

ACRONYM : SABER

TITLE: Satellite Broadband for European Regions

PROJECT CO-ORDINATOR: CSI-PIEMONTE

WORK PACKAGE 4 LEADER: Sli Nua

WORKSHOP 6 MINUTES

Bruxelles, 10TH April 2014, 09:00 – 16:00.

IN ATTENDANCE:

1 – CSI-Piemonte, IT:	Vittorio Vallero; Mara Cocco
2 – CNR-IREA, IT:	Mario Angelo Gomasasca;
3 – Fundecyt-PCTEX, ES:	Kety Caceres;
4 – Lepida, IT:	(ABSENT);
5 – SIR, IT:	(ABSENT)
6 – WNRI, NO:	Ivar Petter Grøtte,
7 – BHV, NO:	Kjell Pedersen-Rise;
8 – NEM, UK:	Alex Roy;
9 – Nievre Numerique, FR:	Clive Peckham;
10 – ACREO, SE:	Crister Mattson; Marco Forzati
11 – SWRA, IE:	Eileen Crowley;
12 – MWRA, IE:	Fiona Mc Cormack; Patricia Fogarty;
13 – COI, PL:	Beata Rajchel
14 – RDHOR, SI:	Davorin Rogina;
15 – MIT, RO:	Alin Gaitanaru;
16 – ETA-2U, RO:	Bogdan Grecu;
17 – eTRIKALA, GR:	Athanasios Ballis
18 – TOSP, IT:	Sabino Titomanlio;
19 – INFOTER, HU:	Kazon Pandula, Fabian Zsolt;
20 – DEVONCC, UK:	(ABSENT);
21 – RCITT, PL:	Jacek Korona, Michat Piast

22 – SLINUA, IE:	Rosemary O'Connor, Patrick Sullivan;
23 – EUTELSAT, FR:	Stefano Agnelli, Luisella Ciani;
24 – Airbus Defence and Space, FR:	Agnes Salvatori
25 – SKYLOGIC, IT:	Giorgio Tarchi
26 – SBBS-SES, LU:	(ABSENT)

Guests

27 - NEREUS	Roya Ayazi;
28 - Newtec	Geert Adams
29 – DG Connect	Pertti Jauhiainen, Guido Acchioni;
30 – ViaSAT	Bob Wilson;
31 – Tuscany Region	Livio Stefanelli;
32 – Lysios	Marie-Myrtille Marichal.

Agenda

MORNING SESSION

Welcome & Introduction: goals and objectives

Coordinator– V.Vallero (CSI-Piemonte)

Pilot Panel 1: From availability to penetration

P. Jahuainen (EC-CNECT), L. Ciani (Eutelsat), E. Crowley (SWRA), I.P. Grotte (WNRI), Grecu B. (Eta2U), K. Pedersen-Rise (BHV), R. Ayazi (NEREUS)

Chair: P. Sullivan (Slí Nua)

Questions & Answers, discussion

Pilot Panel 2: Digital divide and very high-speed services: meeting 2020 objectives

S.Agnelli (Eutelsat), A.Salvatori, (Airbus Defence and Space), B. Wilson (Viasat), G. Adams (Newtec), D. Rogina (RD Horizon), J. Korona (RCITT),P. Jahuainen (EC-CNECT)

Chair: M. Forzati (Acreo)

Questions & Answers, discussion

Morning conclusions

(Slí Nua Development)

AFTERNOON SESSION

Working session on WP4 deliverables

EC Broadband Guidelines Introduction – M. Forzati (Acreo)

Working Groups – Drafting Guidelines:

Objectives:

- ☐ To further develop the draft guidelines and toolkit
- ☐ To give recommendations for pilot actions and partnerships

Topics to be covered:

- ☐ Toolkit construction
- ☐ Procurement Guidelines

Feedback from Parallel Working Groups

Rapporteur reports from working groups

Q&A, discussion.

SABER Project next steps

Coordinator– V.Vallero (CSI-Piemonte)

WP4 Coordinator – R.O'Connor (Slí Nua Development)

1 Welcome and Introduction

Vittorio Vallero welcomed everyone to Workshop 6. The goals of the workshop were outlined.

2 Pilot Panel 1: From availability to penetration

The first panel discussion was chaired by Patrick Sullivan from Slí Nua Development. Patrick indicated that previous discussions had focused on the achievement of the DAE targets for basic broadband. These targets are generally considered to have been achieved; the focus now is on encouraging take-up of broadband to achieve greater broadband penetration. SABER partners had been invited before the workshop to put forward their proposals and ideas for potential pilot project that could be put forward by SABER.

Patrick invited Ivar Petter Grotte from the Western Norway Research Institute to share the approach being taken in Norway to address regions lagging behind on broadband penetration.

Ivar outlined the creation of a National Broadband Council in Norway to provide a representation and lobby body for regions in Norway; particularly for rural regions lagging behind in terms of access to advanced broadband. The aim of the council is to achieve 100 mbps for all inhabitants by 2020. A national funding programme has been launched with a €20m budget in 2014.

Bogdan Grecu from ETA2U was invited to share his idea for a pilot project. Bogdan shared the challenges experienced in the Arieseni region located in the Central-West of Romania. 70% of Arieseni region's income is from tourism. Because of the mountainous terrain, GSM/3G communication is very limited, there is no terrestrial internet infrastructure; agro-tourism guest houses are not able to reach potential customers via the internet or on the telephone. A broadband service via satellite would be very interesting for local communities to speed-up their development. Bogdan proposed a pilot to cover 40-50 groups of guest houses to connect them to the internet and to demonstrate the benefits for local communities. Local administration is very supportive of this kind of initiative and ETA2U would be very interested in being involved in its implementation.

Eileen Crowley put forward a proposal for a pilot from the South West region of Ireland. The South West region of Ireland has a lot of rural areas with low population density; the region has also suffered from a 'brain drain' in recent years due to a lack of employment opportunities. The region would like to set up an eCentre with advanced broadband facilities that would encourage people to spend longer periods at their holiday homes. Such a

centre could also be used for training young people; primary schools also suffer from a lack of broadband connectivity. The pilot proposed by the South West Regional Authority would involve the establishment of high speed connectivity to a rural village that could be used by the schools and for remote working.

Kjell Pedersen Rise outlined the challenges experience in the Agder region of Norway in getting broadband for all households; the cost of delivering services and the limitations of mobile broadband have proven to be key issues. There is a sense that satellite is likely to be the best solution for rural locations. The pilot proposed by Kjell would involve making households and companies more aware of the possibilities of satellite; there are a number of misunderstandings and myths circulating about satellite as a result of some negative experiences. An information letter could be sent to municipalities who are losing DSL connectivity to explain the benefits of satellite and to be clear on what satellite can deliver. Support with procurement, administration, financing and monitoring and evaluation could be built into the pilot.

Patrick shared the pilot idea put forward by Sandra Lotti from Lepida sPA in Emilia Romagna. Sandra expressed an interest in a pilot that would address the provision of broadband in rural areas; particularly in areas with tourism activities. Fiona McCormack of the Mid West region of Ireland had also expressed an interest in a pilot for advanced broadband in rural areas with tourism activities; in particular there are pockets around Lough Derg that would benefit from such a pilot.

Luisella Ciani from Eutelsat put forward a pilot idea for a roadshow across European regions to raise awareness of the potential solution that satellite broadband could offer. The roadshow could also include practical demonstrations, Q&A etc. and would focus on the specific needs of regions, e.g. by targeting different groups of stakeholders such as farmers.

(Copies of the PowerPoint slides used during panel 1 are available on the SABER website.)

A general discussion on the proposed pilots ensued. Luisella identified Leader as a potential source of funding for pilots; the European LEADER Association for Rural Development (ELARD) was identified as a possible contact point.

Roya Ayazi from NEREUS stressed the importance of the social economic situation and the geographic context; the provision of a roadshow and

awareness raising materials could be very useful. Different messaging is required for citizens and public administrations.

Pertti Jauhiainen from DG CNECT recognised the significant challenge for rural areas in particular. Achieving broadband penetration will be a focus for the future and H2020 should offer funding opportunities. The CIP will be merged into the research programme; this will have an innovation programme that will be looking for fast pilots in 2015. In the education area there is a role for satellites. The Connecting Europe Facility should be published shortly and will have broadband technical assistance. Awareness raising should be a possibility here.

Guido Acchioni from DG CNECT indicated that the Structural Funds are currently under negotiation with the Member States; the process should be finalised by the summer. ERDF will have some funds for broadband; these will be restricted to rural areas. Representations should be made to national ministries and EU institutions. Demand aggregation in rural areas needs to be considered to ensure funding authorities are informed of the needs.

The key points raised during the discussion highlight the importance of working together (regions and industry) to develop pilots. Demand aggregation in key sectors is also important. The development of pilots to address the digital divide was supported by the regions present. It is hoped more clarity on possible funding sources would be available by the next workshop in June.

Crister Mattsson indicated that ACREO is doing some work on quantifying the socio-economic impact of broadband. This is currently focused on fibre however it could be extended to regions that can only be connected via satellite.

3 Pilot Panel 2: Digital divide and very high-speed services: meeting 2020 objectives

The second panel discussion was chaired by Marco Forzati of ACREO. Marco shared the most recent DAE scoreboard results which indicate that broadband for all has reached 95.5% of the basic broadband target and 54% have access to more than 30mbps whilst 2% of households have access to more than 100mbps. Panel 2 was focused on the delivery of high speed broadband services and included representatives from regions and different aspects of the satellite broadband value chain.

Davorin Rogina from RD Horizon provided an overview of broadband penetration in Slovenia. Forty four of the 212 municipalities are involved in broadband projects. White areas have been mapped; currently one third of households do not have access to basic broadband. There is a concern that the new Operational Programme does not include any provision for broadband. The need to influence regional and national policy makers was highlighted.

Stefano Agnelli from Eutelsat acknowledged the clear message received from regions that broadband coverage is not enough; there is a need for broadband penetration also. Broadband grows from the centre to the periphery and needs follow different patterns. There is a conflict between fibre versus satellite in terms of political objectives versus practical implications. The DAE targets are valid however there are also targets for take up of broadband. The opposition between different broadband solutions is relevant to political objectives however when it comes to implementation a more evolutionary approach is needed. Broadband solutions will evolve to reach the objectives of the DAE. Flexibility is needed in the Operational Programmes to continue to finance even <30mbps systems as these are part of the evolutionary path. Moving to >30mbps is a very significant step; it is important to continue the evolution to achieve this.

Bob Wilson from Viasat shared his perspective of satellite being perceived so negatively. Bob identified the need to increase awareness that this negative perception is no long valid; technologies need to work together. There is a challenge in maintaining speed and capacity in peak periods. Bob expressed his view that people generally only need a few mbps – not 20mbps or 30mbps. Affordability is a key issue.

Geert Adams from Newtec spoke about the convergence taking place between broadcast and broadband. Newtec's mission is to shape the future of satellite communications. Products with 30mbps are available and some sample products of 46mbps are also available. The dialogue platform will evolve over time to offer large capacities.

Agnes Salvatori from Airbus Defence and Space explained their role in working with the ground manufacturers to build satellites to the specification of operators.

Jacek Korona shared their experience and challenges in Poland to offer guidance and information to local government and to address blank spots; mapping and finance are key challenges in this respect.

Marco posed the question as to whether theoretical availability versus take up is a stronger advantage of satellite?

Stefano Agnelli responded by stressing the importance of finding the right balance of getting everyone on board versus take up. In the context of an evolutionary path the aim is to deliver the service that people need. The technology is constantly evolving; providing a service is not a problem however satellite operators have to ask themselves if it is worth investing in developing solutions as the response from public authorities is not always as expected.

A question was put to Pertti Jauhiainen of DG CNECT as to how the EC view the 2013 target of 100% basic broadband coverage.

Pertti responded that theoretically networks are providing up to 20-30mbps of broadband; the evolutionary perspective from satellite is not a problem. The EC is looking at 5G now and are expecting 1GB access. The EC sees an evolutionary path towards this through partnership working. Yes, the 2013 have broadly been achieved in that 95% theoretically have coverage. There is a need to work on achieving greater capacity; the issue is how to fund this.

Bob Wilson identified some resistance factors from a satellite perspective associated with speed and the higher price for equipment. In the US Viasat subsidises to acquire subscribers; some people can pay \$50-80 a month. Viasat seeks to make an investment with customers to keep them satisfied. Challenges can be experienced in densely populated areas; it can be difficult to assess white spaces. The aim is to try to put capacity where it is needed; new technology developments facilitates tailoring services to where customers are; it can be expensive to target specific areas – different options are being tested such as subsidising end user equipment.

Geert Adams highlighted the chicken and egg situation for rural areas in that the digital divide will be much shorter as people will not be used to broadband and therefore will not be concerned about 20-30mbps. As part of the evolutionary path there is a need to stimulate awareness through regions. Investment should go into services, e.g. how software is made available through the cloud – broadband should be the same. The focus should be on the roll out of services rather than infrastructure.

Marco Forzati referred to the tangible nature of ground equipment versus fibre and the fact that satellites are launched in the sky compared to the need to dig for fibre infrastructure.

Bob Wilson referred to the longer term social investment required for satellite; satellite can contribute indirectly to job creation however subsidies always go to areas where jobs are created.

Geert Adams referred to the self-installable nature of satellite equipment.

Agnes Salvatori explained the continuous evolution of satellite technology; capacity has been doubled by maximising current technology. The flexibility of payload systems has allowed capacity to be moved from one place to another once demand levels are understood. There is a big step in order of magnitude to be gained in terms of technology – bigger antennae with different wavelengths for users and feeders will develop such large scale development. R&D support is needed for this; the industry can contribute 50% however public support is also needed. Industry relies on ESA and the EC; there is no dedicated funding line for satellite which is very disappointing. Horizon 2020 focuses on user centric aspects; the industry would like the EC to have a vision, e.g. for Terabit satellite.

Pertti Jauhiainen responded that the EC is seeking a big step forward in communications in terms of 5G; there is scope for satellite here. The EC would like to see satellite and terrestrial coming together on backhaul and other areas. The vision for terabit and 5G broadband is becoming clearer.

Stefano Agnelli identified a prospective risk in what Pertti had mentioned. Stefano perceives a lack of overall vision from DG Agri, DG Comp, DG Regio etc. on an evolutionary use of satellite communications. Evolution needs to be considered in terms of both technology evolution and concrete responses to real needs.

The discussion was opened to the floor. Sabino Titomanlio identified integration to offload traffic using satellite as one of the challenges. New networks will be information and not infrastructure centric. The quality of the experience is critical. The EC needs to communicate clearly that 30mbps is not needed in all contexts. There is a risk that the 2-4% of population not reached by broadband communications will not be addressed if the focus is always placed on advanced broadband.

Pertti Jauhiainen agreed with this perspective; in the past satellite has had a bad reputation. New studies demonstrate that satellite is the best option in some cases.

Guido Acchioni from DG CNECT indicated that the EC is about to publish an eGuide on State Aid. A guide on broadband investment is also being produced (this was presented by Marco Forzati in the afternoon session). The EC has stated that the DAE targets are in place; there is a need to clarify that in specific cases different capacities are required for different contexts. Guido raised some questions for consideration:

- What capacity caps are in place for satellite?
- What are the retail prices?
- What role can satellite play in providing services to transport (as an alternative to mobile)?

Stefano Agnelli responded to the question on data caps; quality of experience is an important factor in the wireless environment; offering a guarantee of overall quality for everyone. Limited or unlimited use is not a question of technology but one of quality for all users. In response to the question of prices – it is difficult to have different prices due to the risk of cross subsidy. Could the EC look at subsidy for countries with low purchasing power? – This could be anticompetitive. Could this be included with an equipment subsidy? Stefano confirmed an interest in the mobility/transport market.

Guido Acchioni confirmed that subsidies for monthly fees are not possible - Public Authorities cannot intervene in retail prices. This can only be tackled through competition; alternative providers and unbundling.

Other regions indicated that reliability of service is key for regions, particularly during peak periods. Subsidies must be fair. Achieving good quality basic broadband is a main concern for most regions.

Luisella Ciani referred to two recent panel discussions during an EC event which concluded that being connected was the first priority; there may be a need for flexibility to ensure that everyone is connected, in some less developed areas there may be issues of affordability of equipment.

Bob Wilson shared Viasat's aim to get rid of capacity caps in the future as distinct from having a fair access policy.

Guido Acchioni referred to State Aid Block Exemption regulations that will be published in July; broadband will be included and a €70m limit is expected. The EC is seeking a new policy for universal service obligations; it is considered that the current mechanism is unusable. Further work on mapping will conclude in June. In 2015 guidelines on demand will be developed;

quality measurements will be tackled. Measuring of speed is a critical element for State Aid. Demand can be expressed in basic services, demand aggregation will be expected.

4 EC Broadband Guidelines Introduction

Marco Forzati presented an overview of the EC's new Broadband Guidelines. The aim of the guidelines is to be accessible and readable for those without a technical background.

Marco outlined the overall structure of the guide which includes sections on:

- Choosing infrastructure
- Choosing an investment model
- Choosing a business model
- Choosing finance tools
- Developing and executing a broadband action plan

ACREO, who are developing the guide for the EC, are seeking case studies from regions to be included.

5 Working session on WP4 deliverables

Rosemary O'Connor, Patrick Sullivan and Luisella Ciani presented a draft structure for the regional guidance (D4.2 and D4.3). An overview of the proposed content of each of the sections was presented:

Selecting a deployment model

- Identify stakeholders in satellite broadband deployment (e.g. community group, satellite operator, telco provider etc.)
- Identify the role of stakeholders
- Articulate the needs of end users/geographic area
- Explore options for deployment, e.g. satellite dish (CPE model), wireless satellite (satellite=backhaul), lease transponder capacity etc.

Selecting technology solution(s)

- Articulate needs of geographic area/sector
- Map existing infrastructure/services
- Identify gaps in infrastructure/services
- Define infrastructure requirements
- Define technology requirements

- Review technology options
- Selection most appropriate technology solution(s)

Building a business case

- Define the problem; what needs are you seeking to address
- Identify the key stakeholders in the region
- Identify the beneficiaries
- Assess the time and resources needed; high level project plan
- Crunch the numbers; look at the investment required versus the benefits to be derived – cost/benefit analysis. ROI analysis etc.
- Present the overall business case

Choosing a funding model

- Review funding options available; public, private and revenue generation, loan, equity, grant and commercial options
- Select most appropriate option(s)

Addressing State Aid

- Summary of new EU State Aid guidelines
- Interpretation of EU State Aid guidelines as they relate to the deployment of satellite broadband; what is compliant under the new regulations

Procuring Satellite Broadband

- Updating of satellite broadband procurement guidelines developed in WP2
- Development of guidelines to included satellite in broader broadband procurement

Three working groups went through each section of the regional guidelines and toolkit to provide suggestions and feedback on the proposed content. The following section summarises the feedback on each section:

DEPLOYMENT MODELS

Working Group 1

- This should be before procurement model, as that drives this

Working Group 2

- ❑ Clarification was sought from the Group as to why Lease Transponder Capacity is an alternative?
- ❑ It could be rather considered as “orthogonal” to the other two, because in any case customer equipment will be required to access the network.

Working Group 3

- ❑ Again stakeholders must be already defined, is too vague, first two points must be removed
- ❑ Very close relation with technical – economic aspects
- ❑ Explore options versus needs and business
- ❑ Move before the funding model
- ❑ Procurement guidelines on existing experiences but beyond going to new ways

TECHNOLOGY SOLUTIONS

Working Group 1

- ❑ Mobile (4G/5G) being promoted as broadband solution but it needs fibre itself, has issues with capacity & doesn't penetrate (esp. new green) buildings well (80% usage is indoors)
- ❑ Buying satellite capacity as way of providing broadband – need to understand this opportunity
- ❑ Potential to provide free service in public areas (where market failure, incl. no mobile coverage)

Working Group 2

- ❑ Move point no 3 to point 1 as it is extremely important because mapping is actually part of the business case analysis
- ❑ Important decisions regarding mapping; whether to use existing infrastructure and update it or to provide new mapping infrastructure in order to future proof.
- ❑ Mapping exercise needs to be included from an earlier stage and at business case stage

Working Group 3

- ❑ The three first points must be part of identifying the problem, and so

they would not be included in the guidelines, must be a pre-requisite need to be done before

- ❑ Broadband way – put the infrastructure very clear versus technology (domain for operators)
- ❑ How connecting the most remote users (for simplicity presented as infrastructure possibilities)
- ❑ Technology is a wrong word to describe, and supposed to be made before by the regions – supposed to be first chapter and it is outside the scope of SABER

BUSINESS CASE

Working Group 1

- ❑ Start by mapping existing infrastructure/operators & their 3-year investment plans
- ❑ The missing element is the gap in the business case – i.e. where & why the PA should intervene – need to understand the numbers involved. Is about the wider socioeconomic case rather than the more narrow financial business case (i.e. need to understand social, economic, health needs, etc.)
- ❑ Need to understand characteristics of households/businesses not connected, socio-demographic factors, etc. (including income and willingness to pay for infrastructure) – demand surveys might be a useful tool here
- ❑ Also need to understand private business case and how can best lever this
- ❑ Understanding public & private will mean can identify any co-investment opportunities & develop a funding plan that is believable and trustworthy
- ❑ Need to put in context of broader development/economic regeneration plans & infrastructure needed to support this
- ❑ Short-term (<3yrs) – focus on penetration & operational costs
- ❑ Medium-term (4–5yrs = political term; 5–7yrs = EU funding cycle) – focus on development/regeneration
- ❑ Guidelines could include ready reckoners so can do easy CBA/cost-effectiveness assessments
- ❑ Need to consider maintenance costs as critical part of operational costs

Working Group 2

- ❑ The assessment of the needs shall start from the mapping whether it is available or it has to be performed

- ❑ BUSINESS CASE: Services + Actors + Role Model
- ❑ BUSINESS PLAN = Business Case + Cost/Revenues over the year
- ❑ The group discussed as to whether this was a business case or business plan.
- ❑ Define the main actors and decide on the role each actor plays in providing these services and also who will pay for what aspect of the service delivery etc.
- ❑ Define the value chain and identify tasks for each in order to successfully implement as there will be different levels of service required from different people and people may depend on local services etc.

Working Group 3

- ❑ Define the problem should not be in the toolkit, the public administration should know it and in which extend
- ❑ The guide must be specific when satellite has been identified as a possible solution (not in a very preliminary stage but in a more detailed process, and satellite could solve the problem, and more focused on satellite, too generic like this) – then stakeholders and beneficiaries are known
- ❑ Needs and solutions for beneficiaries – fix the numbers
- ❑ Keep simple to deliver (test case/ scalability/ flexibility)

FUNDING MODELS

Working Group 1

- ❑ Budget needs to split investment (which is where public intervention comes in) and operational costs (which should be privately financed and need to be covered for sustainability) – i.e. split table into 2 (lines 1 & 2 about investment; line 3 about revenue generation – e.g. maintenance costs paid back by 3rd line only)
- ❑ There are potentially some opportunities for public services to provide operational costs for networks, though there are questions of State aid eligibility
- ❑ Assess private funding first & can then assess gap
- ❑ Where public funding comes in to support (dependent on amounts available)
- ❑ Need to consider how public funding is provided to ensure State aid compatible (incl. differences for grey vs. white areas)

Working Group 2

- ❑ Change the layout of table presented and put in matrix format whereby a tick the box effect will be used as all the funding sources may not be an option i.e Community most likely not eligible for equity funding etc..
- ❑ Add tax incentives to funding 'type'
- ❑ Include an additional distinction between residential and business customers, since they may require different approaches
- ❑ Add public/private partnership to source
- ❑ Query for EIB representative; what type/category of funding does the EIB fall under?

Working Group 3

- ❑ Establish the list of things really need funding
 - Difficult to subsidy subscriptions
 - Baseline subsidy the terminal
 - Split the digital should be theoretically
- ❑ Voucher model don't need to be so precise (cost for unit)
- ❑ Equipment by internet provider
- ❑ The community should be taken separately –need complementary funding

STATE AID

Working Group 1

- ❑ State + users can co-invest to get connections
- ❑ Need to understand the Block Exemptions fully
- ❑ Need to understand Vouchers and how apply within State aid
- ❑ These are essentially ways *around* State aid rather than having to get State aid approval
- ❑ Procurement also key to State aid – e.g. call-off procedure of all key ISPs and users choose
- ❑ Important that State investment is not competing with existing market enterprises

Working Group 2

- ❑ Distinguish the specific national regional guidelines and ensure the region is eligible for accessing the State Aid available.

- Ensure that all the stability rules of each country/region are checked and that a region not prohibited to access funding through State Aid as a result.

Working Group 3

- General block exemptions – identify the state aid when to complicate things

PROCUREMENT

Working Group 1

- Voucher Schemes (e.g. Galicia – get into EC Guidelines) – how ensure compliance with State aid
- Ensure calls for tender don't exclude satellite in the way the calls are written – e.g. for infrastructure rather than access &/or focus on FTTP/B as long-term goal

Working Group 2

- Insert 'the Process of' into the title to clarification what is involved
- Discussions in the working group took place around the inclusion of technological neutrality and partners wished for this to be included to ensure no source of broadband was excluded.

Working Group 3

- Learning from experiences where broadband satellite and dissemination with technical assistance
- Horizontal actions – harmonisation (common approach)
- The individual users / entirely individual choices (from consumers point of view)

Additional points from Working Group 3:

Demand Aggregation –

- Should not be a specific chapter of the toolkit
- Wrong word, not useful – harmonisation (common approach) – connected to the procurement model

Other considerations for the guidelines

- Having in mind all the time three groups to be considered that must be

divided into three main groups:

- Decision-makers inside the regional plans (some of them technicians and others no)
 - Influencers (example chambers of commerce)
 - Beneficiaries
- Must be very clear otherwise regions will take minimum risk with interpretation
 - Include as appendix in the guidelines, 4 or 5 best practices (one page each)

6 SABER project next steps

The next SABER workshop was agreed for Tuesday 24th of June in Kristiansen, Norway.