

New fuels will expand phone cover

The problem of providing mobile phone coverage to large expanses of the developing world may be coming closer to being solved through the use of alternative fuels.

Many people have little or no mobile coverage because base stations, which provide the signal that the phones use, are prohibitively expensive to run - mostly because of the fuel costs.

But the GSM Association - the trade body for the mobile phone industry - says solar power and biofuels could be used to power new base stations and so network up more of the world.

"We are looking at how we can make those base stations more self-sustaining, and that is looking at alternative sources of power," Tom Phillips, Chief Government and Regulatory Affairs Officer at the GSMA, told BBC World Service's Digital Planet programme.

"We want to get away from either networked electricity or diesel generation - and of course with diesel generation you have to get a truck down there."

Source of income

Most base stations have to be set up in remote locations - meaning there is often no electricity supply nearby.

This means they have to rely on diesel generators - but this presents two big problems.

Not only is there a rapidly rising cost of diesel, but there is also the practical difficulty of getting the fuel to the stations.

"When you look at the cost of putting a new base station in to cover a group of villages, you're looking not only at the cost but of the road, of the electricity, and so on," Mr Phillips said.

"The costs can multiply many times."

Mr Phillips added that he was hopeful that the development of more base stations using alternative fuel sources would provide a source of income for the communities "as they manage the production of those fuels and secure the base station at the same time."

Most of the big mobile phone manufacturers are investing heavily in reducing the energy that base stations use.

The base stations use a lot of air conditioning, for example - and in areas where getting energy into the station is very difficult this is one of the biggest consumers of energy.

But the plan is to run the stations a few degrees hotter - which can significantly cut power consumption.

Story from BBC NEWS:
<http://news.bbc.co.uk/1/hi/technology/7398565.stm>

Published: 2008/05/14 08:25:05 GMT

© BBC MMVIII