Terms and Conditions
For the Use of the D-Cube Benchmarking Facility at the Institute of Technical Informatics at Graz University of Technology

The purpose of this document is to establish the acceptable and unacceptable use of D-Cube benchmarking facility (hereafter "benchmarking facility") located at Graz University of Technology (hereafter "TU Graz").

1. Description of the benchmarking facility

The Institute of Technical Informatics at TU Graz makes its internal low-power wireless benchmarking facility available to academic and industrial institutions working in the area of networked embedded systems, such that they can test their low-power wireless protocols on real hardware at a large scale.

The benchmarking facility, accessible via https://iti-testbed.tugraz.at/, is located in the rooms and laboratories of the Institute of Technical Informatics at TU Graz (Inffeldgasse 16, 8010 Graz, Austria). As of today, the benchmarking facility offers the possibility to remotely program a number of Advanticsys MTM-5000-MSP (TelosB / Tmote Sky replicas) and Nordic Semiconductors nRF52840-DK wireless sensor nodes, to collect serial traces from each wireless sensor node, as well as to assess the performance of each run that was executed.

The users of the benchmarking facility can program the wireless sensor nodes by uploading a single `ihex` file (i.e., no source code needs to be disclosed) through the Web interface or REST API for the benchmark suite of interest. The latter identifies the hardware platform, the application scenario, and the set of performance metrics to be measured. All `ihex` files are stored into the benchmarking facility's server and are not publicly available.

The benchmarking facility also allows to continuously test the performance of a given protocol on the available benchmark suites. In particular, the benchmarking facility offers to its users the possibility to upload a binary firmware to be perpetually tested in a best-effort fashion to accurately profile its performance and compare it to that of other solutions. Such performance measurements are publicly available and serve as a reference for academics and companies alike. Each binary firmware that is provided for continuous testing is stored internally in the benchmarking facility's servers and is not publicly available. The only public information, besides the results of the performance measurements, are the name of the protocol and a short description provided by the protocol's owner, which may include a link to the owner institution's Webpage.

2. Terms of use

Granting access to the benchmarking facility is conditioned to an agreement between the users of the benchmarking facility (hereafter "users") and the Institute of Technical Informatics at TU Graz about:

    A. The nature of the experiments to be carried out on the wireless sensor nodes;
    B. The acceptable use of the wireless sensor nodes in the benchmarking facility.

In particular, by signing this agreement, the users that are granted an account to access the benchmarking facility declare:

- To use the provided account and benchmarking facility exclusively for research & development purposes;
- Not to use the provided account and benchmarking facility to gain (or try to gain) unauthorized access to or disrupt (or try to disrupt) any service, data, account or network;
- Not to use the wireless sensor nodes of the benchmarking facility to deliberately jam the radio frequencies in the building in which the benchmarking facility is located;
- Not to use the provided account and the benchmarking facility to violate a person's privacy or sniff ongoing wireless traffic;
- Not to constitute or eventually lead to any threat or damage against any person or organization;
- Not to infringe any copyright, nor violate any import/export control and personal data privacy regulation;
- To promptly inform the maintainers of the benchmarking facility about any malfunctioning hardware and/or software, unexpected unavailability of the facility, or any damage that occurred during experimentation;
- To agree on the Austrian Federal Act concerning the Protection of Personal Data (DSG 2000) available at https://www.ris.bka.gv.at/Dokument.wxe?Abfrage=Erv&Dokumentnummer=ERV_1999_1_165;
- To properly cite D-Cube (see https://iti-testbed.tugraz.at/wiki/index.php/Publications) in any document or scientific publication containing results obtained through experimentation in the benchmarking facility;
- To seriously consider the possibility of uploading a binary firmware to be perpetually tested in a best-effort fashion, should the performance results of their protocols be satisfactory, in order to support the initiative.

The users declare not to upload any spyware, malware, or pornographic material to the benchmarking facility's nodes as `ihex` file or in any other form, and to waive TU Graz from liability on the stored content. The users further confirm that every uploaded firmware does not connect to devices other than those composing the benchmarking facility and will not make use of packets/beacons that voluntarily interfere with the operations of smartphones, laptops, and other equipment that is co-located with the benchmarking facility.

The users finally acknowledge and agree that every `ihex` file uploaded through the Web interface or REST API is permanently stored into the benchmarking facility's server and can be used by the maintainers of the facility to benchmark its performance. The users also acknowledge and agree that the performance results of the benchmarked protocols can be displayed online to serve as a reference for academics and companies alike.

3. Availability of the benchmarking facility

The benchmarking facility is available to its registered users in a best effort fashion during nighttime, i.e., between 20:00 and 6:00 of Graz local time, and during Austrian's public holidays. While the maintainers of the benchmarking facility will try to ensure its correct operation, the availability and functionality of the benchmarking facility is not guaranteed. Note that TU Graz employees and affiliates will be granted with a priority access policy.

The maintainers of the benchmarking facility also reserve the right to revoke access to registered users at any time and are not liable for inaccuracies in performance measurements as well as for the unavailability of the benchmarking facility.

4. Maintainers of the benchmarking facility (and contact persons)
- Markus Schuss (markus.schuss@tugraz.at, +43 316 873 6403);
- Carlo Alberto Boano (cboano@tugraz.at, +43 316 873 6413).

5. Violations of the terms and conditions

Users that do not adhere to the aforementioned terms and conditions will be denied access to the benchmarking facility (i.e., their account will be deactivated) and will further be liable for any administrative or criminal consequences of their actions.

IN ACCEPTANCE OF THE AFOREMENTIONED TERMS AND CONDITIONS

I hereby declare that I have read, understood, and will strictly adhere to the terms and conditions for the use of the D-Cube benchmarking facility.

First and last name:

E-mail address:

Institution and address:

Date: _____ **Signature:** _____

Note that, by signing this form, you agree to the use of your personal data (name, affiliation, address, and e-mail) for the purpose of maintaining the D-Cube benchmarking facility. The data collected in this statement will be stored internally and will not be passed to third parties. Consent may be withdrawn at any time by sending an e-mail to the benchmarking facility's contact persons.