



European Satellite Operators Association



Broadband via Satellite

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Absolutely Everywhere





The EU Economic Recovery Plan

- December 2008: €1.02 billion proposed for Internet Connectivity
- Objectives:
 - ⇒ *Serving the unserved/ underserved*
 - ⇒ *Target 2010*
- €1.02 billion for what?
 - ⇒ *EU regulation: “Creation of new ... infrastructure...”*
 - ⇒ Satellite requirements:
Access to existing infrastructure using ground equipment

Q. Is satellite eligible?

A. YES

EAFRD Regulation:

“Creation of and *enabling access* to broadband infrastructure including backhaul facilities and *ground equipment* (e.g. fixed, terrestrial wireless, satellite-based or combination of technologies)”

Consumer “Ground Equipment”



Outside



Inside





Manufacture: €100m - €400m

Launch: €100m

Insurance: €15% of total investment



Purchase & Installation: €250 - €500 per connection



Allocation of new EU funds under EERP for Rural Broadband & New Challenges

	Bel	Bul	Cz	Dk	D	Est	Ire	Gre	Esp	Fr	It	Cyp	Lat	Lith
2009	2.22	19.50	21.00	1.74	50.34	5.34	15.78	24.72	44.88	35.52	56.52	1.20	7.80	13.02
2010	1.55	13.65	14.70	1.22	35.24	3.74	11.05	17.30	31.42	24.86	39.56	0.84	95.46	9.11
Total	3.77	33.15	35.70	2.96	85.58	9.08	26.83	42.02	76.30	60.38	96.08	2.04	13.26	22.13
%	0.37%	3.25%	3.50%	0.29%	8.39%	0.89%	2.63%	4.12%	7.48%	5.92%	9.42%	0.20%	1.30%	2.17%

	Lux	Hun	Mal	NL	Aus	Pol	Port	Rom	Sln	Svk	Fin	Swe	UK	Total
2009	0.60	28.44	0.60	2.28	27.18	98.70	26.94	59.82	6.78	14.70	14.58	12.42	7.38	600.0
2010	0.42	19.91	0.42	1.60	19.03	69.09	18.86	41.87	4.75	10.29	10.21	8.69	5.17	420.0
Total	1.02	48.35	1.02	3.88	46.21	167.79	45.80	101.69	11.53	24.99	24.79	21.11	12.55	1 020.0
%	0.10%	4.74%	0.10%	0.38%	4.53%	16.45%	4.49%	9.97%	1.13%	2.45%	2.43%	2.07%	1.23%	100.00%

Source DG AGRI figures, to nearest €10 000; % calculated by AGRA FACTS;

E.g. Poland

Even at €500 per connection, in Poland nearly 200,000 connections could have been made in 2009

“A million extra businesses or households in rural areas can connect to broadband via satellite by the end of 2010 - that too, using only half of the EU’s broadband package allocation”

“Immediate & sustainable boost to the competitiveness of rural businesses leading to a permanent transformation of rural areas”

Generating Local Economic Stimulus

- Basic Infrastructure in place: *Immediate Connectivity*
- Access to Connectivity: *Ground Equipment*
- Ground Equipment: *Requires installation*



- Ground Equipment & Installation: *Eligible for Funding* (if measures for satellite included in Rural Development Programs)
- *Public Support* to cover 100% cost of ground equipment & installation
- How? Aggregation of demand/ bulk purchases with distribution to eligible users/ other model
- Installation requires *Local Labour* - Public Funding turns into *Opportunities & Employment* for local SMEs





Examples of Satellite Offerings Across Europe

Offer Service Provider X

Equipment Cost: €299-399

Down-link (kbps)	Up-link (kbps)	Volume (GB)	€/m
2048	384	1.8 (Down +Up)	29.90
2048	384	3.0 (Down +Up)	37.90
2048	384	5.0 (Down +Up)	54.90
2048	384	9.0 (Down +Up)	94.90

Offer Service Provider Y

Equipment Cost: €399

Down-link (kbps)	Up-link (kbps)	Volume (GB)	€/m
512	96	Progressive bit-rate decrease from 0.8 GB Down, 0.15 GB Up	29.90
1024	128	from 1.4 GB Down, 0.25 GB Up	39.90
2048	128	from 2.24 GB Down, 0.4 GB Up	69.90

Offer Service Provider Z

Equipment Cost: €615

Down-link (kbps)	Up-link (kbps)	Volume (GB)	€/m
512	256	5.0 (Down + Up)	22.00
1024	256	10.0 (Down + Up)	33.00
2048	512	15.0 (Down + Up)	44.00
3072	768	20.0 (Down + Up)	55.00

Satellite BB Around Europe: Connecting Rural Schools



In Cyprus following a trial of connecting 6 schools, the Cypriot Minister of Communication & Works announced on 24th March 2009 the connection of all the schools in the 152 villages in Cyprus to broadband via satellite

Now this will be extended to all remote communities not connected to ADSL as well



Satellite BB Around Europe: Connecting Remote Citizens



Satellite BB Around Europe: Connecting Farmers

“Can you tell me the way to
the digital highway?”



The Dutch Federation of Agriculture and Horticulture decided to start providing its members (55000 farmers) with satellite-based two-way broadband services

- Checking crop prices
- Administrative formalities
- On-line trading

Piemonte

- *Population: 4,166,442*
- *Area (sq km): 25,399*
- *Mountain: 43.3%*
- *Hill: 30.3%*
- *Flat land: 26.4%*



- Public bid for bidirectional satellite service + supply, installation, maintenance / assistance of 200 terminals
- Giving Local Administrations in rural and mountain areas access to broadband Internet & to the applications of the Regional Administration
- Service extended to public mountain huts in at the end of 2006 (email, consultation of the weather forecasts, webcam, etc.)
- Advantages: promotion for tourism, backup in case the traditional system of communication has a failure, managing emergency interventions

- The Scottish Government identified 4000 homes and businesses beyond the reach of terrestrial broadband
- Tender to supply satellite broadband services ranging from 512kbps to 3Mbps to end users
- Equipment and installation costs were fully subsidised by the Scottish Government

A business and domestic user, in Perth, commented:

"We can't believe the speed of our broadband service compared to our previous dial up connection. Using the internet has now become a pleasure rather than a chore"



- Need to create awareness around key characteristics
 - ⇒ *Immediate deployment giving immediate employment (SMEs)*
 - ⇒ *Targeted investment: real & not potential users*
 - ⇒ *Best Economic Offer*
 - ⇒ *No geographical constraints*
 - ⇒ *If fibre arrives, move the dishes to another white spot*
 - ⇒ *Leave no one unconnected NOW, provide equal opportunities TODAY*

Just as fibre is a natural solution for black spots

Satellite is the natural answer for white spots



Satellites

Connecting the Planet