



HYLAS 1 APPLICATIONS EXAMPLES

Graham Peters

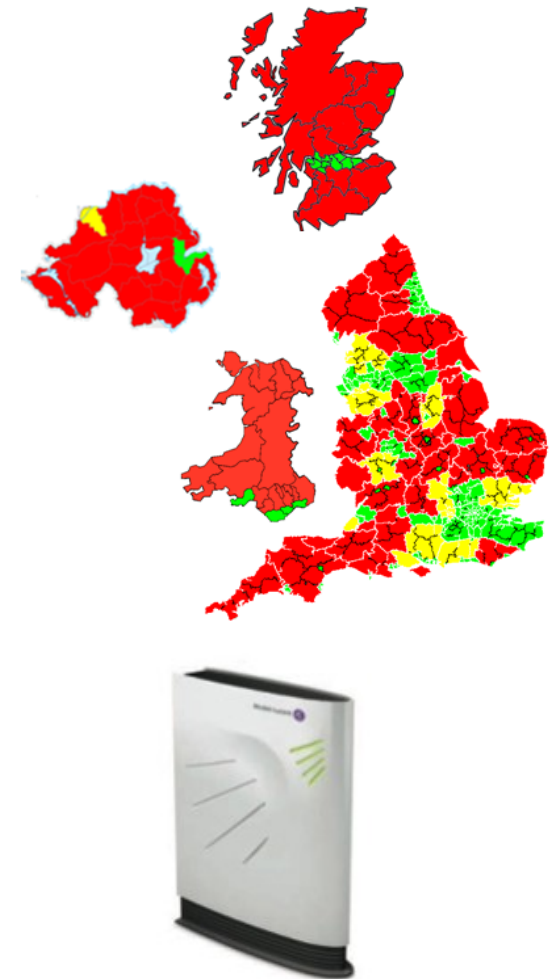
October 2011



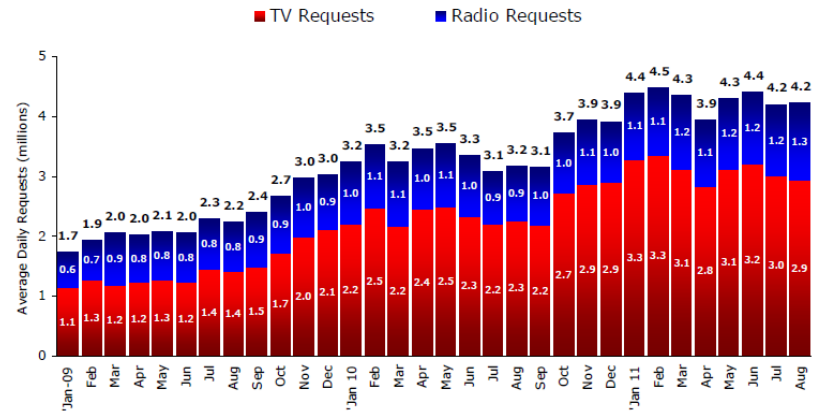
- Funding: ESA ARTES 3-4
- Subcontractor: STAB Srl (Italy)
- Project Objectives:
 - Reduce cost of satellite install
 - Reduce the need of installer expertise;
 - Fewer/simpler installer tools;
 - Shorten time;
 - Improve precision;
 - Increased reliability;
 - Fast/free adjustment and re-alignment;
- Project Scope
 - Develop software interface
 - Simplify physical interface to satellite terminal
 - "Productise" the motor for commercial deployment
 - Trials with real end users using HYLAS 1

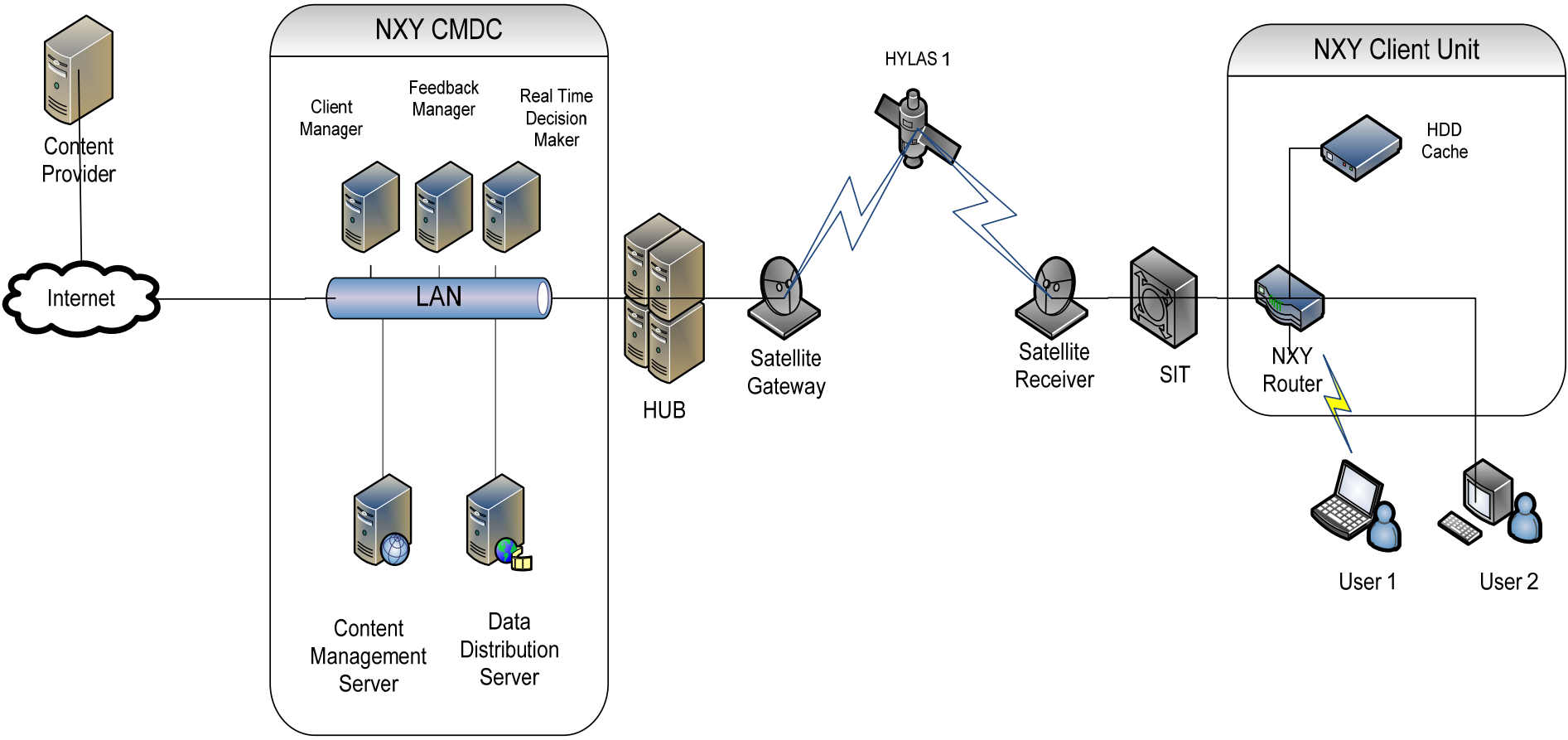


- Funding: UK Technology Strategy Board - "Collaboration Across Digital industries"
- Project Partners: Alcatel Lucent, Docobo, CamVista
- Project Objectives:
 - Evaluate how outdoor 3G mobile "femtocells", integrated with satellite backhaul, can be used to support new services to rural communities
- Scope
 - Optimise the performance of satellite adapted femtocell technology
 - Implement demonstrator for an "Assisted Living" application and a remote security application
 - Demonstration with real end users using HYLAS 1



- Funding: ESA ARTES 3_4
- Project Objective:
 - Improve the efficiency of IPTV in satellite broadband network by using pushVOD techniques
- Project Scope:
 - Develop a prototype system
 - Perform a 6 month trial involving approx 100 real customers based in the UK
- Content pushed to local caches
 - Efficient Content delivery via reliable multicasting techniques
- Improved perceived Quality of Service
 - Video starts immediately
 - No breaks due to buffering while watching
- Saves bandwidth for ISP
 - Content only sent once, not once per viewer







NXY USER INTERFACE

The screenshot shows a web browser window with the following elements:

- Browser Title Bar:** Applications Places System | Nxy iPlayer - Google Chrome
- Address Bar:** 192.168.1.122:8085/NxyiPlayer/resources/jsp/index.jsp
- Page Header:** nxy Player | Home | Find Programs | Explore Cache
- Main Content Area:**
 - Browse by Genre:** Local, Others, Documentaries, **Movies** (selected), Entertainment, Sports, News, Boxsets, Technology.
 - Recommended Content:** A large banner for "SHOWBIZ TONIGHT" with "Prev" and "Next" buttons.
 - Content Providers:** Includes a "TWIT" section with a logo and text "This week in tech network with technical podcasts", and a "YouTube" section.
- All Cached Content:** A grid of seven content items with thumbnails and titles:
 - Reptiles and Amphibians Ep 02
 - Challenges of Life Ep 01
 - Apple after Steve Jobs
 - Google's changing Algorithm
 - 'State of the Union' podcast: 09/04/11
 - Tea for Eight
 - Photo Not Available



Technology Strategy Board

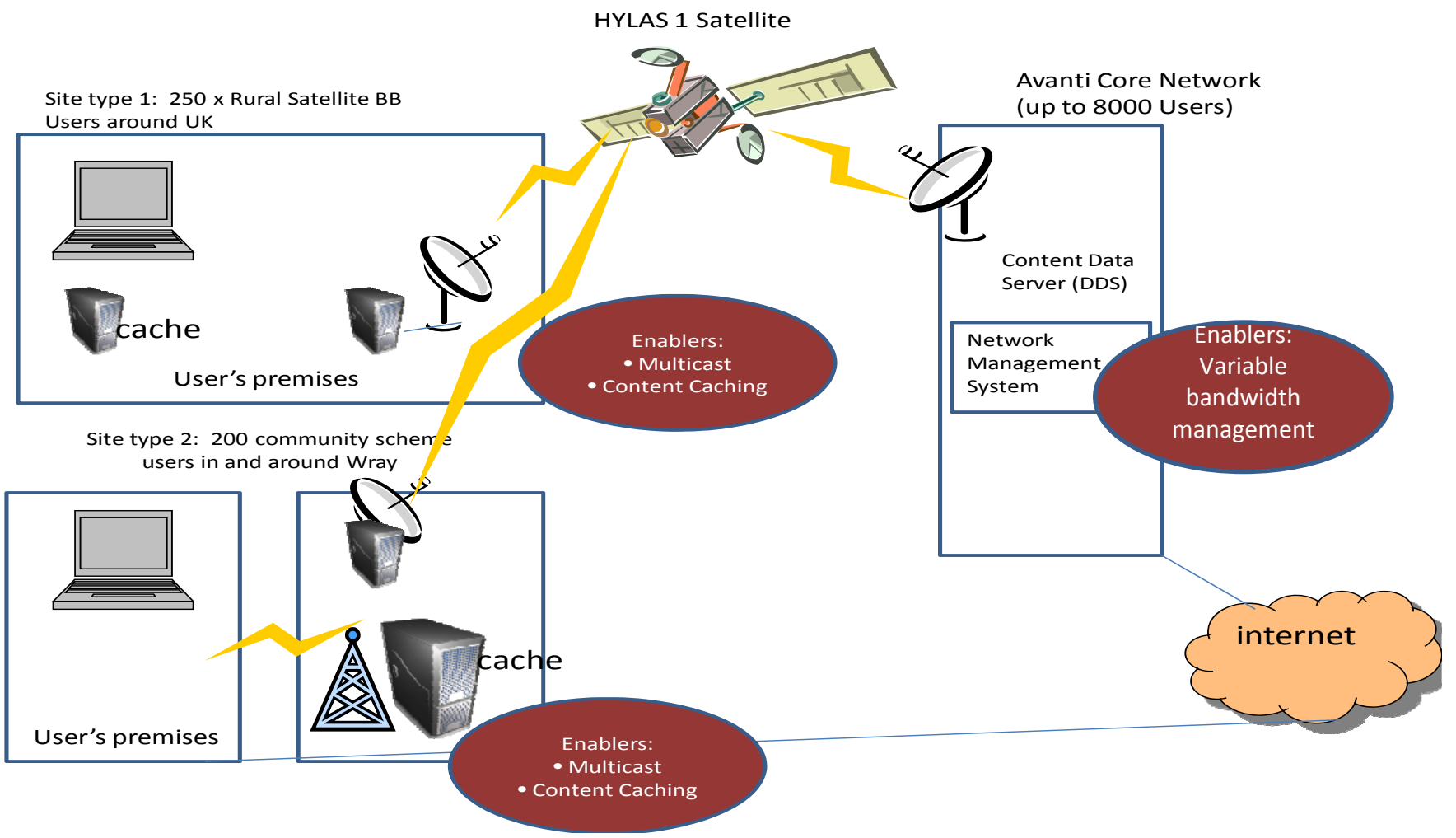
Driving Innovation

The UK Digital Testbed



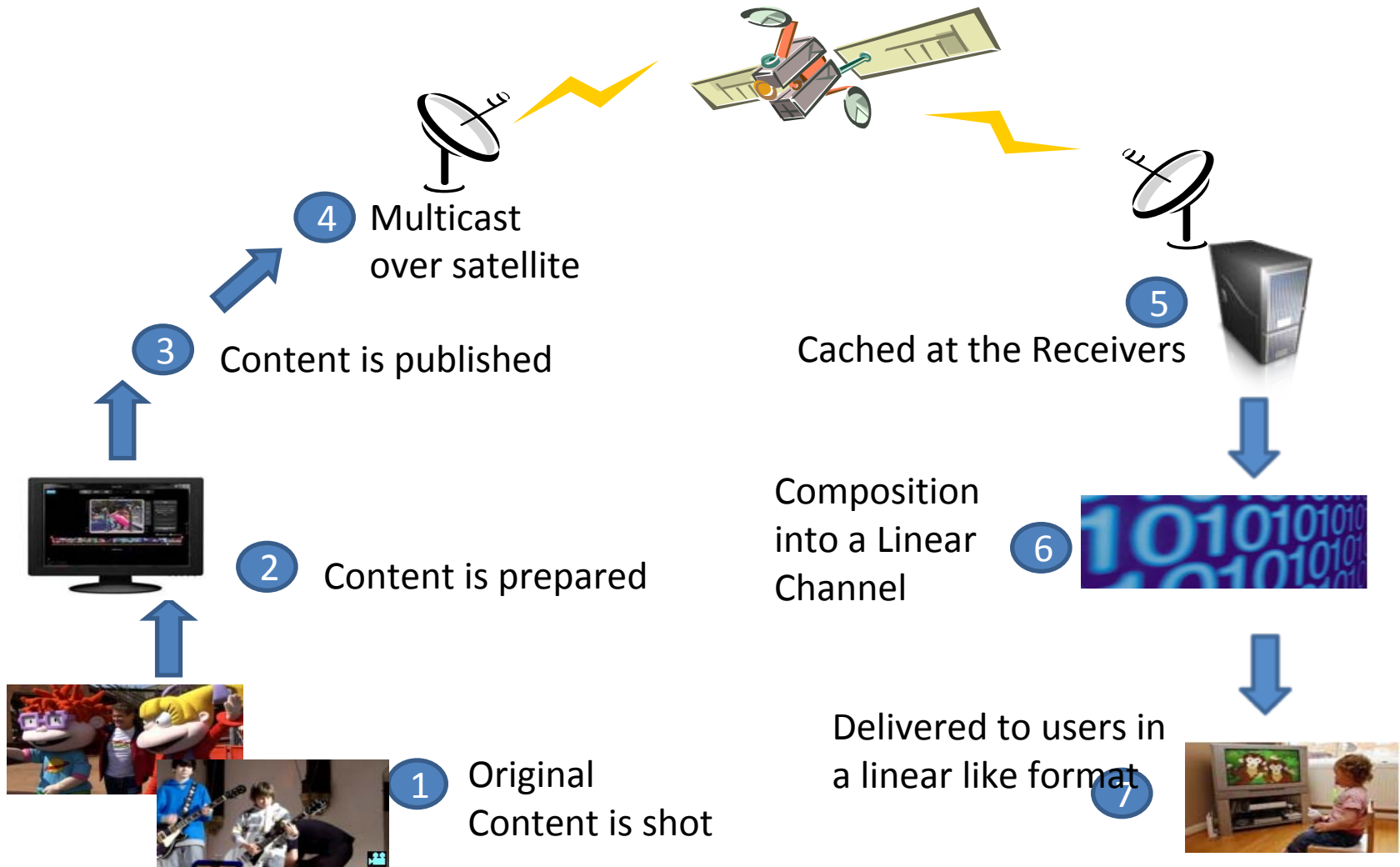
- A controlled experiment or ‘Living Lab’
 - for business, technology and consumer
- Real consumers try out new products and services at scale
 - testing new technology, studying new behaviour
- New ways to run the internet, looking 5-10 years out

- Project Funding: TSB
- Objective:
 - One of five advanced testbeds
 - Available for experimentation around new applications, services and business models
- Comprises:
 - A network
 - “advanced network enablers”
 - A user base
- Network enablers:
 - IP Multicasting over satellite
 - Reach users across vast distances with a single transmission
 - Caching
 - Similar to NXY
 - Dynamic User Service Improvement
 - Services can change (increase) a users bandwidth dynamically





DART USE CASE: "RED SQUIRREL TV" - LOCAL TELEVISION. A PROJECT LED BY EXEMPLAR ASSOCIATES LTD AND FUNDED BY TSB





THANK YOU

Avanti Communications Group plc
www.avantiplc.com
74 Rivington Street, London EC2A 3AY
AIM:AVN