

## **PAKISTAN, IRAN AND AFGHANISTAN**

Col Karan Singh, VSM

**Saudi Arabia Signs \$20 Bn in Investment Deals with Pakistan.** Saudi Arabia has pledged investment deals worth \$20bn (£15.5bn) with Pakistan which is seeking to bolster its fragile economy. Of the latest deals, Prince Bin Salman said: "It's big for phase one, and definitely [our commercial relationship] will grow every month and every year, and it will be beneficial to both countries." In addition to the staggering financial package, MBS ordered the "immediate release" of more than 2,000 Pakistani prisoners incarcerated in the Kingdom and enhanced the quota of Haj pilgrims.

**Comments.** Saudi Arabia has a long history of providing financial support to Pakistan. It is reported that at least eight MoUs for investment in medium- to long-term period have been signed. According to Muzzammil Aslam, former CEO of EFG-Hermes Pakistan, Saudi investments are from short-term period to long-term tenure in key sectors such as power, renewable energy, petrochemicals, infrastructure and mining, among others. Approximately \$5-6 bn investment deals will be for a short-term period while \$2-3 bn in the medium term and another \$10-12 bn investment is of long-term nature. Thus, this will not solve the immediate crisis of balance of payment, however, Pakistan will be back to investors' radar and follow up investments from other countries will come through. The projects will ease Pakistan's long due structural deficit. With the projects' completion, the surplus will encourage value-added industry to set up and encourage local investors to participate. The deals include funding for an \$8bn oil refinery in the city of Gwadar.

**Incentives for Saudi Arabia.** The two countries have a long-standing military relationship and the MBS visit comes at a time when geopolitics in the region are shifting - including concerns over the influence of Iran and Taliban. The conduct of Taliban talks in Qatar has excluded Saudi Arabia and thus Pakistan is the only conduit for Saudi Arabia to exert influence. The Saudi Arabia presence in Baluchistan will enable it to better manage and encircle Iran from east where due to presence of Sunni majority, Iran is extremely vulnerable. In addition these investments provide Saudi Arabia meets its needs to diversify its oil-dependent economy. In addition, Pakistan is also important as it provide military capacity to Saudi Arabia with as many as 65,000 Pakistani soldiers is serving in the Kingdom including previous COAS as part of IMCTC.

**Pakistani Suicide Bomber Kills 27 Revolutionary Guards.** The Feb. 13 bombing in a restive Iranian region was one of the county's deadliest attacks in years. Iran said Tuesday that at least three Pakistani citizens were among the assailants responsible for killing 27 members of the Islamic Revolutionary Guards Corps on a bus last week, including the driver of the explosives-laden car that rammed the vehicle.

**Comments.** The Feb 13 bombing took place in a restive southeast region of Iran along the Pakistan border was one of the deadliest attacks in years to strike Iran. A militant Sunni extremist group, Jaish al-Adl, which has operated in southeast Iran for years and has links to Al Qaeda, claimed responsibility. Iranian officials accused the US, Israel and Saudi Arabia of complicity in the attack. Iran also suggested it was more than coincidental that it had been carried out as representatives of all three nations were meeting in Warsaw at a conference aimed in part at isolating Iran. Tasnim quoted General Pakpur as saying that

two members of the terrorist team and the suicide bomber were from Pakistan, and that three others were from Sistan and Baluchistan. As appreciated Iranian media and official did not connect the timing of attack with Saudi Arabia Prince visit to Pakistan.

**Mike Pence Chides US Allies at Warsaw Summit on Iran.** The US Vice-President, Mike Pence, has sharply rebuked Washington's European allies over their efforts to shield their businesses from US sanctions on Iran, as transatlantic tensions over US foreign policy were laid bare at a conference in Warsaw. A scheme the European Union has set up to facilitate trade with Iran was "an effort to break American sanctions against Iran's murderous revolutionary regime", Pence said during a conference on the Middle East organised by the US in Warsaw.

**Comments.** The Warsaw meeting was attended by more than 60 nations, but major European powers such as Germany and France, parties to the landmark 2015 nuclear accord with Iran, refused to send their top diplomats. The US-led summit focused primarily on Iran apart from the Israeli-Palestinian issue. The US was represented in Warsaw by Pence, Mike Pompeo, Washington's top diplomat, and Jared Kushner, who is special aide on the Middle East. The Israeli Prime Minister, Benjamin Netanyahu, also attended. It is to be recalled that EU has not been supporting US sanction on Iran

**Iran's Foreign Minister Rejoins After Resignation.** Two days after saying he intended to step down, Iran's foreign minister, Mohammad Javad Zarif, returned to his post after President Hassan Rouhani rejected the resignation. Despite his return, the major reason for Mr. Zarif's resignation — his diminished status in the government — is not likely to change significantly, analysts said.

**Comments.** Mr. Zarif considered as moderate in Iranian politics was instrumental in brokering landmark deal with world powers curtailing Iran's nuclear program. But President Trump's withdrawal from the nuclear deal last year sent Mr. Zarif's stock sliding within Iran's leadership, relegating him and his team of professional diplomats back to the sidelines. The issue with triggered the resignation was when Mr. Zarif, was left out of a meeting with President Bashar al-Assad of Syria and this was an attempt to reassert his influence. Despite the United States' withdrawal from the nuclear deal, Mr. Rouhani's administration has continued to adhere to the treaty, hoping for a victory by a Democrat in the 2020 United States presidential election that could undo the confrontational policies of Mr. Trump.

## **NORTHEAST**

Brig HS Cheema

**Japan to Provide \$32.5m More for Rohingyas, Host Communities.** The government of Japan has decided to provide approximately US\$ 32.5 million as additional new money to support Rohingyas and host communities in Cox's Bazar. Since the massive influx of Rohingyas into Bangladesh in August 2017, the government of Japan had granted approximately US\$ 50.2 million to international organisations. With this additional support, the total amount of assistance has reached a total of approximately US\$ 82.7 million, said the Japanese Embassy in Dhaka on 26 Feb 2019. The government of Japan will extend the humanitarian assistance for Rohingyas and host communities in Cox's Bazar through

site management of camps, providing food, shelter, medical services and trainings, and wash facilities and forest regeneration through a number of international organisations. These are the United Nations High Commissioner for Refugees (UNHCR), the International Organization for Migration (IOM), the United Nations Population Fund (UNFPA), the United Nations International Children's Emergency Fund (UNICEF), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), the World Food Programme (WFP), the World Health Organization (WHO), the International Committee of the Red Cross (ICRC), the Global Partnership for Education (GPE), the Médecins Sans Frontiers (MSF, also known in English as Doctors Without Borders).

*Asian Age on line.* <https://dailyasianage.com/news/165389/japan-to-provide-325m-more-for-rohingyas-host-communities>

**Comments.** International help is a need of the hour to rehabilitate the Rohingyas. Japan coming forward for additional financial aid is a welcome sign. However, more than financial aid it should be the endeavour of International community to ensure that Myanmar is persuaded to take these refugees back as early as possible. Longer these people stay in Bangladesh it will not only create more financial problems but a major law and order issues.

**PM Oli Stresses that Nepal should get Water as per Mahakali Treaty.** Prime Minister KP Sharma Oli today stressed that Nepal should get the exact amount of water as per the commitment made in the Mahakali Treaty. He made this comment on the eve of a meeting of a high-level team of experts for the Pancheshwar Multipurpose Project (PMP). Oli directed authorities of the Ministry of Energy, Water Resources and Irrigation to keep the country's interest in priority during the high-level Pancheshwar meeting at a discussion programme organised by the Water and Energy Commission on 26 Feb 2019. As per the Mahakali Treaty, Nepal should get 250 cusecs of water per second; however India has not stuck to that commitment. PM Oli also directed concerned officials to raise this issue during the meeting. "This will be the third 'team of experts' meeting related to DPR and I hope this meeting will pave a way for project implementation." On April 27 last year, the secretary-level meeting between Nepal and India had extended the deadline to prepare the DPR of the Pancheshwar Project to December, but neither has the DPR been finalised nor was a meeting held. The Pancheshwar Multipurpose Project was conceived under the Mahakali Treaty between Nepal and India in 1996. Apart from generating electricity, the project will provide irrigation facility to 0.13 million hectares of land in Nepal and 0.24 million hectares of land in India in addition to other incidental benefits.

<https://thehimalayantimes.com/business/pm-oli-stresses-country-should-get-water-as-per-mahakali-treaty/>

**Comments.** India and Nepal need to sit and resolve the issue of water sharing amicably and should not give an opportunity to third party to intervene. India may consider to be more accommodative to help Nepal to ensure better relations.

**Arunachal Pradesh.** Two Killed After Massive Protest Break Out Over Permanent Resident Certificates to Six Communities. The northeastern state of Arunachal Pradesh witnessed massive protests since, February 22 over the Joint High-Power Committee (JHPC) recommendation which grants permanent residence certificates (PRC) to six communities. The communities – Adivasi, Deori, Gorkha, Mishing, Moran, and Sonowal Kachari – are not native to the state but have been living in Namsai and Changlang districts of the state for decades. Defying the curfew which was imposed on 22 February, the protestors have allegedly set residence of Deputy Chief Minister Chowna Mein ablaze and vandalised it. A large number of protestors marched through the streets, vandalising public property and vehicles.

Meanwhile, Union Minister Kiren Rijiju said that the government has decided to not accept the recommendations of the Joint High-Power Committee (JHPC) and even blamed Congress for instigating sections of people for the protests. According to NDTV, Khandu had even called for an all-party meet on 24 Feb none of the parties including the opposition had turned up. The recommendations were supposed to be tabled in the Assembly on February 23 but were not tabled as the Speaker adjourned the house sine die. These communities have for a long time to get PCR which is a document of a persons' residence in a state. It is useful in getting reservation against quotas for state residents in educational institutes and jobs. Arunjyoti Moran, president of All Moran Students' Union (AMSU) told The Indian Express, "The PRC is a genuine, legitimate demand of the communities including Morans living in Arunachal Pradesh — they genuinely belong to the state. We are not even demanding ST status, but only PRC. Even the government is not able to do it now they have to consider our demand later." While the government tried to douse the flames by not tabling the recommendations in the Assembly, continued protests in the capital perplexed many. Reportedly, the recommendations infuriated several community-based groups and students' organisations who claimed that if the state government accepts the recommendations, then the rights and interests of the indigenous communities will be undermined.

*<https://thelogicalindian.com/news/arunachal-pradesh-two-killed-massive-protest/>*

**Comments.** Arunachal Pradesh is a most peaceful state among all the NE states except for certain districts adjoining Nagaland and Assam. Permanent Resident Certificates issue is very sensitive issue and need to be handled while taking care of the sensitivities of local population. In fact, reservation has become a tool being exploited by various political parties to assuage feelings of particular communities for their personal political benefit which is a dangerous trend and need to be curbed. Arunachal Pradesh is a border state with very parietic population and it is of immense importance that peace prevails in the state.

**JAPAN, MALDIVES, SRI LANKA**

Col Arvinder Singh

**Japan, India Agree to Join Forces on 5G Technology as Huawei Concerns Linger<sup>1</sup>.**

The Japanese and Indian governments have agreed in principle to work together on measures to combat cyber-attacks related to the development of 5G technology, with concern on the Japanese side centred mainly on the products of Chinese telecommunications equipment giant Huawei. The agreement is seen as showing the two countries' intentions to share information on security-related risks such as the illegal access of data, and prevent the dominance of Chinese products in the vast Indian market. The two sides will meet in Tokyo for the third round of bilateral talks on cyber issues on 28 Feb.

**Comments.** This is the first time that 5G has been escalated to the main topic of discussion in these talks. The Japanese side plans to have top officials of the Foreign Ministry and National Police Agency attend the conference, while India is expected to dispatch top officials from its External Affairs and Home Affairs ministries. At the conference, the two sides are expected to exchange information on risks and other aspects associated with Chinese products regarding 5G technology. The intention is to gain India's understanding that, as the flip side to the low costs of Chinese products, there are various risks, and to urge India to join forces with Japan. In Japan, 5G technology will begin to be phased in by service providers from the middle of this year, while India plans operational testing within the year. India as a promising market in connection with 5G, is gaining the attention of companies around the world. Huawei is no exception, and against the backdrop of the Chinese government's "One Belt, One Road" global economic strategy, it aims to penetrate the market.

**Maldives Hits New Low in Chinese Tourism Market<sup>2</sup>.** China Outbound Tourism Research Institute (COTRI) revealed that only 61,000 tourists visited Maldives in the last quarter of 2018, making it the lowest arrival results in the last five years. Chinese tourists travelling to Maldives on holiday showed a continuous and steady annual decrease of 13 percent in the last quarter of 2018.

**Comments.** The most glaring reason for the loss of Chinese tourists was that Maldives' new government policy is perceived as being less "China friendly", and it is very likely that China will use its Soft Power approach to tourism against Maldives, which will cost Maldives even more Chinese guests. It is here that India can step in by encouraging Indian tourists to visit the island nation which will increase people to people contact and will ensure that strategically located Maldives doesn't fall under Chinese influence again.

---

<sup>1</sup><https://www.thejakartapost.com/news>

<sup>2</sup><https://edition.mv/news>

**Opposition Moves No-confidence Motion against Defense Minister<sup>3</sup>.** Opposition lawmakers of Maldives submitted a motion of no-confidence against Defense Minister Mariya Didi over controversial comments made during an interview with an Indian newspaper. Leaders of the four-party ruling coalition, which controls a majority in the People's Majlis, have vowed to defeat the motion. The opposition contends that defense minister's interview with Strategic News International during a visit to India in late January provided grounds for dismissal in which she said that "If the Indians really wanted to occupy Maldives, they never had the intention, I'm sure, but if they do, I don't know how we can stop it. You see, your air force, your navy, your infantry, literally there is nothing we can do. The remarks prompted a backlash from opposition supporters but the defense ministry insisted her remarks about India's age-old respect for the independence and sovereignty were omitted in local media reports.

**Comments.** The no-confidence motion comes after rising anti-India sentiment among opposition supporters over alleged unauthorized military uses of two helicopters gifted to the Maldives military. Earlier this month, former home minister started planning demonstrations against the presence of Indian soldiers who operate the helicopters. A form was circulated on social media calling on interested individuals to join the 'Indian Soldiers Leave!' campaign. He sought activists, volunteers and financial contributions. He said that "Helicopters, Dornier aircrafts, radars and Indian military hardware are tools that will be used against us on the day when India takes over our country's freedom." India should continue its engagement with the new government and local population proactively to thwart any attempts by opposition leaders duly supported by China to rise anti India sentiments in the region.

**US to Provide Additional \$9.5 Million in Assistance to Maldives<sup>4</sup>.** The Trump Administration on 20 Feb announced its intent to provide USD 9.5 million in assistance to the Maldives as part of its effort to strengthen its ties with the island nation. In a meeting with visiting Maldivian Foreign Minister, US Secretary of State Mike Pompeo discussed their common interest in deepening bilateral ties and their shared commitment to a free and open Indo-Pacific region. He expressed strong support for the US-Maldives partnership, announcing the intent of the State Department to work with the Congress to provide USD9.5 million in additional assistance for Maldives.

**Comments.** The US-Maldives declaration of commitment to free and open Indo-Pacific region has added significance because of the China factor. China sent warships to the Indian Ocean region near the Maldives after the emergency was proclaimed in February

<sup>3</sup><https://maldivesindependent.com>

<sup>4</sup><https://www.moneycontrol.com>

last year by previous President Yammen. Beijing is also a major investor and aid-giver to the Maldives.

## TELECOM & IT

Brig Navjot Singh Bedi

**Chipset Innovation: India Enters into an Elite Club.** India has entered into an elite club of countries with chipset-level innovation. Bengaluru-based semiconductor company Signalchip on 27 Feb 19, unveiled a dual carrier 4G/LTE and 5G New Radio (NR) standards-based modem that can work on up to 6GHz frequency range — creating a breakthrough after eight-year long Research and Development (R&D) activities in multiple complex domains. Signalchip is a 40-member led Startup Company and has unveiled a highly-sophisticated System on Chip (SoC) for small cell base stations. It was extraordinary that an Indian company has come forward and launched not only 4G-LTE chip but also a 5G NR modem. With India's foray into chipset technology driven by Signalchip, the company has become an arch rival to the globally dominant US majors such as Qualcomm, Intel and Broadcom.

The company Signalchip launched four chips as part of its SCBM34XX and SCRF34XX/45XX series, code-named 'Agumbe'. The four chips include SCBM3412 (single chip 4G/LTE modem), SCBM3404 (single chip 4X4 LTE), SCRF3402 (2X2 transceiver for LTE) and SCRF4502 (2X2 transceiver for 5G NR standards). The chips also support positioning using India's own satellite navigation system, NAVIC. The RF sections cover all LTE/5G-NR bands upto 6GHz. The Agumbe series builds up on SCRF1401 which was supposedly India's first RF transceiver chip for high performance wireless standards like 3G/4G and WiFi, created by Signalchip in 2015. The chips are optimally designed to support evolving network architectures like Open RAN/CRAN with flexible interface configurations.

**Comments.** This innovation has immense economic as well as security implications. Core ICT capabilities are going to be a key differentiator as we see the US and China battling out for it. Many countries are watching how India acquires technology and has economic stakes. Only indigenous technology can actually ward off security threat. Only eight companies worldwide have capabilities to design semiconductor chips. As such this is a pioneering innovation and is something which is huge for India. With the first in-house chip, India is able to break into an elite club of countries. The new development would also have deep implications on data sovereignty and security. It is not only a first 4G-LTE chip coming from India but also a 5G chip. These chips are a significant step in this direction as they have the potential to cater to the growing digital connectivity needs of the next 5 billion users.

If Indian manages to bring into IPR, it would be path breaking. The new chipset technology may be taken up by a small group of companies and countries initially while that could further increase performance as it would go along the competitive market. When we talk of 5G, we think of foreign original equipment makers coming and setting up infrastructure. The original equipment makers could take advantage of this technology to bring down costs. The price-to-performance ratio is a key differentiator. India is expected to import semiconductor chips worth Rs 1,87,200Crore from a Rs 36,21,600 crore market worldwide

in 2020. Semiconductor is at the heart of any technology. Indian companies have no ownership at the silicon core level. Building competencies in the semiconductor are key to India's technology and defence roadmap.

*(<https://telecom.economictimes.indiatimes.com/news/chipset-innovation-india-enters-into-an-elite-club-says-aruna-sundararajan/68186731> and*

*<https://telecom.economictimes.indiatimes.com/news/signalchip-launches-indias-first-indigenous-semiconductor-chips-for-4g-lte-5g-nr-modems/68185586>)*

**4G Expansion to Drive Growth in Non-Telco Space in India.** Nokia said that it had bagged 75 contracts in the 2018 calendar year with a majority of growth coming from beyond mobility or non-telco space in India. The company won 15 new deals in the cable operator and internet service provider (ISP) segment, in 2018 taking the total count to 25. In addition, the plan by Telcos to modernize backhaul connectivity will also open a new revenue opportunity for the company this year. Nokia is aggressively targeting deals from enterprises outside of the traditional Telecom Service Provider (TSP) segment in search of new revenue opportunities. It is currently in talks with web scale companies for data center connectivity. The company is specially targetting banking and finance, transportation and railways. The company feels that the need for better customer experience is likely to lead to demand for Nokia's software solutions.

**Comments.** Telcos are getting ready for 5G by modernizing networks end-to-end, offering even bigger growth opportunity going ahead. Nokia along with Chinese gear companies Huawei and ZTE are currently bidding for Vodafone Idea's wire line contracts. The Telco is expected to award new contracts soon. In the wireless space, 4G expansion by Indian telecom operators will continue to drive growth for the company. On the mobility side, 4G will still continue to drive growth in the market as Telcos look for capacity and are going for TD-LTE. Telcos are getting their network ready for 5G with their deployment of massive mimos and small cells on TD-LTE technology. Global players are coming to India and are looking to set up data centers and India players are also looking to do the same as the enterprise segment is likely to open up new opportunities for various firms which can provide customised software solutions for better customer experience. This is a good opportunity to give an impetus to the 'Make in India' initiative and also leverage some spin offs for capacity building and augmentation in defence.

*(<https://telecom.economictimes.indiatimes.com/news/nokia-bags-75-new-deals-in-2018-says-4g-expansion-to-drive-growth-in-india/68184187>)*

## **RUSSIA**

Col Arvinder Singh

**Russia Says "Show Restraint" Amid Escalating India, Pakistan Tensions<sup>5</sup>.** Russia urged India and Pakistan to show restraint as it expressed serious concern about the escalation of hostilities between the two countries. They further called for India and Pakistan to "step up efforts" to resolve the matter through political and diplomatic channels

---

<sup>5</sup><https://www.ndtv.com/india-news>

and said that they are ready to further assist in strengthening the counter-terrorism potential of both the countries.

**Russia Presses Case for Greater Control over its Internet**<sup>6</sup>. The Russian spokesman said that reports that the US military carried out a cyber attack in Russia ahead of the US midterm elections proves that the country needs to create its own, self-controlled segment of the internet. He was reacting to a recent report in The Washington Post that quoted unnamed US officials as saying that the US military remotely blocked internet access to a Russian "troll farm" ahead of the 2018 midterm elections. Russia's parliament this month passed the first reading of a bill that proposes all internet traffic be routed through servers in Russia. Opponents fear the measure would lead to widespread censorship.

**Comments.** Russia is trying to create a Russian intranet towards a goal of duplicating the Great Firewall of China to restrict the access of the country's internet users to content deemed harmful by the authorities. Russia feels that western countries could just push a button to disconnect Russia from the global internet at the time of any conflict.

**Russia Wants to Get Iran Out of Syria, Netanyahu Says After Putin Meet**<sup>7</sup>. Israeli PM Netanyahu after meeting with Russian President Putin in Moscow said that getting the Iranians and all foreign fighters out of Syria is also one of Russia's stated goals. It was further added that Putin did not place limitations on Israel's actions in Syria. Putin also accepted the invitation to visit Jerusalem and participate in the opening ceremony for a new monument in Jerusalem commemorating victims and survivors of the World War II Siege of Leningrad. The discussion between the two leaders was mostly about Iranian entrenchment in Syria and the S-300 air-defense system that Russia delivered to Syria in September.

**Comments.** The meeting can be seen as diplomatic efforts by Israel, regarding its actions in Syria with its stated policy that we will continue to act and it be accepted with understanding and also to put behind the crisis of downing of the Russian spy plane in Syria in September 2018.

## **NUCLEAR**

Gp Capt GD Sharma, VSM (Retd)

**Ongoing Second Summit between Trump and Kim Jong Un.** President Trump and North Korean leader are meeting at Hanoi on 27 and 28 Feb 19 for summit. This is the second summit after a similar meet at Singapore in March 2018. The first, Singapore summit was criticised for not producing anything substantive towards the larger aim of denuclearisation of North Korea. In fact he had acceded to the summit only after North

<sup>6</sup><http://www.news-gazette.com/news>

<sup>7</sup><https://www.haaretz.com/israel-news/russia>

Korea had developed ICBM (Howson 15). Which can hit anywhere in United States. Clearly he was using this capability as leverage to seek concessions from the United States. He however did not get relief from the sanctions.

As the recent news report indicates that this summit too has met the similar fate. United States has not accepted the demand for complete removal of sanctions until there is credible and verifiable regime for denuclearisation of North Korea. Such denuclearisation could be carried out in stages. In the first stage, the ICBMs and its nuclear war heads could be moved from the country, the next step would be comprehensive inspections on North Korea's nuclear facilities and nuclear ICBM weapons programme by the International Atomic Energy Agency (IAEA).

The meeting failed to produce the positive results as expectation for the both the parties were different, while US wanted to initiate the process of denuclearisation to commence Kim Jong Un main focus was removal of sanctions. It appears difficult that North Korea will leave leverage of nuclear weapons since it also serves the interests of Chinese who would like to use the North Korean nuclear capability to put Japanese, US and South Korean on the back foot in the region where US is trying to re-establish its hegemony.

## **AI TECHNOLOGY**

Air Cmde T Chand (Retd)

### **Identification of AI Technology Used for Fiction Writing and Fake News Generation.**

On 14 Feb 2019 the nonprofit research firm 'Open AI' released a new language model capable of generating convincing passages of prose. The written passages were so convincing that the researchers have refrained from open-sourcing the code, in hope of stalling its potential weaponisation as a means of mass producing fake news.<sup>8</sup> A short article written by this AI application is reproduced below:-

---

<sup>8</sup> *The technology behind OpenAI's fiction-writing, fake-news-spewing AI, explained by Karen Hao dated 16 Feb 2019; [https://www.technologyreview.com/s/612975/ai-natural-language-processing-explained/?utm\\_campaign=Artificial%2BIntelligence%2BWeekly&utm\\_medium=email&utm\\_source=Artificial\\_Intelligence\\_Weekly\\_99](https://www.technologyreview.com/s/612975/ai-natural-language-processing-explained/?utm_campaign=Artificial%2BIntelligence%2BWeekly&utm_medium=email&utm_source=Artificial_Intelligence_Weekly_99)*

SYSTEM PROMPT  
(HUMAN-WRITTEN)

*Recycling is good for the world.*

*NO! YOU COULD NOT BE MORE WRONG!!*

MODEL COMPLETION  
(MACHINE-WRITTEN,  
25 TRIES)

Recycling is NOT good for the world. It is bad for the environment, it is bad for our health, and it is bad for our economy. I'm not kidding. Recycling is not good for the environment. It is destructive to the earth and it is a major contributor to global warming. Recycling is not good for our health. It contributes to obesity and diseases like heart disease and cancer. Recycling is bad for our economy. It increases the cost of a product, and in turn, the price of everything that is made with that product. Recycling is not good for our nation. We pay a tremendous price for the privilege of having the world's most advanced and efficient recycling system. Recycling is a huge, colossal waste of time, energy, money, and resources. And THAT is why we need to get back to basics and get back to basics in our recycling efforts. One of the best ways to start is to look at the process of creating a paper product. When you make a paper product, it is basically a long chain of materials. Everything from the raw materials (wood, cardboard, paper, etc.), to the reagents (dyes, solvents, etc.) to the printing equipment (chemicals, glue, paper, ink, etc.), to the packaging, to the packaging materials (mercury, chemicals, etc.) to the processing equipment (heating, cooling, etc.), to the packaging materials, to the packaging materials that are shipped overseas and to the packaging materials that are used in the United States. Each step along the way creates tons of waste that we constantly have to clean up. The process of making a paper product is a very wasteful one. But the end result is something that all of us need to consume. And if we want to keep the recycling process running efficiently, then we really need to think about each and every step that goes into making a paper product.

The passage seems so real that it has evoked a keen interest in this application globally. It is believed that the technology used is not entirely new. Instead more data has been used for training the algorithms for producing nearly realistic results. These findings are different from a genuine understanding of language, the ultimate goal of the subfield of AI known as Natural Language Processing (NLP). For machines to reach that level is likely to take a long time as technologies needed for that purpose are still under initial stage of development.