

ComConsult: innovaphone makes the most energy efficient VoIP telephone systems



A current study by ComConsult came to the conclusion that innovaphone makes the most energy efficient VoIP telephone systems currently available on the market. The reknown consulting company used a report published in May 2008 by the German Association of Telecommunications (VAF) entitled "Electricity costs at a glance: TDM, hybrid, VoIP



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variations – Analysis shows great differences" as an opportunity to undertake an extensive comparison of energy consumption in VoIP telephone systems. Several grave methodic shortcomings in the report were revealed. The results of the ComConsult study disagree with the general bias against VoIP as a "climate killer". In fact ComConsult analysts come to a totally different conclusion. According to which VoIP can even take on the role of an energy saving technology if cost savings by using softphones are taken into consideration. According to calculations by ComConsult, softphones can cut energy consumption by more than 90 percent compared to conventional TDM (Time Division Multiplex) technology.

The analysts from ComConsult intended to defuse the current debate surrounding energy efficiency in telephone systems and to base the results on realistic facts. They have completely fulfilled this intent. The authors came to the conclusion, that "VoIP is neither a climate killer nor a cost guzzler." Electricity costs for IP infrastructure can rise moderately with the current common use of hardphones, however these additional outgoings can easily be compensated for through VoIP typical saving effects (consolidation, homogenisation, simplified management etc.)"

At the same time the ComConsult analysts acknowledge several myths floating in the market. Their study comes to the conclusion that VoIP solutions with hardphones only use slightly more electricity than conventional solutions. Using softphones across the board could even considerably reduce the electricity consumption of a VoIP solution compared to TDM technology. The study reports, "Using VoIP with softphones is therefore the key to energy efficiency in telephone

system solutions." The authors of the study continue to confront the statement that IP telephony needs a separate network. There is a range of scenarios such as broadcast storms or spanning tree problems, where it appears to make sense to separate the networks in order to increase failsafety. However in practice this meanwhile takes place purely due to cost reasons in setting up virtual LANs and not as the VAF report suggests, through creating a separate network.

Dagmar Geer, chairman of the board at innovaphone AG, is content at how well the IP telephony specialists came off in the study and also knows about the reasons behind the favourable energy balance. "Most VoIP systems need a server, however servers prove to be electricity guzzlers, even when low-voltage processors and modern virtualisation technologies are implemented. That is not the case with innovaphone. The innovaphone PBX works on autarkic hardware of the VoIP gateway, therefore our solution does not need a server. That has a positive effect of course on the electricity bill."

Besides the energetically rather favourable product concept, there are two further factors in the innovaphone solutions which have a positive effect on electricity consumption: On the one hand all components are optimised concerning energy consumptions. Thus the innovaphone telephone system IP6000 (one single device for up to 2000 subscribers) uses just a fraction of the electricity (max. 10 Watt) that a conventional telephone system of a similar size would need. Another plus point: All components are PoE capable. Moreover cooling is not necessary. Dagmar Geer is absolutely positive that "even if energy costs currently play just a minor role in such investment decisions, there are customers for whom it definitely pays off to calculate down to the last penny. We know of companies where purchasing an innovaphone solution has paid for itself, through electricity cost savings alone."