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| **Radiocommunication Advisory GroupGeneva, 25-27 June 2012** |  |
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|  | **Addendum 3 to** |
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| Director, Radiocommunication Bureau |
| report to the NIneteenth meeting of the radiocommunication advisory group |
| The BR International Frequency Information Circular (BR IFIC) -Terrestrial services - New DVD media, presentation and layout |

1. **General**

The BR International Frequency Information Circular (BR IFIC) - Terrestrial Services - is a service publication on DVD ROM. It contains particulars of frequency allotments and assignments to terrestrial services and is published by the Radiocommunication Bureau in the six official languages of the ITU once every two weeks. A full copy of the data relating to the MIFR and the various Regional and World Wide Plans and Agreements for terrestrial services is thus made available to the administrations on a fortnightly basis.

Since the beginning of the BR IFIC (Terrestrial Services), the information concerning the frequency assignments and allotments was stored in a Microsoft Access® database on CD ROM (and later on DVD ROM). Various programs distributed on the BR IFIC (such as ***TerRaQ*** for queries, ***TerRaNotices*** for generation of electronic notices, and ***TerRaNV*** for validation of electronic notices) read that database. In addition, administrations and other users of the BR IFIC have developed their own programs which also read that database.

1. **Motivations**

With the increasing volume of data and the evolution and variety of the operating systems platforms to be supported, the BR IFIC – Terrestrial Services – in its current format is known to have several constraints and problems, among which:

* Given the size of the data (~4GB), single layer DVD data capacity is becoming an issue.
* Due to file size limitations with Microsoft Access®, several containers (four/five files) are needed and have to be “linked” at installation time, thus leading to a “lengthy” and “tedious” installation procedure.
* Microsoft Access® (2003 or higher) needs to be present on the user’s machine.
* Several problems have been reported relating to security settings and user’s administrative privileges.

Many BR IFIC users have expressed their concern about this situation on several occasions, including the World Radiocommunication Seminar 2010 (WRS-10). A number of users requested that the Bureau find an alternative to the Microsoft Access® database management system. Consequently, the Bureau decided to explore the possibility of replacing Microsoft Access® on the BR IFIC (Terrestrial Services) by an alternative database management system, and added this task to the Bureau’s Operational Plan which was presented to the Radiocommunication Advisory Group (RAG) in 2010.

1. **New directions**

For some time, the Bureau has been conducting tests with an alternative database management system named SQLite (see <http://www.sqlite.org/>). SQLite is an “open source” product; there is no need to purchase a license to use SQLite, and there is no need to adjust system security settings to install an SQLite database. The Bureau’s tests included distribution and use of a small portion of the BR IFIC database with SQLite rather than Microsoft Access®. Since the results of these tests have been favourable, the Bureau decided therefore to proceed with the introduction of SQLite on the BR IFIC (Terrestrial Services).

1. **Current development status**

One of the major advantages is that SQLite format allows compacting the whole database in a single file. This permitted the Bureau to develop:

• a new version of the query program ***TerRaQ***, as well as revised versions of ***TerRaNotices*** and ***TerRaNV*** which will be included on the BR IFIC, and will read the SQLite database;

• a new “navigation menu” in a “plug-and-play” mode, which allows the user to browse the data, perform queries, execute one of the above mentioned software packages, directly from the DVD without the need to perform any installation.

• an “install-on-demand” utility, which allows the user to install the BR IFIC data and/or its software packages on the user’s hard disk, if so wished.

The Bureau recognizes that this switch to the SQLite database management system could cause inconveniences to those users who have developed programs which work directly with the Microsoft Access® database on the BR IFIC. It is to be noted in this regard that there are several free of charge ODBC drivers, .Net providers, etc. for SQLite which allow easy and transparent transition for those users who have developed their own programs. It should also be highlighted that the terrestrial DVD database structure (e.g. name of tables, name and type of fields) has remained unchanged, so as to reduce the necessary changes to any other third party software. In addition, aiming to minimize any potential disruption, the Bureau investigated various possibilities and developed several tools, including:

* utilities to convert an SQLite Terrestrial BR IFIC database to a Microsoft Access® database and vice-versa;
* offering the option, in ***TerRaQ***, of exporting data to a Microsoft Access® database, in addition to an SQLite database.
1. **Expected timeline**

The BR IFIC – Terrestrial Services – in its new format has been successfully tested and used inside the Bureau. Therefore, in order to allow for a test period with the ITU-R membership before moving the Terrestrial BR IFIC to the new format, the Bureau decided that, **starting with BR IFIC No. 2719, a Beta copy of the same BR IFIC with the new BR IFIC DVD layout will be sent along with the regular BR IFIC DVD**. The purpose is to invite the administrations and other BR IFIC users to submit their comments and suggestions about the Beta tests in order to apply the possible enhancements before the “cutover” date.

BR issued Circular Letter [CR/332](http://www.itu.int/md/R00-CR-CIR-0332/en) dated 24 April 2012 containing information on the new DVD media, presentation and layout for the BR IFIC - Terrestrial Services.

Figure 1 below shows the expected timeline for the move of the Terrestrial BR IFIC DVD to the new format, the milestone being the coming World Radiocommunication Seminar (WRS-12) to be held in December 2012.



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