

IMF, B'desh agree on 1st review of \$4.7bn bailout

Dhaka: Bangladesh and the International Monetary Fund (IMF) reached a staff-level agreement on the first review of a \$4.7 billion bailout on Thursday, in a boost for the cash-strapped economy as it heads towards a national election in January.

Bangladesh's \$416-billion economy was one of the world's fastest growing for ye-

CASH-STRAPPED

ars, but has recently struggled to pay for imported fuel as its dollar reserves have shrunk by more than a third due to costly imports following Russia's invasion of Ukraine.

Completion of the first review, subject to IMF board approval, will make about \$681 million in loans available to the country, the IMF said.

"The authorities have made substantial progress on

structural reforms under the IMF-supported programme, but challenges remain," the Fund said. "Continued global financial tightening, coupled with existing vulnerabilities, is making macroeconomic management challenging, putting pressures on the Taka and FX reserves."

The IMF approved \$4.7 billion in loans to Bangladesh in January, with an immediate disbursement of about \$476 million, making it the first to secure such funds out of three South Asian countries that applied last year.

Bangladesh's central bank hopes the IMF board meeting on December 11 will approve the second tranche of loans, its spokesperson said.

The country is battling stubbornly high inflation spurred by a spike in energy and food prices, along with a weakening currency. REUTERS

Safety test for Gaganyaan

On Saturday, ISRO will test the performance of the Crew Escape System of India's planned human space flight mission. Crew safety is top priority for the mission, and this is the first of a series of tests before ISRO attempts to lift a human to space. The space agency will also demonstrate its new low-cost Test Vehicle

JOHNSON T A
BENGALURU, OCTOBER 19

ON SATURDAY, less than two months after the Chandrayaan-3 Moon landing, ISRO will carry out the first of a series of tests of systems and procedures with the aim to ultimately launch an Indian astronaut into space, perhaps in 2025.

The Flight Test Vehicle Abort Mission-1 (TV-D1) will demonstrate the performance of the Crew Escape System of the Gaganyaan project. The flight will be the first of two abort missions to test the safety mechanisms that will allow the Gaganyaan crew to leave the spacecraft in an emergency.

The test exercise will see the rocket rise to an altitude of almost 17 km before an abort signal is triggered, leading to the separation of the Crew Module, which will descend using a parachute for a splashdown in the Bay of Bengal.

The test mission will last a total 532 seconds from liftoff at 8 am to the Crew Module splashdown about 10 km from the Sriharikota coast. The rocket, ISRO's new, low-cost Test Vehicle, will reach a peak relative velocity of 363 metres/second (about 1307 km/hr) during the flight. The Crew Module will be empty for the test.

What will be tested?

Saturday's TV-D1 flight will demonstrate, first, the new Test Vehicle — this is the reason why the test has been named Test Vehicle-Demonstration 1 (TV-D1).

Second, it will demonstrate a basic version of the Crew Module — the capsule in which the astronauts will be seated during the Gaganyaan human space flight. The test will check the functioning of systems for separating the Crew Module from the rocket in case of a mid-flight emergency (abort mission) and the escape of astronauts.

ISRO's technical definition of the TV-D1 mission is, "In-flight Abort Demonstration of Crew Escape System (CES)". The flight will "simulate the abort condition during the ascent trajectory corresponding to a Mach number of 1.2 encountered in the Gaganyaan mission", including Crew Module separation and its safe recovery.

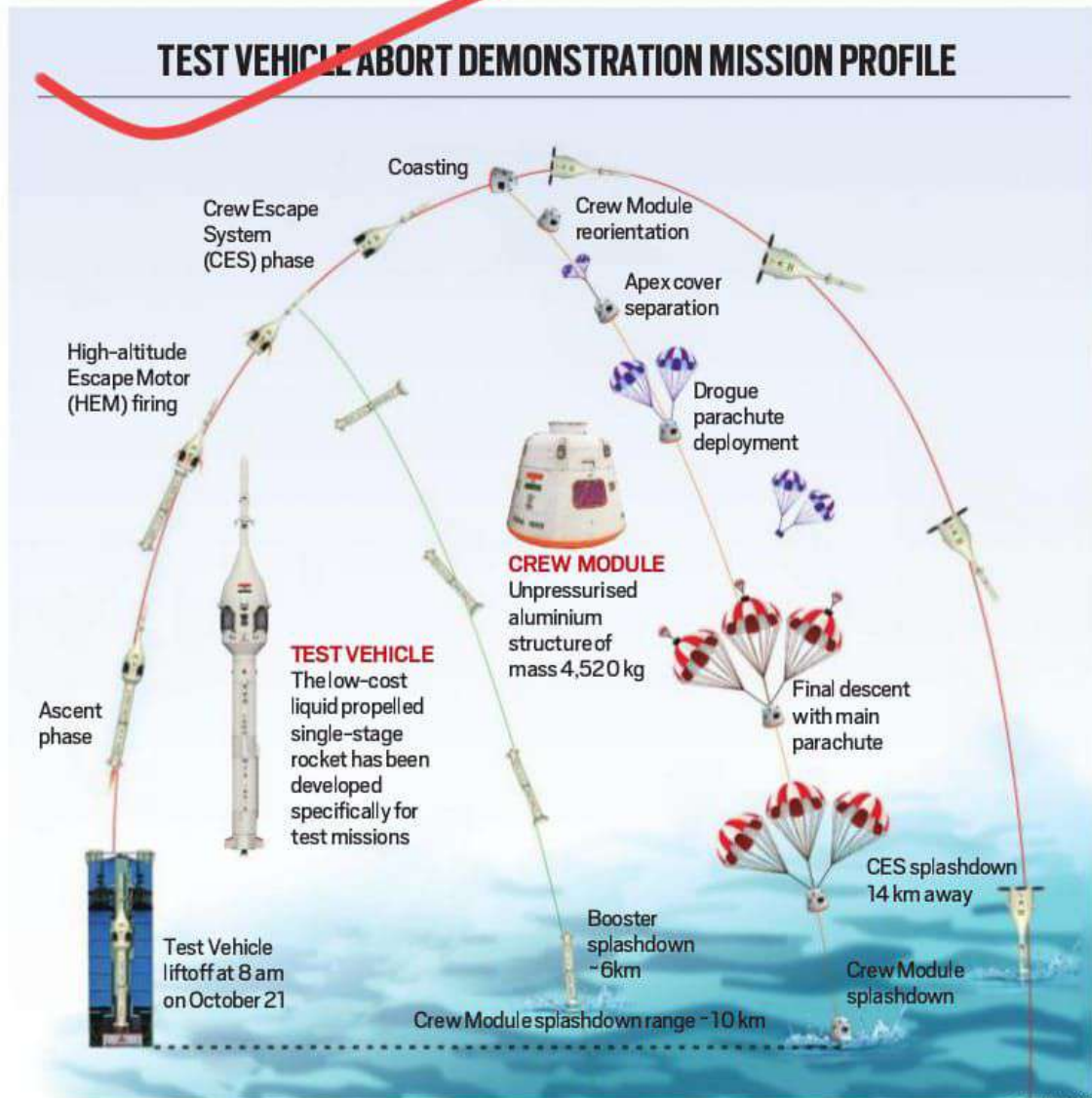
The new Test Vehicle

While the full-fledged test flight of the Crew Module into space and back will be carried out on the human-rated LVM3 rocket (an upgraded version of the heavy lift GSLV Mk III rocket) in 2024, for the TV-D1 mission, ISRO will use a low-cost basic rocket that it has built specifically to test systems.

This Test Vehicle will use existing liquid propulsion technology, but has innovations such as the throttleable and restartable L110 Vikas engine (which forms the core second stage of the LVM3 rocket), which is capable of controlling propellant use.

The only previous test flight of the Crew Module — called the Crew Module Atmospheric Re-Entry Experiment or CARE — on December 18, 2014, used a GSLV Mk III rocket. But since each GSLV Mk III launch costs Rs 300-400 crore, ISRO has developed the cheaper Test Vehicle. The Gaganyaan human space flight programme has a budget of around Rs 9,000 crore.

"We will have many tests flights of the human capsule using a developmental launch vehicle called the Test Vehicle..." ISRO chairman Dr S Somanath had said in 2018, when he was director of the Vikram Sarabhai Space Centre, which has developed the new



rocket. "It (the Crew Escape System of the Gaganyaan mission) is the key, and we need to test it a number of times without incurring large costs."

ISRO will use the Test Vehicle for several concepts that are under development, including the Scramjet engine technology for re-usable space launch vehicles.

Crew Escape System

On October 11, 2018, a failure of the Russian Soyuz FG rocket led to a premature end of Expedition 57 to the International Space Station (ISS). As soon as the failure was detected at an altitude of 50 km, the Crew Module was separated from the rocket in an emergency operation, and the two astronauts aboard the mission, Alexey Ovchinnikov of Roscosmos and Nick Hague of NASA, landed on Earth 402 km from the launch site at Baikonur cosmodrome in Kazakhstan. The failure of the Soyuz MS 10 mission was the first mid-flight failure of a Soyuz rocket since 1975, and the first failure of the Soyuz FG rocket in 55 launches.

ISRO has put safety of the crew at the centre of the Gaganyaan project, and has persuaded the union government that the 2022 deadline set by the Prime Minister on August 15, 2018 should be relaxed in order to ensure a safe and successful mission.

The Crew Module must be safe for astronauts under conditions of very high heat and

pressure, and must have a reliable escape mechanism in the event of an emergency. ISRO is developing environmental control and life support systems for the Crew Module, as well as an integrated vehicle health management system which can sense anomalies that could put the life of an astronaut at risk, and trigger actions to abort the mission.

Some of these systems will be tested in the TV-D1 flight. The 2014 CARE test had assessed technologies including "the performance of parachute-based deceleration system, and a "Pad Abort Test — PAT" was conducted in July 2018.

Stages of TV-D1 mission

After a flight of about a minute, at an altitude of 11.7 km, the Crew Escape System will separate from the Test Vehicle; and after about 90 seconds, the Crew Module will separate from the escape system. It will deploy parachutes, and descend slowly to the surface over about seven minutes. A diving team and ship of the Indian Navy will recover the Crew Module from the Bay of Bengal.

"This Test Vehicle mission with this CM (Crew Module) is a significant milestone for the overall Gaganyaan programme as a near-complete system is integrated for a flight test. The success of this test flight will set the stage for the remaining qualification tests and unmanned missions, leading to the first Gaganyaan mission with Indian astronauts,"

ISRO has said.

Status of preparations

Dr Somanath has said that the timeframe for the Gaganyaan mission is now 2024 and even beyond, if failures are experienced in the development stages. "...We do not want to rush... The primary objective of human space flight is a sure-shot, safe mission. We have redefined it in such a way that we will achieve success in the very first attempt," he said earlier this year.

"The current schedule is that there will be an unmanned mission in the beginning of next year. This year we will have the abort missions. The manned mission is being talked about for the end of 2024 or early 2025. It depends on various other scenarios," the chairman said.

ISRO has completed the human rating of the LVM 3 rocket which will be used for the Gaganyaan mission. On May 13, 2022, it completed the static test of a human-rated solid rocket booster (HS200) that will be used in the first stage of the rocket. The testing of the human-rated versions of the liquid propellant L10-G engine for the second stage of propulsion and the third stage C25-G engines with cryogenic propellant has also been completed.

Four astronauts from the Indian Air Force selected for the mission have undergone training in Russia. They will undergo further training ahead of the final mission.

Planning to join China's Belt & Road, say Taliban

JOE CASH

BEIJING, OCTOBER 19

THE TALIBAN administration wants to formally join Chinese President Xi Jinping's huge 'Belt and Road' infrastructure initiative and will send a technical team to China for talks, Afghanistan's acting commerce minister said on Thursday.

Beijing has sought to develop its ties with the Taliban-run government since it took over in 2021, even though no other foreign government has recognised the administration.

Last month, China became the first country to appoint an ambassador to Kabul, with other nations retaining previous ambassadors or appointed heads of mission in a charge d'affaires capacity that does not involve for-

mally presenting credentials to the government.

"We requested China to allow us to be a part of the China-Pakistan Economic Corridor and Belt and Road Initiative... (and) are discussing technical issues today," acting Commerce Minister Haji Nooruddin Azizi told Reuters in an interview a day after the Belt and Road Forum ended in Beijing.

The Pakistan "economic corridor" refers to the huge flagship section of the Belt and Road Initiative (BRI) in Afghanistan's neighbour.

Azizi said the administration would also send a technical team to China to enable it to "better understand" the issues standing in the way of it joining the initiative, but did not elaborate on what was holding Afghanistan back.

REUTERS

'Ground offensive' looms on Gaza

Israel deploys hundreds of tanks, soldiers on Gaza border

TEL AVIV, Oct 19 (ANI)

ASA "ground offensive" of the besieged Gaza Strip loomed, hundreds of Israeli tanks were deployed near the border in south Israel on Thursday, waiting for the all-clear

from the country's political establishment and the military top brass.

Israeli tanks and troops mounted on armoured vehicles were deployed in the region, seeming to suggest that a ground assault on

Hamas in their backyard, Gaza, could begin any time soon.

Meanwhile, the Israel Defence Forces said 4 rockets of nine launched from Lebanese territory were intercepted, adding that several

anti-tank missiles were fired from Lebanon. Israeli forces targeted the site in Lebanon from where 7 rockets were fired into Israel and also struck at Hezbollah terrorist infrastructure using tank fire.

Israel's Defence Minister

told ground troops to be ready to enter the Gaza Strip.

In a meeting with soldiers, Yoav Gallant urged the forces to "get organised, be ready" for an order to move in. "Whoever sees Gaza from afar now, will see it from the

inside," he said. "I promise you." As Israel gears up for an all-out ground offensive, one of the biggest challenges they face is Hamas' extensive underground tunnel network in the area.

(Contd on page 3)

'Hundreds of Hamas infrastructures destroyed'

JERUSALEM, Oct 19 (IANS)

AS THE raging conflict between Israel and the Hamas continued for the 13th day on Thursday, the Israel Defence Forces said that hundreds of infrastructures linked to the Palestinian militant group have been destroyed since the beginning of the war on October 7.

In a post on X, the IDF said it "continues to attack all the time throughout the Gaza Strip", the BBC reported.

The military also said that it destroyed "anti-tank missile launch sites, tunnel shafts, intelligence infrastructures, operational headquarters and

Sunak pledges to stand with Israel in its 'darkest hour'

TEL AVIV, Oct 19 (PTI)

BRITISH Prime Minister Rishi Sunak on Thursday pledged to stand with Israel in its 'darkest hour' and welcomed the opening of a humanitarian corridor into Gaza as he held talks with the country's top leadership during his two-day visit to the Middle East aimed at preventing further escalation of conflict.

After his meetings with

Israeli President Isaac Herzog and Prime Minister Benjamin Netanyahu, Sunak acknowledged the 'shocking scenes' over the past day.

He pledged to stand with Israel in its 'darkest hour' and welcomed the opening of a humanitarian corridor into Gaza. The British Indian leader was greeted by Netanyahu with an embrace and described each other as "my friend".

Families of 203 hostages notified

JERUSALEM, Oct 19 (IANS)

THE IDF have notified the families of 203 hostages in Gaza after the October 7 Hamas attack, the military said.

IDF spokesman Rear Admiral Daniel Hagari said, said that the military had also notified the families of 306 soldiers who have been killed since the massive Hamas assault on October 7.

other headquarters".

It further alleged that "over ten terrorists were also eliminated". The Israel-Lebanon border, the IDF said that in the last 24 hours, several anti-tank missiles were fired from the neighbouring country. It said in a separate post on X, it said that "9 launches crossed from Lebanon into Israel" and there were "4 interceptions by the IDF Aerial Defence Array".

"Our forces responded to these hostilities by returning fire to the origin of the strikes; thwarting a terrorist cell using an IDF UAV; (and) striking Hezbollah terrorist infrastructure using tank fire."

After Biden, Sunak backs Israel as conflict toll crosses 5,000

Egypt Aid Route To Open; Ground Invasion Looms

The toll in the ongoing Israel-Hamas conflict crossed 5,000 Thursday amid reinforcement of western support for Israel — from visiting British PM Rishi Sunak — and a declaration by Egypt that the

FULL COVERAGE: P 21, 22

Rafah crossing would be opened Friday to allow humanitarian aid into Gaza. Late night, the Israeli defence minister hinted at the expected ground invasion, telling troops they will soon see Gaza “from inside”.

The Hamas-run health mi-



ANI
“We also want you to win,” British PM Sunak told Netanyahu in Jerusalem on Thursday

nistry in Gaza said 3,785 people have been killed in Israeli airstrikes since October 7 when the Palestinian outfit launched an offensive on Israel, killing around 1,400 people.

Following US president Biden and the German chancel-

lor, Sunak arrived in Tel Aviv and vowed to stand by Israel “in its darkest hour”. “We also want you to win,” he told his Israeli counterpart Benjamin Netanyahu in Jerusalem.

Western countries have tried to balance support for Israel with calls to ease the crisis in Gaza, which has angered the Arab world — a stance being tested by rival claims over the blast at a Gaza hospital. While Biden had backed the Israeli version, Sunak said British intel was still working to establish the culprit. Sunak was due to travel after Israel to Saudi Arabia to meet Crown Prince Mohammed bin Salman, who was on the brink of agreeing to normalise ties with Israel before the Hamas attack. AGENCIES

PM dials Abbas to condole deaths in hospital attack

India's delicate balancing act on the Gaza conflict saw PM Modi on Thursday speaking to

Palestinian Authority President Mahmoud Abbas and condoling loss of lives in the Gaza hospital bombing.



India will continue to provide humanitarian aid, he said.

Earlier, the foreign ministry reiterated India's call for strict adherence to international humanitarian law that is applicable to conflicts. P15