



Advisory to NavIC Users (ANU)

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SATELLITE NAVIGATION PROGRAMME

INDIAN SPACE RESEARCH ORGANIZATION (ISRO)

- ISRO has developed a system to publish Advisory for NavIC Users (ANU) in line with international GNSS practice (NANU of GPS, NAGU of Galileo and GLONASS).
- The automated system publishes information about any activity or event in the NavIC system that impacts Signal-in-Space (SIS), satellite availability, or to intimate any general information regarding the services, in the form of advisory notices.
- Advisory notices shall be published at least 48 hours in advance for planned activities and within two hours in case of unplanned events.
- The advisory notices are both human readable and machine-readable to support automated parsing of the information for further processing.
- Some of the typical users include:
 - Specific users for mission planning.
 - Assisted GNSS systems.
 - Providers of precise GNSS products.

Types of Advisory Notices

Type	Description
Planned Manoeuvre	Planned manoeuvre affecting the attitude and/or orbit.
Un-planned Manoeuvre	Unplanned manoeuvre affecting the attitude and/or orbit.
Planned Outage	Planned activity, in space or ground segment, that can potentially cause an outage of the broadcast satellite SIS.
Unplanned Outage	Outage of the broadcast satellite SIS due to occurrence of any unscheduled event.
Unavailable until further notice	Unscheduled outage of the broadcast satellite SIS, characterized by an undefined duration.
Usable	The satellite restarts transmitting healthy SIS, concluding an unplanned outage period of undefined duration.
Cancellation	Cancellation of published advisories.
Decommission	Decommissioning phase of a NavIC satellite.
Launch	Notification of a NavIC Satellite Launch.
Satellite First Time Useable	Satellite enters into service for the first time and the signals are useable.
Leap Second	General notifications for leap second adjustment.
General Notice	Any general notice.



NavIC Advisory Portal Indian Space Research Organisation



Advisory Feedback

Select Satellite:

Search Options

Satellite

Advisory ID

Date Wise

Status

Display All

User Manual

Advisory ID	Satellite	Start Date	Start Time	End Date	End Time	Flag	Type	Advisory Date	References
10929	IRNSS-1B	2022-10-11	14:46:00	2022-10-11	16:26:00	PLANNED	PLANNED MANEUVER	2022-10-05 05:01	N/A
10928	IRNSS-1B	2022-10-09	14:46:00	2022-10-09	16:26:00	CANCELLED	CANCELLED	2022-10-05 05:01	10914
10919	IRNSS-1B	2022-09-27	11:15:36	2022-09-27	12:05:36	COMPLETED	UNPLANNED MANEUVER	2022-09-27 12:05	N/A
10918	IRNSS-1I	2022-10-20	02:25:00	2022-10-20	04:05:00	PLANNED	PLANNED MANEUVER	2022-09-27 05:01	N/A
10917	IRNSS-1I	2022-09-23	09:14:00	2022-09-23	10:15:24	COMPLETED	PLANNED MANEUVER	2022-09-23 10:15	10858
10916	IRNSS-1E	2022-10-21	16:02:00	2022-10-21	17:42:00	PLANNED	PLANNED MANEUVER	2022-09-23 05:01	N/A
10915	IRNSS-1C	2022-10-07	05:40:00	2022-10-07	07:20:00	PLANNED	PLANNED MANEUVER	2022-09-23 05:01	N/A
10914	IRNSS-1B	2022-10-09	14:46:00	2022-10-09	16:26:00	PLANNED	PLANNED MANEUVER	2022-09-22 05:01	N/A
10913	IRNSS-1F	2022-10-14	14:16:00	2022-10-14	15:56:00	PLANNED	PLANNED MANEUVER	2022-09-20 05:01	N/A
10912	IRNSS-1D	2022-10-13	03:34:00	2022-10-13	05:14:00	PLANNED	PLANNED MANEUVER	2022-09-20 05:01	N/A
10911	IRNSS-1B	2022-09-20	01:44:36	2022-09-20	02:45:24	COMPLETED	PLANNED MANEUVER	2022-09-20 02:45	10900
10910	IRNSS-1F	2022-09-16	15:41:00	2022-09-16	16:55:24	COMPLETED	UNPLANNED MANEUVER	2022-09-16 16:55	N/A

1 2 3 4 5 6 7 8 9 10 11 Next Last

ADVISORY TO NavIC USERS 10929

Maneuver: Planned

DATE GENERATED (UTC) :2022-10-05 05:01
 TYPE :PLN_MNVR
 SUBJECT :PLANNED_MANEUVER
 ANU NUMBER :10929
 REFERENCED TO :N/A
 SATELLITE AFFECTED: [IRNSS-1B]
 SIGNAL(S) AFFECTED:[L5, S]

SATELLITE ID	START DATE	START TIME	END DATE	END TIME	STATUS
IRNSS-1B	11102022	144600	11102022	162600	PLANNED

EVENT DESCRIPTION : NavIC Satellite(s) :[IRNSS-1B] Navigation Signals :[L5, S] expected usable :2022-10-11 beginning from :16:26 UTC
 NavIC Satellite(s) :[IRNSS-1B] Navigation Signals :[L5, S] unavailable from 2022-10-11 beginning from :14:46 UTC

ADVISORY TO NavIC USERS 10878

Unplanned Maneuver: Completed

DATE GENERATED (UTC) :2022-09-07 16:25
 TYPE :UNPLN_MNVR
 SUBJECT :UNPLANNED_MANEUVER
 ANU NUMBER :10878
 REFERENCED TO :N/A
 SATELLITE AFFECTED: [IRNSS-1F]
 SIGNAL(S) AFFECTED:[L5, S]

SATELLITE ID	START DATE	START TIME	END DATE	END TIME	STATUS
IRNSS-1F	07092022	151036	07092022	162524	COMPLETED

EVENT DESCRIPTION : NavIC Satellite(s) :[IRNSS-1F] Navigation Signals :[L5, S] expected usable :2022-09-07 beginning from :16:25:24 UTC
 NavIC Satellite(s) :[IRNSS-1F] Navigation Signals :[L5, S] unavailable from 2022-09-07 beginning from :15:10:36 UTC

ADVISORY TO NavIC USERS 10928

Planned Maneuver: Cancelled

DATE GENERATED (UTC) :2022-10-05 05:01
 TYPE :PLN_MNVR
 SUBJECT :CANCELLED
 ANU NUMBER :10928
 REFERENCED TO :[10914]
 SATELLITE AFFECTED: [IRNSS-1B]
 SIGNAL(S) AFFECTED:[L5, S]

SATELLITE ID	START DATE	START TIME	END DATE	END TIME	STATUS
IRNSS-1B	09102022	144600	09102022	162600	CANCELLED

- The system has been developed in phases:
 - ✓ Phase-1: Generation of NavIC advisory notices and circulation via email to the stakeholders within ISRO.
 - ✓ Phase-2: Publishing of NavIC advisories via Web Portal and made available for users within in ISRO.
 - Phase-3: NavIC advisory web portal shall be deployed over internet for general public after the completion of security audit, test & evaluation and obtaining user feedback.

Acknowledgment

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¹ISRO Telemetry Tracking and Command Network



Thank You

