

Telefónica S.A. response to the Public consultation on the future use of the UHF TV broadcasting band: the Lamy Report

1. Respondents' profile

Telefónica thanks Pascal Lamy and the European Commission for the work leading up to this public consultation, and welcomes the opportunity to comment on a topic of significant relevance to us.

The Telefónica group has made its name as a telecommunications operator, and that continues to be our core business. We already cover 40% of Spanish households with FTTH, and our plan is to increase that figure to 80% by the end of 2017. In parallel, we have a co-investment agreement with Deutsche Telekom in Germany which will give us access to 60% of German households with FTTC/VDSL technology by the end of 2016, and we are investing heavily to deploy near-nationwide 4G mobile networks in Spain, the UK and Germany.

Our future, however, is beyond the limits of a provider of telecommunication services. We see ourselves as a Digital Telco, combining traditional and digital assets to help people access and enjoy the best that technology can offer in all aspects of our lives, including the way we consume audio-visual services, an activity where technology is already driving change at a fast pace. The picture of audio-visual consumption in Europe should change dramatically in the near future, and we are preparing for it by increasing our capabilities to buy, produce and distribute audio-visual content. In Spain, between September 2013 and September 2014 we have multiplied by 2.5 the number of subscribers to our IP-TV platform, surpassing cable. Telefónica now has a customer base similar to that of the Satellite platform¹, for which we have made an offer that, pending regulatory approval, will make Telefónica the market leader in pay TV services in Spain. In September 2013 we also created Telefónica Studios, a company dedicated to produce Films and TV Series that in its first year of operation has produced or co-produced twenty seven films that have been seen in theatres by 21 million spectators². The new company is devoted to create high quality content for theatres and TV, for the moment focused in Spain and Latin America but with plans to expand its audience to other European countries and North America.

Being a relevant provider of both mobile connectivity and audio-visual services, the two main candidates to use the UHF band in the future, puts us in a unique position to

¹ <http://www.lavanguardia.com/television/audiencias/20141113/54419260690/movistartv-abonados-canal.html>

² <http://telefonicastudios.com/>

comment on the long term strategy, a discussion that in our view should be continuously updated and to which we also hope to contribute in the future.

2. Confidentiality

This response is not confidential

3. The citizens' dimension

N/A

4. Potential repurposing of the 694-790 ('700') MHz band

Question 4.1

What long-term advantages and disadvantages do you see in using the 700 MHz band for wireless broadband services in the Union?

Telefónica agrees with Pascal Lamy that repurposing the 700 MHz and licensing it under the principles of technology and service neutrality is desirable for the following reasons:

- There is a clear shift in consumption habits in favour of more flexible means of accessing audio-visual content. Consumption of on-demand audio-visual services in mobile devices is rising at a very fast pace in all of the EU, while consumption of linear broadcasting content over DTT platforms is stable at best and declining in a large number of EU countries.
- A global wireless broadband ecosystem has developed in the 700 MHz band, with Europe planning to adopt a band-plan compatible with those implemented in Asia-Pacific and Latin-America. As a result of economies of scale and propagation characteristics, the band is particularly well suited for increasing the capacity of mobile networks in rural areas and inside buildings, and the repurposing will make it easier for Europe to meet the broadband coverage targets of the Digital Agenda.
- Social and cultural objectives traditionally fulfilled by terrestrial TV licenses can today be better addressed through a hybrid model that incorporates other platforms. The internet and IP TV are better suited than broadcasting to efficiently distribute content to minorities and ensure access to diverse sources of information. Repurposing the 700 MHz band does not go against those goals. On the contrary, it puts Europe in a better position to attain them by fostering better and more affordable broadband connectivity.

We acknowledge that the transition has costs for broadcast networks, which should be minimized with appropriate timing and coordination. However, we also note that the capacity increase resulting from moving forward in time the transition to more efficient DTT technologies will in general also have benefits to broadcast networks, by facilitating the introduction of UHD channels. In those cases where a reduction in the number of DTT channels is considered to make room for wireless broadband, the impact on the value of DTT should be calculated at the margin, taking into account that

the DTT audience is concentrated in a very small number of channels, and that as mentioned above minorities can be served by alternative broadband platforms.

Question 4.2

What merits do you see in a coordinated EU approach for changing the use of the 700 MHz band in the Union from broadcasting to wireless broadband services?

Telefónica firmly believes that a coordinated EU approach is desirable for changing the use of the 700 MHz band. There are three main reasons:

- Neighbouring countries rely on each other to set the timing of the release of the band, because TV signals can travel tens of kilometres beyond the borders. Bilateral or multilateral agreements between the Member States directly affected are in our view the appropriate immediate tools to face this challenge. However, there is a role for the EU to play in setting a legal and institutional framework that creates the appropriate incentives and fosters efficient and timely agreements.
- Economies of scale lower the costs of handsets and networks, and facilitate the deployment and adoption of mobile technologies using the band. This issue is not as critical in the case of 700 MHz as it was in the case of 800 MHz, because Europe has adopted a band plan compatible with other regions that are already using these frequencies for wireless broadband. Nevertheless, there are still benefits for operators running multinational networks and for the development of roaming services in having a certain degree of synchronisation in the assignment and release of the band.
- Telefónica is in favour of the EU setting high level spectrum management principles to be followed by all member states, and advocates for an institutional framework that disseminates best practices through information sharing and peer reviews. These considerations are also valid for the 700 MHz band.

Question 4.3

In your opinion what should a potential EU coordination cover?

The starting point of the different EU countries is extremely diverse, and European economies of scale are not as large in this band as they were in the first digital dividend. Individual Member States should therefore retain a relatively high degree of decision-making power to adapt the transition to their situation, and EU decisions should not be a substitute for bilateral or multilateral negotiations between neighbouring countries.

EU coordination should in this context be limited to a narrow but well defined set of issues. Telefónica would like to highlight the following:

- A deadline for the release of the band all across Europe, to provide certainty to investors that economies of scale, albeit not as large as in other cases, will be realized at a certain point in time.
- A deadline for Member States not to interfere neighbouring EU countries with their 700 MHz TV signals. The objective of this deadline is to speed up the renegotiation of the Geneva 06 agreements governing the use of TV frequencies in border regions, and establish a more balanced distribution of rights between Member States that decide to repurpose the band at a faster pace (and whose wireless broadband signals do not travel far beyond the border) and those that decide to proceed more slowly (and whose TV signals do travel well beyond borders).
- A general principle to delay payments for spectrum rights until the spectrum is actually released and available for use by the new licensees, with the only possible exception of the resources needed to vacate the band. This provision would in our view generate the appropriate incentives for Member States to release the band in a timely manner.

Question 4.4

Should there be a common EU deadline for making the 700 MHz band available for use for wireless broadband services across the EU?

- Yes
 No

Question 4.5

Please provide justification of your answer on a common EU deadline including cost assessment.

Question 4.6

Which date would you propose for such a deadline [The Lamy report proposes a deadline of 2020 +/- 2 years]?

Merged answer to questions 4.5 and 4.6:

Telefónica proposes a dual deadline in line with the recent RSPG opinion on the matter, which in our view allows sufficient time for broadcasting networks to upgrade to more efficient technologies at a reasonable cost and pace:

- A first deadline of 2020 by which Member States would not be entitled to interfere neighbouring EU countries' mobile networks with their 700 MHz TV signals
- A second, non-extendable, deadline of 2022, by which the 700 MHz band must be released and available for wireless broadband in all of the EU

Question 4.7

Should there be measures at EU level mandating use of the latest, most spectrum-efficient technologies for DTT equipment (such as DVB-T2, HEVC etc.)?

Yes

no

Question 4.8

Please specify which measures you would propose to mandate.

In Telefónica's opinion mandating use of specific DTT technologies would go against the technology neutrality principle and would be a disproportionate measure. Member States and broadcasters should have flexibility to decide the details of the transition to a service and technology neutral use of the 700 MHz band, and adapt it to their country's demand for DTT services and to their DTT licensing regime.

EU countries with small DTT platforms and low demand for DTT services might be able to release the 700 MHz without upgrading to DVB-T2 or HEVC, and in those cases the upgrade is a purely commercial decision. It is also not inconceivable, given audio-visual consumption trends, that in many countries reducing the number of DTT channels is a more efficient transition path than upgrading to more spectrum efficient DTT technologies.

Less intrusive measures targeted at increasing transparency and protecting buyers of TV sets would in our view be warranted, and Telefónica would welcome EU-wide harmonization on this field.

Question 4.9

Which date would you propose to mandate such spectrum-efficient technologies?

N/A

5. Ensuring regulatory certainty for current users of spectrum

Question 5.1

Should there be a common EU deadline for safeguarding primary use of the 470-694 MHz band for DTT and further use for wireless microphones and other wireless audio equipment?

Question 5.2

Please provide justification of your answer on a common EU deadline to safeguard existing uses.

Question 5.3

Which date would you propose for such a deadline [The Lamy report proposes a deadline of 2030]

Merged answer to section 5:

In Telefónica's view it is sensible to set a deadline by which a change to a service and technology neutral licensing regime needs to be implemented, like those suggested in

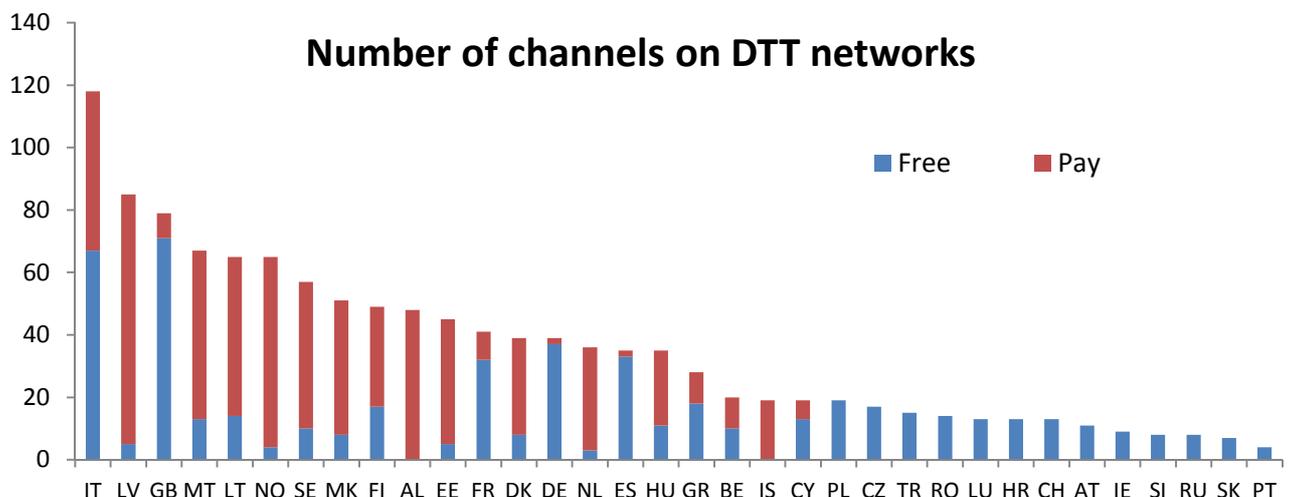
section 4 of this consultation. On the contrary, there are no compelling arguments to set deadlines that prevent EU countries from implementing that change before a certain date, like the one suggested in this section. The likely outcome of this proposal would be an inefficient spectrum allocation in a significant number of EU countries.

Telefónica acknowledges that current users of spectrum in the 700 MHz band hold licenses and authorisations that entitle them to certain rights, the extent of which varies from country to country. It is also clear that investments in broadcast networks require regulatory certainty. However, it does not follow that safeguarding for a decade and a half primary use for DTT and further use for wireless microphones and other wireless equipment is a sound spectrum policy decision.

First of all, there are better ways to ensure regulatory certainty than freezing the spectrum allocation on a potentially inefficient use for a long time. Assuming that some investments in upgrading DTT networks make sense “ex-ante” from a private investor’s perspective or from the point of view of Social Welfare, certainty can be provided by assuring investors that they will be compensated if the investments eventually become stranded by Regulatory decisions. In the same vein, and taking due consideration of compensations for windfall gains, Regulators could increase the property rights of current licensees over their spectrum holdings when investments in the upgrade of DTT platforms are mandated and not voluntary. The increase in property rights should preferably be in the form of more flexibility, facilitating for example trading and change of use, rather than through an extension in the duration of a license that is not service or technology neutral.

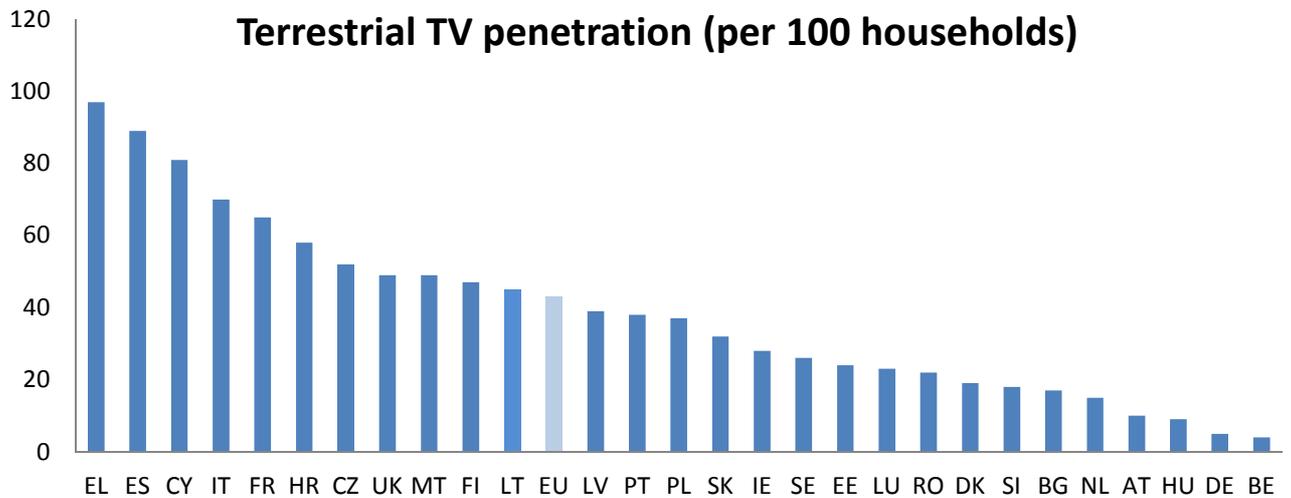
Secondly, it is not obvious that broadcasting will be the Welfare maximizing use of all the spectrum in this band for the next 15 years all across Europe, and the diversity of starting points suggests that a single deadline is not appropriate, let alone a deadline as far away in time as 2030:

- The DTT picture in Europe is very heterogeneous. Some EU countries already make very limited use of DTT platforms, while others still use them quite heavily.



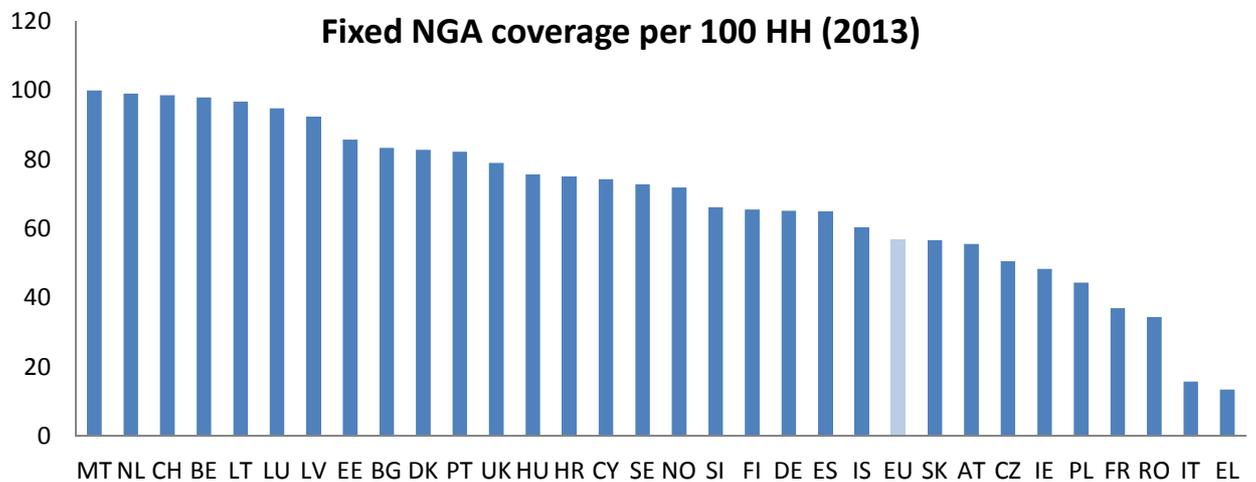
December 2012 Excluding Local/Regional.

Source: European Audiovisual Observatory 2013 yearbook (Based on MAVISE database).



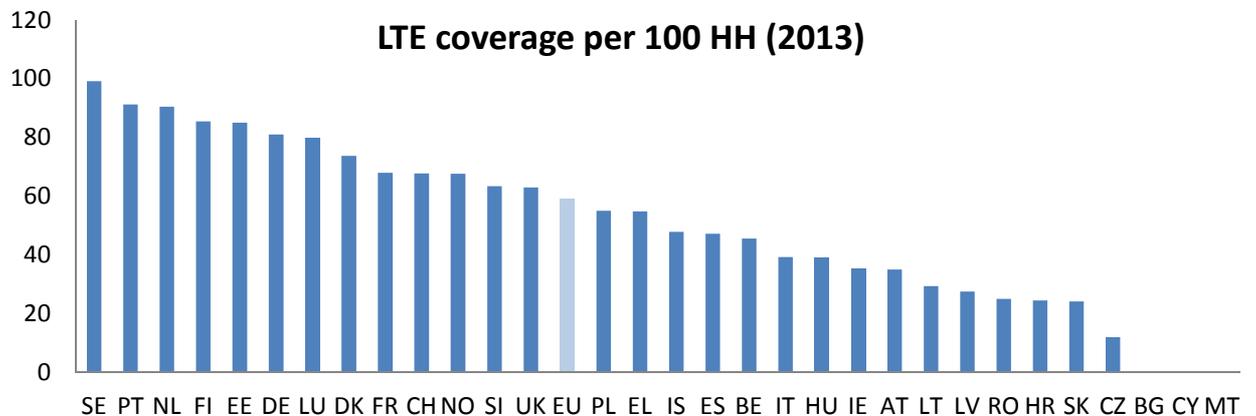
Source: Special Eurobarometer 414. Fieldwork January 2014. Page T28

- It is safe to assume that DTT usage will decline in favour of IP TV and OTT services distributed over broadband networks, but the extent and exact timing of that substitution is unclear and will not be synchronised, in view of the diversity in broadband penetration rates across Europe.



Source: HIS & VVA for the European Commission

- The picture of wireless broadband needs is also very heterogeneous, with some countries potentially having capacity problems much earlier than others



Source: HIS & VVA for the European Commission

6. Flexibility of use of sub-700 MHz (470-694 MHz) spectrum

Question 6.1

Do you support flexible downlink-only use of the 470-694 MHz band also for wireless broadband services, which safeguards primary use of this band for DTT according to national circumstances?

- Yes
 No

Question 6.2

What scenarios and conditions should be studied to allow flexible downlink-only use in the 470-694 MHz band?

As shown in the answer to the previous section, the heterogeneous starting point suggests that there will be a relatively long period in which a significant number of countries will continue to use the (470-694 MHz) spectrum for DTT, while individual circumstances will lead other countries to vacate at least part of it and dedicate it to other uses. During this period, a synchronized release of additional spectrum for mobile in the UHF band and a common EU band plan will not be feasible. However, a solution should be found that allows Member States with large IMT demands not to be delayed by Member States with low IMT demands, preventing an outcome where large parts of the UHF band remain unproductive.

In view of the diversity of circumstances, Telefónica advocates for “optional harmonization”, meaning that a limited number of alternatives are defined and harmonized, each adapted to one of the possible scenarios. The availability of several harmonized options would potentially also facilitate the transition, as a particular country could evolve from one option to another as circumstances change, potentially including the possibility of letting the different licensees negotiate the timing.

Broadly speaking, Telefónica envisages two main scenarios:

- A significant and contiguous part of the UHF band below 694 MHz is vacated from DTT and licensed for new use across a relatively large geographic area, potentially covering the full territory of a Member State with the possible exception of some border regions. In this scenario, Telefónica sees no reason for limiting the co-existence studies to down-link only use. Two-way communications should also be analysed as potential alternatives, especially if an ecosystem for an FDD band-plan develops in other regions and can be adopted in Europe.
- DTT use of the band in a particular country or region, or in neighbouring countries, makes it impossible to release a significant amount of contiguous spectrum, and only interleaved spectrum is available for licensed wireless broadband on a secondary status to DTT. In this scenario, Telefónica agrees with Pascal Lamy that licensing the interleaved spectrum for down-link only seems at this early stage as the alternative that maximizes the options of co-existence. In any case, this option should be considered only as a temporary solution during the transition to a more ambitious technology and service neutral licensing regime.

In particular, should these include primacy for the provision of audiovisual services to mass audiences?

In Telefónica's opinion the type of content delivered through wireless broadband networks should not be imposed.

It would be natural that broadband operators and content providers, including public and private broadcasting groups, reach distribution agreements. These agreements could even be part of a wider negotiation involving also spectrum rights, if eventually trading and change of use is allowed in the band. In any case, the terms of those agreements should always be commercial in nature, including the target audience and whether the distribution is based on broadcasting or on-demand technologies.

7. Harmonisation of use of sub-700 MHz (470-694 MHz) spectrum in the long-term, the European approach and the International Telecommunication Union (ITU) context.

Merged answer to section 7:

Question 7.1

Do you see merits in a common EU position on the UHF band for World Radiocommunication Conference 2015?

Yes

No

Question 7.2

Do you see merits in a common EU position on the UHF band for future World Radiocommunication Conferences?

Yes

No

Question 7.3

What should be the EU position with regard to the 470-694 MHz band for World Radiocommunication Conference 2015?

Question 7.4

What should be the EU position with regard to the 470-694 MHz band for World Radiocommunication Conferences beyond 2015?

Question 7.5

What measures would be needed at national and/or EU and/or ITU level to safeguard flexible downlink-only use in the 470-694 MHz band?

The objective for Europe at World Radio Conference 2015 with regard to the 470-694 MHz band should be to ensure that the EU countries that have borders with non-EU countries and face circumstances that justify dedicating part of this spectrum to IMT services can move forward and are not restrained by unnecessary barriers.

To achieve that goal, Telefónica advocates preferably for a co-primary allocation of the 470-694 band to mobile in Region 1 already at WRC 15, and at the latest in WRC 19.

8. Market review of the state-of-play of broadcasting and wireless broadband services

Question 8.1

Should there be a common EU deadline for conducting a review exercise regarding market developments?

Demand and supply developments regarding use of this band, both in Europe and in other regions, should be constantly monitored, especially until a service and technology neutral licensing of the band is in place and the market can play a larger role in the actual use of the spectrum.

Telefónica sees benefits in conducting periodic review exercises at EU level, and also in setting deadlines in legal texts to ensure that there is a proper common understanding of their relevance and scope.

Question 8.2

Which date would you propose for such a deadline [The Lamy report proposes a deadline of 2025]?

In order to integrate the periodic reviews into the regular work-flow of the EU institutions, Telefónica suggests that they are performed at least once in every RSPP cycle, preferably at the end of it to allow for the conclusions of the reviews and the policy implications to be properly taken into account during the debates and in the legal text approved by the Council and Parliament.

Question 8.3

What objectives, scope and method should such a review exercise pursue?

The main objective of the reviews would be to make an assessment of whether the justifications for exempting the 470-694 MHz band from a general service neutrality principle are still valid.

To meet that objective, the reviews should include at least:

- An analysis from the spectrum demand side, which should look in particular at the evolution of DTT usage and the availability of alternatives like the internet or IPTV that could be used to fulfil the social objectives traditionally linked to the terrestrial TV platforms.
- An analysis from the spectrum supply side, including technical alternatives for co-existence and global developments to see if an ecosystem for mobile broadband is developing that increases the value of the band in Europe when used for mobile services.
- An analysis of the diversity across the EU to assess whether a flexibility is still needed or a harmonized single approach has become a better alternative.

9. Other comments

Question 8.1

Do you have further comments related to the Lamy Report?

Question 8.2

Do you have further comments regarding relevant issues in the context of the future use of the UHF band (470-790 MHz)?

Telefónica has no further comments beyond those already expressed on previous sections.