



# NEXT GENERATION 112

## EVOLUTION OF TELECOMMUNICATION



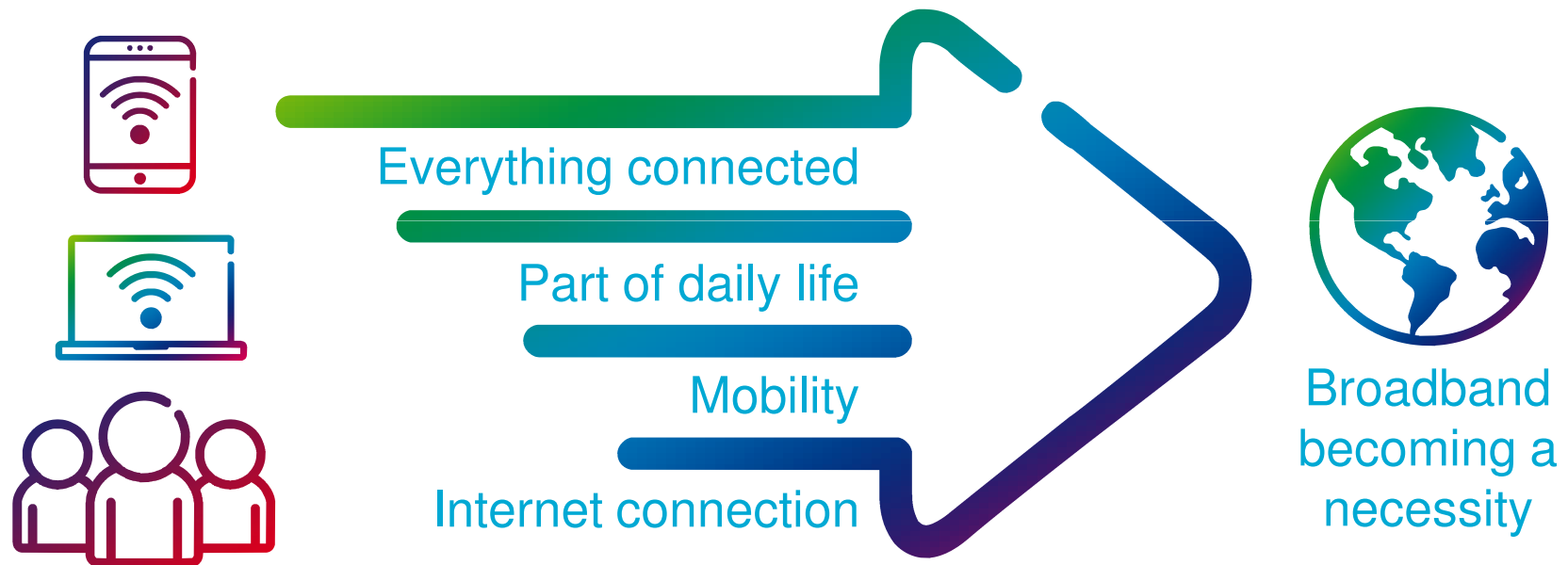
# AGENDA

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- › Telecom industry facts & trends
- › New EU e-communication law – ”Better rules for e-communications” - 2009/140/EG
- › IP services - The foundation for 112 multimedia services
- › Devices for 112

# THE MOBILE BROADBAND REALITY

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# EVERYTHING WILL BE CONNECTED

## Drivers

- Entertainment, security, health
- Productivity, new revenues
- Sustainability, regulation

### Connected consumer electronics



### Intelligent transport, industry and society, smart utilities



- Broadband ubiquity
- Declining cost of connectivity

## Enablers

# MOBILITY IN EVERY ASPECT



# MOBILE BROADBAND SUCCESS

4.5 billion GSM/WCDMA/  
HSPA subscriptions  
(including **380 million HSPA  
subscriptions**)

**353 commercial HSPA  
networks** in 147 countries  
(58% supports 7.2 Mbps or  
higher)



Mobile  
Broadband

80 LTE commitments  
in 33 countries

Launched in Sweden  
and Norway



**2579 HSPA devices**  
from 235 suppliers

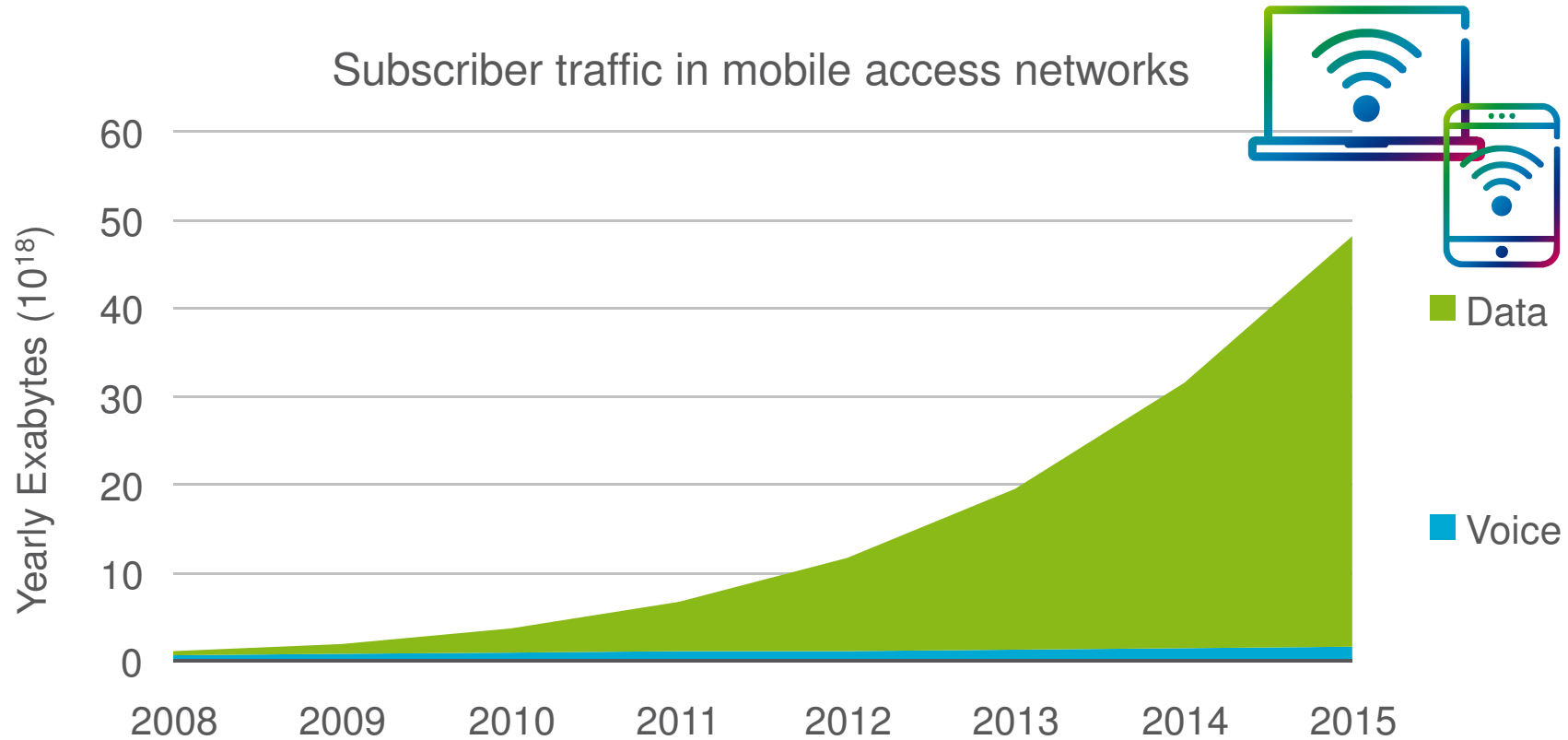
**63 HSPA Evolution networks**  
already launched in 35 countries

7 HSPA networks support 28 Mbps  
3 HSPA networks support 42 Mbps

*Source: GSA, July 2010*

**Large and fast growing ecosystem brings economies of scale**

# IMPRESSIVE MOBILE DATA GROWTH



Source: Internal Ericsson

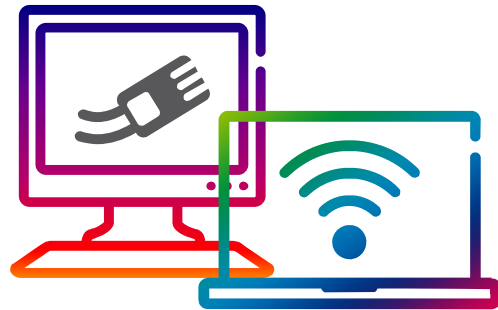
M2M traffic to be added on top.

This slide contains forward looking statements

Mobile data traffic has surpassed voice and data traffic nearly triples in a year

# MOBILE BROADBAND TRIGGERS

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***Mobility***, the trigger for  
*Combined users*

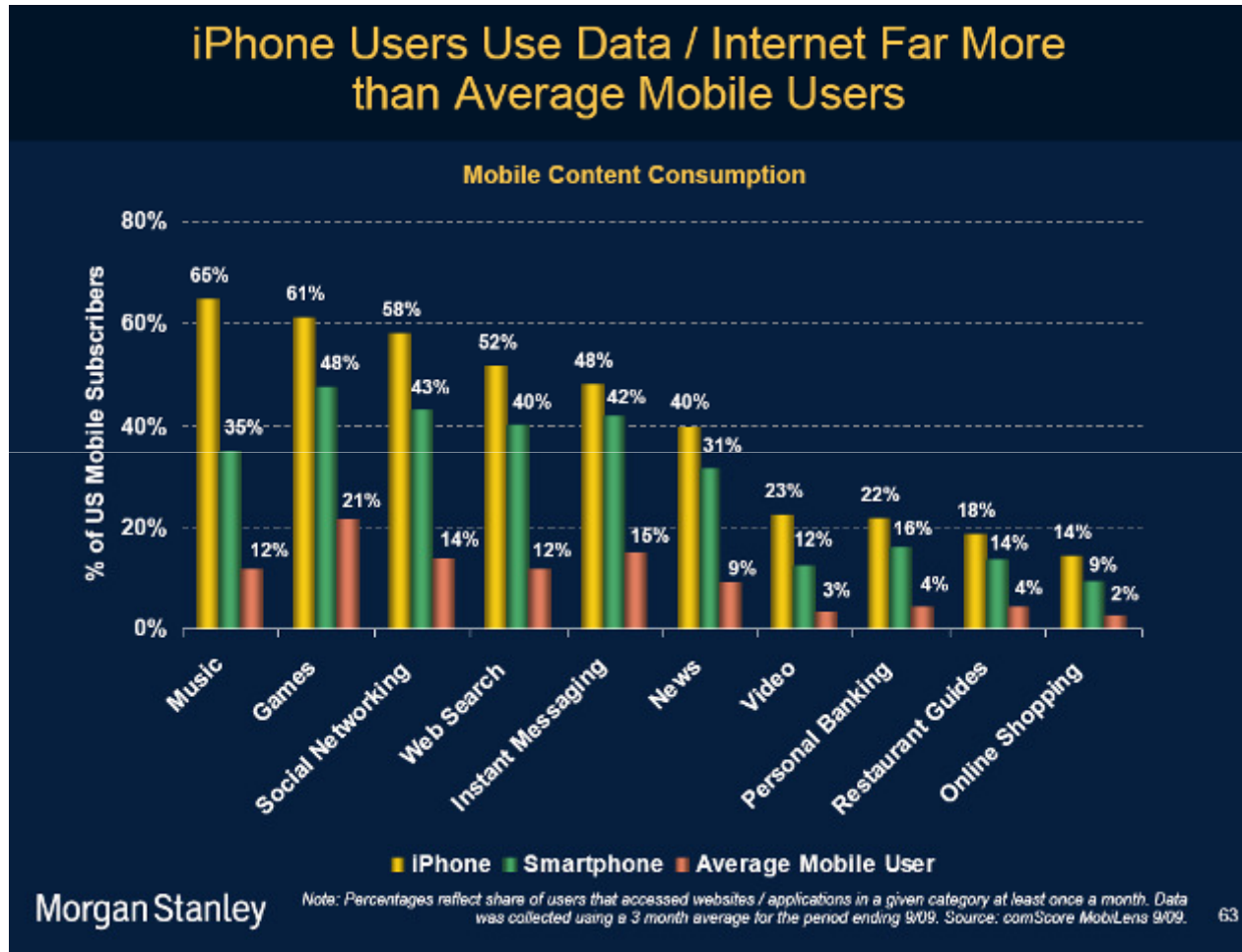
*85% will maintain both connections*



***Internet connection***,  
the trigger for *Mobile  
Broadband only users*

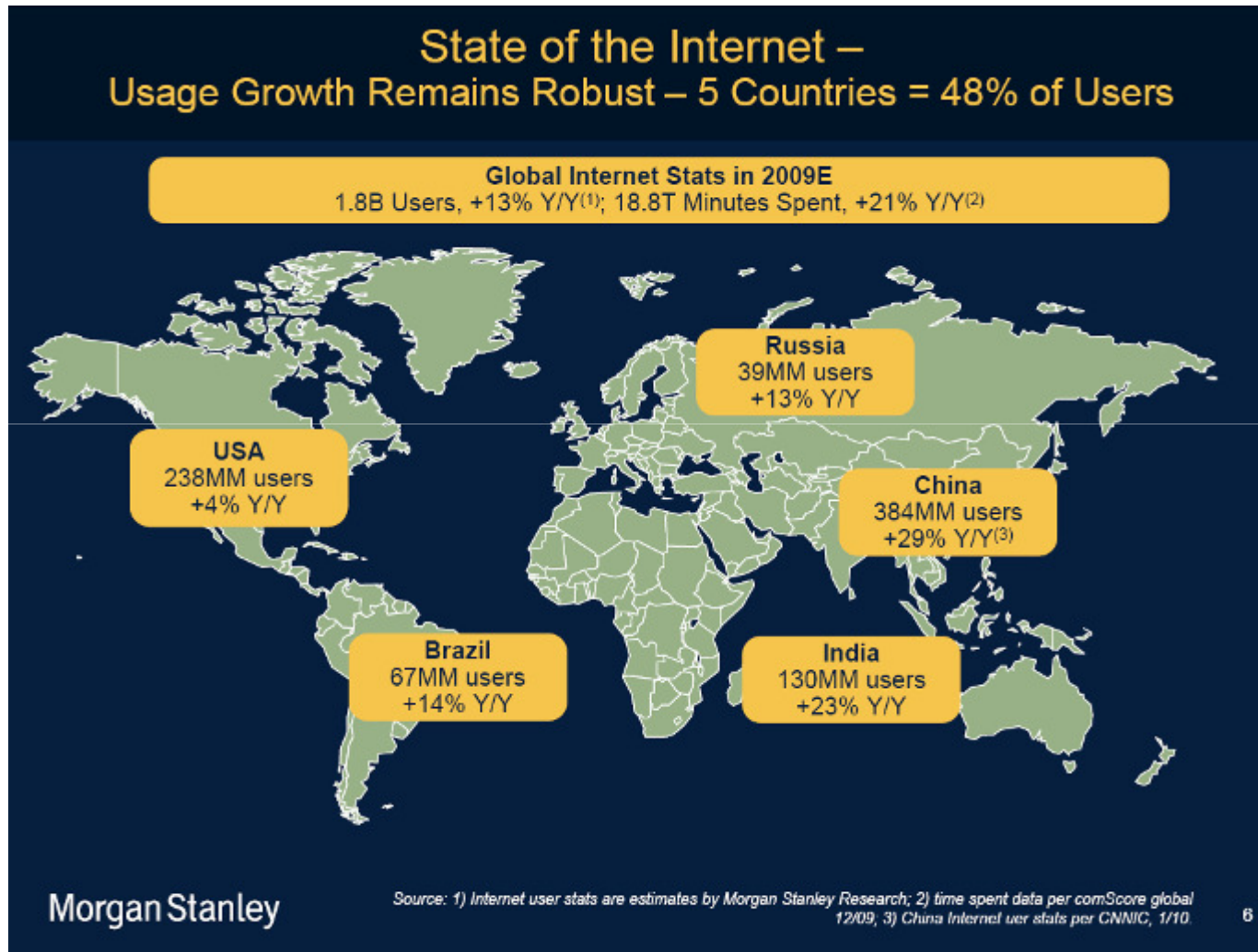
[ Two distinct groups of users having different triggers ]

# SMARTPHONE USAGE IS ABOUT DATA, NOT VOICE



Source: Morgan Stanley, 2010

# MOBILE INTERNET BIGGER THAN DESKTOP INTERNET WITHIN 5 YEARS



Source: Morgan Stanley, 2010

## ”Better rules for e-communications”

- › All telecom operators, including IP service/telephony providers, shall be able to handle 112 calls
- › All telecom operators including IP service/telephony providers, shall be able to position all 112 calls ... **for free**
- › Acceptance of and positioning of 112 SMS and other 112 calls using IP services – Skype, facebook, MSN and others



# NEW EU E-COMMUNICATION DIRECTIVE - 2009/140/EC



## ”Better rules for e-communications”

Insights:

- › The 112 organization will be held responsible to accept all types of 112 calls also from new sources
- › Also national and international roaming calls shall be positioned
- › Incentive for the telecom operators to reach high Quality of Service (e.g. position granularity) is needed
- › Use existing commercial solutions for fast deployment
- › Dialogue with the telecom operators is needed
- › National exceptions from the directive must be defined



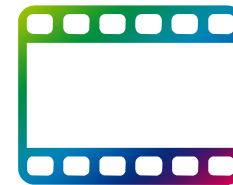
# IP SERVICES - THE FOUNDATION FOR 112 MULTIMEDIA SERVICES

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General IP service requirements:

- › Voice (IP telephony)
- › Video
- › Chat
- › Multiple sessions



all based on ECRIT specifications

# IP-TELEPHONY - THE FOUNDATION FOR 112 MULTIMEDIA SERVICES

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This requires:

- › Termination of IP-calls directly into the PSAP using
- › SIP signalling based on a standard\*
- › Redundant NW strategy corresponding to the existing one for ISDN/ISUP connected PSAPs
- › Considerable investments



\* ) Sweden has defined the 112 IP telephony and multimedia standard "ITS25"

# DEVICES FOR 112

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## IETF (Internet Engineering Task Force) drives heavy requirements

- › "A device or application **SHOULD support emergency calling** if a user could **reasonably expect** to be able to place a call for help with the device."
- › "Devices that create media sessions and exchange audio, video and/or text, and have the capability to establish sessions to a wide variety of addresses, and communicate over private IP networks or the Internet, **SHOULD support emergency calls.**"

# CONCLUSION

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- › The mobility and mobile broadband trend together with the power of existing and new IP services increase the need of great urgency
- › Directives and legislations stipulates extensive actions
- › The implementation of emergency call IP services terminating in the PSAP must start now

# CONTACT

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