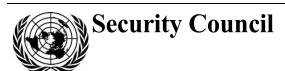
United Nations S/2019/911



Distr.: General 27 November 2019

Original: English

## Letter dated 21 November 2019 from the Permanent Representatives of France, Germany and the United Kingdom of Great Britain and Northern Ireland to the United Nations addressed to the Secretary-General

Further to our letter dated 25 March 2019 (S/2019/270), France, Germany and the United Kingdom wish to bring to the attention of the Security Council recent actions undertaken by Iran which are inconsistent with paragraph 3 of annex B to resolution 2231 (2015), regarding Iran's ballistic missile programme.

As the Security Council is aware, paragraph 3 of annex B to resolution 2231 (2015) states:

Iran is called upon not to undertake any activity related to ballistic missiles designed to be capable of delivering nuclear weapons, including launches using such ballistic missile technology, until the date eight years after the Joint Comprehensive Plan of Action adoption day or until the date on which the International Atomic Energy Agency (IAEA) submits a report confirming the Broader Conclusion, whichever is earlier.

France, Germany and the United Kingdom are concerned that the developments outlined in the present letter are inconsistent with this provision, which was included in Security Council resolution 2231 (2015) to provide reassurance to the international community that Iran was not actively developing nuclear-capable missiles or technologies which could support such systems.

## **Definitions**

In forming an assessment of what constitutes a "ballistic missile designed to be capable of delivering nuclear weapons", we have used the performance characteristics of Missile Technology Control Regime category-1 systems. These comprise rocket systems capable of delivering at least a 500 kg payload to a range of at least 300 km, the recognized minima for the mass of a nuclear warhead and the distance required to ensure self-preservation after delivery. Missile Technology Control Regime category-1 systems are recognized through long-standing international consensus as being the systems of most concern with respect to weapons that are capable of delivering a nuclear payload. These criteria have been widely used amongst Missile Technology Control Regime and non-Missile Technology Control Regime members, including with respect to implementing obligations under Security Council resolution 1540 (2004). "Designed to be capable" in this context means having the capabilities by virtue of technical design, regardless of claimed intent.





### Iranian activity inconsistent with Security Council resolution 2231 (2015)

(a) Shahab-3 manoeuvrable re-entry vehicle development

Undated footage released on social media on 22 April 2019 (see image 1 in the annex) reveals a previously unseen flight test of a new Shahab-3 medium range ballistic missile variant equipped with a manoeuvrable re-entry vehicle.

The Shahab-3 booster used in the test is a Missile Technology Control Regime category-1 system and as such is technically capable of delivering a nuclear weapon. The International Atomic Energy Agency's 2015 report on possible military dimensions of Iran's nuclear programme concluded that extensive evidence indicated detailed Iranian research in 2002–2003 on arming the Shahab-3 with a nuclear warhead. The final report of the United Nations Panel of Experts established pursuant to Security Council resolution 1929 (2010) of 9 May 2012 also concluded that the Shahab-3 was "potentially nuclear-capable". Though the test date is unknown, the similarity between the new manoeuvrable re-entry vehicle and that seen in 2018 suggests that it is highly likely to have occurred in the last two years, thereby falling under Security Council resolution 2231 (2015).

Though the Shahab-3 has previously been equipped with the Emad manoeuvrable re-entry vehicle, this test features a manoeuvrable re-entry vehicle design similar to that observed in media footage of Iranian Qiam missiles launched against targets in Syria on 30 September 2018. The modification is likely to both improve the accuracy of missiles produced in future and enable existing missile stocks to be upgraded, increasing their accuracy.

The new manoeuvrable re-entry vehicle is a modification of the triconic warhead currently deployed on Iran's Qiam and Shahab-3 missiles, with the addition of a guidance and control section to the rear flare of the warhead. Control is achieved by four small triangular fins. The triconic warhead design has also featured on the Borkan-2H, launched by Houthi forces in Yemen, meaning that from a technical perspective the Borkan-2H could also be upgraded by incorporating this manoeuvrable re-entry vehicle.

(b) Unveiling of the "Borkan-3" medium-range ballistic missile

On 2 August 2019, Houthi forces in Yemen announced the launch of the Borkan-3, a new liquid-propelled medium-range ballistic missile, travelling approximately 1,300 km. Video of the launch shows that the missile is clearly an adaptation of earlier Borkan-2H missiles, which the United Nations Panel of Experts on Yemen concluded were "an advanced derivative of the Iranian Qiam-1 specially designed with weight-saving measures by the designers of the Qiam-1 to achieve the range of 1000+km". Like the Iranian Qiam-1, the Borkan-3 has a short guidance bay and a lack of large stabilizing fins; these unique features of the Qiam-1 are indicative of its Iranian origins; the booster airframe has been extended up to 1.4 metres to accommodate extra propellant.

While the Borkan-3 and earlier Borkan-2H both have small winglets at the rear, unlike the original Iranian Qiam-1 design, the same configuration has now been publicly displayed on the latest Qiam-1 missile launch in September 2018 against targets in Syria. This again indicates the links between the Iranian missile programme and the use of ballistic missiles in Yemen, raising serious concerns and suggesting that Iran may be breaching the arms embargo under Security Council resolution 2216 (2015)

<sup>1</sup> IAEA, document GOV/2015/68, p. 13.

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<sup>&</sup>lt;sup>2</sup> S/2012/395, p. 11.

<sup>&</sup>lt;sup>3</sup> S/2018/594, p. 126.

as the United Nations has previously found, and may be acting in breach of relevant provisions in annex B to Council resolution 2231 (2015) barring the transfer of missile technology from Iran. The Borkan-3 features a new conical warhead, smaller than any previously seen on Houthi ballistic missiles. Modelling of this lighter warhead with the improved design and configuration of the Borkan-3 confirms the new missile has a maximum range over 1,000 km and is therefore classed as a medium-range ballistic missile. This capability brings most of the region within range of Houthi strikes.

#### (c) Test launch of a Shahab-medium-range ballistic missile

On 24 July 2019, Iran launched a ballistic missile that flew over 1,000 km. Media reporting indicated that this was a test launch of a Shahab-3 medium-range ballistic missile, which had travelled around 1,100 km within Iranian territory. We believe this system meets the Missile Technology Control Regime category-1 standards of being capable of delivering a payload of at least 500 kg to a range of at least 300 km. As a Missile Technology Control Regime category-I system, which is inherently capable of delivering nuclear weapons, this missile is designed to be capable of delivering nuclear weapons. If confirmed, this test would constitute an activity inconsistent with paragraph 3 of annex B to Security Council resolution 2231 (2015).

## (d) Attempted launch of a Safir satellite launch vehicle

On 29 August, media reporting indicated that Iran unsuccessfully attempted a launch of a Safir satellite launch vehicle. The Safir has previously been reviewed by the United Nations Panel of Experts established pursuant to Security Council resolution 1929 (2010), which noted in its final report, dated 4 June 2012 (8/2012/395), that "the Panel reached a consensus that both ballistic missile and space launch programmes shared a great deal of similar materials and technology, including systems for propulsion, control and navigation. The Panel also noted that, although some examples existed of ballistic missiles programmes developed from space launch programmes, in general there were more examples of the reverse – space launch programmes developed on the basis of ballistic missile programmes" (para. 87). The majority of the Panel also concluded that "the Safir made use of ballistic missile technology" and that it was based on ballistic missiles capable of delivering nuclear weapons, as the Safir is derived "from two nuclear-capable missiles (the Shahab-3 and the R-27 submarine-launched ballistic missile in its second stage)" (para. 36).

We also recall the technical analysis of the Safir satellite launch vehicle provided in our letter to you dated 25 March 2019. If confirmed, the latest attempted launch of the Safir satellite launch vehicle would constitute an activity inconsistent with paragraph 3 of annex B to Security Council resolution 2231 (2015).

### Conclusion

France, Germany and the United Kingdom assert once again our firm conclusion that Iran's developments of nuclear-capable ballistic missiles and related technologies is inconsistent with paragraph 3 of annex B to resolution 2231 (2015). These activities are the latest in a long series of advances in Iranian ballistic missile technology, as we argued in our letters of November and December 2018 and February and March 2019. Furthermore, Iran continues its proliferation of ballistic missile technology in the region, in breach of Security Council resolutions 2231 (2015) and 2216 (2015).

We further request that you once again report fully and thoroughly in your next report on Iran's ballistic missile activity that it is inconsistent with resolution 2231

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<sup>&</sup>lt;sup>4</sup> S/2012/395, p. 23.

(2015). We should also be grateful if you would have the present letter circulated as a document of the Security Council.

(Signed) Karen Pierce
Permanent Representative of the United Kingdom
(Signed) Nicolas de Rivière
Permanent Representative of France
(Signed) Christoph Heusgen
Permanent Representative of Germany

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# Annex to the letter dated 21 November 2019 from the Permanent Representatives of France, Germany and the United Kingdom of Great Britain and Northern Ireland to the United Nations addressed to the Secretary-General

Image 1

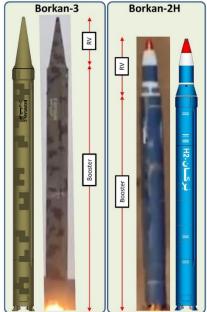
Image 2

Borkan-3
Borkan-2H
Qiam

22 April 2019, manoeuvrable re-entry vehicle-equipped Shahab-3 launch

Similarity of Borkan-3, Borkan-2H and Qiam tail fins









Similarity of Borkan-3 and Qiam "short" guidance sections

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Image 5



Borkan-3 launch video

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