

# **Non Contact Warfare (NCW) - Managing Conflict in 21<sup>st</sup> Century**

**Brigadier Vivek Verma®**

## **Abstract**

*The world has been devising strategy of winning without fighting. Over last three decades, terms like hybrid warfare, unrestricted warfare, asymmetric warfare, information warfare and political warfare have been used to define future warfare. At the heart of these is technology that has fuelled competitions and conflicts. The technological innovations have closely networked government, people and financial institutions. It has, for the first time, exposed people, political leadership, governance structures and economy to new generation threats emanating from Non-Contact Warfare (NCW). Autonomous systems, miniaturisation, stealth, speed and stand-off precision strike, incognito platforms have changed the character of war. The technological developments have increased accessibility to state competitors and non-state actors, a fact that risks eroding military response capabilities. In such a dynamic and ever evolving world, non-contact warfare is being rampantly used and abused by all actors to remain ahead in the dominance race. It is imperative for India to evolve policies to thwart impending threats from NCW.*

## **The Endless War**

**T**he speech of Mike Pence, Vice President of the United States, on 04 October 2018 at Hudson Institute has portents of

unveiling a cold war 2.0 and replay of 'competitive strategy' as practiced in 1980s against the Soviet Union that led to its implosion. Pence bluntly accused China of using predatory economics and legislations to steal American technology and intimidate American companies and neighbouring countries, militarising the South China Sea and persecuting religious believers at home, while in the same breadth he boasted about the crippling effect the trade war is having on Chinese economy. The Vice President laid out clearly the United States National Defence Strategy of 'compete, deter and win'.<sup>1</sup>

Gulf War of 1991 and 2003 demonstrated the "Revolution in Military Affairs" (RMA) created by combination of new technologies and doctrines where the long range vectors shaped the battlefield and information operations unleashed by Cable News Network (CNN) influenced the global perceptions. New millennium saw 11 September 2008 (9/11) attack on the United States by the armed non-state actors. The world, which was so far battling capitalist and communist ideology, was now confronted with religious ideology and the threat of terrorism. A Global War on Terrorism (GWOt) declared against rogue regimes in Iraq and Afghanistan and terrorist organisations like Al Qaeda, Taliban and ISIS saw extensive use of non-contact means by the Allied Forces. By 2010, the social media applications connecting the world were weaponised. Faceless platforms were created to script mass agitations and revolutions like Arab Spring to change and challenge regimes across Arab world. More recently, the Facebook/Cambridge Analytica crisis opened up debate of data diversion and analytics and resurfacing of 'political warfare'. Actions like Wikileaks highlighted the potency of data compromise and its effect on strategic alliances.

Militaries across the world have been forced to reassess the impact of new warfare. There has been shift in operational doctrine from 'massing of forces' to 'massing of effects', with quantum reduction in physical contact between adversarial forces. The pace of technological reforms in the fields of stealth, stand-off precision targeting, networked Intelligence, Surveillance and Reconnaissance (ISR), autonomous systems have compelled

major powers like the United States, Russia and China to initiate defence reforms. The traditional battlespace of land, seas, air and outer space is overlapping with the non-battlespace like technological space (cyber and electromagnetic space), social spaces (politics, economics and culture) and cognitive space of human mind.<sup>2</sup> Virtually every space is being contested with battlefield significance. Chaos and complexities added by non-state actors are affecting civil and military equally. The opportunity to use non-lethal means, asymmetric measures and non-contact response options has pushed the world to endless war.

### **NCW – Understanding the Perceptions**

Russian military analyst, Major General Vladimir Slipchenko in the aftermath of Desert Storm in 1991, spoke of “no-contact warfare” as the optimal form for sixth generation warfare (6 GW) necessitating major military reforms.<sup>3</sup> According to him victory would pivot on defeating the opponent’s armed forces in his own territory, destruction of the enemy’s economic potential and subverting or changing adversary’s political system. The goal is to attack the political and military leadership in order to quickly achieve the stated strategic objectives.<sup>4</sup> He made a compelling case for Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance (C4ISR) in conducting such operations with blurring of distinction between combatants and non-combatants.<sup>5</sup> According to Major General Alexander Vladimirov, armed phase in future operations will decrease. It will be ‘preceded by operations against nation’s civil society, political leadership and population reinforced by information warfare and psychological warfare’ with reliance on diversionary operations.<sup>6</sup> General Makhmut Gareev, though endorsing the pursuit of non-contact capabilities, underlines the need for contact warfare options citing the outcome of urban warfare in Lebanon in 2006. In 2013, Russian Chief of the General Staff, General Gerasimov while analysing the ‘Arab Spring’ and ‘Colour Revolutions’ pointed out that in 21<sup>st</sup> Century wars will increasingly use non-military methods and will target population and communications with active deployment of special-operations forces.<sup>7</sup>

In May 2001 George Bush Jr., while speaking at the Naval Academy in Annapolis, underlined the need for high-tech armed forces capable of conducting operations by the no-contact method. He emphasised that force structure will rely more on mobility and ease of operations brought about by RMA.<sup>8</sup> Raphael Cohen, political scientist at RAND, points out that 'Political Warfare' has resurfaced as preferred tool of war today by states and armed non-state actors to advance their territorial interests without provoking a full-fledged military response.<sup>9</sup> George Kennan, described 'Political Warfare' in May 1948 as "the employment of all the means at a nation's command, short of war, to achieve its national objectives.....They range from such overt actions as political alliances, economic measures ...and 'white' propaganda to such covert operations as clandestine support of 'friendly' foreign elements, 'black' psychological warfare and even encouragement of underground resistance in hostile states".<sup>10</sup> Hoffman's 'Hybrid Warfare', though contested initially within Pentagon,<sup>11</sup> talked about convergence of physical and psychological domain, combatants and non-combatants, disruptors and information operations. '2018 United States National Defense Strategy' talks about employment of both non-kinetic and kinetic means by adversaries to coerce or subvert the competitive space across multiple domains through use of economy and new technologies including Weapons of Mass Destruction (WMD).<sup>12</sup> It seeks interagency synergy, lethal agile force with advanced autonomous systems and resilient logistics capable of working in a multi-domain attack so that it can deter and win.

Chinese white paper of 2015 has been sceptical of RMA reaching a 'new stage' where technology sophistication of kinetic and non-kinetic platforms coupled with aggressive strategic competition in outer space and cyber space will accelerate informationization and significantly impact international political and military landscapes.<sup>13</sup> The book 'Unrestricted Warfare', which has PLA endorsement, posits that non-war actions will significantly impact militaries like CNN's broadcast of an exposed corpse of a US soldier in the streets of Mogadishu stumped American military in the din of public clamour. According to the book, unconventional methods employed by the technologically

inferior force against advance militaries like the United States will yield disproportionate success.<sup>14</sup>

Major General Rajiv Narayanan, Distinguished Fellow at the United Service Institution of India, finds the world oscillating between 4 GW (guerrilla warfare and use of non-state actors), fifth generation warfare (5 GW) i.e. non-contact warfare enabled due to digitisation and the 6 GW aimed at manipulating the space-time loop based on extreme electronic deception.<sup>15</sup> Lieutenant General Devender Kumar, former Signal Officer-in-Chief of Indian Army, was the first to define the NCW in Indian context. According to him, this type of warfare “involves application of all national capabilities in an integrated manner, while ensuring minimum physical contact of own forces, to conduct distant operations to achieve a quick decisive victory by disrupting, denying and destroying the enemy’s war waging potential and his command and control systems through remote delivery of destructive kinetic energy and soft power by relentless information operations”.<sup>16</sup> This definition is military-centric and focuses on information warfare, missile warfare, remote warfare and robotics.

### **Defining NCW**

The world has been devising strategy of winning without fighting. Hence, the hosts of term like hybrid warfare, unrestricted warfare, asymmetric warfare, information warfare, political warfare have gained currency. Technology is fuelling not only growth but also competition and conflict. The technological innovations brought about by digitisation have networked people and financial institutions. It has for the first time exposed people, political leadership, governance structures and economy to new generation threats emanating from NCW. Autonomous systems, miniaturisation, stealth, speed and stand-off precision strike platforms have changed the character of war. The fact that many technological developments come from the commercial sector means that state competitors and non-state actors will also have access to them, a fact that risks eroding military response capabilities. Hence, options to use non-contact methods to surprise, embroil, embattle, and degrade the adversaries will be used rampantly.

Hence, NCW can be broadly defined as the form of warfare which seeks to employ all elements of national power across multiple domains to target enemy's population, sovereignty, governance structures and economy through non-kinetic and kinetic means with a view to intimidate, paralyse or denude its politico-military response capabilities and enable winning without fighting. NCW looks at targeting enemy sensitivities rather than its vulnerabilities thereby forcing the enemy to react. It looks at employing diversionary methods and deceptions to undermine the enemy OODA (Observe, Orient, Decide and Act) loop thus creating false orientation resulting in decision dilemma and disorder. In the era of endless war, non-kinetic means of 'information war' will play lead role in shaping battlespace across the continuum of conflict to deceive, deny, disrupt and disorientate the governance structures thereby creating crisis in decision making. Kinetic capabilities will be used to degrade, deter and restrict response actions. NCW will be waged through a well devised escalation matrix. The role of conventional forces as the nation's last responder will be tested due to the fluidity of the operational environment. The breakdown of governance structure may create conditions where the probability of the armed forces being sucked into a subsidiary role may increase. Non-contact response and asymmetric response to conventional superiority is where NCW will play a pivotal role – typically, American 'Full Spectrum Dominance' and Chinese 'Unrestricted Warfare'.

### **Implications for India**

Ajit Doval, India's National Security Advisor (NSA), while expounding about the RMA at Sardar Patel Memorial Lecture in New Delhi in November 2018, alluded that India needs to prepare for fourth generation warfare (4 GW), including fighting invisible enemies. He spoke about contactless wars and how major powers have increased the non-conventional force components as part of their force restructuring.<sup>17</sup> It is evident that Government of India is seized of the enormity of the threat posed by NCW to the population, governance structure and the economy. Key areas which need government attention are:-

(a) **Data Sovereignty.** EU has been the vanguard at looking at the data processing legislation through its General Data Protection Regulation May 2018. The framework is both technology and sector-agnostic and lays down the fundamental norms to protect the privacy of Europeans, in all its facets. China has approached the issue of data protection from the perspective of averting national security risks. Its 2017 cyber-security law, has adopted a consent-based framework with strict controls on cross-border sharing of personal data. Indian draft Personal Data Protection Bill 2018 formulated by Ministry of Electronics and Information has tried to follow a middle path while examining the current legislation i.e. to unlock the data economy, while keeping data of citizens secure and protected.<sup>18</sup> Data sovereignty remains a key to protect the nation and the report by Justice B.N. Srikrishna on 'A Free and Fair Digital Economy Protecting Privacy, Empowering Indians' needs deeper look by the security establishment.<sup>19</sup>

(b) **Technology Sovereignty.** 2014 Air Marshal M Matheswaran Committee Report stressed on the need to develop at least a dozen of critical technologies to prevent foreign powers from interfering with our security.<sup>20</sup> According to Dr Arvind Gupta, former Deputy NSA, the challenge includes the need to keep pace with rapidly evolving technologies; protect critical infrastructure and deal with regulatory and legal challenges.<sup>21</sup> Hence, while developing and deploying critical technologies, India need to simultaneously work on legislations to enable progressive evolution of these new technologies based on security and economic considerations.

(c) **Inter-ministerial synergy.** The threats to population and governance structures necessitate constant risk analysis. Hence, each ministry needs to evolve response levels based on threats. Inter-ministerial flow of information and coordination is essential to deal with them in real time. Information space across multiple domains require inter-agency coordination and action plan.

(d) **Reforming Higher Defence Organisation.** According to Brig Gurmeet Kanwal, Defence Planning Committee (DPC) constituted under the Chairmanship of the NSA in April 2018, is the right step to deal with the challenges of national security. DPC will drive country's military and security strategy and guide defence equipment acquisitions.<sup>22</sup> The committee will operate through four sub-committees: on Policy and Strategy, Defence Diplomacy, Plans and Capability Development and Defence Manufacturing Ecosystem. The composition of the DPC makes it a high-level empowered committee. However, the challenge remains how to redeem strategic planning from insular vertical silos while resolving of contentious inter-ministerial issues.

(e) **Reforming the Armed Forces.** With the enhanced battlespace scenario it is prudent that armed forces undertake structural reforms and work out doctrines to deal with the threats across non-traditional fronts too. The transformation set about by General Bipin Rawat for Indian Army will require support from Ministry of Defence. The defence planning, procurement and acquisitions will have to be smoothened to enable timely capacity and capability building. The forces will need to have cross domain knowledge to tackle threats emanating from different quarters. It should also look at cross pollination of experts from civilian fields to infuse talent.

(f) **Expanding Strategic Partnership and Cooperation.** To strengthen security, it is imperative to work out strategic partnerships to curb cross border terrorism and money laundering by non-state actors. Mutually beneficial collective security will help us to fight the tide of growing radicalism. Therefore, we need to form strategic alliances with the countries where our interest lies. Trade, tariff and technology will need to be negotiated to prevent the countries from tremors of economic upheavals.

(g) **Robust Legislation.** The new technologies have opened new spheres of influence. While the countries with



first user advantage will like to influence legislations to retain their influence, it is imperative for India to formulate such legislations so as to regulate these technologies and prevent their use for inimical purpose. With resurfacing of political warfare as tool to influence legislation in democratic countries, it is important that legislative reforms be brought about to arrest outside interference in our polity.

### **Conclusion**

How a nation must adapt to meet the growing threat of NCW is a challenge every government and military is facing today. Leon Trotsky's words resonate the security battlespace, "you may not be interested in war, but war may be interested in you". Hence, for all security planners the point illustrated by Alvin and Heidi Toffler in their book 'War and Anti-War' remains relevant, "if war was ever too important to be left to generals, it is now too important to be left to the ignorant – whether they wear uniform or not". Reform is the only key to remain ahead in this endless war.

### **Endnotes**

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<sup>2</sup> Qiao Liang and Wang Xiangsui, Unrestricted Warfare, Beijing: PLA Literature and Arts Publishing House, February 1999 pp.41-44, 205.

<sup>3</sup> "Major-General Vladimir Slipchenko Views Possible US 'Non-Contact' War on Iraq", Vremya Novostei, October 5, 2002.

<sup>4</sup> Mattsson , Peter A., Russian Military Thinking – A New Generation of Warfare, Journal on Baltic Security, Volume 1, Issue 1, 2015.

<sup>5</sup> Kipp, Jacob W., Russian Sixth Generation Warfare and Recent Developments, Eurasia Daily Monitor, Volume 9, Issue 7, January 25, 2012, accessed on 12 December 2018 at <https://jamestown.org/analyst/jacob-w-kipp/>.

<sup>6</sup> Ibid.

<sup>7</sup> General Valery Gerasimov, The Value of Science In Prediction accessed online from blog of Mark Galeotti on 12 December 2018, <https://inmoscowsshadows.wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/>>.

<sup>8</sup> Commencement Address by George W. Bush Jr, The President of United States of America at the United States Naval Academy in Annapolis, Maryland, May 25, 2001 extracted from <http://www.presidency.ucsb.edu/ws/?pid=45908>.

<sup>9</sup> Cohen, Raphael S. and Robinson Linda, Political Warfare is Back with a Vengeance, The RAND Blog accessed online on 12 December 2018, <https://www.rand.org/blog/2018/04/political-warfare-is-back-with-a-vengeance.html>.

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<sup>11</sup> US Government Accountability Office (GAO) Study Report on NATIONAL DEFENSE: Hybrid Warfare GAO-10-1036R, Sep 10, 2010 accessed on 02 January 2014.

<sup>12</sup> Op Cit. Summary of 2018 National Defense Strategy of The United States of America, p1-2.

<sup>13</sup> China's Military Strategy, The State Council Information Office of the People's Republic of China, May 2015, Beijing, accessed online on 09 April 2018, [http://eng.mod.gov.cn/Press/2015-5/26/content\\_4586805.htm](http://eng.mod.gov.cn/Press/2015-5/26/content_4586805.htm)>.

<sup>14</sup> Qiao Liang and Wang Xiangsui, Unrestricted Warfare, Beijing: PLA Literature and Arts Publishing House, February 1999 pp. 12, 19.

<sup>15</sup> Maj Gen Rajiv Narayanan, Evolution of Warfare and Technology -1, Indian Defence Industries, 08 December 2018, accessed from <https://indiandefenceindustries.in/evolution-of-warfare-1>.

<sup>16</sup> Kumar, Davinder, 'No Contact Warfare and the China Factor', Scholar Warrior, Spring 2014, Published by Centre for Land Warfare Studies, pp.76-78.

<sup>17</sup> Sankar R, War by other means: Why India needs to embrace irregular warfare, The Week Online edition, 03 November 2018.

<sup>18</sup> Government of India, Ministry of Electronics & Information Technology, Electronics Niketan, New Delhi, Letter No.3(6)j2017-CLES dated 31st July, 2017, accessed from <http://meity.gov.in/data-protection-framework>.

<sup>19</sup> Report by Committee of Experts under the Chairmanship of Justice B.N. Srikrishna, A Free and Fair Digital Economy Protecting Privacy, Empowering Indians, <http://meity.gov.in/data-protection-framework>

<sup>20</sup> India must develop a dozen critical technologies, Times of India Online Edition, 17 December 2014, accessed on 26 December 2018 from [http://timesofindia.indiatimes.com/articleshow/45543024.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://timesofindia.indiatimes.com/articleshow/45543024.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst).

<sup>21</sup> Gupta, Arvind, 'Technology Challenges before India', Presentation at the Global Tech Summit, Bangalore, 07 Dec 2017, accessed on 26 December 2018, <https://www.vifindia.org/directorremarks/technology-challenges-before-india>.

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®**Brigadier Vivek Verma** is a Gunner Officer with experience in sub conventional conflict, border management and disaster management. He is Post Graduate in Weapon Systems and M Phil in Defence Studies. He is pursuing his Research Fellowship on Non-Contact Warfare.

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