

## **BrahMos tested in extreme weather conditions**

The supersonic cruise missile BrahMos was successfully test-fired on Monday, under extreme weather conditions, as part of the service life extension programme for the Army.

“The missile followed the designated trajectory and the key components functioned perfectly. BrahMos has again proved its all-weather capability, flying in sea state 7, with waves as high as nine metres,” the Defence Ministry said in a statement. (Sea state is the degree of turbulence at sea, generally measured on a scale of 0 to 9 according to average wave height). The missile was fired from a mobile autonomous launcher at 10.17 a.m. from the Integrated Test Range at Balasore, Odisha.

BrahMos, a joint venture between India and Russia, has been demonstrated in various configurations in land-attack, anti-ship and from the air. The Army and the Navy have already inducted the missile, while the air launched variant is undergoing trials. It has a strike range of around 290 km and is described as the world’s fastest supersonic cruise missile.

Defence Minister Nirmala Sitharaman congratulated the scientists, officials of BrahMos and the Army for the successful test firing of the missile. Senior Army officials and scientists from DRDO and BrahMos witnessed the trial.

“BrahMos missile has established itself as a major force multiplier in modern-day complex battlefields with its impeccable land-attack, anti-ship capabilities with multi-role and multi-platform abilities,” the Ministry said.

Monday’s test launch comes close on the heels of two trials of the missile conducted on May 21 and 22 in which the major sub-systems manufactured indigenously under the ‘Make in India’ campaign were tested.

## **Supersonic cruise missile BrahMos test fire successful**

The world’s fastest supersonic cruise missile BrahMos was today successfully test-fired from a military base at Balasore in Odisha. The Defence Ministry said the missile was test-fired from a “mobile autonomous launcher” as part of its service life extension programme and it will be in the armoury of the Army. BrahMos has a strike range of around 290 km and is described as the world’s fastest supersonic cruise missile, which can be fired from land, sea and air. The missile is a strategic asset for India as it provides the country a deterrence against any possible threat from China and Pakistan.

“BrahMos, the supersonic cruise missile was successfully test-fired at 10:17 AM today, from the Integrated Test Range (ITR) at Balasore,” the defence ministry said. The ministry said the precision strike missile followed the designated trajectory and its key components functioned perfectly during the trial. “BrahMos has proved again its all-weather capability flying in sea-state 7 with waves as high as nine meters,” the ministry said adding the missile’s capability to operate in the most severe weather condition has also been validated during the test-firing.

Defence Minister Nirmala Sitharaman congratulated the scientists, officials of BrahMos and the Indian Army for the successful test firing of the missile. Senior Army officials and scientists from DRDO and BrahMos witnessed the trial. “BrahMos missile has

established itself as a major force multiplier in modern-day complex battlefields with its impeccable land-attack, anti-ship capabilities with multi-role and multi-platform abilities,” the ministry said.

Today’s test launch comes close on the heels of two trials of BrahMos missile conducted on May 21 and 22 this year in which the major sub-systems manufactured indigenously under the ‘Make in India’ campaign were tested .BrahMos is a joint venture between Defence Research and Development Organisation (DRDO) and the NPOM of Russia.

## पंजाब केसरी

Tue, 17 July 2018

### भारत ने दिखाई ताकत: ब्रह्मोस सुपरसोनिक

#### क्रूज मिसाइल का हुआ सफल परीक्षण

बालेश्वर: सुपरसोनिक क्रूज मिसाइल ‘ब्रह्मोस’ का सोमवार को ओडिशा के चांदीपुर से सफल परीक्षण किया गया। चांदीपुर स्थित एकीकृत परीक्षण केंद्र से सुबह 10:15 बजे सुपरसोनिक मिसाइल ब्रह्मोस का परीक्षण किया गया। भारत और रूस के संयुक्त उपक्रम परियोजना के तहत निर्मित ब्रह्मोस मिसाइल 290 किमी तक की दूरी तक प्रहार कर सकेगी। यह अपने साथ 200 किलोग्राम वजनी मुख्वास्त्र को अपने साथ ले जाने में सक्षम है। नौ मीटर लंबी इस मिसाइल को थोड़े बहुत परिवर्तन के बाद किसी भी जहाज या पनडुब्बी पर ले जाया जा सकता है। यह ध्वनि की दोगुनी गति से 14 किलोमीटर की ऊंचाई तक जा सकता है। इसमें ठोस प्रणोदक का इस्तेमाल किया जाता है।

आईटीआर सूत्रों ने बताया कि मिसाइल की परिधि 670 मिली की है और लगभग तीन टन वजनी यह मिसाइल जमीन के निकट भी प्रहार कर सकती है लेकिन इससे इसकी रेंज कम होकर 120 किलोमीटर रह जाएगी। ब्रह्मोस का पहला परीक्षण फरवरी 2003 में किया गया था। इसका नाम दो नदियों भारत के ब्रह्मपुत्र और रूस के मोस्क्वा से लिया गया है। ब्रह्मोस दुनिया की कुछ सुपरसोनिक क्रूज मिसाइलों में से एक है और इस मिसाइल सिस्टम को नौसेना पहले ही स्वीकार कर चुकी है।

# Focus on critical military equipment

## HT INTERVIEW

**NIRMALA SITHARAMAN**, defence minister

**NEW DELHI:** In her first interview to mainstream media after taking over as the country's defence minister in September 2017, Nirmala Sitharaman spoke with HT's **Shishir Gupta** and **R Sukumar** on the military's priorities and preparedness, addressed criticism that the defence budget is too low, and spoke of the progress of defence public sector units. Sitharaman, who is one of the Bharatiya Janata Party's (BJP) most articulate voices, also spoke of how her party would approach the 2019 parliamentary elections and on the coalition-in-the-making that hopes to oppose it. Edited excerpts:

**The defence budget in 2018-19 is 1.58% of GDP, a level it hasn't been at since 1962. Pakistan's is 2.9%. China's is 2.1%. Is there a resource crunch for the military? This whole argument will have to be understood in context. What was the GDP in 1962, and what is it today? India has just beaten France to become the sixth-largest economy. You can definitely give a lot more money. Modernisation is a very big exercise, but I am underlining the fact that every year, since 2014, the quantum of the defence budget has only increased. Admittedly, in the first two years of this government, 2014-15 and 2015-16, the amount spent was lesser, because there were too many waiting lists, too many procedural knots. Also (Manohar) Parrikar and (Arun) Jaitley-ji (the two defence ministers before her in this government) spent a lot of time to see what had happened in the ministry. To see why was there policy paralysis; why was the army feeling that it was short of ammunition; that it was not prepared?**

Parrikar and Jaitley-ji spent time to clear lots of things, to get the weeds removed. The policy paralysis that had set in had to be shaken up. So yes, in the first two years, the amount actually spent was far less - I'm not talking about the allocation. But after that, 2016-17 and 2017-18,

the expenditure has gone up. Actual utilisation has gone up. It's one thing to get the money apportioned in the budget; the other is to utilise it completely. The army has used 108% of what was given; navy has utilised 98%; air force has also exceeded 100%. Utilisation is the first measure I want you to look at. This year we are already on course. By September, I think we would have fully utilised what was committed.

**Is enough going into capital spending?**

As I said, what is enough? You want to modernise, reduce the flab, but also look at sophisticated equipment. We will need a lot more, that's for sure. But what is being given over the years is now also being spent. Also, critical ammunition, things you need for preparedness, is being prioritised. That's one of the reasons why we decided to give powers to the vice chiefs that anything that is procured under capital (expenditure), could be brought through the revenue route and revenue allocations were made. Some of the smaller capital expenditure items - permission has been given for them to be bought under revenue expenditure so that it is expedited.

Because of this, preparedness and priorities have been very clearly attended to.

**Are you satisfied with the preparedness?**

Yes, absolutely.

**If you leave out all the nice-to-have stuff, if you look at the critical equipment we need for modernisation, do you think there's been enough progress? Do you think we now have a clearer road map in terms of acquisitions?**

Yes. If 10 years have gone without much of procurement happening that waiting list will still be with us. What I have done is to ensure the three forces looked at that list which was waiting for the last 10 years and said how many need updating in terms of technology. The

same equipment probably has a next generation that has come into the market. Do we want that? Because the procedures are such that what has been first quoted as an AON (acceptance of necessity), is what will continuously guide you till the last. If some of them (the services) now feel that they need something else, they have to tell us what that something else is. So the waiting lists have been reconciled. Either you still want it, or you reject it.

We are also talking about - resources being what they are - the kind of priorities. Which priority takes precedence from the point of view of preparedness. There are some (equipment) that necessarily have to be acquired. We are willing to do that anyway, without adding them to the modernisation exercise. This has given us a bit of an advantage in terms of clearing the old list and also keeping in mind true modernisation in terms of technology

**But you are also in a bit of a piquant situation where even when you go ahead and expedite acquisitions, it could become controversial. One example is Rafale...**

It's a sad state that for 10 years no decision was taken - a lot of effort went in, committees sat, they negotiated the cost, everything was discussed. But with so much of work put in, eventually, the sum and substance is that you didn't buy it. The necessity for the aircraft remained, but you did nothing.

We came in. The air force is crying hoarse saying they need aircraft. So, and what could be more transparent, we went in for an intergovernmental acquisition.

(When the controversy broke) we told people, let's understand this in all the detail you want, but certainly not the detail where you expose this country's readiness, fitness, potency. Do you want me to reveal that? It's only on that aspect that we said, "Sorry; just like you had, in various defence ministers' times....".

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All of them have resorted to saying, "Sorry, we can't reveal it in the interest of national security." We have not done something new. To say that there is something wrong here, to create suspicion in the minds of people, is absolutely motivated.

**Are you happy with the output and the progress by Indian state-owned manufacturers? Hindustan Aeronautics Ltd (HAL) has been working on the Light Combat Aircraft Tejas for years.**

Well, more can be done. In missile and missile-related matters we have progressed so much that today we are the envy of so many countries. We are also scaling up production of those.

Now, regarding parts, for several of our platforms, and some re-engineering, we have made some progress although we still import a lot of our spare parts from Russia.

As regards maintenance and operations and refits, we have made progress although we are still dependant on other powers when it comes to aircraft.

On shipbuilding, on submarine building, on warship building, coastal surveillance or small vessel building, we have both public and private sector. The capacities have really been scaled up and the skill sets, hi-tech skill sets, have been acquired. Today we can produce every kind of vessel that you need for coastal and deep-sea activity. On aircraft, the LCA has been tested and appreciated by most people, but my grievance there has been that we don't produce as many as we want. On that I've had several meetings with HAL. We are working to see if we can scale up the production...

**What is the problem there?**

When you want to produce with your existing capacities, you can only produce so much. In order to give them the assurance that we are going to take whatever they produce, we already gave HAL the orders. Orders for 43 or 83 later have all been given. In spite of that.... But being a public sector under-

*Contd...*

taking also means limitations in terms of recruitment, investment. So we are now sitting with HAL to see how we can boost that capacity. Within HAL, and also with the help of HAL, elsewhere. The same with the production of helicopters.

**You spoke of getting spare parts from Russia. There's a threat to it now because of the US CAATSA (Countering America's Adversaries Through Sanctions Act). How will you be able to get around this? Almost 64% of our defence imports last year were from Russia.** Over the decades we have had this relationship with Russia; many platforms and many vectors have been bought from them. Even today they supply us. We have never had any difficulty in getting supplies from them. And we wish to continue because these are actively used assets. I'm glad that both the US defence secretary and foreign secretary have spoken in a language that clearly indicates that India has to be given a waiver (from CAATSA for defence imports from Russia). We are grateful that they have recognised the issue. When the house armed forces committee had come, I told them very clearly that India's procurement of arms from Russia isn't yesterday's or today's business; it's been going on for decades.

**There seems to be some reorientation in terms of how the planning and co-ordinating is happening in the defence ministry with the creation of committees such as the DRDO Science and Technology Management Council and the Defence Planning Committee...** The defence minister's operative directives guide all our defence and defence-related activities. The committees are for different purposes. For instance, the one that will be relevant to Tejas (the LCA); Tejas will be the first case looked at by this committee... which is being formed. (This committee will look at why products being made by PSUs cost more than what the OEMs are giving us. The same thing, when an OEM gives us, comes for far less than when the OEM gives us the technology and we manufacture it.

There is another committee

that is looking at the status of all projects over ₹500 crore that have been on for several years.

There's also this DRDO Council; they do a lot of activities. On missiles, I've told you about the progress, but what about other areas. Artificial Intelligence, for example. What's the progress? Many of these committees feed into the larger ops directives in order to better implement them.

**What's the status on cantonments? There are reports that the army will scrap all cantonments.** We have rebutted that. I haven't seen any such proposal. After several MPs representing cantonments approached me saying that many of these roads (in cantonments) being shut (to others) is causing problems...

I must say that much to my surprise, many of those roads were closed without a reason, or following proper procedure. The procedure involves that locals are consulted, that local cantonment boards are kept informed. Some of those roads have been closed for decades.

My attempt, based on letters from elected reps, was only to make sure that if you have to close, do so only after following due process. But open them first. Then follow process.

**Moving on to politics, what's your sense on the 2019 elections? There's a grouping that's slowly taking shape to oppose you.**

Jaitley-ji has come out with a Facebook post asking whether what's happening in Karnataka where (chief minister HD) Kumaraswamy is coming out and shedding tears about being part of a coalition – is that a preview of what's going to happen in this country in 2019? Or do we want decisive leadership? This country has seen what kind of effort Prime Minister Modi has put in over the last four years. People may want lots more; all of us may want lots more, but has there been any sitting back and allowing things (to slide)? No, he has actually touched every aspect of our society and economy to see if they can be improved.

Nobody is wishing away any sort of formation that may come. But even upfront there are issues. Who is leading

them? What is their shared ideology? What exactly do they want to give India? A Karnataka-like situation? Or a corruption-ridden government like the UPA 1 and 2, particularly UPA 2. Or the laid back administration many states saw under the Congress? What is it? So it is 24x7 transparent, absolutely devoid of corruption governance where questions are answered, not rebutted, versus a formation which is yet to happen. A formation which is completely chaotic. A formation whose only agenda is, why should he be there; I should be there. So, 2019, the people are not fools. I am confident. Prime Minister Modi will be voted back. If your objective is only going to be "he shouldn't come back; I should be there", you are not going to be talking about substantial issues. Even on other issues, what kind of record do any of these parties have? Upliftment of poor? Rights of the SCs and STs? Where have the parties been all this while? The way in which disruptions have happened for frivolous things... when important bills are brought in, you choose not to be in the House. These are not things people will forget

**Rahul Gandhi has just written to the Prime Minister pushing for the women's reservation bill?**

I am sure the PM's office will respond but these are realisations when 2019 is getting closer. What have they done in their time? Why were they not able to convince – we supported them in LS and RS – other parties, which opposed the bill?

**There is a fear that there will be more polarisation between now and 2019.**

The BJP is looking at showcasing what we have done in the last four years in terms of reaching out to every section of society, making sure that fundamental changes are happening in the economy by being transparent, and ensuring that benefits directly reach those entitled to. Thereby saving money from pilferage and reaching out to actual beneficiaries. We will also say what more can be done and fight on those grounds.