Orange welcomes the opportunity to share some views with the Radio Spectrum Policy Group on the preparation of ITU World Radiocommunication Conference (WRC) in Europe. In addition, Orange congratulates all the national and EU administrations, which are members of RSPG for their interest in WRC-11 issues in general and for the public consultation of an RSPG opinion on EU spectrum interest including the Preparation of ITU World Radiocommunication Conferences (RSPG09-275 part 1) and the main themes of WRC-11 of interest for EU-Wide support (RSPG09-275 part 2).

Moreover, Orange would like to encourage the RSPG to further emphasize the involvement of the industry on the coordination of EU spectrum interest.

1- Preparation of ITU World Radiocommunication Conferences

For the development of the radiocommunications, the aim of WRC is to progress towards worldwide harmonisation of frequency bands in order to faster the development of services for the overall benefit.

a. CEPT activity

The current preparation of the Conference done in CEPT within the framework of Common Preparatory Groups (CPGs) is very efficient, ensuring representation of the various debates from Administrations and industry. Furthermore, the coordination organised by CEPT before and during the conference has proved to be efficient.

The availability of all the documents on the European Communication Office (ECO) website ensures transparency and information availability. The duration of the process allows a full debate to be held and ensure the elaboration of a strong position for CEPT during the WRC.

The WRC preparation process developed by CEPT in cooperation with the other regional associations has proved to be an efficient means to move towards converging agreements during the Conference. Participation of representatives from other regions to CPGs, and reciprocal arrangements, also the work done during the CPGs helps to avoid endless conflicts.
One proposal for an improvement could be to support bilateral meetings with other regional organisations involving industry representatives.

**b. European Common Position**

The extensive preparation process that leads to an European Common Position (ECP) has demonstrated its consistency and is appropriate to achieve consensus and to include views of the minority. As a result, the usual commitment of the CEPT members to the ECP is satisfactory.

It is therefore of great importance that representatives from the European Commission participate to the different meetings. Support of European Union representatives to the underlying policy principles during this process should help to promote the positions expressed in the European Common Proposals for the benefits of the European Union countries.

Orange encourages the holding of dedicated workshops at European level, jointly organised by EC and CEPT, as a means to develop common views. Orange also notes the increased importance of RSPG. We believe that any procedural updates should be included in the new regulatory framework to further ensure the promotion of EU interests and facilitate the broad acceptance of the ECP. Furthermore, the valuable participation of industry representatives to the process should be promoted.

**c. Schedule for the WRC-11**

WRC-11 was initially scheduled for end of year 2011. But after a consultation process associating all ITU Member States, new dates for the WRC (23 January to 17 February 2012) preceded by the Radiocommunication Assembly (16 to 20 January 2012) have been proposed by ITU. Both meetings will take place in Geneva. However, recently, some administrations in Region 3 highlight issues about the newly proposed schedule for the RA and the WRC.

Orange believes that the European Commission should encourage Member States to agree to the proposed new dates for the RA and the WRC, but not to support any further delay beyond the proposed new dates.

**2- Main themes of WRC-11 of interest for EU-Wide support**

Some agenda items at WRC-11 could potentially have a significant positive impact on common European policies and on important pan-European industrial sectors.

Among all different points that have been identified, the agenda items (AI), dealing with spectrum management (AI 1.2, 1.19, 1.22), coexistence with mobile spectrum (AI 1.4, 1.5, 1.17, 1.18), protection of fixed links (AI 1.11, 1.12, 1.13, 1.20, 1.21), satellite activity (AI 1.3, 1.7, 1.13, 1.25), and future agenda items (AI 8.2) should be carefully considered.
a. Spectrum Management

i. Agenda Item 1.2

The first objective of the AI 1.2 is to clarify whether the current international framework can adequately meet the changing requirements in the radiocommunication spectrum and allow the implementation of new and changing technologies in a timely manner. Especially when new technologies (for example the impact of cognitive radio under AI 1.19 and underlay systems for short-range services under AI 1.22) will be available, it will be key to have the appropriate regulatory framework to continue to operate efficient electronic communication networks.

The European Commission should encourage Member States to emphasise the view that provisions of Radio Regulations should be utilised not only to protect existing services but also to facilitate the introduction of current, emerging and future radio applications taking into account the digital convergence trend.

ii. Agenda Item 1.19

Considering the cognitive radio aspects, WRC-07 included the agenda item 1.19 into WRC-11 Agenda based on the proposals made by CEPT and Arab States. Agenda item 1.19 deals with the consideration of regulatory measures to facilitate the introduction of software-defined radio and cognitive radio systems.

Orange encourages the RSPG to carefully assess all aspects related to cognitive radio technologies.

b. Coexistence with mobile spectrum

i. Agenda Item 1.17

Noting that the digital dividend is planned to be allocated to mobile communications in United Kingdom, Sweden, France, Denmark before the next WRC-11 from mobile industry point of view, the main goal of this agenda item should be the confirmation of the mobile allocation and IMT identification in the band 790-862 MHz in Region 1 before 2015 in more countries than the one listed in 5.316A during WRC-11 after validation of the on-going studies within JTG5-6.

In the preparation of the Agenda Item 1.17 in WRC-11, Orange supports actions from the European Commission to confirm the introduction of mobile services in the band 790-862 MHz not only in countries that have already open this flexibility but also in countries having borders with others that are not part of the European Union.

It is particularly important that the European Commission favours coordination of regulatory measures by encouraging the inclusion of all European Union countries in the footnote 5.316A of the ITU Radio Regulations.
ii. Agenda Item 1.18

CEPT proposed and drove this issue for inclusion on the WRC-11 agenda item 1.18 at the request of the European Galileo system supported by the European Commission. It is intended to facilitate new navigation signals for next generation Galileo in a frequency band, which because of its proximity to mobile service allocations above 2.5 GHz, may offer attractive synergies with terrestrial mobile systems due to improved antenna efficiencies and use of shared hardware not possible with other Radio Navigation Satellite Service (RNSS) bands. Radio Determination Satellite Service (RDSS) space to Earth allocations usually have a corresponding Earth to space allocation to enable two-way radio determination. In Region 2 and 3 the paired uplink is at 1.6 GHz. However, there is no requirement for an Earth to space allocation linked to this agenda item and Galileo and CEPT does not seek one. RNSS is a subset of RDSS and Galileo would plan to use the global RDSS allocation at 2.5 GHz in effect as an RNSS allocation (note RNSS is a subset of RDSS in the Radio Regulations).

The RSPG should carefully consider that any modification to the RR as a consequence of A.I. 1.18 should not place undue constraints on IMT systems in the adjacent bands.

c. Protection of fixed links

i. Agenda Item 1.20

Previous WRC efforts (WRC-97, WRC-2000) had undertaken initiative to examine High Altitude Platform Stations (HAPS) types of applications in various frequency bands. Due to the fact that all previous studies were carried out in frequency bands significantly higher than 5 850-7 075 MHz, new electromagnetic compatibility (EMC) studies will have to be initiated and conducted. The EMC studies will have to address HAPS ability to coexist with mobile, fixed satellite services as well as with radiolocation service, which exists in adjacent frequency bands. Land-based and maritime radiolocation systems operate in the lower adjacent frequency band. Fixed, mobile, and fixed satellite systems also operate in the 5 850-7 075 MHz band. Remote sensing systems operate in the 6 475-7 075 MHz band.

The 6.5GHz (6.425 – 7.110 GHz) fixed service channelling follows the band plan 6B ITU-R F Rec 384-7 and the ERC REC 14-02 and is heavily used by the Orange footprints. The RSPG should carefully consider the importance of the mobile backhauling based on microwave links (Fixed Services) and it remains essential to ensure appropriate protection of existing services.

ii. Agenda Item 1.12

Lunar, planetary and other SRS missions will be using the bands 37-38 GHz and 40-40.5 GHz allocated worldwide to the space research service on a primary basis. The SRS systems will be used inter alia for high-rate digital data transfer of telemetry,
voice, and video between the Earth and other planetary bodies such as the Moon and Mars to support manned exploration.

The 37-39.5 GHz band plan is referenced in recommendations ITU-R 749-2 and ERC REC 12-01 and Orange would like to highlight the constant increasing usage of this band. As a necessity, the European Commission should encourage Member States to consider this band as essential for backhauling operations.

d. Satellite activity
   i. Agenda Item 1.25

WRC07 agreed that because access to mobile satellite spectrum claimed to be congested at 1.5/1.6 GHz, 1.6/2.4 GHz and this would shortly occur at 2 GHz as well. Satellite systems operators at WRC11 should look towards consideration of providing studies for new mobile satellite service (MSS) allocations with particular focus in bands between 4-16GHz.

The RSPG should not support any allocation on primary and secondary basis for MSS in the specific range of bands below 4 GHz while terrestrial services partially occupies the 3.4-4.2 GHz band. Possible allocation could be supported by the European Union Member States if the newly allocated service does not place any undue constraints on existing and future services operating between 4 and 16 GHz.