**TARGETING OPTIONS (Appendix 02)**

**Introduction**

As set out in the Advice Part II, @ §§ 42 to 47, my intention with regards to this Appendix is to present the actual targeting detail to translate the outline targeting scenario termed the “Moscow Criterion”, for which there exists in the public domain considerable evidence of policy planning, and which also is capable of pertaining to an exclusive or sole British only use of our Trident Nuclear Weapons (that is outside of or without simultaneous commitment of US weapons), whether as part of a NATO coordinated or a simple bilateral US-UK attack, into a practical target list.

Thereafter, it is hoped that this detail will then be instrumental in helping to inform the “expert witness statements” of those who will hopefully later be willing to contribute technical knowledge and information as to (a) the detail concerning the extent and longevity of lethal health effects, socio-structural disintegration and long-term environmental harm effects, of the uses so specified, and (b) the rationale for the policy planning positions adopted, with respect to the targets chosen.

**The “Moscow Criterion” Scenario (x50 Targets with x60 warheads).**

In addition to the expository materials for the establishment of the historical basis for this scenario, as now already set out in the main advice (Part II), I wanted to say a word or two about the importance and significance of major structural and reorganisation reform that has occurred to the Russian Armed Forces since the end of the Cold War (in or about 1996), and in particular the further structural reforms toward diversification and dispersal brought about by President Putin in particular, since especially a series of presidential ordinances promulgated by him in 2008.

More detail about these and related doctrinal and structural changes can be found in particular in the following document “*Russia’s New Army*” (edited by Mikhail Barabanov)[[1]](#footnote-1). In brief, however, the important effect of these reforms so far as concerns the subject here in contemplation, means that the highest echelons of C3I of the Russian Armed Forces, are no longer exclusively concentrated in and about the city and oblast of Moscow, to anywhere near the same degree as would have been the case for the equivalent Soviet Armed Forces facilities in the time of the Cold War, and, at least in part, this represents a deliberate programme for both diversification and dispersal, whereby the Russian Armed Forces command now appreciates the vulnerability of having all of its highest echelon ‘eggs’, as it were, in the ’Moscow’ basket, versus the greater resilience of dispersed forces.

For example, beginning with the regional command for the combined Armed Forces services, following a presidential decree (dated 15 Sept 2010) there has now been formed a new all-encompassing “Western Military District”, which combines the former Moscow and Leningrad Military Districts together with command and control of both the Northern (largest) and Baltic Russian Fleets, and therefore now exercises ultimate military jurisdiction from the Norwegian to the Ukrainian frontiers, from Kaliningrad to the Urals. Its new headquarters are located at the former Leningrad Military District HQ, on Palace Square in central St Petersburg, but having undergone extensive improvement and expansion – including sub-terranean facilities – to cater to its new role.

Equally, until as recently as 30 Oct. 2012, the General Staff Command Centre of the Russian Navy, was located in a rather unassuming Soviet-era neo-classical building off small Kharitonievsky Lane (rear entrance off , Big Koslowski Lane), in a quite north-eastern suburb of Moscow’s city centre. However, since that time it has moved to new quarters (3-years in the construction) within the resplendent empire-style Admiralty Building (a UN World Heritage site) on the banks of the Neva in St.Petersburg city-centre[[2]](#footnote-2), just a stone’s throw from Palace Square.

Major reforms to the structure of the Russian air-forces, started in 2009, and have seen complete devolution and dispersal of command structure. Gone is the old Soviet-era hierarchy of independent squadrons and aviation regiments formed up into air divisions, corps and armies (with its parallel and distinct Air Guards forces); and instead replaced with semi-autonomous airbases and aero-space defence brigades. Air Armies have been replaced with fully independent Commands for Air Force & Air Defence, Long Range and Military Transport Aviation. Whilst command & control of, for example, the Aero-space defence Command is still based around a bunker near Balashikha, 16 mls due east of Moscow city-centre, the lost of this facility merely now permits individual brigades and air bases to communicate and co-ordinate with each other independently.

Finally, whilst there remains a fully operational command bunker for the command and control of Russia’s independent Strategic Rocket Forces (RSVN - *Ракетные войска стратегического назначения*) at Odintsovo-10, again approx.16mls this time WSW of Moscow’s city-centre, the C3I command of all Russian Strategic Rocket Forces is now capable of being organised in parallel from an underground facility at Kosvinsky Kamen[[3]](#footnote-3) instead, developed since 1996 deep beneath a mountain top in the Sverdlosk Region of the Urals, more than 800mls east of Moscow.

In the result, a distinct effect of all these changes ‘on the ground’ means that, whereas at one time – during the era of the Cold-War Soviet command structure of military forces – there was some arguable basis for maintaining that a “Moscow Criterion” strike scenario, brought with it the benefits of a substantially effective ‘military command’ decapitation consequence, that is simply no longer an arguable proposition. Consequently, any former arguable “military advantage” to be gained from such a strike scenario, I would now maintain is no longer even tenable, even in its own terms.

In the following targeting scenario, although involving as explained in the Annex Part II, an attack from two separate boats, and involving a total of x60 warheads is taken as the basis for the targeting matrix, in the case of x10 such targets (principally though not exclusively concerned with space satellite early warning detection of missile attack and also the Moscow ABM defence network), because the option is taken for strategic reasons to make these locations subject to the so-called early or first “double-strike” attack tactic, involving obviously two warheads each, this then results in the overall total of just x50 such targets being included.

The remaining explanatory strategy or rationale for the complete scenario being, quite simply, the near total eradication of the remaining top-echelon military and political executive command, control, communication, computational and intelligence infrastructure of the Russian state located in and around its capital city.

**PS**

A meta-data map file which opens in Google Earth and titled “05 Google Earth Meta-data file for Trident Moscow Criteria Targets (50 Targets)” is to be found in the same sub-folder as this document and which provides a fully interactive cartographic satellite visualisation of all the detailed targets appearing below.

Robbie Manson

For the Institute for Law, Accountability & Peace

and Trident Ploughshares (UK)

August 2015

**The Moscow Criterion Scenario**

**Table of Targets x50 Targets x60 Warheads**

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Name & Brief description**  *Street Address* | **Earth Co-ordinates** | **No. of**  **Warheads** |
| **Central Moscow (*Центральный Московский* ) – 107031**  **inside the “Boulevard Ring” (*Бульва́рное кольцо́*) X10 Targets x9 Warheads** | | | |
| **01** | **The Office of the President of the Russian Federation - Kremlin Senate Building** | **55° 45.195'N**  **37° 37.115'E** | **x2** |
| **02** | **HQ Federal Protective Service (FSO) - Kremlin Administration Building** | **55° 45.120'N**  **37° 37.237'E** |
| **03** | **Russian Ministry of Defence (Main Building)**  *Ulista Znamenka, 14, Москва* | **55° 45.118'N**  **37° 36.204'E** | **x1** |
| **04** | **HQ of the General Staff of the Armed Forces**  **of the Russian Federation**  *Znamenka Street, 19, Moscow* | **55° 45.010'N**  **37° 36.169'E** |
| **05** | **(New) HQ Federal Security Service (FSB)**  Reception of the FSB (off Lubyanka Square)  *ulitsa Kuznetskiy Most, 22, Moscow* | **55° 45.683'N**  **37° 37.593'E** | **x1** |
| **06** | **Administration Building of the**  **President of the Russian Federation**  *2/14 Старая площадь (Old Square), Москва* | **55° 45.349'N**  **37° 37.765'E** | **x1** |
| **07** | **HQ of The Special Communications**  **and Information Service**  *4 Большой Кисельный (Big Kiselni Lane), Москва* | **55° 45.867'N**  **37° 37.513'E** | **x1** |
| **08** | **Communications and Mass Media Ministry**  *Central Telegraph Building,*  *Tverskaya Street, 7, Moscow* | **55° 45.492'N**  **37° 36.669'E** | **x1** |
| **09** | **Russian State Duma (Parliament)**  *Building 1,Okhotny Ryad Street, Moscow* | **55° 45.474'N**  **37° 36.962'E** | **x1** |
| **10** | **Federation Council of Russia (Upper House)**  *ulitsa Bolshaya Dmitrovka, 26, Moscow* | **55° 45.859'N**  **37° 36.727'E** | **x1** |

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Name & Brief description**  *Street Address* | **Earth Co-ordinates** | **No. of**  **Warheads** |
| **Inner Moscow (Внутренняя Московский ) –**  **inside the “Garden Ring” (*Садо́вое кольцо́*) x1 Target x1 Warhead** | | | |
| **11** | **The Moscow Quarters of the**  **Western Military District**  *Kosmodamianskaya Embankment, 24. Moscow* | **55° 44.533'N**  **37° 38.445'E** | **x1** |
| **Inner Moscow (*Внутренняя Московский* ) –**  **inside the “Third Ring” (*Тре́тье кольцо́*) x3 Targets x3 Warheads** | | | |
| **12** | **Main Command of the Ground Forces**  **of the Russian Federation**  *Frunzenskaya Embankment 20-22, Moscow* | **55° 43.649'N**  **37° 35.387'E** | **x1** |
| **13** | **Headquarters of The Rear of the Armed Forces of the Russian Federation**  *Bolshaya Pirogovskaya Street,23. Moscow* | **55° 43.826'N**  **37° 34.146'E** | **x1** |
| **14** | **The House of the Government of the Russian Federation (The “Russian White House”)**  *Krasnopresnenskaya Embankment, 2, Moscow* | **55° 45.273'N**  **37° 34.363'E** | **x1** |
| **Outer Moscow (внешний Москва) –**  **inside the “Moscow Automobile Ring Road” (*MKAD*) x12 Targets x11 Warheads** | | | |
| **15** | **Headquarters of the Main (Military) Intelligence Directorate (GRU)**  *Khoroshevskoye shosse 76, Khodinka, Moscow* | **55° 46.940'N**  **37° 31.454'E** | **x1** |
| **16** | **№162 Centre for Military and Technical Information (GRU)**  *Volokolamskoe shosse, 56/2, Moscow* | **55° 49.038'N**  **37° 28.030'E** | **x1** |
| **17** | **FSO Cryptology Centre (Spetssvyaz)**  *Molodogvardeyskaya Street 12, Kuntsevo, Moscow* | **55° 44.069'N**  **37° 25.764'E** | **x1** |
| **18** | **FSO Computer Management Information Systems Centre**  *проспект Вернадского 10, Москва* | **55° 41.217'N**  **37° 31.087'E** | **x1** |
| **19** | **FSB Counter-terrorism Complex**  *проспект Вернадского 12, Москва* | **55° 41.012'N**  **37° 30.788'E** |
| **#** | **Name & Brief description**  *Street Address* | **Earth Co-ordinates** | **No. of**  **Warheads** |
| **20** | **Special Control Service (SSK) of the 12th Directorate**  *Рубцовско-Дворцовая ул., 2, Москва* | **55° 47.186'N**  **37° 41.544'E** | **x1** |
| **21** | **HQ of the Russian Interior Forces**  *Energetiskaya Улица, 2А, Лефортово, Москва* | **55° 45.678'N**  **37° 42.010'E** | **x1** |
| **22** | **Military Academy of the General Staff of the Armed Forces of Russia**  *ул. Академика Анохина, 100, Москва* | **55° 38.973'N**  **37° 28.355'E** | **x1** |
| **23** | **Moscow City Air Defence Bunker**  **Military Unit в/ч 03667**  *Варшавское шоссе, д.170, Москва* | **55° 35.196'N**  **37° 35.277'E** | **x1** |
| **24** | **Headquarters of the Collective Security Treaty Organization (CSTO)**  *41 Ленинградский проспект Москва.* | **55° 47.791'N**  **37° 32.117'E** | **x1** |
| **25** | **Ostankino Transmission Tower**  *ulitsa Akademika Koroleva,15, Москва.* | **55° 49.171'N**  **37° 36.728'E** | **x1** |
| **26** | **HQ Complex of the SVR**  **Russia’s Foreign Intelligence Service**  *Yasenevo 11 Kolpachny, Москва.0101000*  Located in the Butovsky Forestpark, just outside the MKAD in the Moscow Oblast (Region). | **55° 35.022'N**  **37° 31.047'E** | **x1** |
| **Moscow Region (Московская Область) - outside the City of Moscow**  **Underground Command Bunkers x10 Targets x12 Warheads** | | | |
| **27** | **Russian Navy Reserve Command Centre**  *Gorki-25, Sokolniki, Moscow Oblast* | **56° 12.302'N**  **37° 20.467'E** | **x1** |
| **28** | **Strategic Aerospace Defence Command**  *Balashikha, Moscow Oblast* | **55° 46.603'N**  **38° 1.275'E** | **x2** |
| **29** | **Russian Air Force (Reserve) Command Centre  Monino Air Force Academy**  *Monino, Moscow Oblast.* | **55° 50.089'N**  **38° 11.355'E** | **x1** |
| **30** | **Russian Strategic Rocket Forces (RVSN) Headquarters Command Bunker***Odintsovo-10, Vlasikha, Moscow Oblast.* | **55° 40.964'N**  **37° 12.428'E** | **x2** |
| **#** | **Name & Brief description**  *Town/Settlement Name* | **Earth Co-ordinates** | **No. of**  **Warheads** |
| **31** | **Russian Strategic Missile Forces (Reserve) Central Command Bunker**  *Balabanovo-1, Kaluga Oblast.*  *Located just 6mls outside Moscow Region* | **55° 11.309'N**  **36° 36.592'E** | **x1** |
| **32** | **Command Bunker of the General Staffs of the Armed Forces of the Russian Federation**  *Chekhov-3, Moscow Oblast* | **55° 9.594'N**  **37° 15.436'E** | **x1** |
| **33** | **Alternate Reserve Command Bunker of the General Staffs of the Russian Armed Forces**  *Chekhov-4, Moscow Oblast* | **55° 9.825'N**  **37° 25.267'E** | **x1** |
| **34** | **Central Government Command Bunker**  *Chekhov-2,* *Moscow Oblast* | **55° 11.046'N**  **37° 37.540'E** | **x1** |
| **35** | **Ground Forces Alternate Command Centre**  *Ilinskoe, Moscow Oblast* | **55° 13.982'N**  **37° 57.747'E** | **x1** |
| **36** | **Alternate Command Centre**  **Rear Forces & Logistics**  *Egorievsk-6, Moscow Oblast* | **55° 17.198'N**  **39° 2.267'E** | **x1** |
| **Moscow Region (Московская Область) - outside the City of Moscow**  **Russian Space Force Bases x5 Targets x8 Warheads** | | | |
| **37** | **820th Main Centre for Missile Attack Warning**  *Solnechnogorsk-7,Timonovo, Moscow Oblast* | **56° 14.429'N**  **37° 0.876'E** | **x2** |
| **38** | **1383rd Alternate Command Centre  Military unit # 17204**  *Negomozh, Kolomna - Moscow Oblast* | **55° 3.303'N**  **38° 59.493'E** | **x1** |
| **39** | **485th Independent Radio-Technical Unit**  **Missile Warning Satellite Ground Station**  *Serpukhov-15, Kurilovo, Kaluga Oblast*  *Located just 2.5 mls outside the Moscow Region* | **55° 3.961'N**  **37° 2.877'E** | **x2** |
| **40** | **821st Main Space Intelligence Centre**  *Noginsk-9, Dubrovo, Moscow Oblast.* | **56° 4.635'N**  **38° 30.386'E** | **x2** |
| **41** | **153rd Main Trial Centre for Satellite Command**  *Golitsyno-2, Krasnoznamensk, Moscow Region* | **55° 35.622'N**  **37° 3.453'E** | **x1** |
| **#** | **Name & Brief description**  *Town/Settlement Name* | **Earth Co-ordinates** | **No. of**  **Warheads** |
| **Moscow Region (Московская Область) - outside the City of Moscow**  **Moscow ABM Defence System Targets x9 Targets x16 Warheads** | | | |
| **42** | **Central Command Post of the Moscow ABM Early Warning System (military unit в/ч 92154)**  *Senezh, Moscow Oblast* | **56° 11.692'N**  **37° 2.635'E** | **x2** |
| **43** | **Don-2N Moscow ABM Defence Radar  объект 2311**  *Balabanovo, Pushkino, Moscow Oblast* | **56° 10.397'N**  **37° 46.185'E** | **x2** |
| **44** | **Sofrino ABM missile launch complex  Military Unit в/ч 51084**  *Balabanovo, Pushkino, Moscow Oblast* | **56° 10.866'N**  **37° 47.202'E** | **x2** |
| **45** | **Skhodnya ABM missile launch complex  Military Unit в/ч 51086**  *Korstovo, Moscow Oblast* | **55° 54.079'N**  **37° 18.457'E** | **x2** |
| **46** | **Korolev ABM missile launch complex  Military Unit в/ч 51085**  *«Elk Island» National Park , Moscow Oblast* | **55° 52.683'N**  **37° 53.583'E** | **x2** |
| **47** | **Vnukovo ABM missile launch complex  Military Unit в/ч 51087**  *Kartmazovo- Moscow Oblast* | **55° 37.550'N**  **37° 23.380'E** | **x2** |
| **48** | **Lytkarino ABM missile launch complex Military Unit в/ч 51089**  *Kartino – Moscow Oblast* | **55° 34.659'N**  **37° 46.304'E** | **x2** |
| **49** | **Sergiyev Posad-15 ABM missile launch complex Military Unit в/ч 48701**  *Taratino – Vladimirskaya, Moscow Oblast.* | **56° 14.560'N**  **38° 34.515'E** | **x1** |
| **50** | **Naro-Fominsk-10 ABM missile launch complex  Military Unit в/ч 28000**  *Vasilchinovo - Moscow**Oblast.* | **55° 21.015'N**  **36° 28.965'E** | **x1** |

A meta-data map file which opens in Google Earth and titled “05 Google Earth Meta-data file for Trident Moscow Criteria Targets (50 Targets)” is to be found in the same sub-folder as this document and which provides a fully interactive cartographic satellite visualisation of all the above detailed targets.

1. Centre for Analysis of Strategies and Technologies (2011), Moscow, Russia. A copy of which I’ll make sure is made available online for those wanting to examine the subject matter further. [↑](#footnote-ref-1)
2. <https://russiandefpolicy.wordpress.com/tag/navy-main-staff/> [↑](#footnote-ref-2)
3. <http://www.globalsecurity.org/wmd/world/russia/kosvinsky.htm> [↑](#footnote-ref-3)