CORRIGENDUM

RFP No. BECIL/RF TOOL/RFP/2016

Some Technical queries have been received from prospective bidders. In view of these queries, our point-wise reply is as below:

Technical Queries

1. **BIDDER Query:** Please advise if the tool should support IRT 2D (2D propagation model of the Institut für Rundfunktechnik, IRT in Munich, Germany)?
   BECIL Response: *Not an essential requirement.*

2. **BIDDER Query:** We require a clarification if the RF planning software solution must have a GIS module integrate
   - **BECIL Response:** *Yes.*

3. **BIDDER Query:** The RF planning software solution should provide a direct interface to the ITU Digitized World Map (IDWM), for example for showing country borders?
   - **BECIL Response:** *Not an essential requirement.*

4. **BIDDER Query:** Please advise if the RF planning software solution should support population analysis with a raster type population map?
   - **BECIL Response:** *Yes.*

5. **BIDDER Query:** Please advise if the RF planning software solution should provide an interface to the IDWM from ITU?
   - **BECIL Response:** *Not an essential requirement.*

6. **BIDDER Query:** Please confirm that the RF planning software solution must support Import from ITU's BRIFIC DVD?
   - **BECIL Response:** *Not an essential requirement.*

7. **BIDDER Query:** Please advise if the RF planning software solution should support Electronic notification according to the TerRaSys format description, import and export, e.g. such as described in ITU-R circular letters CR/120 and CR/262; XML import and export?
   BECIL Response:
   - *CR/ 120 (March, 1999) relate to Forms of notice and formats for electronic notification of VHF/UHF television and VHF sound broadcasting assignments.*
   - *CR/262 (addemdums 1&2)- These circulars are primarily addressed to Member States of Region-1 (except Mangolia) and to the Islamic Republic of Iran and relate to File formats for submission of electronic notices related to analogue and digital broadcasting assignments/allotments for the application of Articles 4 and 5 of the Regional Agreement relating to the planning of the digital terrestrial broadcasting service in Region 1 (parts of Region 1 situated to the west of meridian 170° E and to the north of parallel 40° S.*
   - *Import & Export of Electronic file formats for ITU notifications not required.*

8. **BIDDER Query:** The planning tool must be able to perform area, line, polygon and testpoint calculations?
   - **BECIL Response:** *Yes.*

9. **BIDDER Query:** Should the RF planning software solution be able to link both steady (at 50% of time) and tropospehrical (at 1% of time) field strength results as well as C/I results to a transmitter used for calculation automatically?

- **BECIL Response:** *Yes. Additionally, provision to be made available for steady field strength predictions at % of time from 50 to 99.*

10. **BIDDER Query:** Please confirm that the planning tool must be able to support true multi-core operation with at least 4 cores? A single software user license must be able to use at least 4 cores simultaneously, within the same application. Increase of the core numbers should increase the performance reflecting to the significant decrease of calculation time.
    - **BECIL Response:** *To be decided by the bidder.*

11. **BIDDER Query:** We request you to kindly confirm if the RF planning software solution must be able to have separated field strength calculations from network and interference analysis, so that once calculated field strength result can be used for different network scenarios without a need to re-calculate?
    - **BECIL Response:** *Not an essential requirement.*

12. **BIDDER Query:** The RF planning software solution must have built-in database?
    - **BECIL Response:** *Yes.*

13. **BIDDER Query:** The RF planning software solution should be able to have information database which is reference and central database and a local working database for planning purposes?
    - **BECIL Response:** *Yes.*

14. **BIDDER Query:** The RF planning software solution should have integrated result database, at both reference and working level?
    - **BECIL Response:** *Yes.*

15. **BIDDER Query:** The RF planning software solution should integrated transmitter database, at both reference and working level?
    - **BECIL Response:***Yes.*

16. **BIDDER Query:** The RF planning software solution should have integrated testpoint database, at both reference and working level?
    - **BECIL Response::** *Yes.*

17. **BIDDER Query:** The RF planning software solution should have an integrated antenna database?
    - **BECIL Response:***Yes.*

18. **BIDDER Query:** The RF planning software solution should have integrated allotment, area and agreement databases, at both reference and working level?
    - *Not an essential requirement.*

19. **BIDDER Query:** The RF planning software solution should have an integrated protection ratio database?
    - **BECIL Response:***Yes.*

20. **BIDDER Query:** Please confirm if the RF planning software solution must have an independent network processor for each specific broadcast technology, with automatically applied technology specific parameters (e.g. analogue TV or DVB-T2 network processor must be tailored to its specific parameters)?
    - **BECIL Response:***Yes.*

21. **BIDDER Query:** Does BECIL want the RF planning software solution to be able to calculate Interference based on the available protection ratio for all different kind of analogue (B, G, K, L ..) or digital (DVB-T, DVB-T2, DVB-H) television systems (ITU-R Rec. BT.655, BT.1368)?
    - **BECIL Response:** *Only required for analogue PAL (B/G) & DVB-T2 (All Profiles, Base & Lite)*

22. **BIDDER Query:** Should the RF planning software solution have a concept of protection ratios required versus the same broadcast service (DVB-T2) and vs. other OFDM DTT systems (such as DVB-T) and analog TV or LTE? These values shall be adaptable by the user?
    - **BECIL Response:** *No.*

23. **BIDDER Query:** Coverage Reserve (C/I): Should the tool indicate the coverage reserve (difference between usable field strength and the wanted field strength, taking into account protection ratio) in dB? With only one reference transmitter selected the C/I should be indicated in the whole calculation area? With several marked reference transmitters, the C/I should only be indicated in that region of a reference transmitter where the latter could be a potential supplier?
    - **BECIL Response:** *The question needs further clarification.*

24. **BIDDER Query:** Should the tool support the below analysis-

    Best Server (C/I>0): If there are several reference transmitters for a certain pixel (location), this result indicates the transmitter with the highest positive C/I (= reference transmitter for the Pixel). The minimum field strength for coverage has to be exceeded additionally. Interference must be taken into consideration.
    - **BECIL Response:** *Yes.*

25. **BIDDER Query:** Should the tool be able to perform interfering transmitter calculations? The influence of a reference transmitter (e.g. of a new transmitter which has to be set up) on an existing transmitter network should be examined by the interfering transmitter calculation? The nuisance fields of the reference transmitter on all concerned transmitters should be determined and put down in descending order in a list?
    - **BECIL Response:** *Yes.*

26. **BIDDER Query:** Should the RF planning software solution be able to support direct reading from the data of the BRIFIC DVD-ROM, which is published by the ITU? Direct queries should be possible for complete database extracts, e.g. parts of the GE06D plan or notifications, as well as latest publications? It should be possible to copy the extracted data directly to the Planning tool transmitter databases?
    - **BECIL Response:** *Not an essential requirement.*

27. **BIDDER Query:** Should the RF planning software solution have possibility to perform calculation macro procedures, enabling combination and interaction of database searches with the computation of field strength (and related values)? A number of automated procedures (macros) should be available, simplifying the coverage and respectively compatibility calculation of new or existing television or radio transmitters?
    - **BECIL Response:** *Yes.*

28. **BIDDER Query: DVB-T2 specific Features:** Should the user at any time be able to modify all protection ratio values?
    - **BECIL Response:***Yes.*
29. **BIDDER Query:** For DVB-T/2, should it be possible to specify all possible values for minimum field strength values as given in the GE06 or respective ETSI or EBU planning guidelines? The value for minimum field strength may depend on the type of reception, the frequency band, the required C/N and the desired location probability?
    - **BECIL Response:***Only for application of respective ETSI, EBU or ITU planning guidelines.*

30. **BIDDER Query: DVB-T2 specific Features:** The RF planning software solution should include a post processing module, that allows to combine C/I results of MFN-stations or SFN-networks to create a country wide network coverage, thus minimizing re-calculation effort if not the parameters of all network stations are changed?
    - **BECIL Response:***Not an essential requirement.*

31. **BIDDER Query: DVB-T2 specific Features:** Should the RF planning software solution offer various default sets for fixed (FX), portable outdoor (PO), portable indoor (PI) and mobile (MO) reception cases? It must be possible to apply different protection ratios for this different reception cases?
    - **BECIL Response:***Yes.*

32. **BIDDER Query: DVB-T2 specific Features:**

    - The RF planning software solution must have a separate database for allotments and support the standardized types of allotments as given in GE06 ?
        - **BECIL Response:** *Not an essential requirement.*
    - With regards to the GE06 Agreement the RF planning software solution must support following functions?
    - Import and Export Functions according to CR/262 (Allotments & Assignments) - GT1, GT2, GS1, GS2, GA1, GB1, G02. GE06 Coordination Distance Contour, according to the GE06 Agreement, Annex 4, Section I use for Article 4 of GE06?
        - **BECIL Response:** *Not an essential requirement.*
    - GE06 Conformity Check according to the GE06 Agreement, Annex 4, Section II use for Article 5 of GE06?
        - **BECIL Response:** *Not an essential requirement.*
    - BRIFIC Access GE06A, GE06D, Article 5 Notifications, GE06L?
        - **BECIL Response:***Not an essential requirement.*

33. **BIDDER Query:** For the MF module, please specify conductivity layers.
    - **BECIL Response:** *Single and mixed values for Indian sub-continent to satisfy ITU MF Planing procedures.*

    All other Terms and Conditions mentioned in the Tender shall remain unchanged