

INTUG World Trade and Roaming

The economic consequences
of cross border barriers
to on-line business processes

Nick White
Executive Vice President,
INTUG

INTUG Why is it so important?

- Not just holidaymakers' inconvenience, but substantial barrier to on-line trade

INTUG Why is it so important?

- Not just holidaymakers' inconvenience, but substantial barrier to on-line trade
- Explosive growth in mobile data

INTUG Why is it so important?

- Not just holidaymakers' inconvenience, but substantial barrier to on-line trade
- Explosive growth in mobile data
- Negative impact on economic welfare

INTUG Why is it so important?

- Not just holidaymakers' inconvenience, but substantial barrier to on-line trade
- Explosive growth in mobile data
- Negative impact on economic welfare
- Unworkable for machine to machine

INTUG Why is it so important?

- Not just holidaymakers' inconvenience, but substantial barrier to on-line trade
- Explosive growth in mobile data
- Negative impact on economic welfare
- Unworkable for machine to machine
- A “taxing” problem since the 1990s

INTUG A bill shock horror story

- A South Florida woman got the shock of a lifetime when she opened her mobile phone bill to find she owed \$201k, due to roaming charges after holiday texting
- She said, “My life is over - it’s like buying a nice house”
- Texting was the only way for her to communicate with her two deaf and dumb brothers

INTUG Suppose it applied to cars?

Symposium on Mobile Roaming
Geneva, 22 March 2012 www.INTUG.org



“Driven from abroad sir? That’s a 300% petrol roaming surcharge! And an extra 3p per mile insurance, and a 100% mark up on spare parts while you’re here!”

INTUG Or it applied to hotels?

Symposium on Mobile Roaming
Geneva, 22 March 2012 www.INTUG.org



“Hilton Honours member, sir? Oh, you live abroad!
That means a 250% surcharge, as you’re roaming!”

INTUG Or it applied to Banks?

Symposium on Mobile Roaming
Geneva, 22 March 2012 www.INTUG.org



“You wish to withdraw £100, sir? As your account is in France, that’s £200, including the roaming charge!”

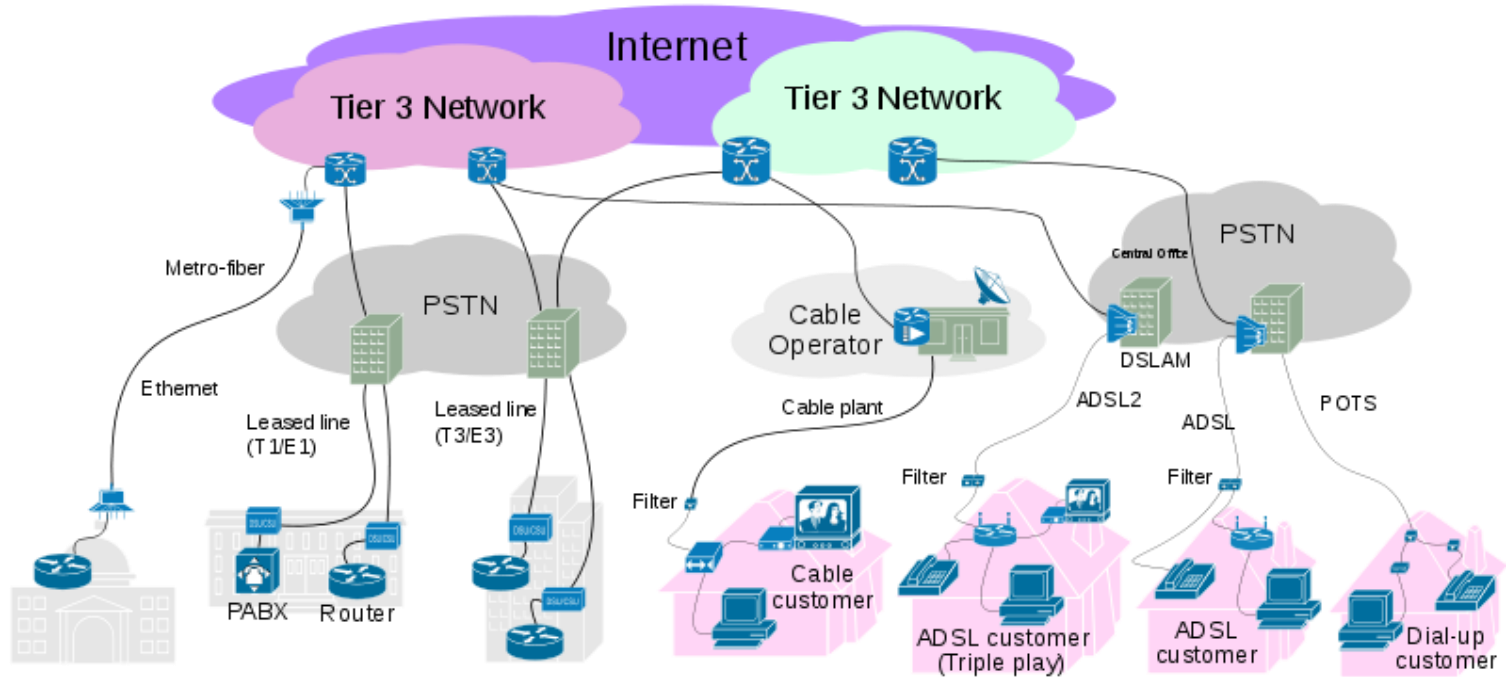
INTUG Or it applied to power?

Symposium on Mobile Roaming
Geneva, 22 March 2012 www.INTUG.org



“You wish to use your portable iron, madam?
You do not have an electricity account here,
so that’ll be €0.90 per Kwh roaming charge!”

INTUG Or it applied to ISPs?



“Broadband Internet, sir - that will be \$39.99 per month
- Oh, you have a .ch email address, sorry that’s \$99.99
per month, with the roaming charge!”

INTUG Why is it so important?

- Not just holidaymakers' inconvenience, but substantial barrier to on-line trade
- Explosive growth in mobile data
- Negative impact on economic welfare
- Unworkable for machine to machine
- A “taxing” problem since the 1990s

As we approach the 20th anniversary of “roaming”, it is time to eradicate this costly mobile communications disease

INTUG Short term approaches

- Regulation – price caps, transparency and awareness, bill shock safeguards

INTUG Short term approaches

- Regulation – price caps, transparency and awareness, bill shock safeguards
- Commercial – contracts, tariffs, bundles

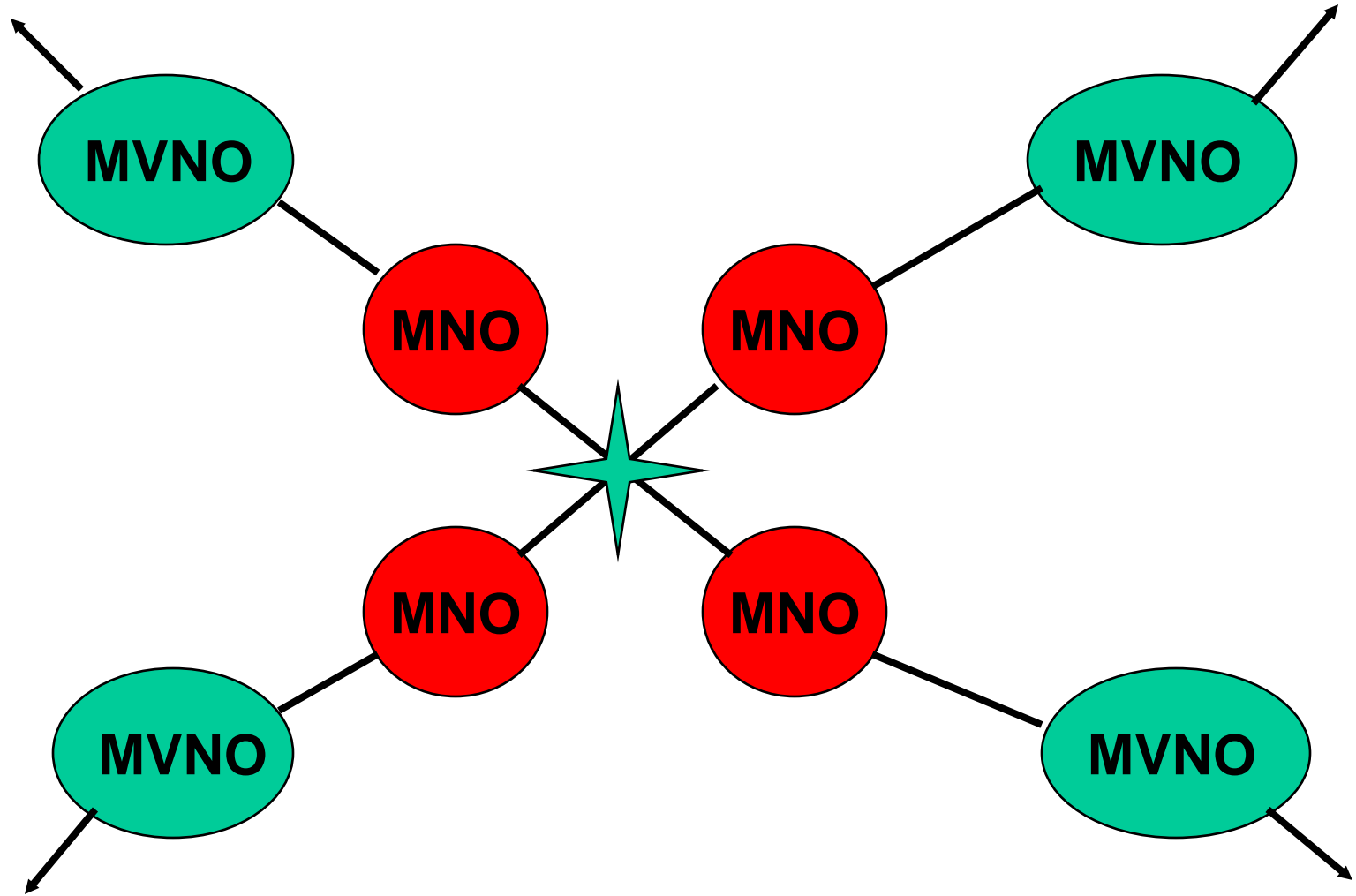
INTUG Short term approaches

- Regulation – price caps, transparency and awareness, bill shock safeguards
- Tariffs – flat rates, bundles
- Avoidance – multiple SIMs, multiple contracts, call back, gateways

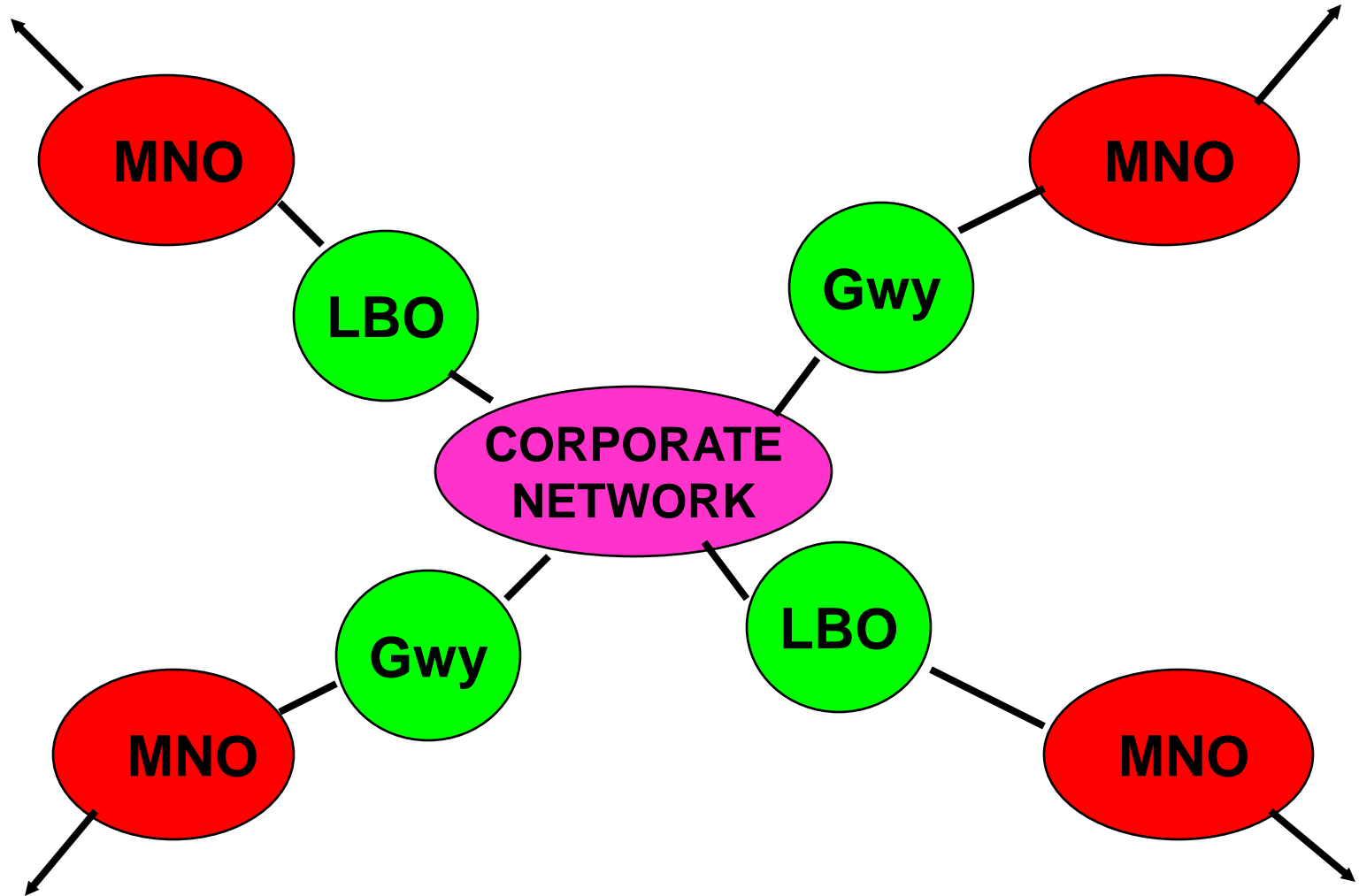
INTUG Short term approaches

- Regulation – price caps, transparency and awareness, bill shock safeguards
- Tariffs – flat rates, bundles
- Avoidance – multiple SIMs, multiple contracts, call back, gateways
- Structure – separation, local break out, international operators, MVNOs

INTUG Multinational MVNOs



INTUG Local Breakout/Gateways



INTUG Short term approaches

- Regulation – price caps, transparency and awareness, bill shock safeguards
- Tariffs – flat rates, bundles
- Avoidance – multiple SIMs, multiple contracts, call back, gateways
- Structure – separation, local break out, international operators, MVNOs

Just stop gaps - undesirable, costly, inconvenient, complex – not a solution

INTUG On-Line Business Future

- International public and private clouds

INTUG On-Line Business Future

- International public and private clouds
- Ubiquitous mobile broadband access

INTUG On-Line Business Future

- International public and private clouds
- Ubiquitous mobile broadband access
- Multi-operator extended supply chains

INTUG On-Line Business Future

Symposium on Mobile Roaming
Geneva, 22 March 2012 www.INTUG.org

- International public and private clouds
- Ubiquitous mobile broadband access
- Multi-operator extended supply chains

But the “roaming” debate should not be simply about prices.

There is another issue which demands a long term solution to the problem

INTUG The Spectrum Challenge

- Spectrum availability pressures

INTUG The Spectrum Challenge

- Spectrum availability pressures
- Growing global acceptance of problem

INTUG The Spectrum Challenge

- Spectrum availability pressures
- Growing global acceptance of problem
- Sharing will be come essential

INTUG The Spectrum Challenge

Symposium on Mobile Roaming
Geneva, 22 March 2012 www.INTUG.org

- Spectrum availability pressures
- Growing global acceptance of problem
- Multiple duplicated infrastructures unaffordable and unjustifiable
 - Sharing will become essential

INTUG The Spectrum Challenge

- Spectrum availability pressures
- Growing global acceptance of problem
- Multiple duplicated infrastructures unaffordable and unjustifiable
 - Sharing will become essential

Next generation (4G/LTE) mobile spectrum licensing is an opportunity for a long term solution to the problem

INTUG Long Term Approach

- Steep glide path to zero for “roaming”

INTUG Long Term Approach

- Steep glide path to zero for “roaming”
- Adopt Internet style traffic exchange

INTUG Long Term Approach

- Steep glide path to zero for “roaming”
- Adopt Internet style traffic exchange
- Spectrum licence condition to allow open access to strongest signal

INTUG Long Term Approach

- Steep glide path to zero to eliminate
- Adopt Internet style traffic exchange
- Spectrum licence condition to allow open access to strongest signal
- Multinational MVNOs, gateways, LBO

INTUG Long Term Approach

- Steep glide path to zero to eliminate
- Adopt Internet style traffic exchange
- Spectrum licence condition to allow open access to strongest signal
- Multinational MVNOs, gateways, LBO

This will reduce capital expenditure, eliminate notspots, improve service, increase speed, obsolete price caps

INTUG World Trade and Roaming

Let's make it an opportunity
to make progress, not a problem

Thank You

Nick White
Executive Vice President,
INTUG