



ANGLAIS

European Satellite Navigation System

More and more often, it will become necessary to ascertain one's precise position in space and time in a reliable manner. This will be possible with the GALILEO satellite radio navigation system, an initiative launched by the European Union and the European Space Agency. This worldwide system will ensure complementarity with the current GPS system.

5 Satellite radio navigation is an advanced technology. It is based on the emission from satellites of signals indicating the time extremely precisely. This enables any individual to determine his or her position or the location of any moving or stationery object (e. g. a vehicle, a ship, or a herd of cattle, etc). to within one metre thanks to a small cheap individual receiver.

10 GALILEO is based on a constellation of 30 satellites and ground stations providing information concerning the positioning of users in many sectors such as transport (vehicle location, route searching, speed control, guidance systems, etc.), social services (e. g. aid for the disabled or elderly), the justice system and customs services (location of suspects, border controls), public works (geographical information systems), search and rescue
15 systems, or leisure (direction-finding at sea or in the mountains, etc.).

 Since time immemorial, people have looked to the heavens to find their way. Today satellite navigation is continuing this tradition, while offering, thanks to leading-edge technology, an accuracy far beyond that possible by simply observing the sun and the stars. This technology, which has been developed over the last thirty years or so, essentially for
20 military purposes originally, enables anyone with a receiver capable of picking up signals emitted by a constellation of satellites to instantly determine their position in time and space very accurately.

Energy and Transport – Galileo.

Epreuve du 1^{er} groupe

I READING COMPREHENSION (08 marks)

A) Are the following sentences True or False ? Justify by quoting the text. (04 marks)

1. The GALILEO satellite radio navigation system can only be used within the European Union.
.....
2. With GALILEO, tourists will be able to find their way to museums or restaurants they are looking for.
.....
3. Satellite navigation technology has been developed recently.
.....
4. Systems of communication via satellites were initially available to civilians.
.....

B) Refer to the text and complete the sentences meaningfully. (01 mark)

5. Long ago, people could find their way.....
6. Today, with satellite navigation, people.....

C) What do the underlined words refer to ? (01,5 mark)

7. this
8. this tradition.....
9. their position.....

D) Information transfer (01,5 mark)

GALILEO Satellite Navigation System		
Developers	Network components	Information collected
10.....	12.	14.
11.	13.	15.

II LINGUISTIC COMPETENCE (07 marks)

E) Rewrite the following sentences without changing the meaning (04 marks)

16. a. The ground receiver can recognize signals from any particular satellite.
b. Signals from any particular satellite.....
17. a. You can't ascertain your precise position without using the GALILEO system.
b. Unless.....
18. a. The GALILEO system is more recent than the GPS system.
b. The GPS system is not.....
19. a. GALILEO will not only offer everybody satellite positioning services, it will also guarantee reliability.
b. Not only.....

Epreuve du 1^{er} groupe

F) Find the questions corresponding to the underlined words.

(01 mark)

20. Galileo is the Europeans' initiative.

21. This new system will provide several professional applications.

G) Fill in the blanks with one of the following link words.

(02 marks)

however – while – whose – thanks to – as a result – for.

22. The Pentagon has a satellite.....name is Big Bird.

23.....satellites, astronomers can locate distant stars.

24.expensive GALILEO may be, it is a really useful invention.

25. New satellites are launched everyday. more TV channels are available.

III WRITING : Choose one topic and write about 100 words. (05 marks)

A- Nowadays, many new technologies are being invented. Take one of them and give its advantages and limits.

B- Do you think that technological research can help the African continent develop ? State your reasons.