

Where is Controversy?

The Future of the Internet

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Agenda

what was there?

from whence it (the 'net) came

what is here?

path 0.5

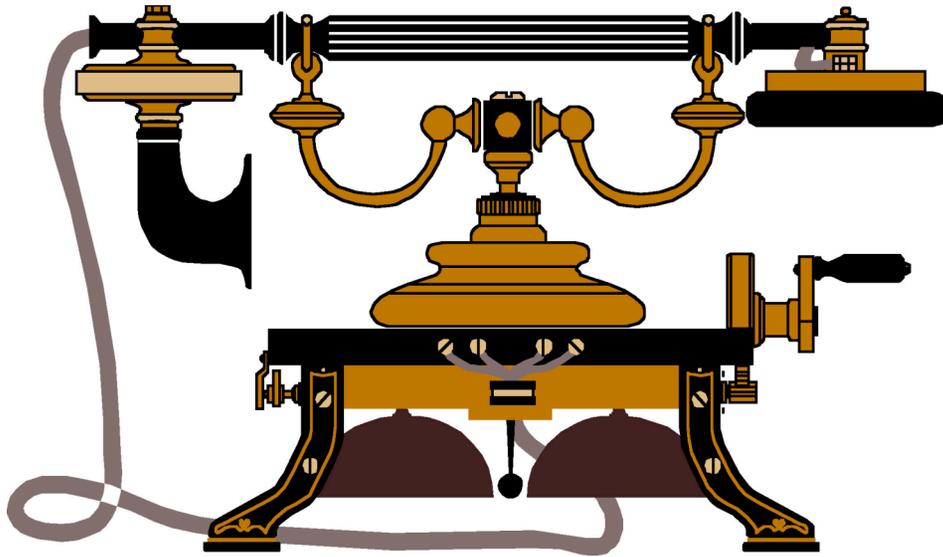
path 1

path 2

the root problem

cures?

What Was There (mid 1960s)?



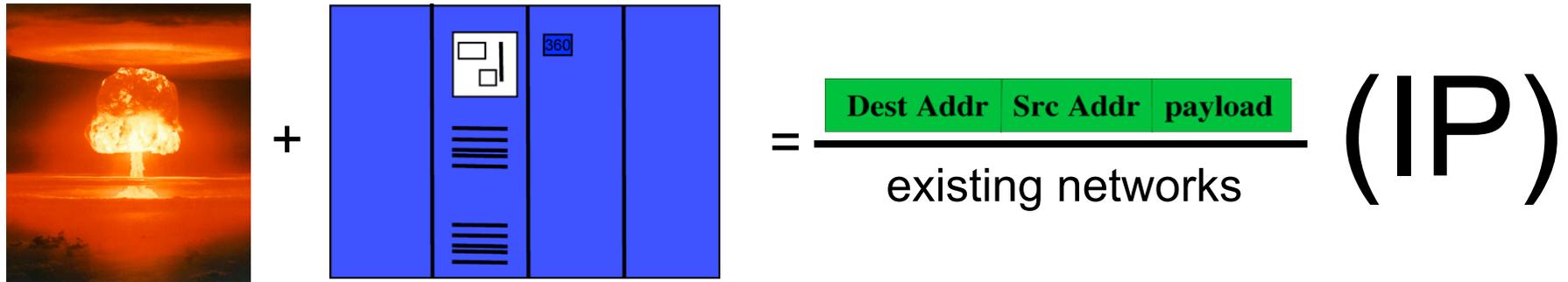
(1964)

X.25



(1968)

From Whence It (the 'Net) Came



e2e = application agnostic

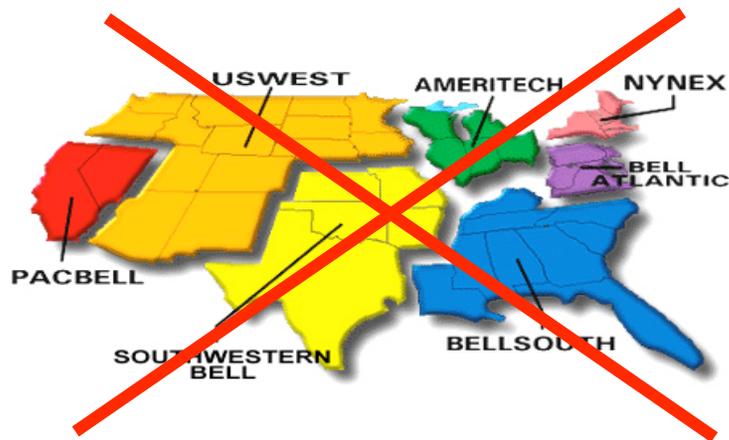
good enough is good enough
(for many things)

!security
!QoS
!efficiency



telco view

What Is Here?



~~standalone
ISPs~~ neutrality?
security?

“code is law”?



> 2,000,000,000 (worldwide)

shrinking # landlines

3G, 4G ... - ‘wireless data jack?’

IN

> 700,000,000 Internet users

routing!

user produced content

Path 0.5



I E T F

IPV6	iSCSI
SIP	iCAL
MPLS	WebDev
IPSec	NFSv4
pseudowires	smime
mobile IP	Kerberos
l(1 2 3)vpn	...
eap	
enum	
diffserv	
TLS	
NSIS	



not



?

Path 2



Global Environment for Networking
Investigations (GENI)

out of NewArch

rethink Internet based
on new realities

The Root Problem

flow of \$

Cures?

It's my wire: *"Google, Vonage & Skype are using **my** network for **free**"* - AT&T CEO

Sep 26, 2006

San Francisco to Study City-Owned Wi-Fi

???