



EBlink in a nutshell

- Active since 2005
- Headquartered in Europe
- Subsidiary in the US
- Carrier grade product portfolio
- Radio and optical vendor partners
- Granted patent families

Leadership Team

Chairman: **Olivier Baujard**

- Former CTO Alcatel-Lucent & CEO France
- Former CTO Deutsche Telekom

CEO: **Eric Sèle**

- Former VP-GM Ciena Europe
- Former GM Mobile Lucent Fr

CTO: **Laurent Bellot**

- Former Technical and Mktg Dr
- Harris, Lucent, Philips and Alcatel

Front-haul Market Trends

- 9B\$ investment in 2018
- CAGR 2017-2020 around 24%
- Millions of cells to be densified and centralized
- Early adopters: ATT, Vz, KT, SKT, China Mobile and NTT

EBlink Market Position

- Strong brand awareness with awards on best-in-class efficient CPRI Fronthaul
- Lab and field trials with Orange, ATT, VZ, VF, Telefonica, TI, ByTel
- Interoperable with Nokia and E//
- Testing interoperability with Huawei
- Sub-6Ghz systems installed in US and Europe
- Ongoing POC with microwave and optical vendors

Our Vision

Mobile with its unmatched versatility will dominate broadband access

Our Ambition

Be a leading enabler of wireless and optical front-hauling of time critical signals in mobile networks

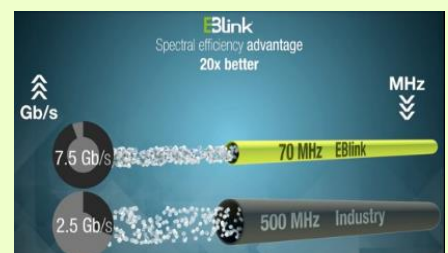


There is an unprecedented boom in mobile data usage and users. There are many categories of users with diverging needs. New categories are on the verge with the emergence of a.o. Industry 4.0, IoT, Connected Vehicles, drones, VR and AR. The versatility of mobile access can truly capture this opportunity.

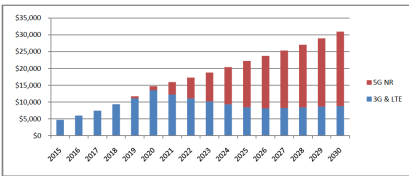
Satisfying those diverging needs will require some key technologies to be able to set prioritizations in terms of capacity, coverage, QOS and mobility towards these categories.

EBlink has developed unique low latency signal processing solutions to boost ultra high speed CPRI transmission over any medium (Wireless, Fiber or Coaxial). It is a truly versatile solution offering operators a toolbox for diverse deployment scenarios to densify and centralize the RAN.

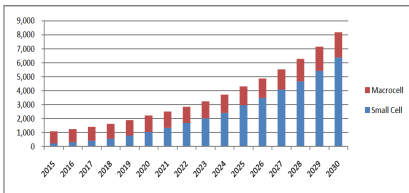
The solution is transparent for the RAN, hence coordination between cells and carrier aggregation within cells is guaranteed. It can be applied on any carrier frequency. Multiple optical and wireless segments can be daisy chained to form an end-to-end front-haul connection.



5G Market Dynamics



5G Revenue in M\$ versus 3G/LTE



Small cells in 000 units versus Macro cells

EBlink Use Cases



Densification

- Capacity offload from macro
- Multi-carrier support (CA)
- Inter-cell coordination (CoMP)
- Full macro integration
- Compact remote sites
- Economical, quick deployment and integration
- 5G future proof

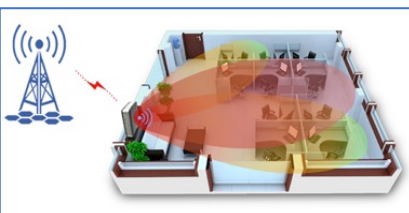


Blind – and hotspots a.o Campuses

- Leverages existing macro
- Cost effective solution with full RAN integration
- Outdoor and indoor coverage

Venues, stadiums, events, etc.

- Efficient alternative to CoWs
- Leverages pooled BBUs



EBlink Value Proposition

Through industry partnerships with radio and optical equipment vendors, EBlink accelerates the densification and centralization of the mobile broadband access network while preserving existing investments.

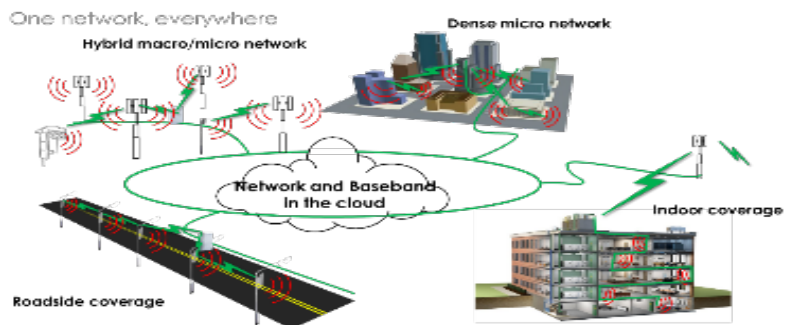
EBlink enables **wireless front-hauling** of Micro-Sites to densify Macro-Cells to cover blind spots a.o. at street level in urban areas or in buildings and to increase capacity in hotspots such as a.o. public or corporate venues, hotels, malls, campuses or stadiums. As EBlink's solution is transparent for CPRI transport or any other protocol, coordination (CoMP) between the Micro-Cells and the Macro-Cell is guaranteed.

This way of densifying the Macro-Cells with two or more Micro-Sites is a cost-effective path towards 5G RAN. Radio and antenna configurations on the Micro-Sites can be upgraded while aggregation of carriers (CA) on the Micro-Sites is guaranteed as EBlink's solution is transparent.

EBlink offers a portfolio of wireless P2P front-haul solutions through its radio vendor partners covering the spectrum from Sub-6 Ghz, micro- to mm waves. This way EBlink brings versatility to the wireless front-hauling of Micro-Sites. Wireless transport is possible as the CPRI is "compressed" with a factor 20 at a latency < 30µs.

Likewise, EBlink offers a portfolio of **optical front-haul** solutions via its optical vendor partners to transport in a transparent way CPRI or any other protocol over existing optical networks at 1G level. There is no need to upgrade to 10G or higher level transport (CAPEX Lite).

Optical front-hauling can be used as an alternative to wireless front-hauling of Micro-Sites or for the centralization of BBU's to evolve smoothly and in a cost effective way towards Cloud RAN/vRAN to further improve network efficiency and slicing.



EBlink has considerable expertise on interworking with existing RAN equipment. Networks' KPIs are ensured. Smooth network integration of any embarked solution by our partners integrating EBlink's technology is guaranteed.

License free solution for immediate densification

- BBU
- 3 Sectors
- LR3



- Macro-Site
- Micro-Site
- Feeding a DAS

FL-58 Series

- Line of Site distance: 100 to 4km*
- License free 5.8 GHz (Opex Lite*)
- Robust to interferences and environment
- Fast installation and easy to align

*subject to local regulation