

CONNECT TO LEARN

WITH ERICSSON TECHNOLOGY



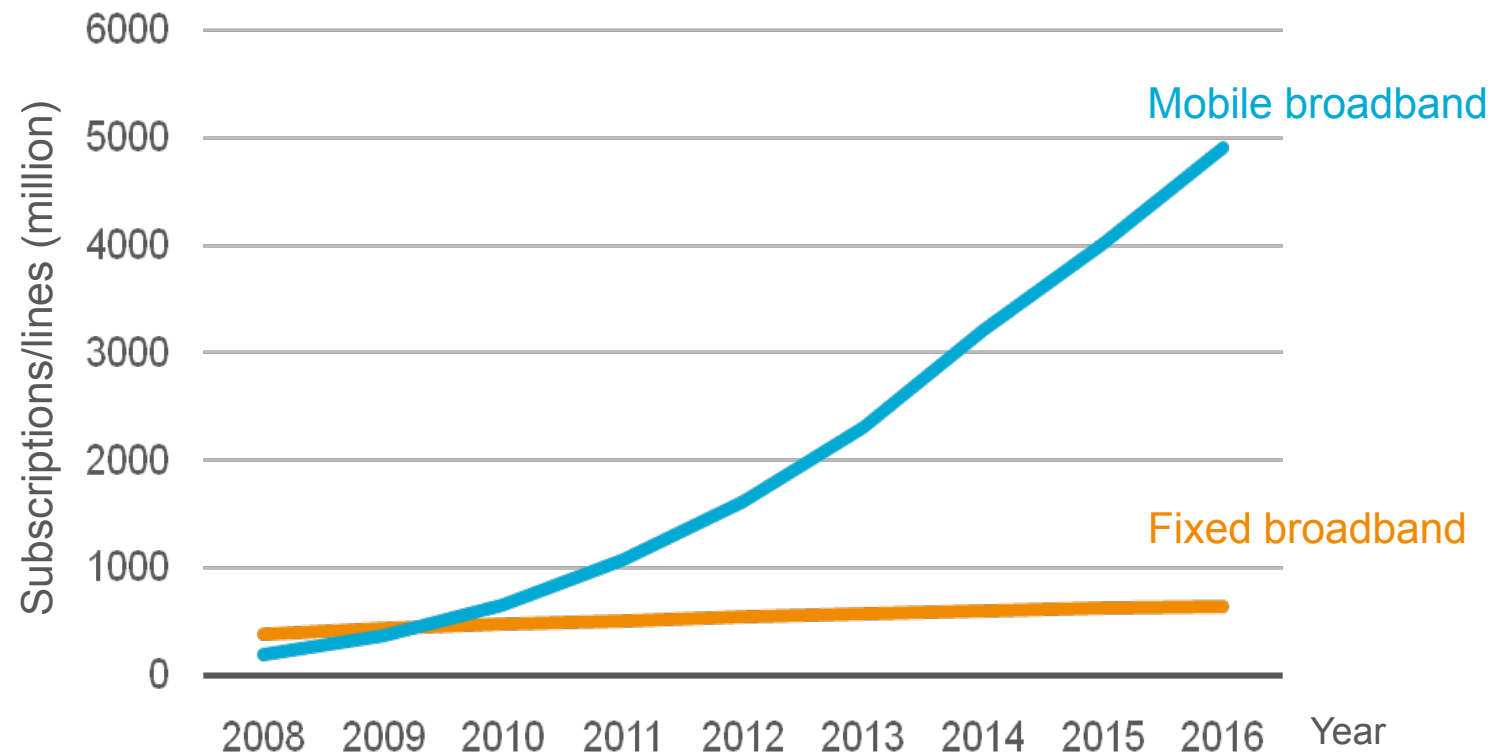
MOBILE PENETRATION AND ECONOMIC GROWTH



Every 10% increase in broadband penetration is shown on average to deliver a GDP growth of 1%.

In developing and emerging markets, broadband penetration has a significant effect on economic growth, with 80 jobs created for every 1000 broadband connections.

10% POINTS INCREASE IN MOBILE PENETRATION = 1% GROWTH OF GDP



MILLENNIUM DEVELOPMENT GOALS



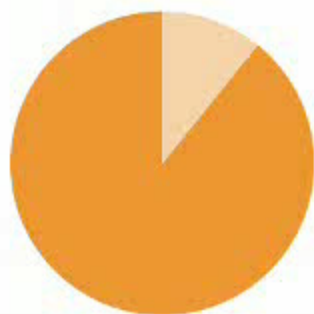
Ericsson has committed to help achieve the Millennium Development Goals by promoting affordable access to telecoms, which can help to fight poverty, support human rights and promote environmental sustainability.





A. CONNECT TO LEARN

- 1) STATE OF EDUCATION 2012
- 2) CONNECT TO LEARN PROVIDES



10%

One extra year of schooling increases
an individual's earnings by up to 10% (UNESCO).

STATE OF EDUCATION IN 2012



› ACCESS: In 2008, 67 million children were out of school. If current trends continue, there will more children out of school in 2015 than there are today.

QUALITY: Millions of children are emerging from school with reading, writing and numeracy skills far below expected levels (UNESCO)

CONNECT TO LEARN PROVIDES



Access to
secondary
education e.g.
through
scholarships*

Quality learning
resources through
mobile broadband
connectivity

A global
advocacy
platform for the
importance of
quality education

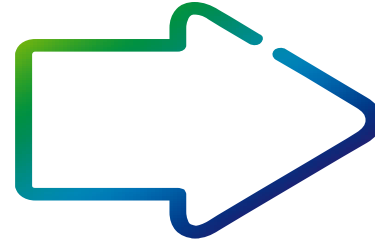
*This applies to selected countries where lack of finance hinders students attending secondary school e.g. sub-Saharan Africa



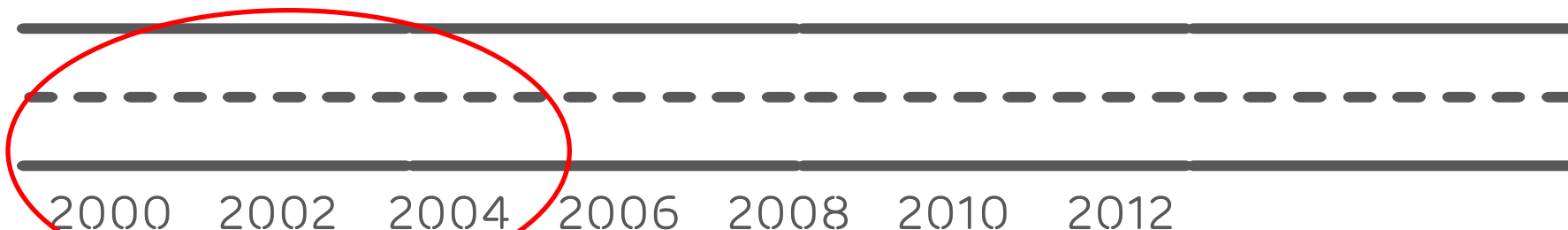
B. ICT IN SCHOOLS

- 1) HOW TECHNOLOGY IMPROVES LEARNING
- 2) FROM COMPLEXITY
- 3) TO SIMPLICITY

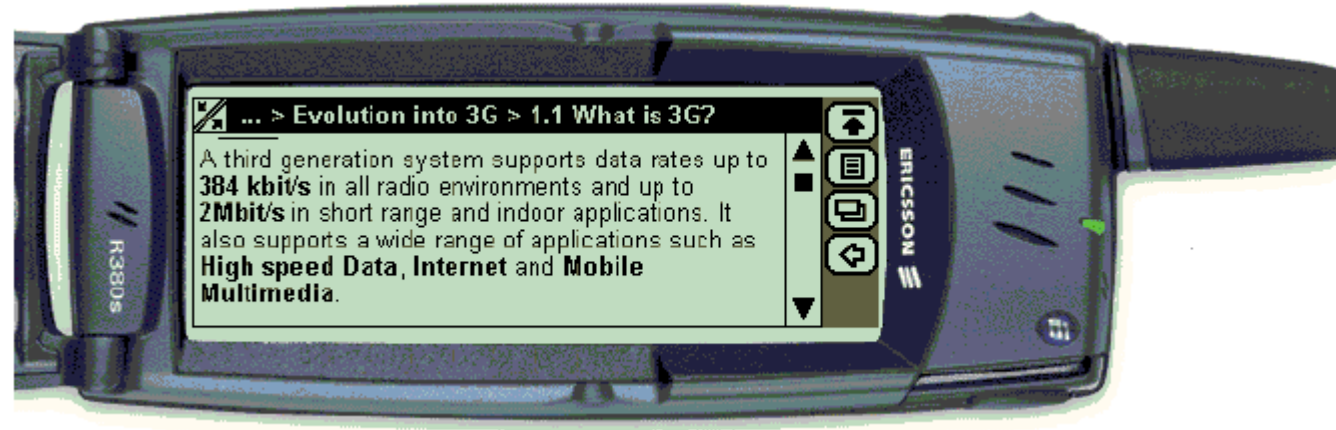
MLEARNING – A JOURNEY THROUGH TIME



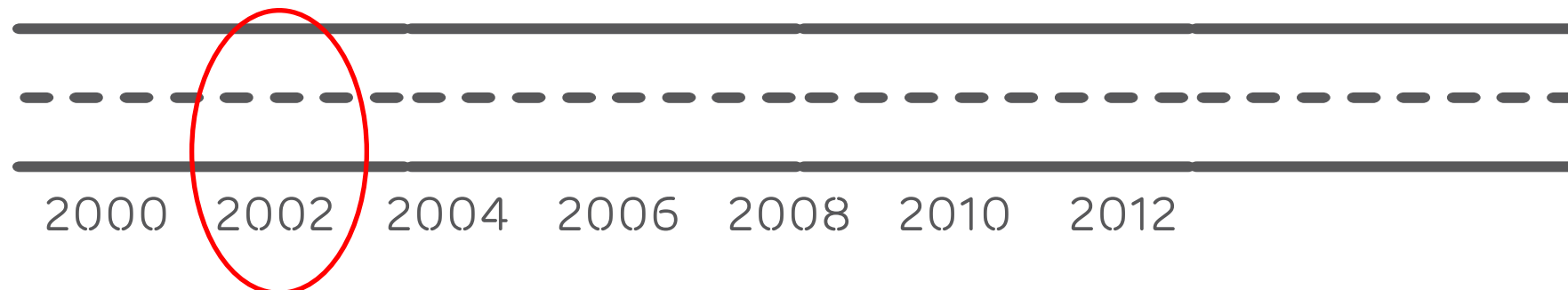
- Beginning of transformation in distance learning to widespread use of eLearning
- Enabled by growing broadband penetration, rise of eLearning standards, multimedia content, virtual classrooms etc
- First 'primitive' trials on mLearning limited by available technology, mainly driven by academics in university/school contexts



MLEARNING @ ERICSSON (2002)



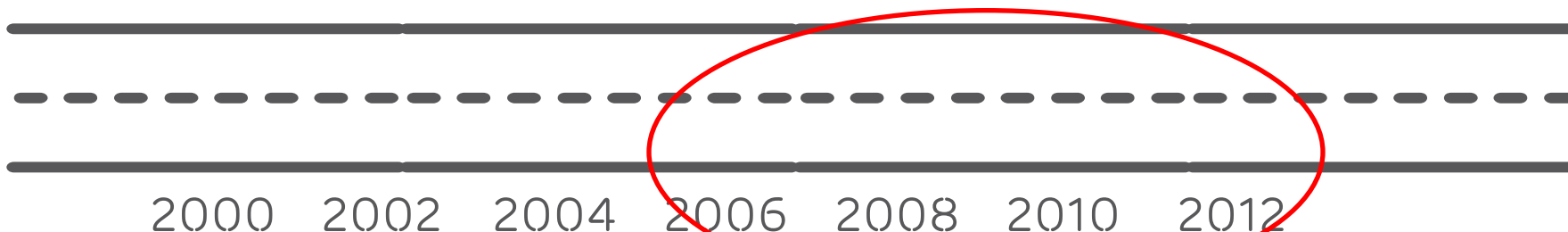
- WAP based, low resolution graphics, mainly text-based
- Focus on what was technically possible, rather than usability or pedagogical value



MLEARNING – A JOURNEY THROUGH TIME



- Move to MBB and improved functionality in handheld device means more sophisticated, media rich content can be delivered
- mLearning considered as an extension of eLearning
- Hundreds of trials, pilots completed within limited scope --
 - no mass market implementations



MLEARNING – A JOURNEY THROUGH TIME



- Example:

mLearning for Community Health Workers in Millennium Villages in sub-Saharan Africa

MVP Reproductive Health	
Course Objectives	
I. Family Planning	
II. Pregnancy Myths	
III. Types of Artificial Contraceptives	
IV. Postpartum Care	
Review Questions	
Case Studies	
Option	Ok

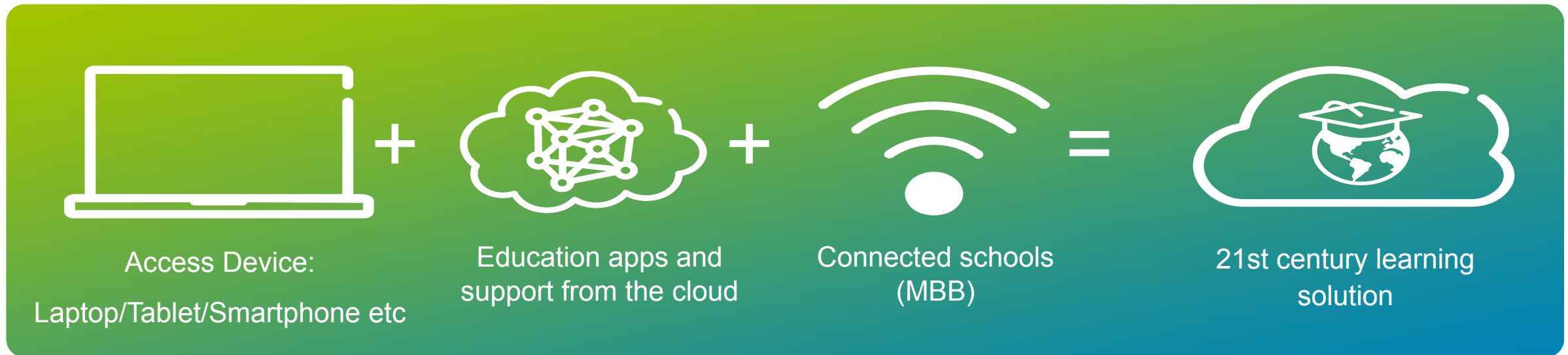
Review Questions	
8. What types of contraception should postpartum breastfeeding women avoid?	
<input checked="" type="checkbox"/>	Condoms.
<input checked="" type="checkbox"/>	None.
<input checked="" type="checkbox"/>	Those with estrogen and cervical caps or diaphragms.
That is correct!	
U06	10/12

I. Family Planning	
A. What is family planning?	
<ul style="list-style-type: none">- Family planning enables women and their partners to choose the number of children they want and the time they want to have them.- It is especially important in poor countries, where about half of all deaths of women of childbearing age are caused by problems of pregnancy and childbirth.	
U02	03/05



2008

THIS IS EDUCATION-IN-THE CLOUD



- › **Simple, manageable & safe** for students
- › **Cost-effective, scalable** accurate **usage information** for schools

HOW TECHNOLOGY IMPROVES LEARNING



Personalized/self-paced learning

Enhanced learning experience

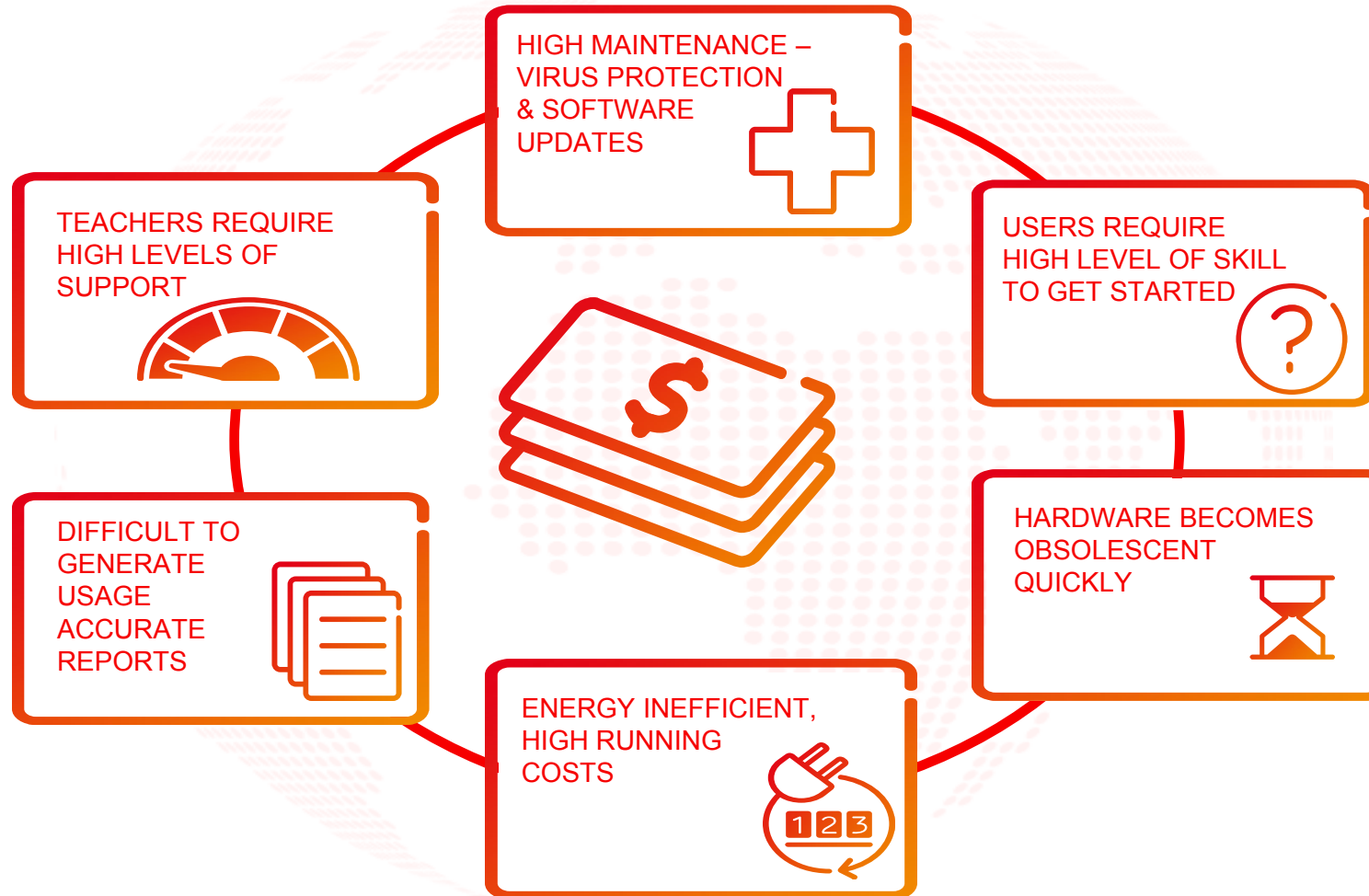
Collaborative/community based learning

Accurate assessment and feedback

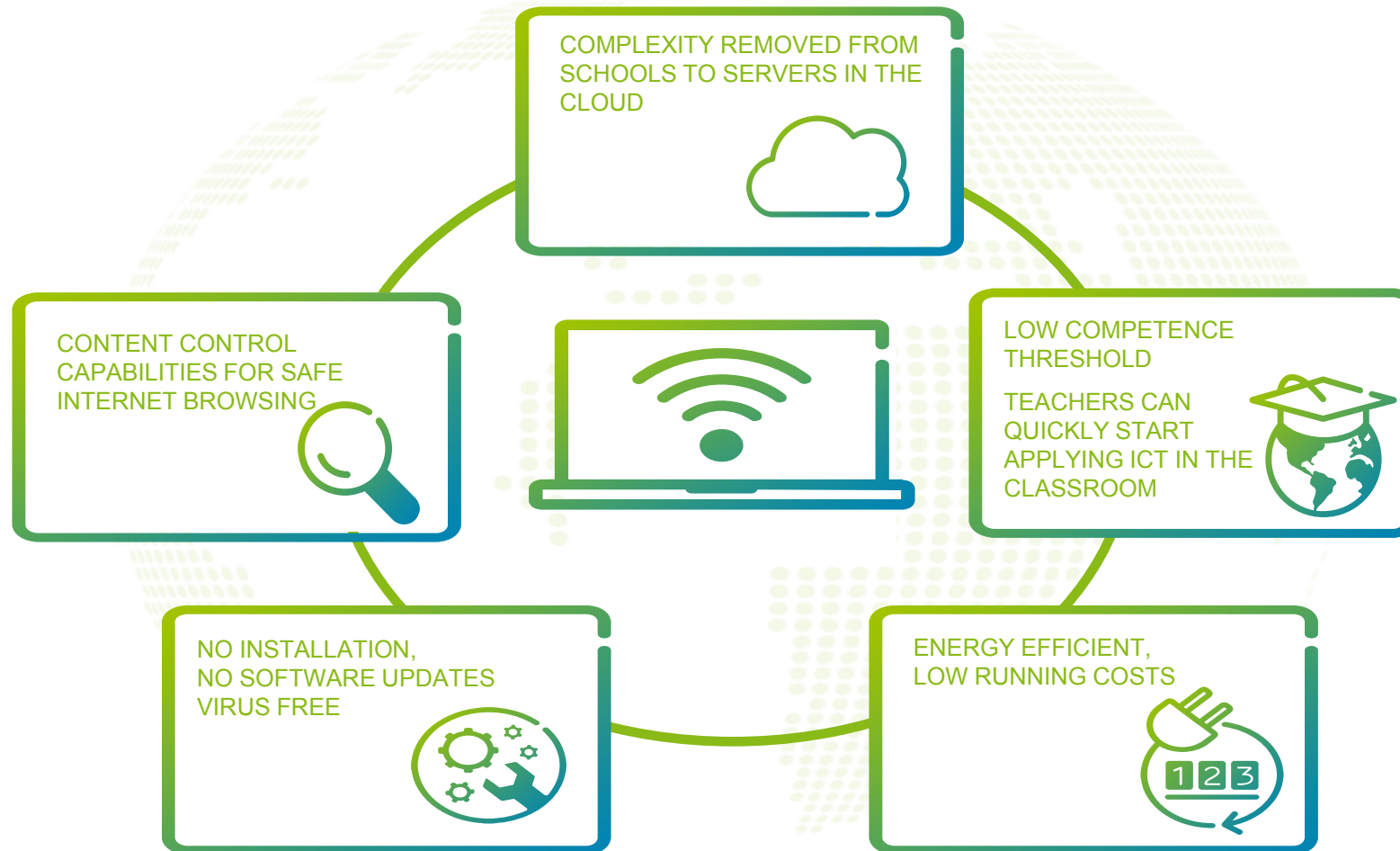
Access to a wide variety of content

Ability to manage large scale issues

COMPLEX TECHNOLOGY TODAY



TO SIMPLICITY WITH CLOUD SERVICES





C. SOLUTION OVERVIEW

- 1) EDUCATION IN THE CLOUD
- 2) SOLUTION VALUES
- 3) TYPICAL DEPLOYMENT

SOLUTION VALUES



Personal Cloud Storage
Each student can use any device with
all their files available



User-friendly education
Specific "class room" PC interface for
intuitive learning



Connecting Schools
Inbuilt communication tools for
exchanges between schools
around the world



**Direct communication channel
to schools**



Maintenance Free
No IT department needed in
schools!



Virus free environment
No SW updates needed and no lost
equipment due to viruses



Usage reports
Report system with details on all usage



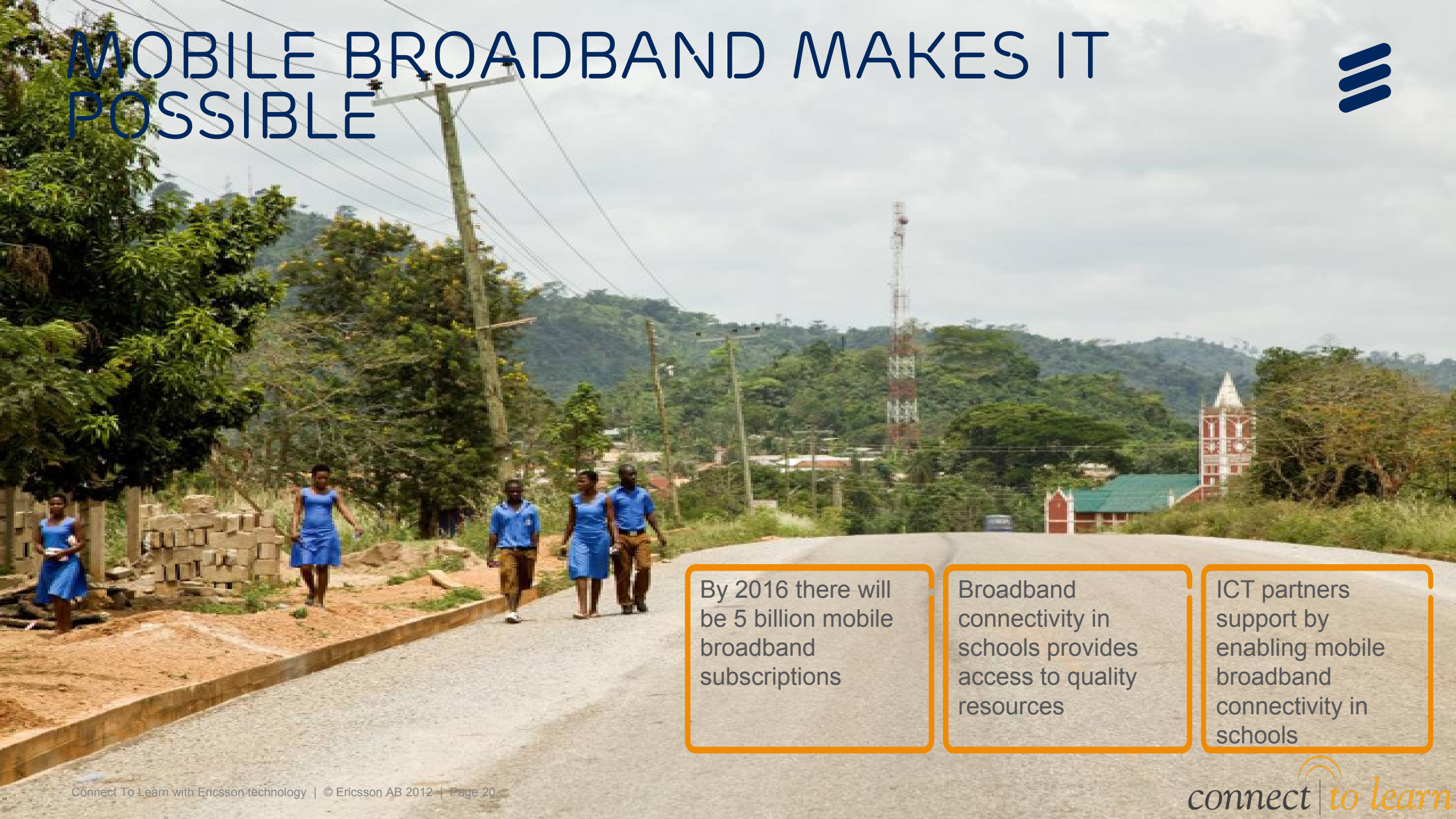
SAMPLE CLASSROOM DEPLOYMENT



25 netbooks
LCD Projector/Screen
Wifi Network
Computer Trolley
Mobile Broadband



MOBILE BROADBAND MAKES IT POSSIBLE



By 2016 there will be 5 billion mobile broadband subscriptions

Broadband connectivity in schools provides access to quality resources

ICT partners support by enabling mobile broadband connectivity in schools

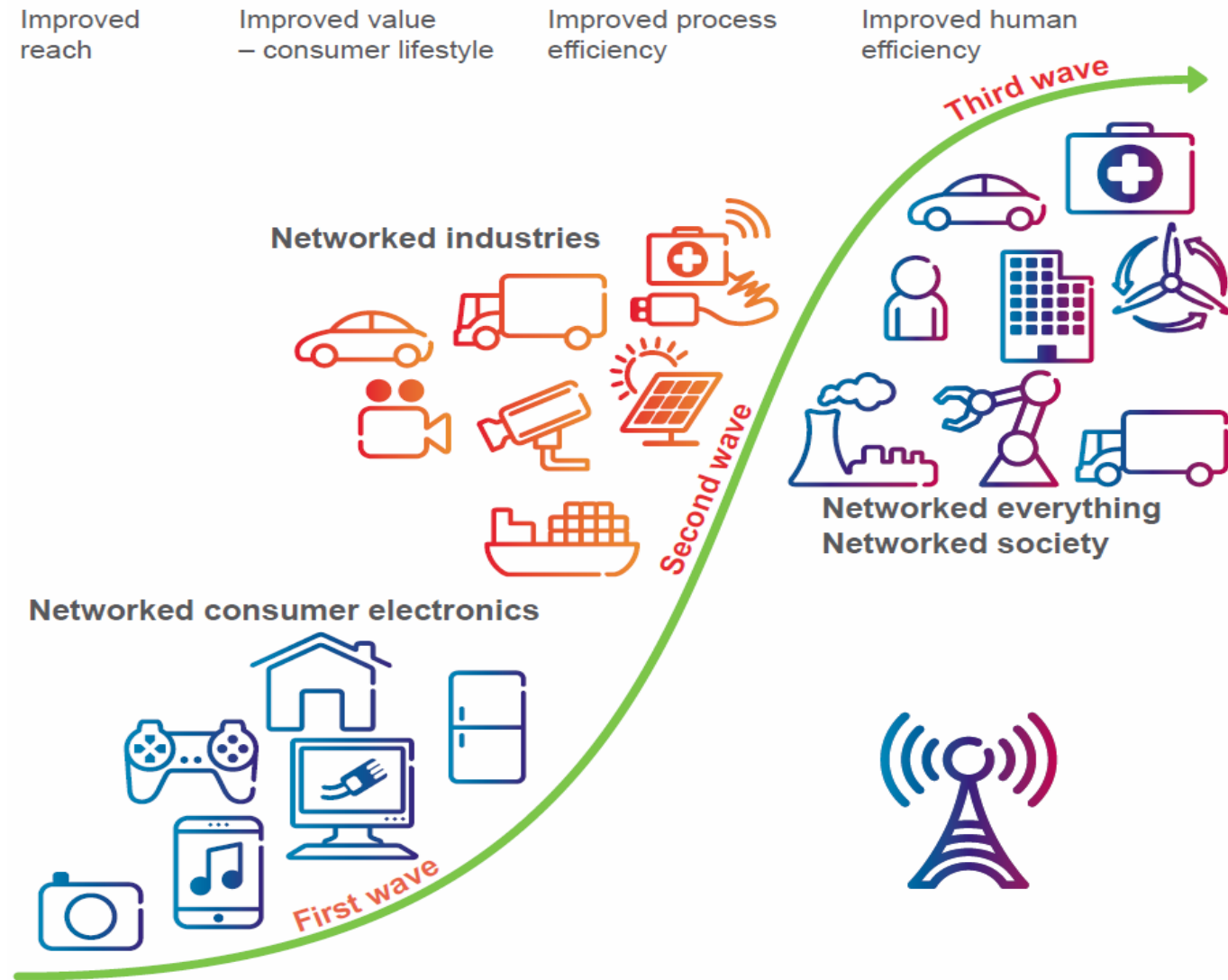


D. INDUSTRY TRENDS

- 1) NETWORKED SOCIETY
- 2) HETNETS

NETWORKED SOCIETY

**When one person connects their life changes.
With everything connected our world changes.
Explore the Networked Society.**



Heterogeneous Network (Hetnet)

Servicing data hungry smartphones

Watching streaming videos, uploading pictures and using cloud-based services will make high demands on mobile networks. At the same time more devices will be connected. Heterogeneous Networks will play an important role to create an optimal customer experience, especially in crowded areas.



2016

In 2016 there will be more than 8 billion mobile subscriptions in the world.

Mobile Broadband subscriptions expected to reach close to 5 billion by end of 2016.

Overall mobile data traffic is expected to grow 10-fold by end of 2016.



2020

Ericsson envisions that there will be 50 billion connected devices by 2020.

3 steps

TO A HIGH-QUALITY MOBILE USER EXPERIENCE

Heterogeneous Network involves a mix of radio technologies and cell types, working together seamlessly to deliver the additional capacity and coverage needed.



1

Improve existing macro cells - this involves improving macro cells with more spectrum, advanced antennas and advanced RBS processing within and between nodes.



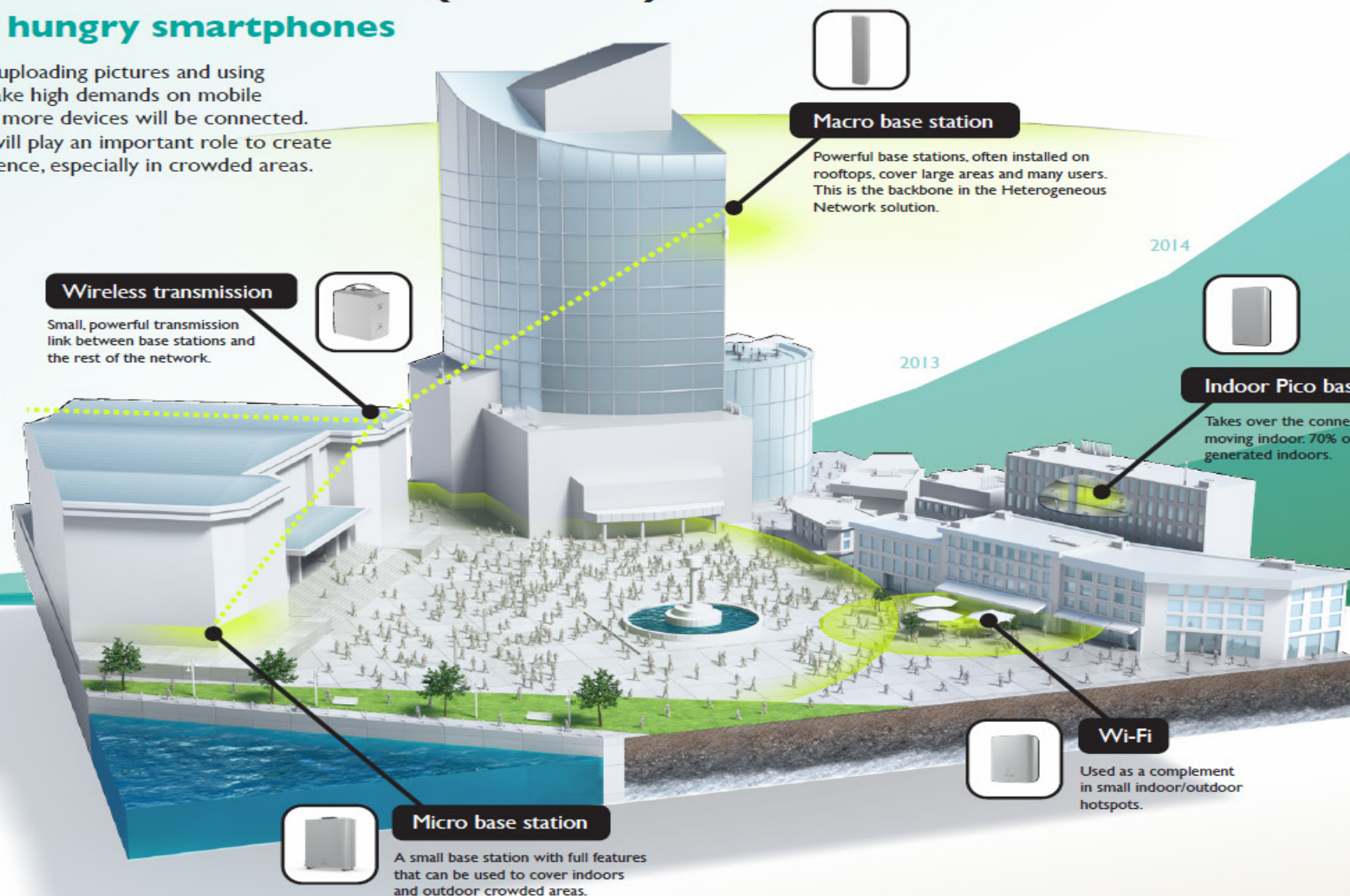
2

Densify the macro network with a small number of strategic cells to improve capacity. In dense urban areas, inter-site distances could be as low as 100 meters.



3

Add small cells and dedicated indoor solutions, which may be based on 3GPP standard (micro cells, pico cells, or low-power Remote Radio Unit (RRU)), as well as Wi-Fi.





E. KEY PROGRAMS

1) SCHOOL TO SCHOOL CONNECTIONS

SCHOOL TO SCHOOL CONNECTIONS



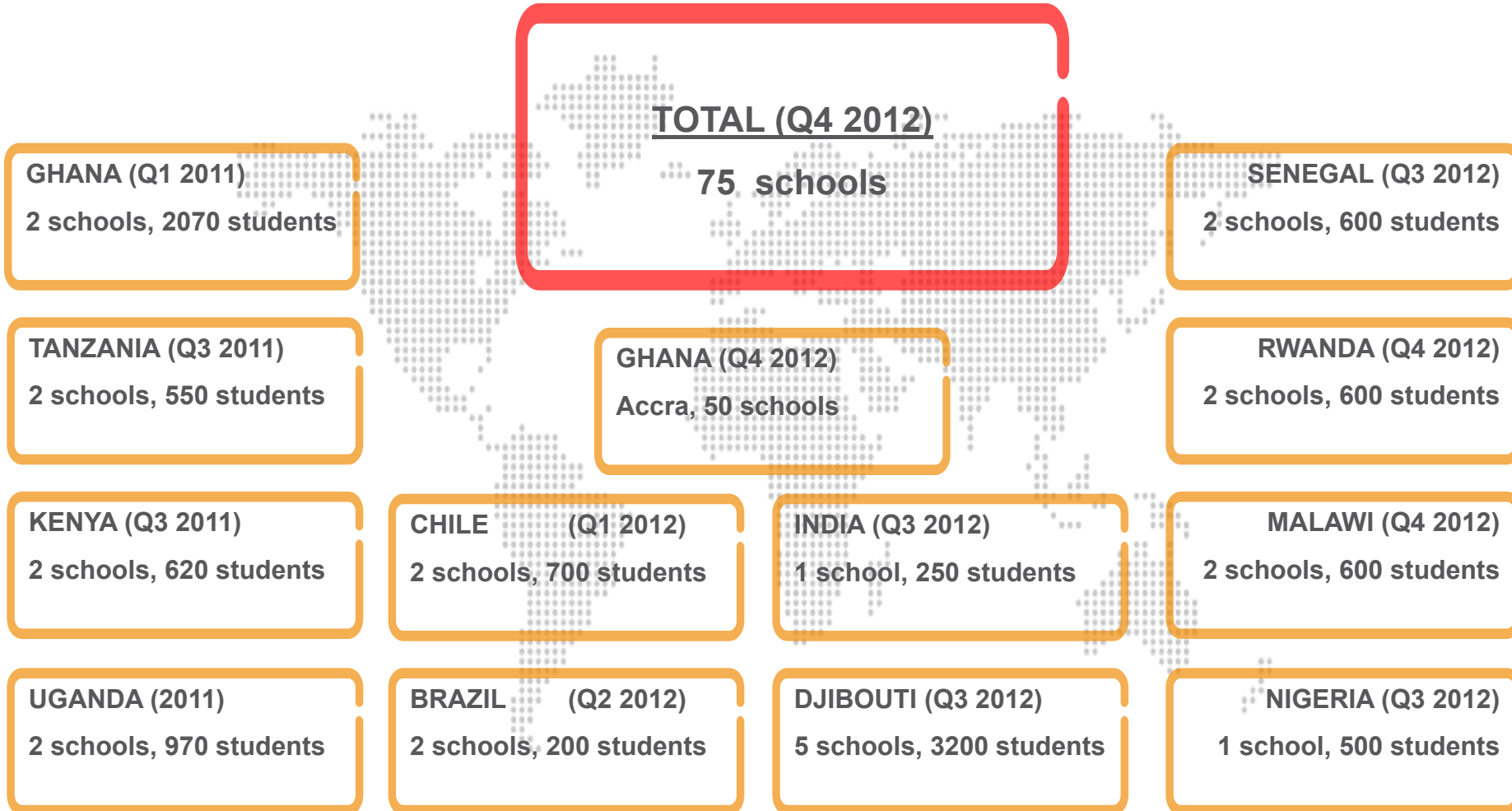
School-To-School Connections Programs connect teachers to teachers and students to students for shared learning experiences and cultural exchange



F. REFERENCE CASES

1) GLOBAL REFERENCE CASES

CTL ICT DEPLOYMENTS

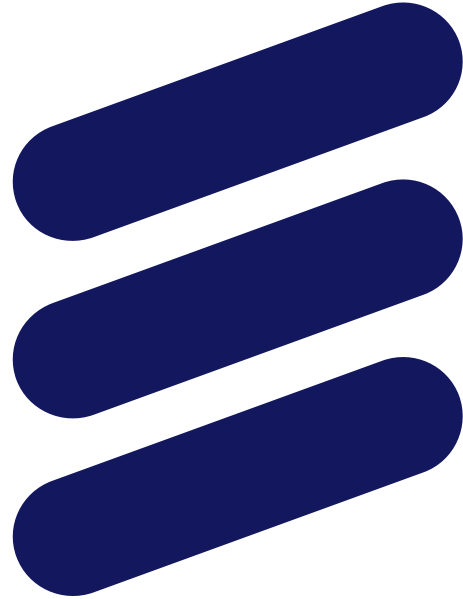


FOUNDING PARTNERS



THE EARTH INSTITUTE
COLUMBIA UNIVERSITY
Scientific Advisor





ERICSSON