

## **Submission representing the private views of Mr Derek Francis.**

### **G9 proposal is not practical and cannot be implemented**

The G9 proposal to build an FTTN cannot work, and is largely a mirage:

It requires legal changes from the Federal Government that:

- allow competitor's rip up Telstra's current network,
- get access to Telstra's trenches and ducts at below cost prices to lay their own network, and
- be able to interconnect their own networks at any point within the Telstra network;

It requires the Federal government to legislate banning other telcos rolling out competing infrastructure for 20 years.

The Federal government will not make such changes.

The G9 proposal also:

- requires Telstra's traffic and co-operation, which will not be forthcoming;
- requires someone to come up with \$3.6 b of capital, G9 itself is not contributing anything;
- requires access to Telstra's network at prices below the cost of provision;
- requires Telstra to identify where its trenches are, which it will not do, even if the government did contemplate confiscating the property.

### **Why is the ACCC doing an inquiry into the G9 proposal?**

I'm not sure why G9 has actually lodged its Undertaking with the ACCC and why the ACCC is looking at it seriously.

Most of the things G9 wants, such as a ban on competing networks, sub loop unbundling, and Telstra directed to put its traffic on the G9 network, the ACCC does not have the legal power to grant, even if the ACCC wanted to do so. So the outcome of any ACCC inquiry on the G9 proposal is actually irrelevant. The G9 FTTN network will never be built no matter what the ACCC decides on the proposal.

It would have been far better for G9 to lodge its request with the Minister of Communications - to request the Government to make the necessary legal changes that could allow the network to be built.

To explain by analogy, I may want to set up a local plant that manufactures cars that will only work if it receives a subsidy of \$1 billion pa. I can go and lodge an undertaking with the ACCC asking for a government subsidy of \$1 b pa. Whether the ACCC approves or otherwise such an Undertaking is irrelevant because the ACCC does not have the legal power to grant the \$1 b pa subsidy. So why would the ACCC bother doing such an inquiry?

### **G9 proposal shows Telstra is being under-compensated for ULL**

About the only thing the G9 proposal is useful for is estimating how much Telstra is being short-changed by the ACCC's current ULL pricing.

G9 estimates it would cost about \$3.6 billion to rollout a Fibre to The Node Network (FTTN). An FTTN network consists of laying conduit through a pre-existing trench structure.

The estimated length of an FTTN in metropolitan areas is about 20,000 km. The length of Telstra's total fixed network in metropolitan areas is about ten times this amount or 200,000 kms.

### **G9 costs show the ACCC is underpricing Telstra's network by 85%**

A fixed line telecommunication network consists of two basic cost elements, a trench structure and conduit. Now back in the days when the ACCC use to do cost modelling of Telecommunications networks, about 10 years ago, it estimated the cost of conduit at about 24% of the total costs of the network. The ACCC estimated the cost of trenching at about 51% of total costs (see exhibit 1). So trenching was more than double the costs of laying the conduit.

### **Exhibit 1. Taken from ACCC Nera cost modelling in 1997**

Table 3.2  
Breakdown of Investment Costs in the Access Network

Type of cost	Investment (Aus\$ million)	% of total
Pillars	\$ 338	2%
Copper cable	\$ 3,996	24%
Trench	\$ 8,302	51%
Line cards	\$ 2,392	15%
Other NTS part of switch	\$ 1,047	6%
Additional costs for remote rural customers	\$ 241	1%
<b>Total</b>	<b>\$ 16,316</b>	

Now, if it costs \$3.6 b to lay conduit in 20,000 KM of trench, it will cost \$36 b to lay conduit in the total 200,000 km of trench.

And, given trenching is double the costs of conduit, the trench structure itself will cost a further \$72b to roll-out. So the metropolitan network roll-out would have a total cost of at least \$108 b.

Thus the G9 proposal has provided indicative cost estimates that suggest the cost, or TSLRIC, of replacing Telstra's current access network in metropolitan areas is about \$108 billion.

Now, by contrast, the ACCC uses an asset base of about \$16 billion or less for this Telstra network (85% less than the G9 estimate). So the ACCC has under-estimated the cost of Telstra's access network by a factor of 6.75 in setting access prices.

### **ULL price should be \$121 per month to achieve cost recovery**

From the above discussion, the price of ULL, to allow Telstra to recover TSLRIC costs, should be  $\$18 \times 6.75 = \$121$  per month in metropolitan areas, according to the G9 costing data. By contrast the ACCC sets the price of ULL at \$18 per month, which is 85% below this cost estimate.

It is because the ACCC sets the price of access below cost that Telstra does not invest in its access network or in new technologies such as FTTN. The lack of investment causes a large loss of consumer welfare.

### **Who wants to bet G9 network will happen?**

Markets are best at revealing whether something has credibility or not.

So I am happy to bet any sum with any person, and offer odds of 10 to 1, that the G9 FTTN network will not be built. So I can collect the money, I will put a date of end of calendar year 2009 by which time the G9 network roll out has to at least start. And my bet is not contingent on any Accc outcome. So you can take this bet up with me today.

That is, I don't care what the ACCC decides on the G9 proposal, because I know the outcome of such an ACCC inquiry is irrelevant to whether the G9 network will actually be built. The G9 FTTN network will never be built, no matter what the ACCC decides.

Does anyone want to take this bet?

## **The G9 proposal is fatally flawed**

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Page 1 of 2 | [Single page](#)

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JUST how seriously are we expected to take the G9 proposal for an alternative to the \$4 billion fibre-to-the-node network (FTTN) that Telstra shelved in 2006?

Very seriously, if we are to believe the Australian Competition and Consumer Commission, which has foreshadowed a public inquiry into the proposal from Telstra's competitors, and which has started an inquiry into so-called sub-loop unbundling to plug one of the key regulatory and technical gaps in the G9 proposal.

Even before the recent release by the Optus-led group of its detailed undertakings on the ownership, access and pricing for services on the proposed network, ACCC chairman Graeme Samuel was describing the G9 proposal for a high-speed broadband network based on fibre optic to be far more complete than anything unveiled by Telstra.

In the face of the ACCC's apparent willingness to give serious consideration to its competitors' plan, Telstra seems dumbstruck and can only complain that the regulator is a "lapdog" of G9's foreign backers.

That Telstra is in shock is understandable because developments in Europe and North America suggest such proposals would normally be destined for the waste paper basket rather than a public inquiry.

Australia is not alone in grappling with the issue of whether competition based on reselling the old copper network can be sustained when copper is replaced with fibre optics in the local network.

In the Netherlands and Britain, the former monopolies KPN and British Telecom (BT) are building 21st century networks and the national regulators have effectively conceded that the regulatory model that has given competitors a near-free ride cannot be maintained.

Dutch regulator OPTA and Ofcom in Britain have had to confront the reality that as fibre optic cable is pushed closer to the customer, or as software defines connections rather than hard-wired physical links, competition based on arbitrage of the old copper lines cannot be prolonged.

Both European markets have followed a similar regulatory path to Australia. Over the past decade, they have allowed competitors to install equipment in telephone exchanges of the former monopoly and then carry voice calls and broadband internet to customers over the copper network at marginal cost.

These regulators have had to consider what happens to the competitors' investment, especially in ADSL broadband equipment, once the dominant telephone company cuts off the copper wire or sells off telephone exchanges that are no longer needed with internet protocol-based networks.

The Dutch regulator commissioned the British consultancy Analysys to consider these issues and examine whether sub-loop unbundling, a critical issue that G9 has asked the ACCC to consider, offered a way to keep competitors in the market. Under sub-loop unbundling, the competitor would interconnect or link into the dominant phone company's copper network close to the customer, at a street cabinet or the familiar pillar rather than at the telephone exchange.

Analysys found that there was no business case for linking competitors networks in this way, a finding that echoes the British experience. In its submissions to Ofcom, British

Telecom, which owns and operates Britain's wired network, told the regulator that competitors found it four times more costly to interconnect at the end of the street rather than at BT's exchanges, and that there was no demand for such interconnection.

The ACCC must know the G9 proposal is fatally flawed. It is dependent on interconnection that other regulators have dismissed. It is dependent, if it is to be built for \$4 billion, on G9 having access to the street cabinets and ducts that now make up Telstra's local network, an assumption that raises a host of complex legal and technical issues. And at its most illogical, it depends on Telstra, which still holds some 70 per cent of the fixed telephone network, happily transferring its revenue onto the G9 network.

What then do G9 and the ACCC hope to achieve other than a further delay in Australia getting true high-speed broadband? They want Telstra to maintain interconnection at the telephone exchange that is vital to the competitors' current business models even after fibre is rolled out. This request forms a key part of the inquiry into sub-loop unbundling.

For Telstra it would be impossible to maintain exchange-based interconnection unless it forgoes the operational savings that are at the heart of 21st century networks. In Holland, KPN will fund over 50 per cent of the cost of its fibre roll-out from disposing of assets such as telephone exchanges. Maintaining parallel fibre and copper networks would drive costs up massively even if it were technically realistic.

Reading between the lines, it's clear the ACCC's issue with Telstra is not about the commercial returns Telstra is seeking from fibre investment but how the regulator can keep the competitors in the arbitrage game.

In the interim, we have reached the extraordinary position where the national telephone company cannot invest in upgrading the national telecommunications network and neither major political party appears to be concerned as investments vital to Australia are further delayed.

*Kevin Morgan served on Kim Beazley's ministerial advisory committee on telecoms reform before becoming an independent telecoms consultant.*