- GE06 Agreement – The end of the transition period

17 June 2015 is the date corresponding to the end of the "transition period", as specified by the GE06 Agreement.

The 119 Administrations part of this Agreement have agreed to this deadline and are expected to respect it, which does not mean that they have to cease analogue transmissions.

What is the transition period?

From 2004 to 2006, Africa, Arab countries, Europe and Iran, have been planning frequencies for the digital broadcasting and set a deadline of the transition from analogue to digital broadcasting, respectively 17 June 2015 for 119 countries in Europe, Africa, Middle East and Central Asia, with a waiver until 17 June 2020 for VHF only in 34 countries, These deadlines, which were set at the Regional Radiocommunication Conference, Geneva 2006 (RRC-06), were taken by consensus and accepted by all Member States participating in this conference.

§ 1.16 and 12.6 of the GE06 Agreement define the transition period as the period following the Conference during which the assignments in the analogue Plan shall be protected.

It started after the RRC-06 (17 June 2006) and shall end on 17 June 2015 at 0001 hours UTC. However, for the countries listed in footnote below1, for the band 174-230 MHz2, the Transition period shall end on 17 June 2020 at 0001 hours UTC.

For the following administrations which were not present at RRC-06, namely Benin (Republic of), Central African Republic, Eritrea, Ethiopia (Federal Democratic Republic of), Guinea-Bissau (Republic of), Equatorial Guinea (Republic of), Liberia (Republic of), Madagascar (Republic of), Niger (Republic of the), Democratic Republic of the Congo, Sao Tome and Principe (Democratic Republic of), Sierra Leone and Somali Democratic Republic, the date of the end of the transition period in the VHF band (174-230 MHz) is 17 June 2020 at 0001 hours UTC, unless any of the aforementioned administrations communicates to the *Bureau* during the 90-day period from the end of RRC-06 that it selects 17 June 2015 at 0001 hours UTC.

¹ List of the countries: Algeria (People's Democratic Republic of), Burkina Faso, Cameroon (Republic of), Congo (Republic of the), Côte d'Ivoire (Republic of), Egypt (Arab Republic of), Gabonese Republic, Ghana, Guinea (Republic of), Iran (Islamic Republic of), Jordan (Hashemite Kingdom of), Mali (Republic of), Morocco (Kingdom of), Mauritania (Islamic Republic of), Nigeria (Federal Republic of), Syrian Arab Republic, Sudan (Republic of the), Chad (Republic of), Togolese Republic, Tunisia, Yemen (Republic of).

Why is there a transition period?

In developing the frequency plan included in the GE06 Agreement for digital television broadcasting transmissions (the "GE06 Plan"), two options were considered:

- Design the digital plan to ensure mutual compatibility between analogue and digital transmissions, i.e. coexistence without harmful interference. This would have allowed full flexibility as to the date at which the digital switchover would occur in each country, but would have led to a very inefficient plan once analogue transmissions have ceased since a large part of the spectrum would remain unused.
- Design the digital plan independently of the analogue plan, which had existed in Europe since 1961 and in Africa since 1989. This implied to define a transition period until the end of which analogue transmissions would have priority (digital transmissions were required to protect analogue transmissions and not claim protection from them) and after which the opposite would happen, i.e. digital transmission would have priority (analogue transmissions are required to protect digital transmissions which are in conformity with the plan and cannot claim protection from them). This second option was the one retained in the GEO6 Agreement.

On 17 June 2015, we have reached the end of the transition period, therefore digital transmissions which are in conformity with the GE06 Plan now have priority over analogue transmissions, among the 119 countries of the GE06 Agreement.

From 17 June 2015, the full potential of digital TV broadcasting in these 119 countries will therefore become available.

Are analogue TV transmissions prohibited after 17 June 2015?

No.

The end of the transition period does not mean the end of analogue TV transmissions. It means that their regulatory status is reduced but they may continue to be operation, provided that they protect digital transmissions operating in conformity with the GE06 plan. In addition, they cannot claim protection from these digital transmissions.

² 170-230 MHz for Morocco.

What happens after the 17 June 2015?

After the end of the above-mentioned Transition period, the Bureau shall cancel entries in the analogue Plan, review the status of the assignments recorded in the Master International Frequency Register (MIFR) and invite the administrations to cancel the corresponding entries in the MIFR. (Article 12 of the GE06 Agreement). The Analogue Plan will cease to exist.

This does not mean that analogue transmissions are prohibited. It just means that their protection is no longer ensured at the international level, and that they must protect digital transmissions which are in conformity with the GE06 Plan.

Concretely, it means that in the border areas of a country, new interference constraints may arise for previously authorized analogue transmissions: their power may be required to protect digital transmissions of the neighbouring countries and they may have to accept interference from these digital transmissions.

Has an extension of the deadline been discussed? Why?

The answer is "No".

As the specialized agency of the United Nations dealing with information and communication technologies, including Spectrum and satellite orbit issues, ITU applies the decisions taken by administrations at World Radiocommunication Conferences and Regional Conferences, such as those related to setting deadlines.

In this case, the deadline was agreed by a consensual decision of all participating Member States in an ITU Regional Radiocommunication Conference and modifying this decision would require to convene another regional radiocommunication conference, which is certainly not envisaged and not necessary.

What should administrations do if they cannot switch-off their analogue stations?

For the analogue stations that will continue operations, coordination of these operations with neighbouring countries is essential, especially for the assignments near the border.

Absent of this coordination, harmful interference may occur, or reductions in power may be required, that may leave a whole area without television coverage.

How to notify analogue assignments to the MIFR?

The administrations willing to record in the MIFR, new analogue broadcasting assignments have 2 options:

According to §5.1.3 of the GE06 Agreement, an Administration may use a recorded digital assignment to operate an analogue station, under the condition that the analogue assignment does not cause more interference, nor require more protection than the Digital one. The analogue assignment under the envelope of the digital Plan entry will have the rights of protection and recognition.

Notify directly the analogue assignment to the MIFR (see § 5.1.7 of the GE06 Agreement) with the condition not to cause unacceptable interference to, and not claim protection from, any assignments in conformity with the Agreement and its associated Plans. The analogue assignment will be recorded in the MIFR only for information.

Why is it important to migrate to digital broadcasting?

As for all other technologies, TV and radio broadcasting also followed the trend to go digital owing to the numerous advantages offered by digital technology. Among the advantages of digital broadcasting:

New possibilities to the viewers:

- Additional number of programmes
- Additional reception modes: portable and mobile reception
- Improved quality of image and sound, including HDTV
- Additional services: interactivity, Electronic Programme Guides, etc.

TV operators/content providers: Significant decrease in transmission costs compared to analogue:

- Power costs: DTT requires less energy to ensure the same coverage as for analogue,
- Investment cost: One DTT transmitter can broadcast multiple channels/programmes, leading to reduction of transmission costs (Sharing infrastructure)
- Development of new TV services without spectrum constraints
- Offering new innovative services (mobile TV, data, games, interactivity, VoD)

For Regulators:

- More efficient use of radio spectrum
- Increased competition: To develop a terrestrial platform competitive with cable and satellite platforms
- To be in line with GE06 Plan (as from 2015 no protection will be available to analogue TV)
- Release a part of the UHF Band for mobile Broadband (as made possible by World Radiocommunication Conferences in 2007 and 2012 - WRC-07/WRC-12), knowing that
 - A dynamic wireless broadband industry can contribute towards economic growth and job creation.
 - The 700 and 800 MHz bands enable the provision of broadband mobile services at a much reduced price due to the excellent propagation characteristics of these frequencies.
 - o Global harmonization of the use of the 700 and 800 MHz bands by the mobile service is progressing well, by the adoption, in Latin America, Asia and Europe, of frequency arrangements which can be used concurrently for both bands in the same terminals. The use of these arrangements in African countries will benefit from the economies of scale of the worldwide market for user terminals and network equipment, contributing to the reduction of the digital divide.

What is the relation between digital transition and the digital dividend?

At the end of the transition from analogue to digital television, analogue transmissions will be switched off. This will release valuable spectrum, known as the digital dividend, which will then become available either for broadcasting (e.g. to provide more TV channels or higher quality TV channels such as HDTV), or for broadband mobile, in order to reduce the digital divide by providing broadband internet access to geographical areas which are still not covered by 3G or 4G.

Processing of notifications of frequency assignments to analogue television broadcasting stations for recording in the Master Register (MIFR) after the transition period (17 June 2015)

References: Regional Agreement GE06, Radio Regulations, Article 11

The procedure described below applies in the bands and planning area of GE06 as follows:

- In the UHF band to all administrations party to the GE06 Agreement

 In the <u>VHF</u> band to those administrations party to the GE06 Agreement that <u>are not</u> mentioned in footnote 7 of Article 12 of the Agreement

Analogue Plan

According to provision 12.6 of the GE06 Agreement, at the end of the transition period, all entries of the analogue Plan were deleted and the provisions of § 4.1 of Article 4 referring to the modification of the analogue Plan are <u>no longer applicable</u>;

MIFR

According to No. 11.34 point 2.2.3 of part A1 of the Rules of Procedure (RoP), the administrations willing to notify analogue broadcasting assignments (in the bands and planning area of the GE06 Agreement) have to follow the procedure of Article 5 of the GE06 Agreement.

Two possibilities are foreseen:

- The analogue assignment notified uses the spectrum mask of a Digital Plan entry (notice type G02) (provision 5.1.3. of the GE06 Agreement):
 - If the assignment is in conformity with the digital plan entry (according to Part A10 of RoP and section II of the Appendix4 of the GE06 Agreement), it will be recorded in the MIFR with favourable findings.
 - If it is not in conformity, the notification will be returned to the administration.
- The analogue assignment notified without making reference to any Digital Plan entry (notice type G02) (provision 5.1.2 of the GE06 Agreement):

If there is no corresponding Digital plan entry, the assignment will be returned to the notifying administration with the specification of "no target found", and the assignment will be published in Part III of the BR IFIC.

The notifying administration can resubmit under provision 5.1.7 of the GE06 Agreement, with a signed commitment that the assignment *shall not cause unacceptable interference to, nor claim protection from,* any station operating in conformity with the Agreement and its associated *Plans (GE06D and the List)*.

The assignment will then be recorded in the MIFR with Favourable finding with respect to RR11.31, and Unfavourable finding with respect to RR11.34.

The following chart shows the notification process described above.

Notice G02 received from Adm. not in the footnote 7 Art 12 of GE06 Agreement and published in part I

