



Best mobile network to connect people

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EVP SDE&W

Press Briefing 06/06



Proximus Quality

Delivering on the strong brand we stand for



Bringing the truly best possible customer experience in mobile to all our customers

Update summer 2013:

3G+ network

3G+ upgrade accelerates mobile data experience of our customers today



4G network

4G extension to a number of cities, including strong coverage at Belgian coast



3G/4G coverage at events

4G at selected events while tripling overall 3G mobile data capacity



3G+ network

Accelerated mobile data experience



Focussed upgrade to maximally improve mobile data user experience



- 35% of devices on our mobile network are 3G compatible
- Mobile data usage is still in early stages, but has grown fast over past months
- Over a period of one year, mobile data traffic has doubled

3G+ boosts experience of our customers

- **Higher average speed** – Speed experience of our customers was **increased with 60%**
- **Faster top speed** – Top speed experience of our customers has been **more than doubled**
- **Huge capacity increase** – Anticipating on the strong data evolution, network capacity was **extended with 70%**



3G+ network

Major upgrade for more capacity & speed



Excelled mobile data experience through higher average speeds and top speeds

Massive extension of
channelization codes



We made **more “trucks”**
available for transport of data,
allowing faster transfers

Higher data modulation
with 64 QAM



We made **all available “trucks”**
larger, allowing that more data
is transported per transfer

Further roll-out of
Dual Carrier technology



We created **additional “lanes”**
allowing parallel truck transports
with data per transfer



3G+ network

How we measure the quality of our network



Network performance is measured quarterly by Independent agency CommSquare

How such drive tests are conducted

- A specifically equipped car with testing gear drives around Belgium during each quarter, traversing approximately 6.000 km
- Car is equipped with 12 testing devices that perform 10.000 voice calls and 5000 data tests per operator
- Half of the voice calls are performed on best available network (2G or 3G), half of the voice calls are performed on 2G



3G+ network mid roll-out

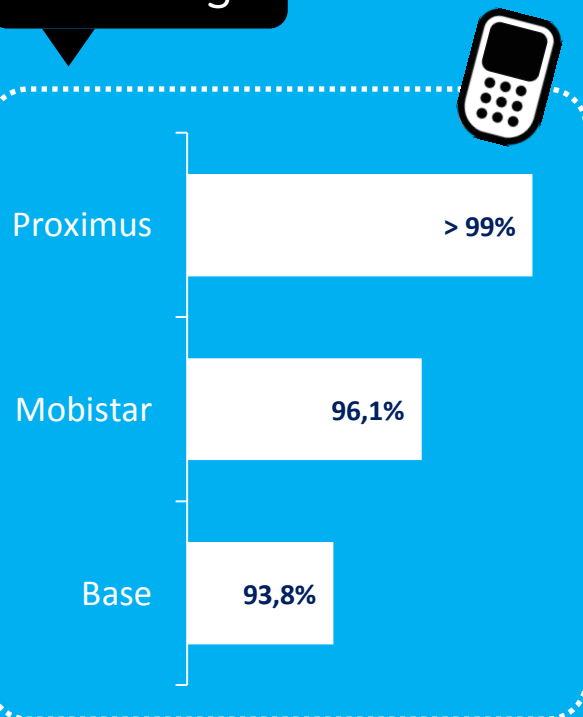
Drive test results end of Q1 2013: DATA

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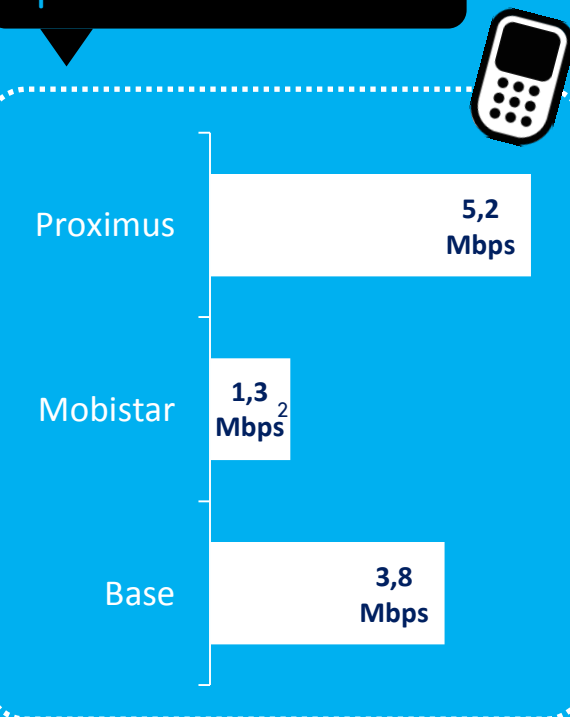
proximus
belgacom mobile

Best coverage with fastest average down- and upload speed available in the market

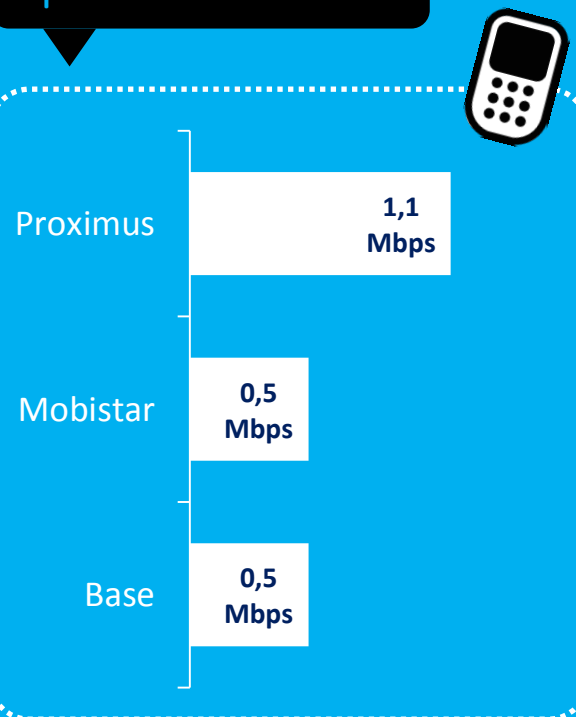
3G coverage¹



Speed to receive a file¹



Speed to send a file¹



¹ Average result based on a quarterly drive test conducted by independent agency CommSquare

² Results for Mobistar biased due to confirmed operational issues on their network at moment of drive test

3G+ network mid roll-out

Drive test results end of Q1 2013: VOICE

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High quality voice experience with minimal interrupted calls

Level of non-interrupted calls¹



Proximus

98,3%

Mobistar

96,5%

Base

98,3%

Quality of sound¹



Proximus

3,9
Mean

Mobistar

3,9
Mean

Base

3,9
Mean



¹ Average result based on a quarterly drive test conducted by independent agency CommSquare

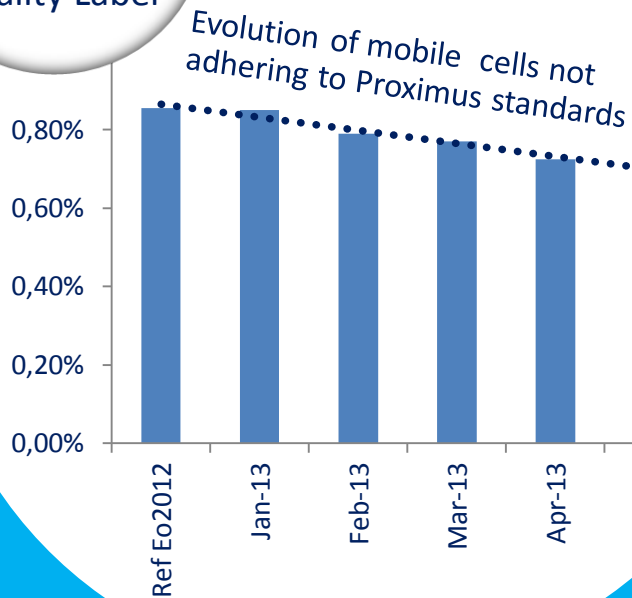
3G+ network

Focus on detail makes the difference



It is not only about coverage and speed, but also about mobile data user experience

Focus on cells
not adhering to
our very strict
Quality Label



From analysis to corrective action

- Analysis on **individual mobile customer experience** is being done on continuous basis
- Root causes for **recurrent quality** (setup failures or drops) or **speed issues** (low throughput) are **identified and linked to mobile cells or sites**
- **6000+** additional carriers were successfully implemented by mid May



3G+ network

What do our customers think?



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Proximus best network quality is being acknowledged by our customers



2G
Proximus

3G
Proximus

4G
Proximus

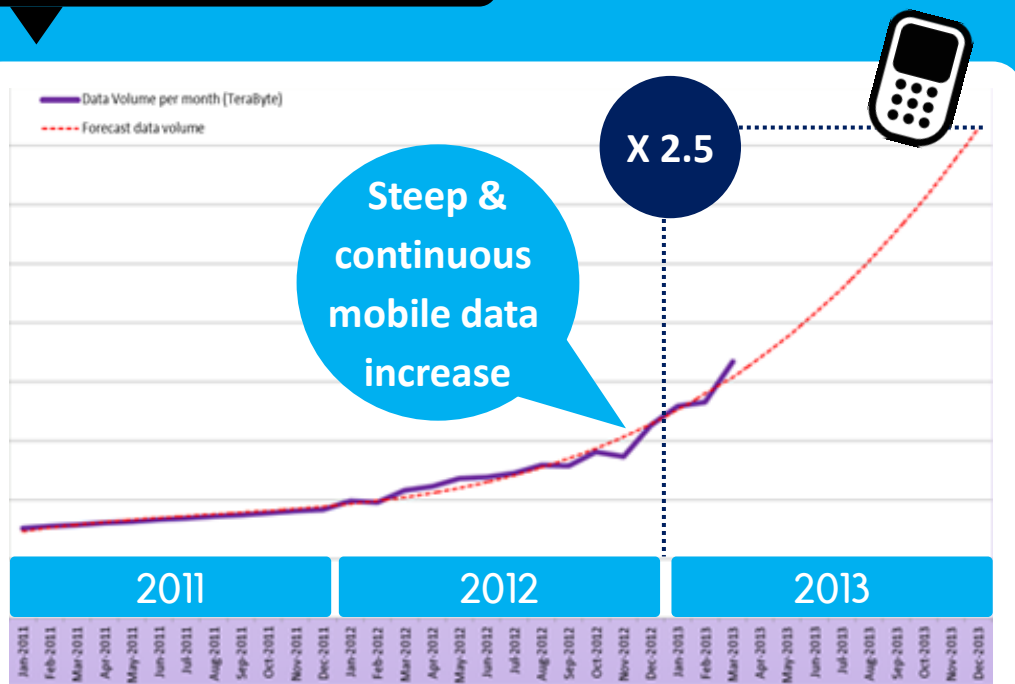
4G network

Mobile data evolution driving need for 4G



Quickly emerging market need for 4G with much higher mobile data usage each quarter

3G Mobile data evolution



Need for 4G mobile network

- Success of mobile devices like smartphones & tablets as well as various social media applications drives steep mobile data incline
- To anticipate to needs of the market, **Belgacom commercially launched 4G in 8 large cities in November 2012 as first Belgian operator**



4G network

35% outdoor population coverage by end of June

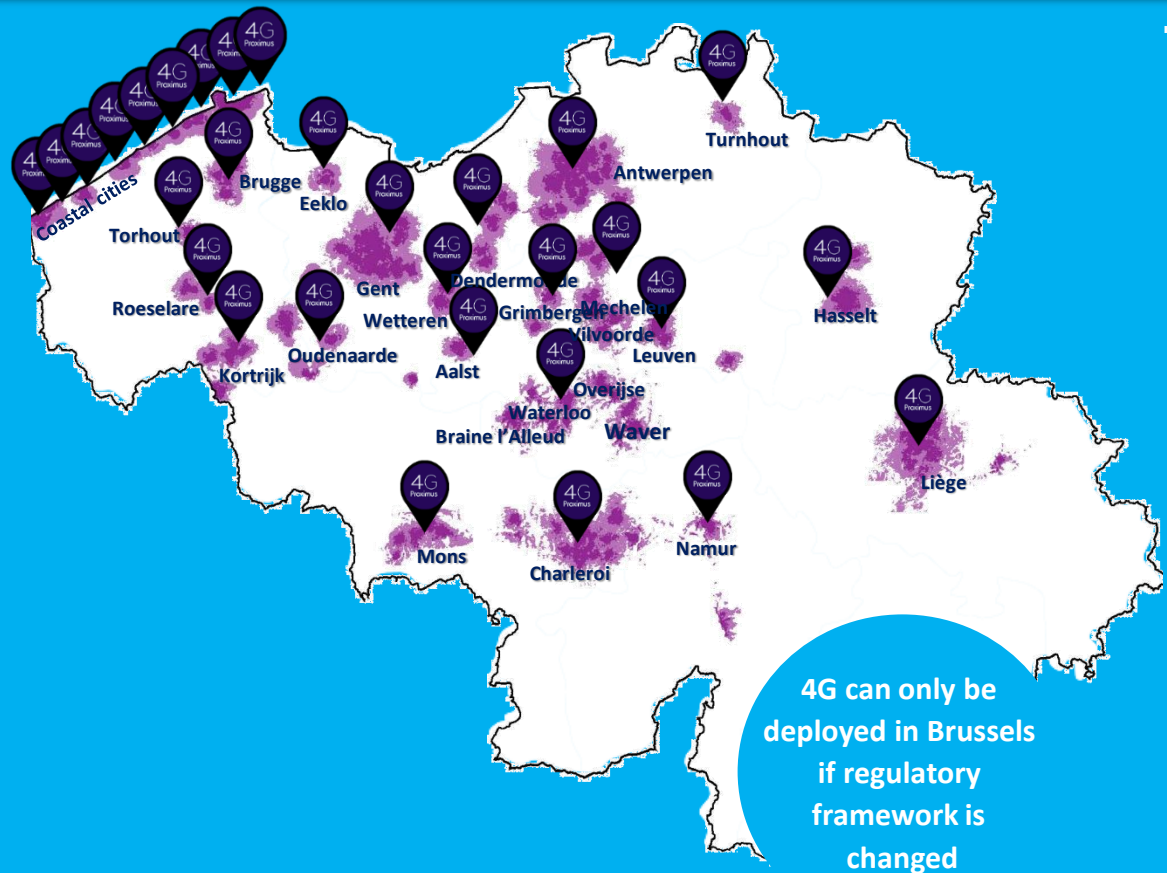
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Before summer 4G extension to number of cities, including strong coastal coverage

New cities with 4G coverage

- Coastal cities
- Brugge
- Charleroi
- Mechelen
- Tournai
- Kortrijk
- Eeklo
- Oudenaarde
- ...



4G can only be
deployed in Brussels
if regulatory
framework is
changed

2G
Proximus

3G
Proximus

4G
Proximus

4G network

Coverage at Belgian coast before the summer

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4G will be available to our customers in the largest coastal cities before the summer

4G
Proximus



2G
Proximus

3G
Proximus

4G
Proximus

4G network

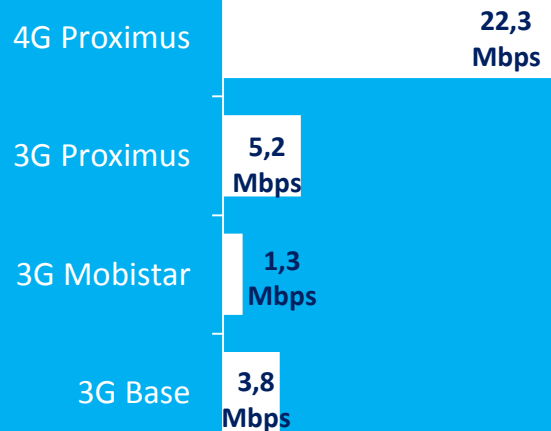
Drive test results end of Q1 2013



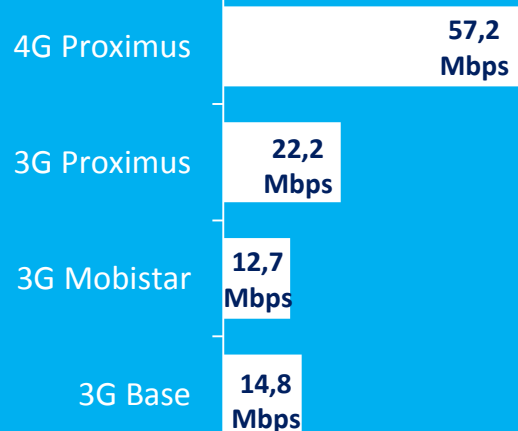
4G improves mobile data experience to average 22Mbps speed and up-to -57Mbps peak speeds

Average speed experience by customers with a 4G compatible device today:

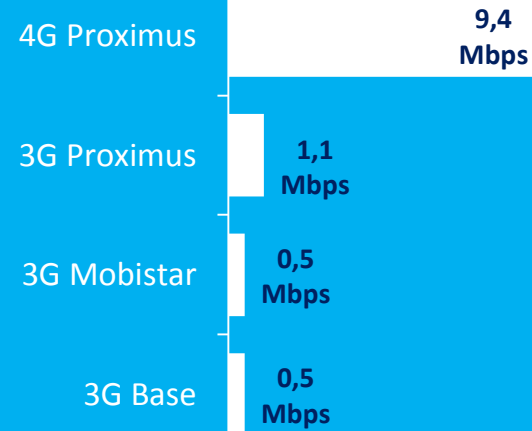
Speed to receive a file



Peak speed to receive a file



Speed to send a file

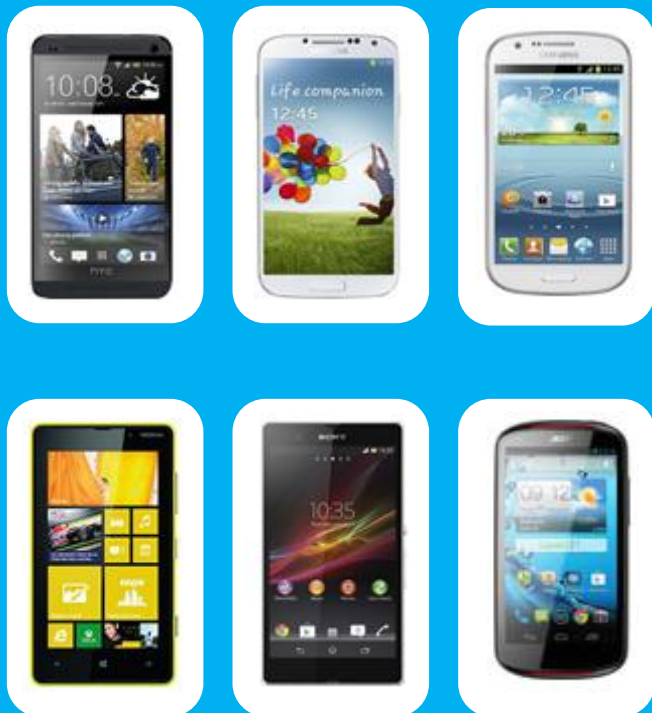


3G+ and 4G network

Compatible devices



A wide range of devices supporting 3G+ and/or 4G are available in our portfolio



Brand	Model	4G	3G+
HTC	One LTE	Y	Y
Samsung	I8730 Galaxy Express LTE	Y	Y
Samsung	I9305 Galaxy SIII LTE	Y	Y
Samsung	I9505 Galaxy S4	Y	Y
Samsung	N7105 Note II LTE	Y	Y
Samsung	I8730 Galaxy Express LTE	Y	Y
Sony	Xperia Z - C6603	Y	Y
Nokia	Lumia 820	Y	Y
Nokia	Lumia 920	Y	Y
Acer	Liquid E2 - C11 - V370	N	Y
Samsung	S7710 Galaxy X Cover 2	N	Y
Sony	Xperia T - LT30p	N	Y



3G/4G coverage at events

Focus on best user experience everywhere

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Aim is to offer the same qualitative user experience during mass events



- Belgacom is present at 260 mass events in Belgium each year to assure best user experience possible for our customers
- Proximus will also offer 4G coverage this year on selected events

Rock Werchter, Pukkelpop, Graspop, Les Ardentes, Francofolies de Spa, Dour Festival, Formula 1 Grandprix (TBC)

4G
Proximus

2G
Proximus

3G
Proximus

4G
Proximus

3G/4G coverage at events

Zoom on Rock Werchter festival

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3G capacity on Rock Werchter was multiplied by 100 in 4 years time

Belgium 2012

- Area: **30.528 km²**
- SMS per day: **11.500.000**
- Data per day: **8.000.000 MB**

377 SMS per km²
262 MB DATA per km²

Rock Werchter 2012

- Area: **3 km²**
- SMS per day: **2.500.000**
- Data per day: **100.000 MB**

833.000 SMS per km²
33.000 MB DATA per km²



DIMENSIONING

Rock Werchter 2013

- Area: **3 km²**
- SMS per day: **3.000.000**
- Data per day: **300.000 MB**

1.000.000 SMS per km²
100.000 MB DATA per km²





Thank you
for your presence & attention

