

Terms of Reference for the Advisory Group of Herouni Mirror Radio Telescope (ROT-54/2.6)

Version 1.2, 21 July 2020

The Advisory Group of Herouni Mirror Radio Telescope (ROT-54/2.6) is formed by experts of Herouni United Space Centre (HUSC, Armenia) and other institutions, in particular of the European VLBI Network (EVN).

The AG will evaluate the status of ROT-54/2.6 and study possible developments and instrumentation for it to be able to operate as a radio telescope for single-dish and as an element of a VLBI network, in particular as a member of the EVN. The AG will as well evaluate the ROT mission, in-house programmes, both for astronomy as well as technical research and development, and suggest enhancements in the areas of personnel, training and education, laboratories and other technical facilities.

In making the evaluation it will consider:

1. The scientific interests and achievements of ROT staff obtained in the past years;
2. The current in-house interests for scientific and technical research, future training and educational activities, and outreach;
3. The science case for the future, in a worldwide context;
4. The available resources (human, technical, ICT, connectivity, etc.);
5. The ROT-54/2.6 structural status, and the type and status of the instrumentation;
6. Options for future technical and operational development at ROT towards its mission;
7. The financial implications foreseen on the basis of these options;
8. The administrative process necessary for ROT-54/2.6 to become a member in EVN and JIVE.

The AG is asked to report for all of these aspects separately, as well as an overall evaluation.

The AG is expected to base its work on:

- A self-assessment document by the HUSC management;
- Documents provided by HUSC: technical reports and additional specific documentation;
- A site visit to ROT and meetings with HUSC staff;
- Strong position of the Government of the RA focused on the development of sciences, engineering, particularly Astronomy and Space, as it stated in official documentation;
- Financial analysis provided by HUSC management.

The membership in AG is for a period of two years, and may be renewed. The initial members of the AG are:

Name	Institute	Expertise/Comment
Jacob W.M. Baars	Retired, ESO, MPIfR, DE	Antenna theory and radio telescope characterisation
Uwe Bach	MPIfR, DE	Effelsberg VLBI friend and EVN TOG chair
Leonid Gurvits	JIVE, NL	JIVE representative, space science and radio astronomy
Kees van't Klooster	Retired, ESA/ESTEC	Radio telescopes and antennas
Pepe López	OAN Yebes, ES	Radio astronomy receivers
Michael Lindqvist	Onsala Observatory, SE	VLBI and radio astronomical observations
John Sarkissian	CASS (Parkes Observatory), AU	Radio telescope operation and development
Félix Tercero	OAN Yebes, ES	Receiver/antenna optics and feeds
Peter Thomasson	Retired, Jodrell Bank Observatory, UK	Radio telescopes and antennas
Harro Verkouter	JIVE, NL	VLBI digital instrumentation and data engineering
Arevik Sargsyan	HUSC, AM	Antenna Engineering

The AG will meet at least twice per year, preferably by videoconferencing. Financial support for the AG is provided, when necessary and in particular for local expenses during the site visits: local transportation and meal (from HUSC).

The AG will elect a chairperson from within its members. The AG chair will have right to assign AG spokesperson for each public event.

The Local Experts Team will be formed by HUSC and will take part in all type of activities of AG, and will ensure adequate communication with the AG.

The AG will issue a report of its activities before the end of 2020, and a final evaluation report before the end of 2022, as a public document to the HUSC management.