

Shoot the Junk Down

The **most pointless engineering project in history** has just been approved by – **guess whom?**

European governments have given the final go-ahead for the launch of the Galileo satellite navigation network, Europe's answer to the U.S.-controlled Global Positioning System.

Europe's answer? What was the question?

The long-delayed \$3.6 billion (3.2 billion euro) system, Europe's biggest ever infrastructure project, will be based on 30 satellites and should be operational by 2008.

Yes, but **what is it for?**

“Only the realisation of this civil system will allow the beginning of the development of the use of satellite navigation in conditions which are suitable for Europeans,” French Transport Minister Jean-Claude Gayssot said in a statement.

“Conditions which are suitable for Europeans”? What is that supposed to mean? Does this man compose his speeches using a Eurospeak random-platitude generator or is he criminally insane?

“It will allow the European Union to liberate itself from dependence on the American GPS system,” he added.

Ah, the one kind of “liberation” that the Euro-folk understand. Now we're getting to the point of all this:

Galileo will lead Europe into conflict with the US, which has security concerns about the building of a navigational network to rival its own system.

GPS, like the Russian Glonass system, is a military-run network and can be downgraded or taken offline if an enemy attempts to use the data to launch guided missiles, for example.

By contrast, Galileo will be a civilian-run operation that

will be guaranteed in all but the direst circumstances so services that are safety-critical – landing planes, for example – can rely on the data.

So – just to be clear about this: the entire purpose of this multi-billion-Euro technological miracle is that one day it will be left switched on at a time when the US has switched off the GPS. Which the US will only ever do when it believes an enemy is “using the data to launch guided missiles, for example”.

The US has absolutely no choice but to announce that if the European system is ever left switched on at a time when the GPS has been switched off for security reasons, the Galileo satellites will be shot down.

Mr Bush, Mr Rumsfeld, members of the United States Congress, please make that announcement now. Some of us here in **Europe** find it galling enough to be forced to pay for this monstrous monument to anti-Americanism, but we do not want blood on our hands as well. Please promise us that if it ever comes to it, you will not hesitate: *shoot the junk down*.

Wed, 05/28/2003 - 14:02 | [digg](#) | [del.icio.us](#) | [permalink](#)

Not on topic but...

What is going to happen about the United States of Europe superstate? Is it going to happen? Will the British people accept it?

by [Sylvia Crombie](#) on Wed, 05/28/2003 - 15:20 | [reply](#)

What will happen?

I was wondering that myself. These are the ideas I've come across:

1. It's already too late, the UK **is now** a fully paid-up member of the evil Communist superstate,
2. It hardly matters, the UK is already on a decline so dire that nothing can save it,
3. We join Europe, change our minds, announce unilateral departure, and Europe starts bombing us.

Some more ideas of my own are:

4. Europe (at any stage of the proceedings) tries to impose some ruling on us that we *really really* don't want, whereupon we get out, war or no war (what's a war these days? A couple of threats from America? Bear in mind Europe would actually have to try to *invade the UK*. Not many people have ever successfully managed that before. And the US would be on our side.)
5. Europe (ditto), whereupon we manage to change that law to suit us, and this keeps happening until such time as we get out, or getting out becomes insignificant because they don't control us anyway.

As far as I can see, our freedoms have not so far been horribly

attacked by Europe. Either they tried to attack and failed, or we basically didn't get up enough energy to care about what measures we buy our food in. Dictating the shape of bananas is as trivial as it is absurd.

"Ah, but surrendering small freedoms is the slippery slope to surrendering big freedoms!" Not necessarily: it depends at what point you decide to tell the people pissing you off to get lost.

"Ah, but surrendering small freedoms anaesthetises us against surrendering big freedoms!" Gosh, people, aren't they dumb? Except for we who are clever, of course, and immune to anaesthetics!

My suggestion: instead of just arguing against Europeanness per se, we need to start arguing against the ideas which we fear being imposed on us. What laws are actually going to get passed, which will compromise our identity?

My suspicion is that the British government is only handing such power as it doesn't care about handing over anyway. Being left-wing, they happen to enjoy stupid banana-regulations. Countries join Europe because they think it will further their own aims. But nobody can make you stay in a gang you don't want to be in anyway, except by threats and force. What we need to know is: what will happen to countries who try to leave, and how will it be enforced?

by [Alice](#) on Fri, 05/30/2003 - 12:42 | [reply](#)

Diversify power!

While I agree that the EU should not be spending this money, in one sense I think it is a good thing. We need to DIVERSIFY power, and the worst thing is for the US State to have all the power. This system should not be in the hands of one tyrannical State (the US) it should be in many hands.

If you are serious about shooting it down, that brings us to something like a *1984* state of affairs.

by a reader on Wed, 06/04/2003 - 12:14 | [reply](#)

Non-Libertarian Argument

Are you saying that it would be wrong for private companies to have a GPS system, or merely that if they did, and the US State perceived a threat, the US State should shoot down their GPS system? It is not clear to me that this would be a good thing. You are naive in trusting the US State this much if you ask me.

by a reader on Wed, 06/04/2003 - 12:20 | [reply](#)

This is totally true! I cannot...

This is totally true! I cannot convey how strongly I agree.

After 8,000 years of human history, we have finally found the magic formula that transforms the lead of violence into the gold of happiness: a state which is all powerful, all legitimate, all glorified, but inoffensive as it consolidates ALL INDIVIDUALS' DEMANDS AND ACTS ON THEM. After all, isn't it the essence of the Anglo-American political tradition to have a state that puts into effect the conclusions of the "social conversation" (if you will allow me for a moment to use French intellectual Newspeak to express a truth)? This sort of state is, to use a Hegelian formula, the incarnation of Right.

Long live the (especially American, Israeli, and Labour-English) state! Be seeing you.

Pierre Lemieux
<http://www.pierrelemieux.org>

by **Pierre Lemieux** on Wed, 06/04/2003 - 14:58 | [reply](#)

How do you shoot down a satellite?

Anyone know if this is even feasible?

by a reader on Fri, 06/06/2003 - 05:42 | [reply](#)

The capability to destroy sat...

The capability to destroy satellites (in low Earth orbit at least) has existed since the 80's. The U.S. has a missile launched from an F15 at high altitude that can destroy a satellite.

The problem of shooting down a satellite is simpler than getting a satellite into orbit. A warhead need only be lofted to the same altitude as satellite to destroy it. The warhead doesn't need to go into orbit. Much less energy is required.

by a reader on Sun, 06/15/2003 - 19:28 | [reply](#)

How to defeat Galileo

No one has yet (publically) fielded an antisatellite weapon capable of shooting down a GPS or Galileo satellite.

Low Earth Orbit (LEO) satellites, those in orbits of about 1000km altitude or less, are relatively easy to shoot down. There was an F-15 anti-satellite missile, I believe successfully tested several times. The Soviets had a system where they used a guided bomb placed in the same orbit as the target satellite. They could tail any LEO satellite they wanted and destroy it at their leisure. This was also tested several times.

LEO satellites are important targets because almost all the surveillance satellites, both imaging and radar, are kept as close to the ground as they can, to maximize resolution.

Navigation satellites, on the other hand, are a much different

problem. Both GPS and Galileo are in (will be in) Medium Earth Orbit (MEO) at about 20000km altitude. It would require a launch vehicle of almost identical capability to the one which originally launched the target to intercept it. This would mean that shooting down a satellite that high is almost as expensive as launching it in the first place.

Probably if we wanted to shut down Galileo, the best way to do it is by spoofing. Spoofing is a process by which an adversary is able to mimic the signal from a real satellite, but with incorrect information, so that receivers on the ground either cannot compute a position at all, which is bad, or compute a wrong position, which is worse.

The whole point of the encoding on the present military system is to prevent spoofing. The GPS transmits two signals simultaneously, one unencrypted and one encrypted, for military use only. The military code is secret. Any satellite broadcasting a military signal without that military code will be completely ignored by the receiver. In fact, the receiver will not even detect that it is there. Since the code is secret, only the military can create that signal, so if your receiver is able to detect it, it must be authentic. The civilian signal on the other hand, since it is published, can be replicated by anybody and therefore easily spoofed.

The Galileo system has a civilian unencrypted signal, a commercial encrypted signal you can buy access to, and a government encrypted signal you cannot. The civilian signal can be easily spoofed, and the commercial signal also if our military buys the keys.

The american GPS satellites are perfectly placed to act as spoofers, and have all the necessary hardware already onboard, to do their main jobs. It would surprise me a great deal if they could not be programmed to spoof either the russian or the new Galileo system, but of course that capability would properly be kept secret

So if the bad guys equip their weapons with civilian or commercial Galileo receivers, those are pretty easy to jam. If they use government receivers, then one of the governments involved is a conspirator and is committing an act of war against whomever the bad guys are targeting. Galileo does not represent a real threat.

On the other hand, a little competition is a good thing. It may be that the american military will be forced to compete against Galileo by providing a better civilian service, thereby causing everyone to buy american GPS receivers which can be disabled in an emergency. This has already begun by the removal of selective availability, an intentional degradation of the civilian signals, and is continuing in the form of new more accurate civilian signals on the next generation american GPS.

As a patriot, I want my military to have as much control over navigation capability as they think they need. As a civilian GPS user, I want as much accuracy as possible. By providing competition, Galileo forces the american military to improve the second to maintain the first.

LETS SHOOT DOWN THE GPS SATELITES!

this is a great idea

Europe just needs to be able to shoot the U.S. satellites down in order to ensure they never shoot the Galileo satellites down

Balance needs to be struck somewhere - WHY SHOULD THE US HAVE CONTROL OF EVERYTHING?

In answer to the British question (whose side are we on?) i say the British need to cast aside both these powers and become as independant and selfsufficient as possible. Even if the cost is high (to the economy) We could rest assured neither powers would invade because this would put them at odds with one-another.

by a reader on Tue, 10/26/2004 - 16:54 | [reply](#)

Balance needs to be struck somewhere...

No, it doesn't. The opposite is the case. Because if even one system capable of being used to destroy the United States is left under the inalienable control of the criminally insane, it is just as much of a disaster for the world as if they all were.

by [Editor](#) on Tue, 10/26/2004 - 17:19 | [reply](#)