# Tellabs®

## **leading Next Generation Network solutions**

A premier partner for all network voice and data initatives, Tellabs® is a world leader in the development of carrier-grade solutions with over 30 years' experience in advancing service provider networks.









residential

For greater effectiveness and efficiency from existing infrastructure today PLUS the gradual and seamless transition towards the latest next generation network services.

#### **Enterprise User Applications**

#### **Residential User Applications**



fixed-line voice services



fax services

fixed-line





2G mobile telephony



data services



high-bandwidth broadband environment



real-time video conferencing



on-demand world-wide e-learning



highly reliable 24hr access to company network

#### 3G mobile services



realizing tele-working anywhere



conferencing through laptops with mobile connections anywhere



VoIP enhanced voice and video user-to-user services

#### WiFi/WiMax technology



wireless company network



intelligent office security

#### **VPN (Virtual Private Network)**

Creating fast, secure and reliable private networks for companies



high-bandwidth broadband environment



music, movies, TV show content download to connected devices



online gaming (Xbox360, PlayStation3, Wii, etc.)



latest face-to-face communication and self expression for today's generation

#### 3G mobile services



for a more visual communication experience



instant updates and uploads to community and personal blogs

VOIP

VoIP enhanced voice and video user-to-user services

#### WiFi/WiMax technology



broadband services through mobile devices, e.g. laptop, mobile phones



connecting gamers through WiFi



for entertainment on the go

#### ■ IPTV



crystal-clear high-definition TV



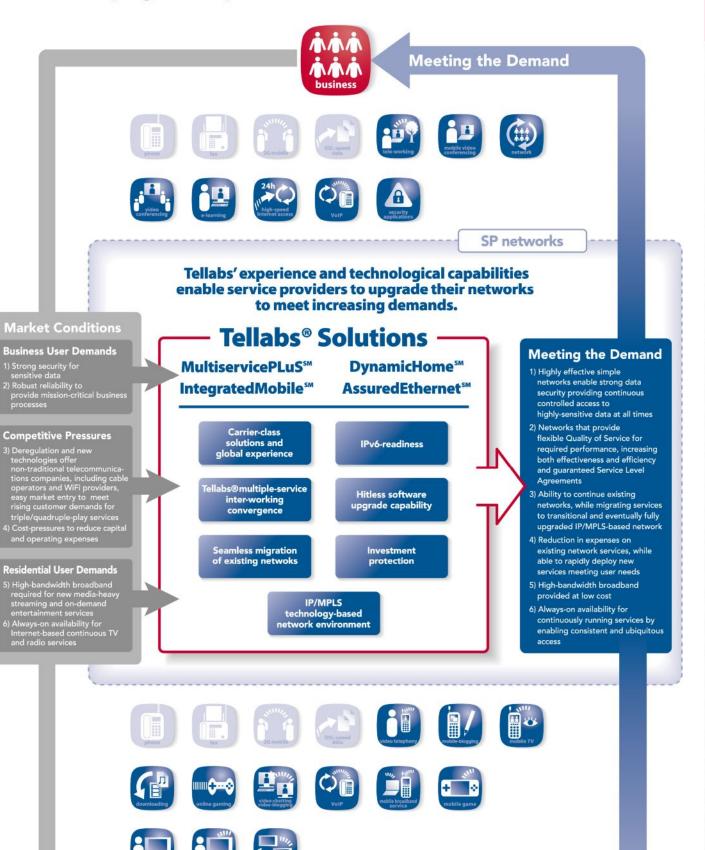
on-demand streaming TV broadcasts



active real-time participation in TV programming

## **Tellabs® Next Generation Network Solutions**

Helping service providers to solve their customers' needs





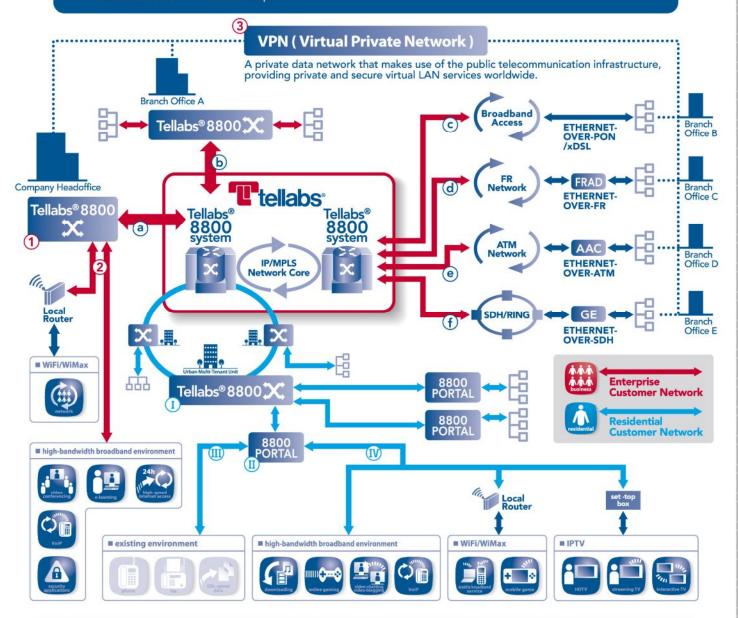
Meeting the Demand

# **Tellabs® AssuredEthernet™ Solution**

### **Providing highly reliable individualized Ethernet services**

#### Solution Features

- Carrier-class reliability, providing mission-critical network availability and hitless software upgrades for continuous network operation.
- Unique Quality of Service capabilities enable individualized and guaranteed Service Level Agreements.
- Multiple services interworking between native Ethernet and existing services enable maximum flexibility in service delivery, enabling any-to-any network communications and individualized services that customers require.
- Full scalability across all dimensions of the network, decreases the need for up-front capital expenditure through efficient Pay-As-You-Grow system.
- Single converged highly-reliable Ethernet-based network simplifies operations to substantially decrease maintenance requirements and operating expenditure while maximizing Ethernet services revenue.
- Evolve existing network and services gradually and seamlessly to pure IP/MPLS networks.



#### Tellabs® Technology **Features**

The Tellabs® AssuredEthernet<sup>SM</sup> Solution with multiple services interworking capability enables the network to handle and aggregate Ethernet over

- (a) dedicated Gigabit Ethernet over fiber line
- to enterprise customer;

  (b) 10/100Mbps up to Gigabit Ethernet over fiber connection;
- © PON/xDSL
- @ Frame Relay network;
- @ ATM network and
- SDH/RING network.

#### **Enterprise Customer Network ①-③**

- Tellabs® 8800 Multi-service Router is connected by dedicated Gigabit Ethernet over fiber line to Tellabs® Switch aggregating Ethernet traffic to network.
- Digital devices to support companies' applications requiring high-bandwidth broadband, as well as local wireless routers, which enable company WiFi networks, are connected directly to the Switch.
- Tellabs® AssuredEthernet<sup>5M</sup> Solution enables service providers to offer their enterprise clients a cost-efficient solution providing secure, reliable, high-speed virtual private networks (VPN), creating a company VPN to include branch offices and subsidiaries in different locations and connected over multiple services @-{f}

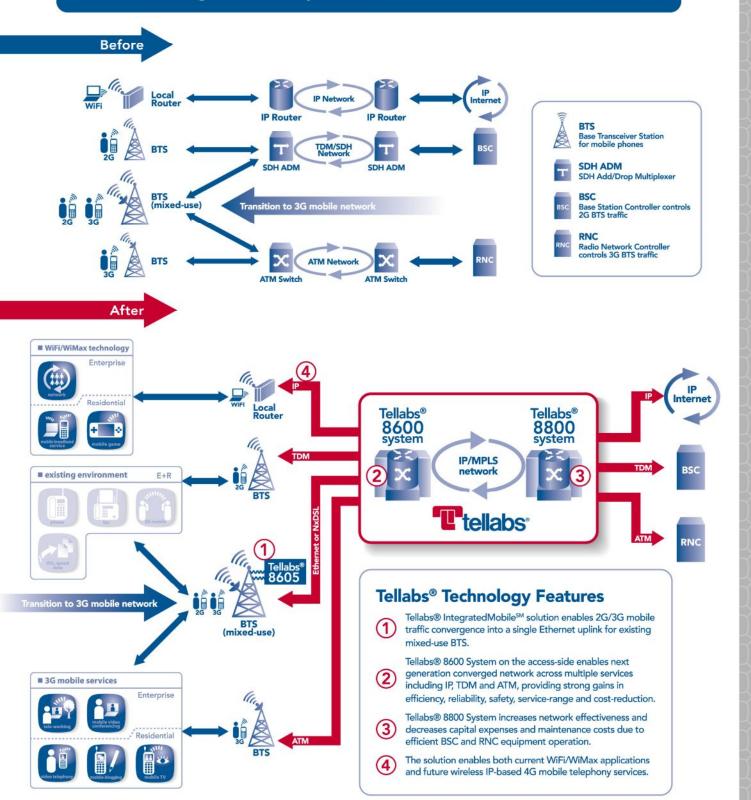
#### Residential Customer Network ①-⑩

- Ethernet-over-fiber RING connection from Tellabs® 8800 Multiservice Switch Router leads to a single Tellabs® Switches in urban Multi-Tenant Unit (MTU) providing connections for individual portals within
- One portal provides complete network access to residential family in MTU.
- The portal connects traditional copper-line voice and fax services over IP. (III)
- The portal connects different user devices to Ethernet ports including local wireless routers for WiFi applications, digital set-top boxes for IPTV applications and PC and other devices that run applications requiring high bandwidth.

# Tellabs® Integrated Mobile<sup>™</sup> Solution Creating a simple cost-effective integrated mobile network

#### Solution Features

- Supports multiple services on a single converged next generation network.
- Seamlessly migrates existing mobile networks to 3G and next generation services.
- Simple network manager enables fast & easy network deployments, end-to-end service provisioning, testing & Quality of Service definitions without any integration work.
- Enables quick and reliable response to customer needs with a highly flexible network architecture and guaranteed Quality of Service.



## **Tellabs® MultiservicePLuS™ Solution**

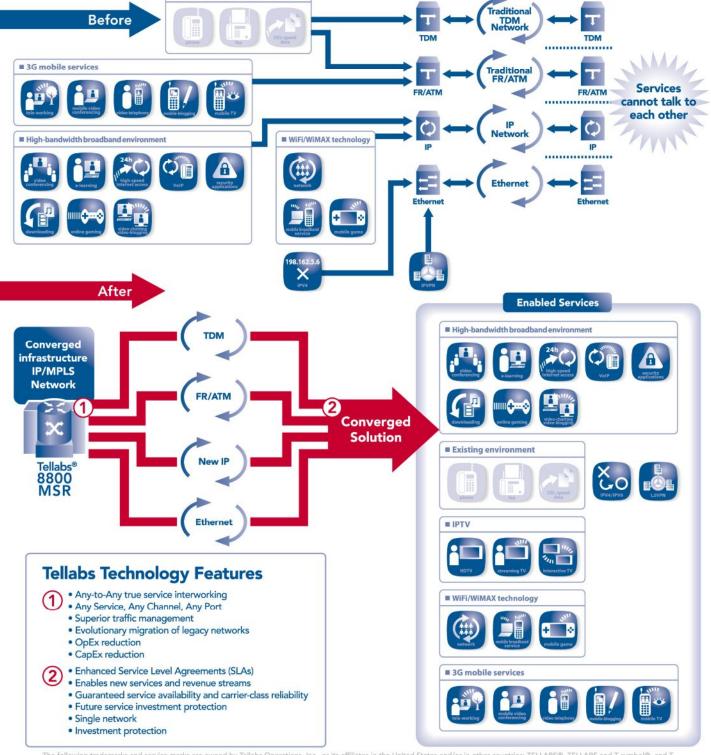
A versatile single-platform breakthrough for true service convergence

#### **Solution Features**

- Deliver truly individualized services for maximum marketplace differentiation. Individualized services offered with Tellabs' unique per-flow Quality of Service (QoS) capabilities enable you to maximize multiservice revenue. Customize services individually by customer or by service type. The Tellabs MultiservicePLuS solution delivers a single platform that can support multiple data service offerings, all with guaranteed Service Level Agreement (SLA) support.
- Tellabs® ServiceAssured<sup>SM</sup> Upgrade enables continuous service availability during software upgrades. Increased network uptime enhances customer satisfaction, acquisition and retention. Unlike other edge routers, the Tellabs® 8800 series enables you to maintain both connectivity and customer traffic during software upgrades.

**■** Existing environment

- You can now deliver a full range of residential, business and wireless traffic anytime/anywhere on a single platform with the Tellabs® 8800 Multiservice Router series. Offer VolP, video and high-speed data traffic together over a single, converged IP network. Migrate seamlessly from ATM and FR to Ethernet and IP at your own pace. With Tellabs you can reduce expenses and maximize Return on Investment by eliminating overlay networks. In addition, you can expect a software-only change when upgrading services, eliminating on-site hardware changes or support.
  - Tellabs enables guaranteed QoS to help you define, measure and deliver SLAs over your IP/Multiprotocol Label Switching (MPLS) network. Deliver today's advanced Ethernet and IP data services with the same level of QoS your customers expect from ATM and FR.

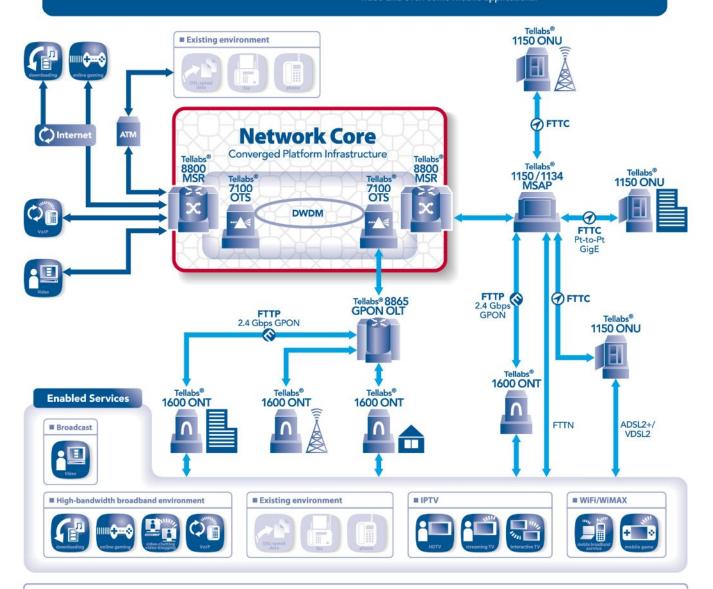


# **Tellabs® DynamicHome™ Solution**

## Delivers unparalleled choice, speed and reliability

#### Solution Features

- Maximize revenue from residential customers by offering more services. By implementing the Tellabs DynamicHome solution, service providers are able to offer their residential customers high-quality advanced FTTx services on one platform.
- Minimize capital expenditures for future network upgrades. By deploying fiber deeper into the network via the scalable and easily upgradable Tellabs DynamicHome solution, you protect your technology investment and gain the ability to respond quickly and cost-effectively to changing customer demands.
- Deliver unparalleled choice, speed and reliability. Choosing the Tellabs DynamicHome solution enables carriers to offer their customers differentiated and more advanced services, providing a competitive advantage.
- Evolve to a complete fiber solution. Support DSL and fiber services on the same platform while strategically positioning your infrastructure for migration to an all-fiber network.
- Create attractive service packages for customers. With the multiple services and expanded capacity enabled by the Tellabs DynamicHome solution, carriers can offer their customers complete service packages incorporating telephone, high-speed Internet, video and even some mobile applications.



#### **Tellabs Technology Features**

- Carriers can leverage Tellabs for deep-fiber solutions including FTTP, FTTC and FTTN.
- Tellabs offers both single-subscriber (ONU) and multi-subscriber (ONT and ONU) network termination devices.
- The solution can efficiently switch high-bandwidth video anywhere in your network and supports both existing TDM and RF overlay video, as well as packet-based VoIP and IPTV video services.
- The Tellabs<sup>®</sup> 8865 ServiceAware GPON Optical Line Terminal (OLT)
  offers per-flow queuing, packet classification, policing, shaping and
  scheduling; enables advanced SLAs; and supports IPTV switched digital
  video with advanced QoS and bandwidth controls.
- Tellabs® 1150 Multiservice Access Platform (MSAP) is a high-density access platform focused on optimized, scalable deep-fiber service delivery. The Tellabs 1150 MSAP enables flexible FTTN, FTTC and FTTP applications.
- The Tellabs<sup>®</sup> 1134 Multiservice Access Platform (MSAP) is a
  medium-density, full-service option ideal for smaller deep-fiber applications.
  The Tellabs 1134 MSAP enables many of the same functions and
  technologies as the Tellabs 1150 MSAP, with size, power and cost optimized
  for cabinet upgrades, providing a migration path from legacy
  infrastructures to deep-fiber applications.