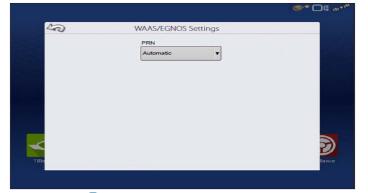




3. The user must tap the following sequence of icons:



I. Finally, the user can configure one of the EGNOS operational GEOs or Automatic (see this <u>link</u>)







### Receiver Trimble CFX-750



#### Model: CFX-750

- EGNOS OS enabled
- GPS/SBAS receiver integrated in the display





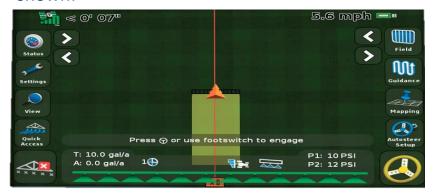






## Trimble CFX-750: **EGNOS OS configuration**

After startup, the CFX750 guidance screen is shown:



2. To start the EGNOS OS setup, users must tap:



**Settings** 



3. At the Settings screen, users must tap:



**GNSS** 

- 4. At the GNSS screen, users must tap GNSS setup.
- 5. Users tap **GNSS Correction Source** and choose **WAAS/EGNOS**. Then tap:



- 6. At the WAAS/EGNOS screen, tap Satellite.
- 7. At the *Satellite* screen, users must tap the <u>PRN</u> currently broadcasting corrections. Then tap:







### Receiver John Deere SF 3000



Model: SF 3000

- EGNOS OS enabled
- GPS/SBAS receiver integrated in the antenna
- Greenstar 3 display













### John Deere SF 3000: EGNOS OS configuration

After startup, the Greenstar 3 display homescreen 3. At the *Menu* screen, users must tap: layout is shown:



To start the EGNOS OS setup, the user must tap:

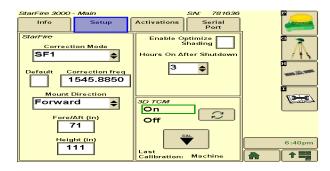


Menu





Then users choose the **Setup** tab and in **Correction** Mode select OFF:



Selecting OFF prohibits the StarFire receiver from receiving SF1 or SF2 correction signals, but it still receives WAAS/EGNOS correction signals.







### **Summary**

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**EGNOS & EDAS provide free GPS corrections for agriculture:** 

EGNOS OS is a free of charge real time SATELLITE based correction service enhacing GPS accuracy (<30cm pass-to-pass) for agriculture througout Europe











### **Summary**

How to access to EGNOS corrections for agriculture:

Access to EGNOS requires a GPS/SBAS receiver

A wide variety of manufacturers offer receivers GPS/EGNOS capable

GPS/SBAS receivers are easily configured through the display. No registration is needed as EGNOS signal is ready to use.

Check PRN codes broadcasting EGNOS operational signal in this link







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http://egnos-user-support.essp-sas.eu



egnos-helpdesk@essp-sas.eu +34 911 236 555 (H24/7)



Corporate Video

### Thank you!

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