

Only 16 stations responded to the survey. The survey questions are listed below in bold.

Question 1: Who is responsible for generating your ILRS tracking schedule?

The majority of the stations (13) manage their own ILRS tracking schedules, while a smaller portion (3) rely on their operations center.

Question 2: Is your ILRS tracking schedule based only on the ILRS Priority List from the ILRS website?

Most stations (10) do not rely only on the ILRS Priority List for their tracking schedules, while five stations do. One station is uncertain and needs to consult their Operations Center.

Question 3: If “Yes” to Question 2, how do you access and use the Priority List? (Select all that apply and please specify if “Other”)

Among the five stations that use only the ILRS Priority List, most (4 out of 5) manually check the list on the website. Two use a software tool to gather data automatically, and one follows the list based on habit or experience. One station also mentioned a custom approach, manually checking dynamic priorities or observation numbers on a specific page when passes overlap, particularly for tandem missions.

Question 4: If “No” to Question 2, why not? (Select all that apply and please specify if “Other”)

Among the ten stations that don't rely solely on the ILRS Priority List, three find it unnecessary for their work, and three use other sources to determine target tracking priorities. Half of them (five stations) have other reasons, mostly involving adapting the ILRS list to their specific needs, combining it with other priorities or campaigns, focusing more on geodesy missions, or including additional activities like Space Debris tracking.

Question 5: If you follow the Priority List without actively checking it, how do you stay updated? (Select all that apply and please specify if “Other”)

Among the stations that follow the ILRS Priority List without actively checking it, three stations rely on software that automatically integrates the list, one station uses third-party tools, and six stations rely on past experience. The largest group, eight stations, has other methods, often involving occasional manual checks of the list, updating their databases when changes occur, or using notifications like SLRMail for major updates. Some stations also mentioned creating their own priorities based on ILRS rules or not following the list at all, showing varied approaches to staying updated.

Question 6: Do you alter the priorities when you feel that some satellites are being avoided?

Most stations (14 out of 16) actively alter the ILRS Priority List when they notice some satellites are not getting enough attention, indicating a proactive approach to ensure balanced tracking. A small minority, two stations, do not adjust the priorities in this way.

Question 7: Are LAGEOS-1, LAGEOS-2, and/or LARES-2 passes not scheduled sometimes due to their current ILRS priority?

The majority of stations (13 out of 16) indicate that the current ILRS priority does not prevent them from scheduling passes for LAGEOS-1, LAGEOS-2, or LARES-2. A smaller group, three stations, feel that these satellites' passes are sometimes not scheduled due to their priority, suggesting that the ILRS priority list may impact scheduling for a minority of stations.

Question 8: What percentage of a day are your tracking resources dedicated to tracking space debris?

The majority of stations (11 out of 16) do not track space debris at all. Of the five stations that do, four spend less than 10% of their day on it, and one spends between 10% and 25%. No stations dedicate more than a quarter of their daily resources to space debris tracking, indicating that this activity is a low priority for most stations in the survey.

General Comments Summary:

Access to Priority List Updates: One station suggested making the ILRS Priority List available via Web-API, such as through the EDC. Another requested email notifications via the ILRS mailing list when priority updates occur, including specific start and end dates for satellite campaigns like GRACE-FO-1/2.

Scheduling and Visibility Concerns: One station noted that LEOs and LAGEOS satellites are not visible in the sky for 14 hours out of 24, and prioritizing them over GNSS and ETALON satellites could create unnecessary friction, as it wouldn't significantly impact the system or its effects.

Funding and Satellite Tracking Challenges: One station highlighted that the era of tracking only a few geodetic satellites is over, as the ILRS Priority List now includes numerous commercial satellites valued at millions (possibly a billion) dollars or euros. They emphasized that laser stations need significant funding for operations, equipment, and sensor development, as the ILRS does not provide financial support for observations. Stations must seek external funding and paid contracts to track various objects, but these funds are insufficient for expensive hardware investments. They also noted that while there were 35 active stations in 2013, this number only slightly increased to 37 by 2023, a rise of about 5.7% over the decade, while the number of satellites on the ILRS tracking list has grown by several hundred percent.

ILRS Station Tracking Priority Survey:
Summary of Results (April 21, 2025)

Priority List Relevance and Campaign Clarity: One station stated that the ILRS Priority List is unnecessary for their operations. They schedule by tracking all passes of LEO and LAGEOS satellites and as many passes as possible for higher-altitude satellites. They believe the priority list would be more relevant if more satellites needed tracking in the future, but that's not currently the case. They also suggested that ongoing tracking campaigns should be clearly stated on the ILRS website, noting that satellites in campaigns are often given higher priority, but this isn't clear to users or applied by stations that don't use the priority list, like themselves.