

HEARING ON INDIA, CHINA, AND THE BALANCE OF POWER IN THE INDO-PACIFIC

HEARING

BEFORE THE

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

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By: EVERLYNE MUISYO

Job No.: 1060175

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1 MR. BRANDS: Good morning and welcome to
2 the first hearing of the US-China Economic and
3 Security Review Commission's 2026 annual
4 report cycle. Thanks very much to our
5 witnesses for sharing their expertise and for
6 the work that you've put into your
7 testimonies. And thanks very much to our
8 staff as well for the preparation that went
9 into today.

10 I'd also like to thank the Senate Foreign
11 Relations Committee for allowing us to use
12 their hearing room and the Senate recording
13 studio for their assistance, live streaming
14 this event. All written testimonies and a
15 transcript of this hearing will be posted on
16 our website uscc.gov.

17 Today's hearing addresses the critical
18 role of India in US-China competition. India
19 is the world's largest democracy, most
20 populous country and a major economic and
21 military power.

22 It's the only power in South Asia capable
23 of balancing China over the long term, yet
24 India faces a militarized border, the risk of
25 a two-front contingency involving Pakistan, as

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1 well as expanding Chinese influence in
2 neighboring states from Nepal to Bangladesh.

3 China also continues to bolster its naval
4 presence in the Bay of Bengal and across the
5 Indian Ocean, giving rise to a new theater for
6 rivalry between the Asian powers. Despite
7 political, economic, and military pressure
8 from Beijing, New Delhi has strengthened its
9 own capabilities and signaled that it will not
10 acquiesce to a Sino-centric South Asia.

11 At the same time, India remains committed
12 to a policy of strategic autonomy, engaging in
13 renewed dialogues with China as it continues
14 to seek economic and security partnerships
15 with the United States.

16 For the United States, the implications
17 are significant. If China constrains India's
18 strategic position, the balance of power in
19 the Indo-Pacific will tilt decisively in
20 China's favor. If India remains a confident
21 and capable counterweight, the outlook for the
22 future of a free and open Indo-Pacific is much
23 brighter.

24 While areas of friction have tested US-
25 India relations over the past year, both India

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1 and the United States have signaled ongoing
2 commitments to one another. These have
3 included the October, 2025 framework for the
4 US-India Major Defense Partnership and the
5 recently announced Interim Trade Framework.

6 Against this backdrop, our witnesses will
7 provide their insights on the key geopolitical
8 and economic challenges shaping the US-India
9 relationship as well as India-China relations.

10 I will now turn the floor over to my colleague
11 and co-chair for this hearing, Commissioner
12 Jon Stivers.

13 MR. STIVERS: Thank you, Commissioner
14 Brands. Welcome and thank you to all the
15 witnesses for being here today.

16 India is a country with tremendous
17 opportunity. It's poised for an advancement,
18 and if realized, will cement its place among
19 the premier global powers. Already the
20 world's fastest growing major economy, India
21 is a leader in certain services and
22 pharmaceutical sectors and is making strides
23 in various industrial and emerging
24 technological fields.

25 Now the world's most populous country,

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1 India is set to enjoy a demographic dividend
2 in the decades ahead from its youth,
3 especially relative to an aging China.

4 While there is good reason to believe
5 that India's moment has come, challenges
6 persist both internally and externally, not
7 least of which is the deeply intertwined yet
8 imbalanced economic relationship with the
9 People's Republic of China.

10 India's large and growing bilateral trade
11 deficit with China is a source of
12 consternation for the country's leaders as
13 they seek to promote self reliance
14 initiatives.

15 In particular, Indian manufacturers
16 largely depend on Chinese suppliers for
17 components and industrial inputs for their own
18 export oriented growth. Some of these
19 dependencies have significant consequences for
20 the United States as well. India is a top
21 supplier of our generic drugs, yet India
22 relies extensively on China for the
23 pharmaceutical ingredients and key startup
24 materials.

25 And while these dependencies present

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1 risks and exposure to economic coercion,
2 inexpensive inputs, and regionally integrated
3 supply networks also have benefited India and
4 hastened the pace of industrialization. New
5 Delhi therefore faces a challenging balancing
6 act vis-À-vis China between economic security
7 and industrial development.

8 With rising national security concerns
9 and a slowing economy in China, companies are
10 seeking to diversify their supply chains out
11 of the country. India is the only global
12 market with a vast and growing workforce, a
13 strong stem pipeline for high skilled workers,
14 and long-term growth trajectory capable of
15 meaningfully absorbing and replacing a
16 significant share of China's role in global
17 supply chains.

18 The country has a dynamic entrepreneurial
19 spirit, excelling as a Software as a Service,
20 and touting over 100 technological startups
21 valued at a -- at above \$1 billion. Perhaps
22 more importantly, India's democratic system
23 and adherence to rule of law create the
24 underlying conditions for fair and transparent
25 commerce.

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1 It's my fundamental belief that a strong
2 and economically dynamic India is firmly in
3 the national interests of the United States,
4 particularly as strategic competition with
5 China intensifies. India's scale,
6 demographic, economic, military, makes it the
7 only country in Asia with the potential to
8 serve as a long term counterweight to China's
9 regional dominance.

10 As a fellow democracy and growing role in
11 the Indo-Pacific, India contributes to
12 maritime security, supply chain
13 diversification, and technological
14 collaboration that all reduce overdependence
15 on China.

16 And supporting India's rise, strengthens
17 a multipolar Asia anchored by sovereign states
18 rather than cores of influence, reinforcing a
19 balance of power that aligns with US economic
20 and security interests over the coming
21 decades.

22 So our witnesses today, especially on
23 panel 2, will examine India's highly
24 consequential and asymmetric economic
25 relationship with China, the ramifications

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1 with the United States, and strategic
2 opportunities for deeper economic cooperation
3 between the US and India.

4 And beyond exploring these issues, the
5 hearing will inform recommendations and
6 pressing issues before Congress, including how
7 the US and India can strengthen resilience on
8 pharmaceutical and other supply chains,
9 promote technology integration with better
10 aligned export controls, and deepen mutually
11 beneficial trade and investment ties.

12 India has continued industrial and tech
13 development, and the decades ahead will have
14 an outsized influence on the balance of power
15 in Indo-Pacific and broad ranging consequences
16 for the US-China strategic competition. So
17 I'll now turn the floor over to my colleagues
18 and the co-chair for this hearing,
19 Commissioner Hal Brands, to introduce our
20 esteemed witnesses.

21 MR. BRANDS: Great. Our first panel will
22 assess the diplomatic and security dimensions
23 of the India-China relationship and the
24 implications for the US.

25 We'll start by welcoming back Dr. Tanvi

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1 Madan, a senior fellow at the Brookings
2 Institution. Her work explores India's role
3 in the world and its foreign policy, focusing
4 in particular on India's relations with China
5 and the United States. And her testimony will
6 provide an assessment of India's role in the
7 Indo-Pacific and its response to China's
8 growing power.

9 Next, we'll hear from Dr. Sameer Lalwani,
10 a senior advisor with the Special Competitive
11 Studies Project and a former South Asia expert
12 at the US Institute for Peace. He's going to
13 examine China's challenge to India's
14 geopolitical and security interests.

15 And third, we'll hear from Lindsey Ford,
16 vice president at Beacon Global Strategies.
17 Ms. Ford formerly served as senior director
18 for South Asia at the NSC. Her testimony will
19 provide context and policy options around US-
20 India security cooperation. Both Ms. Ford and
21 Dr. Lalwani are our new voices for this
22 commission and we're happy to welcome back Dr.
23 Madan as well.

24 Thank you all very much for being here
25 today. We're looking forward to your remarks.

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1 I ask that each of you please keep your
2 remarks to seven minutes. And Dr. Madan,
3 we'll begin with you.

4 MS. MADAN: Coaches Stivers and Brands,
5 members of the Commission, and staff, thank
6 you for the opportunity to testify on India's
7 perceptions of and response to China's growing
8 power in the Indo-Pacific and globally.

9 Over the last two decades, Indian
10 policymakers have gone from seeing China as a
11 potential enabler to more of an obstruction in
12 it achieving India's objectives. This change
13 has affected India's approach towards China,
14 its policies in various functional domains, as
15 well as its partnerships. And this shift
16 towards more intensified competition with
17 China has persisted despite an ongoing re-
18 engagement process between India and China.

19 Driving this shift have been several
20 border crises, including the fatal Sino-Indian
21 military clash in 2020 as well as other
22 bilateral friction points. It has also been
23 amplified by Indian concerns about China's
24 ambitions, its activities, and its influence
25 in South Asia and the Indian Ocean region.

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1 In its immediate neighborhood, New Delhi
2 has long believed that China's close
3 partnership with Pakistan is designed to
4 contain India. In the rest of South Asia and
5 in India's extended maritime and territorial
6 neighborhood, it is worried that Beijing's
7 expanding -- expanded security and economic
8 footprint is boosting China's interests and
9 influence and curbing those of India.

10 This has contributed to a negative Indian
11 view of China's Belt and Road and other
12 regional initiatives. India's wariness also
13 reflects a broader concern that Beijing seeks
14 a unipolar Asia where it gets to set the
15 terms. New Delhi has stated that it instead
16 wants a multipolar Asia where countries have
17 room to make their own choices.

18 Moreover, India believes a multipolar
19 Asia is essential for a multipolar world, one
20 in which India seeks to be a leading power.
21 India does share certain views with China on
22 the global order. For instance, they are both
23 sovereignty hawks and resent interference in
24 their internal affairs. And both oppose
25 Western sanctions and have backed efforts to

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1 support trade in local currencies.

2 But in recent years, Sino-Indian
3 divergences have outweighed convergences on
4 the global stage as well. There are
5 differences on issues like trade where they
6 earlier used to cooperate. Furthermore, while
7 India wants more representative
8 multilateralism, it sees China as an obstacle
9 to Indian membership of institutions like the
10 Nuclear Suppliers Group and the UN Security
11 Council.

12 New Delhi also has concerns about Beijing
13 trying to undercut India's influence in the
14 developing world and even in groupings where
15 they are members like BRICS. And it is wary
16 of China imposing its vision and its standards
17 through its global security, development,
18 civilizational, and governance initiatives,
19 none of which India has endorsed.

20 New Delhi also has little desire to sign
21 on to Beijing and Moscow's efforts to reshape
22 BRICS and the Shanghai Cooperation
23 Organization from non-west platforms to anti-
24 west ones. These regional and global
25 apprehensions have contributed to India

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1 adapting and enhancing its own outreach in its
2 immediate and extended neighborhood as well as
3 in the global South.

4 These concerns combined with a Sino-
5 Indian capabilities gap that limits how much
6 India can respond alone have also affected
7 India's view of the US role in Asia.

8 In contrast to Beijing, New Delhi has, in
9 recent years, wanted to see a persisting or
10 even expanded American presence in the region
11 and India has even indeed -- even sought to
12 partner with the US and other like minded
13 countries including Australia, France, Japan
14 and the United Kingdom to compete for
15 influence with China in the Indo-Pacific.

16 India has also been participating in
17 minilaterals such as the QUAD that are
18 designed in part to offset Chinese advantages
19 regionally and globally. Furthermore, it is
20 cooperating with China's rivals to shape the
21 leadership agendas and outcomes at regional
22 and global institutions.

23 New Delhi has particularly perceived a
24 Washington willing to compete with an
25 assertive China as a useful partner in India's

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1 balancing strategy. This has made India more
2 responsive to US efforts to partner with India
3 bilaterally in the Indo-Pacific and more
4 willing to manage India US differences.

5 It has also made India more ready to join
6 US initiatives on issues such as critical
7 emerging technologies and supply chain
8 resilience. There has, however, been a debate
9 in India about how far and fast to deepen ties
10 with the US and India's current concerns about
11 the US approach towards India and China, if
12 they persist, could limit the pace and extent
13 of Indian cooperation with the US and it could
14 shape the nature and extent of Sino-Indian re-
15 engagement.

16 Any alleviation in these -- in those
17 concerns would be helpful to enable greater US
18 India cooperation in the Indo-Pacific. In
19 addition, in the -- in terms of the road
20 ahead, the administration should be encouraged
21 to undertake regular and updated assessments
22 of India-China dynamics to include issues such
23 as likely India-China contingencies and
24 possible pathways for Sino-Indian re-
25 engagement and their implications for the US.

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1 The administration should also be
2 encouraged to undertake assessments of what
3 capabilities would make India a more effective
4 US partner in balancing Cape -- China in the
5 Indo-Pacific and enable or encourage allies to
6 enable those Indian capabilities.

7 Along with considering reviving or
8 updating various bilateral dialogue mechanism,
9 there should also be more regular US-India
10 consultations on China to exchange
11 perspectives and discuss response options.

12 They should ideally include updating each
13 other on stabilization efforts with China in
14 order to reassure each other. The
15 administration should also be encouraged to
16 undertake with the Indian government a
17 dialogue on Chinese activities in South Asia
18 and the Indian Ocean region.

19 This can help enable more effective
20 collaboration and coordination, avoid
21 duplication, and deconflict New Delhi's and
22 Washington's approaches in the region.

23 There should also be bilateral or QUAD
24 consultations to coordinate ahead of key
25 regional and global summits, a stepping up of

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1 QUAD activities in the regional security,
2 economic security, and technology domains and
3 mapping efforts to identify regional
4 infrastructure gaps or supply chain
5 vulnerabilities.

6 Finally, there should be more and
7 frequent congressional exchanges with Indian
8 counterparts on China and the Indo-Pacific and
9 ideally more visits by members and staff to
10 India with a China or Indo-Pacific-focused
11 agenda. Thank you.

12 MR. BRANDS: Thank you.

13 Dr. Lalwani.

14 DR. LALWANI: Co Brands, chairs, and
15 Stivers (sic), distinguished commissioners and
16 Commission staff, thank you for the
17 opportunity to participate in today's hearing
18 on India-China and the balance of power in the
19 Indo-Pacific. It's an honor to be here
20 alongside esteemed experts on this panel.

21 My testimony today will focus on six
22 aspects of the evolving China-Indian military
23 competition. First, in spite of efforts to
24 stabilize the bilateral relationship, India
25 profoundly distrusts Beijing's intentions and

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1 behavior and will continue to regard China as
2 an adversary.

3 Despite disengagement for -- despite
4 disengagement from key face-off points, New
5 Delhi remains deeply threatened by China's
6 aggression on the disputed border and
7 continued military buildup rather than de-
8 escalation over the past 16 months.

9 India also feels threatened by China's
10 active efforts to arm, train, and wire the
11 Pakistan military, India has -- India's
12 Historic Adversary. Like much of the world,
13 New Delhi has been subjected to China's
14 economic imbalance and coercion and India
15 explicitly distrusts China's technology stack,
16 particularly in critical digital
17 infrastructure that can be weaponized for
18 surveillance disruption and coercion.

19 Second, the China-India border remains
20 highly militarized and that military balance
21 increasingly favors China. Over the past 5 to
22 10 years, the PLA has enhanced its advantages
23 in logistics and firepower in Tibet and even
24 while India tries to catch up. The PLA built
25 up or upgraded a number of dual-use airfields,

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1 logistics hubs, and missile forces that
2 enhance rapid mobilization and power
3 projection.

4 New air defense complexes, forward bases,
5 and hardened shelters near the border, suggest
6 preparation for sustained high-intensity
7 operations. Extensive road, rail, heliport,
8 and border village infrastructure, compresses
9 mobilization timelines.

10 In the past year, aggressive PLA
11 exercises and forward H6 bomber deployments
12 signal rising operational readiness. Despite
13 devoting increased resources to the army and
14 border infrastructure, India still faces
15 structural disadvantages in logistics,
16 terrain, long range fires, and integrated ISR
17 networks, affording Beijing escalation
18 dominance along the frontier.

19 This growing military imbalance could
20 weaken deterrence and lead to conflict. A
21 potential crisis such as a Dalai Lama
22 succession crisis could inadvertently escalate
23 into large-scale conventional conflict.

24 But Chinese leaders might also perceive
25 strategic incentives to deliberately coerce or

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1 initiate conflict against India to settle the
2 border before India modernizes, to punish
3 alignment with the United States, or to test
4 out new capabilities in an easier land
5 campaign.

6 Third, India's May, 2025 conflict with
7 Pakistan, revealed to New Delhi the density of
8 the two-front threat posed by the China-
9 Pakistan Axis. The conflict may have served
10 as a catalyst to shift Indian strategic
11 thinking, moving from a theoretical two-front
12 threat to a one-front reinforced reality
13 where, where china and Pakistan actively
14 collaborate on military campaigns.

15 During this conflict, Pakistan seemingly
16 operated as an extension of the Chinese
17 military. It received live inputs from
18 Beijing's space-based intelligence and
19 tactical data links and relied on high-end
20 Chinese fighter jets, missiles, drones, and
21 air defense systems.

22 Beijing seems committed to arming
23 Pakistan even more to alter the regional
24 balance of power and potentially bog down
25 India on the subcontinent. New Delhi is

1 exploring various offset strategies to counter
2 this two-front reality.

3 Fourth, China's substantial inroads into
4 the Indian Ocean have eroded India's resident
5 advantages. China's navy is steadily building
6 the capacity and infrastructure for sustained
7 Indian Ocean operations to secure sea lanes
8 and overseas interests.

9 Rapid surface combatant growth, expanding
10 logistics networks, and advocacy within China
11 for an Indian Ocean force, create the
12 foundation for future power projection.

13 Routine deployments of warships,
14 submarines, surveillance vessels, fishing
15 fleets, port visits, and increasingly complex
16 exercises, especially with Pakistan, are
17 normalizing a persistent PLA Navy presence.
18 Such a Chinese military presence, could be
19 used to secure sea lines of communication but
20 also intimidate regional states, threaten
21 shipping and conduct offensive operations deep
22 in the Indian Ocean.

23 Meanwhile, India's navy has suffered from
24 budget constraints, procurement delays, and
25 diversion of resources to continental threats,

1 shrinking its relative advantage.

2 Fortunately, India is showing some signs of
3 turnaround and now increasing investments in
4 its own A2AD architecture to balance China
5 including maritime ISR submarines, long-range
6 missiles, and dual-use infrastructure in the
7 Andaman and Nicobar Islands.

8 Fifth, New Delhi stakes in Taiwan
9 security are rising. In the event of a cross-
10 strait crisis, India has the potential to
11 contribute to deterrence by preparing
12 meaningful military contributions to a
13 coalitional defense of Taiwan and the first
14 island chain.

15 A Taiwan conflict would disrupt digital
16 infrastructure critical to India's services,
17 services economy, eliminate an important
18 technology partner, and free China to
19 concentrate more pressure on India's borders.

20 Consequently, Indian officials are
21 studying options ranging from opening a
22 western front to assuming greater maritime
23 security responsibilities in the Indian Ocean
24 in order to free US Forces for Pacific
25 operations. India could also provide

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1 logistics access, ISR overflight rights, and,
2 and, and defense industrial surge capacity to
3 a coalition response, especially in a
4 protracted conflict.

5 As US-India defense cooperation deepens,
6 the mere prospect of Indian involvement may
7 complicate Chinese planning and strengthen
8 collective deterrence in the Indo-Pacific.

9 Sixth, and finally, to support a more
10 stable balance of power in the Indo-Pacific,
11 Congress should take several steps to bolster
12 the US-India defense partnership and
13 deterrence capacities. Congress should
14 increase the resources to support Indian
15 military capacity and build individual and
16 procedural interoperability including standing
17 operations, training and exercises,
18 professional military education, staff
19 exchanges, liaison officers, and unit-to-unit
20 activities.

21 This could be modeled on or nested within
22 the Pacific deterrence initiative. Congress
23 should increase the resources for mechanisms
24 that bolster collaboration of US-India Defense
25 innovation -- of US-India Defense innovation

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1 ecosystems and defense industrial
2 collaboration, especially with the Indian
3 private sector. These include accelerators,
4 challenge prizes, INDUS-X summits and expos,
5 trade delegations, foreign comparative
6 testing, RND, and joint project agreements.

7 Finally, streamlining export controls
8 modeled on AUKUS-style frameworks would
9 accelerate Indian military access to
10 commercial sensing and dual-use technologies
11 in prioritized domains identified by the 10
12 year US-India. Major Defense Partnership
13 Framework. Thank you for your time and I'm
14 happy to any follow-up -- answer any follow-up
15 questions.

16 MR. BRANDS: Thanks very much.

17 Ms. Ford, over to you.

18 MS. FORD: Thank you so much.

19 Commissioners, I appreciate the opportunity to
20 be here to testify at today's hearing. It is
21 a pleasure to join my colleagues for this
22 important conversation.

23 I'd like to start by underscoring three
24 essential points about the US-India Security
25 Partnership. First, a strong US-India

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1 partnership is an, an essential component of
2 deterrence against Beijing. For the United
3 States, a partnership with India provides two
4 unique advantages, geography and scale. Over
5 the next 20 years, no other close Asian
6 partner can provide similar industrial and
7 demographic advantages as well as pressure on
8 China's contested geography.

9 For India, a closer partnership with the
10 United States provides power acceleration,
11 allowing New Delhi to more rapidly address
12 political, industrial, and military
13 disadvantages, it will be hard for it to close
14 in the near term. Both Washington and New
15 Delhi are often hesitant to acknowledge our
16 shared need for interdependence but there are
17 few partnerships that provide as much
18 positional advantage against the PRC.

19 Second, while the US-India partnership
20 will never be an alliance, policymakers should
21 push toward a defence partnership that shares
22 as many alliance-like functions as possible.
23 Our defence partnership has already taken on
24 many functions not dissimilar to US Alliances
25 in the past decade. Indian officers now serve

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1 at US Military commands. We are integrating
2 our defence industrial bases and our
3 military's exercise together across all
4 domains, including space.

5 This is a stunning pace of change in a
6 relatively short amount of time. And today,
7 the fundamental challenge to closer defence
8 cooperation is strategic will and political
9 trust. It is not operational constraints.

10 The past year has undoubtedly made those
11 challenges more difficult but policymakers
12 should not shy away from being ambitious in
13 pushing the outer bounds of the defence
14 partnership.

15 Third, one of the key challenges to
16 building a closer defence partnership will be
17 to reconcile our shared relationships with
18 Pakistan and Russia. Although both the US-
19 Pakistan and India-Russia partnerships have
20 narrowed in the past several years, they can
21 still undermine US-India cooperation, a
22 dynamic that has been particularly apparent
23 over the past year.

24 Neither the United States nor India will
25 give the other a veto over its foreign

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1 partnerships but the need to make difficult
2 trade-offs is likely to grow if we wish to
3 pursue more meaningful information sharing,
4 operational coordination, and technological
5 integration. This will increase --
6 increasingly require frank conversations about
7 the specific activities that each partner
8 views as triggering unacceptable risks to its
9 own interests.

10 It will also necessitate more concerted
11 efforts to align our export control and
12 technology security practices with each other.
13 Looking ahead, defense and technology
14 cooperation provide (indiscernible) in the
15 bilateral relationship as Indian and US
16 policymakers continue to work through what
17 will undoubtedly be challenging conversations
18 related to trade.

19 Over the next year, US security policy
20 toward India should look toward four
21 objectives. First, restoring Indian
22 confidence in US support for its military
23 modernization. The May, 2025 India-Pakistan
24 crisis created deep concern for New Delhi,
25 both accelerating internal debates about

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1 India's requirements for PRC-focused crises as
2 well as reigniting lingering concerns about US
3 reliability as a security partner.

4 The US has a vested interest in helping
5 India close key gaps in military deterrence
6 against the PRC but in the absence of
7 confidence in US assistance, New Delhi is
8 likely to lean into indigenization in ways
9 that will slow the pace of its modernization.

10 US policymakers should accelerate efforts
11 to identify additional opportunities to share
12 high end capabilities, conduct risk
13 assessments on how we could do so, and look
14 for ways to provide India with near-term
15 advantages even as it continues to pursue its
16 long-term indigenization goals.

17 This should include a focus on areas such
18 as air defenses, long-range fires, and
19 undersea capabilities.

20 Second, re-energizing defence industry
21 and defence technology cooperation. Too
22 often, US-India defence industry collaboration
23 stalls out because it focuses on ambitious
24 projects with overly long development
25 timelines. We face the same risks today. The

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1 US and India need to refocus their efforts on
2 building deterrence more quickly, accelerating
3 existing defence trade and focusing on near-
4 term innovation priorities.

5 This should include joint drone
6 manufacturing, collaboration on dual-use
7 technologies through the India-US Defence
8 Acceleration Ecosystem System, INDUS-X, and
9 exploring legislative efforts to enable
10 license-free defense trade.

11 Third, establishing more frequent high-
12 level bilateral dialogues on China policy.
13 With both President Trump and Prime Minister
14 Modi planning to meet Xi Jinping in 2026,
15 there is real potential for misunderstanding
16 or misalignment on China policy this next year
17 and that alignment anchors the US-India
18 Defense Partnership.

19 US policymakers should make it a priority
20 to engage at the highest levels with India
21 both before and after high-level meetings with
22 the PRC and to establish new dialogues to
23 better coordinate on China policy.

24 For its part, Congress can play a role by
25 ensuring these conversations are not only held

1 by a small group of executive branch officials
2 but also include a broader dialogue with
3 Indian politicians and business leaders who
4 can shape the space for US-India defence ties.

5 And finally, leveraging the QUAD to
6 expand India's operational coordination with
7 the United States and like-minded allies.
8 Recent tensions between Washington and New
9 Delhi could damper efforts to be ambitious in
10 expanding sensitive bilateral operational
11 cooperation right now.

12 However, recent progress in India's ties
13 with both Japan and Australia could open the
14 aperture for new security cooperation among
15 QUAD partners. US policymakers should work
16 with Australia and Japan to identify existing
17 exercises or training activities that could
18 include India, especially in areas with a
19 clear connection to PRC deterrence, such as
20 logistics, maritime surveillance, and anti-
21 submarine warfare.

22 They should also look for new
23 opportunities to extend the geographic reach
24 of allied deterrence by expanding QUAD
25 operational activities across a fuller breadth

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1 of the eastern and western Indo-Pacific
2 region.

3 Commissioners, the US And India have a
4 vested interest not only in their partnership,
5 but also in each other's success. It is
6 important for us to reiterate that to each
7 other. While the past year has exposed
8 underlying fragility in our bilateral
9 partnership, Washington and New Delhi now have
10 an opportunity to recommit to building a more
11 sustainable and resilient partnership. Thank
12 you for your time. I look forward to your
13 questions.

14 MR. BRANDS: Thank you. I'm going to
15 abuse the chair's prerogative to ask the first
16 question. And I'm actually going to start
17 exactly where, where you ended.

18 So obviously we're coming out of a year
19 of some tension in the US-India relationship.
20 It looks, hopefully, like the worst of that
21 is, is behind us.

22 But -- and I'll pose this to the entire
23 panel and would be, be happy to hear
24 reflections from any and all of you on this --
25 how have the events of the past year, if at

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1 all, affected the Indian government's view of
2 the US and the strategic environment and
3 affected either on the upside or the downside,
4 the possibilities for future cooperation.

5 You want to get started Ms. Ford and then
6 we can just go across the panel?

7 MS. FORD: Sure. I think there has long
8 been a debate in New Delhi, in the strategic
9 thinker community about how much it was
10 acceptable to rely on the United States as a
11 security partner and what the past year has
12 done is, it has amplified the voices within
13 the Indian community who have always said that
14 the US was a bad bet for India.

15 And what we have seen is parts of the
16 Indian community who have argued that a closer
17 relationship with Russia, a closer
18 relationship with Europe was a safer bet for
19 New Delhi. Those voices have more sway right
20 now and we have seen India accelerate what it
21 is doing with Europe on trade.

22 We have seen variety of defense
23 agreements and initiatives starting with
24 Europe that in some cases, I think in
25 different circumstances, would have gone to

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1 the United States as a priority. And we have
2 seen things like Indian re-upping S-400
3 purchases and conversations with Russia and
4 China in ways that I think could have been
5 prevented or at least dampened if the US-India
6 relationship was closer.

7 I don't think that means, however, that
8 it's the end of the day because I think the
9 US-India partnership in the last decade has
10 constantly surprised us with low lows that
11 were worse than we ever expected and a
12 remarkable ability to rebound.

13 DR. LALWANI: I would concur with Ms.
14 Ford on this. I do think that there's been
15 exposure of US unreliability or perceptions of
16 unreliability and that leads to what I'd call
17 it an "uncertainty discount" in the
18 relationship which just means that all the
19 things that we plan to do in the strategic and
20 military and technological domain take longer
21 and maybe cost more in terms of efforts and
22 resources and bureaucratic energy.

23 And so, that I think just slows us down
24 for the -- for, for the effort that we're
25 trying to make which is to balance China more

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1 effectively and, and rapidly. And the last
2 point I'd say is that, there's also an
3 uncertainty about US-China policy, right? And
4 that too leads to a -- could sort of lead
5 India back towards some sort of hedging
6 behavior.

7 I do think, in this case, India believes
8 the United States to sort of be this anchor
9 balancer and the absence of it, would revert
10 to sort of more -- sort of security-oriented,
11 you know, hedging behavior.

12 MS. MADAN: I think there are two sides
13 to this coin. One, I think in terms of the
14 fragility of the relationship, there are
15 aspects of this last six to eight months that
16 have shown the relationship in certain parts
17 to be fragile.

18 What you've also seen is that, in terms
19 of a reaction, is in that debate that I
20 mentioned on this constant debate in India on
21 how far and fast to deepen ties with the US, i
22 think these last few months have weakened the
23 hands of those within the Indian government
24 that have argued for going at a higher speed
25 and, and at a, a larger scale. You have also

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1 seen, I think, that it hasn't caused the Sino-
2 Indian re-engagement but it has added impetus.

3 And so,, one one hopes that this moment
4 of kind of re-engagement with the US is
5 sustainable because I think that could shape
6 how far that Sino-Indian re-engagement goes.
7 I will say the other thing on the fragility
8 side is, today the fact that you are hearing
9 Indian officials and senior Indian officials
10 not just talking about de-risking from China,
11 but also from the US, is a change from the
12 last few years.

13 Finally, in terms of kind of the more
14 negative side of the situation, one of the
15 things that Indian government officials would
16 say that the reason you could see so much more
17 alignment that governments in India, both this
18 one and the previous one, could make decisions
19 that were crossing certain of India's self
20 imposed red lines to align with the US, had
21 been that the street, the Indian street, was
22 with the US.

23 I think if you start to see and you have
24 seen some degradation in that positivity about
25 the US it constrains the hands of Indian

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1 politicians who start to see relations with
2 the US not as a -- as an asset but a
3 liability.

4 Having said all that, what has been
5 remarkable which would not have been the case,
6 I think, 5 or 10 years ago, is the resilience
7 of the relationship. Despite, not just
8 concerns in, in India about, "Can we trust the
9 US?" In the US in the previous few years
10 about well, "Can, can the US find India
11 reliable? Is the relationship has remained
12 resilient?"

13 And you've also seen functional
14 cooperation, including defense and security
15 cooperation, continue despite these economic
16 concerns in the last few years.

17 MR. BRANDS: Thanks very much.

18 Commissioner Stivers.

19 MR. STIVERS: Co-chair's prerogative. I
20 wasn't ready. You bet you. You bet you.
21 Okay. The first question I -- let's see.
22 Caught me off guard here. You know, China has
23 increased its activities and influence
24 throughout the South Asia region. And so the
25 first question I have would be -- setting

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1 aside Pakistan for a second which I know is a
2 huge issue in and of itself -- what are the
3 activities that China has pursued in the rest
4 of South Asia and Sri Lanka, the Maldives,
5 Bangladesh, and Nepal that are most worrisome
6 to, to Indian policy policymakers?

7 MS. FORD: Sure. I think I would
8 highlight a few. First, we've seen a lot of
9 reports in recent years about China's maritime
10 behavior in the Indian Ocean, increasing use
11 of civilian research vessels for hydrologic
12 surveys that I think for Indian policymakers
13 raise a lot of concerns that the South China
14 Sea today could essentially be the Indian
15 Ocean tomorrow. Question about what those
16 ships are doing.

17 We've seen the Department of Defense talk
18 publicly about China's desire for dual-use
19 facilities elsewhere in the world, including,
20 potentially, places in South Asia. This is a
21 real concern for India about a growing Chinese
22 military presence potentially in places right
23 on India's maritime border where China has not
24 previously had the logistical reach.

25 And third, we've seen a lot of reporting

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1 about activities such as villages being built
2 up all along the contested border between the
3 United States and India in a way that has the
4 potential to put real pressure on India at
5 various points, whether that's Bhutan or
6 Nepal, making it harder for India to have a
7 stable situation along the border.

8 So in sum, I think we have seen a variety
9 of military activities that put pressure both
10 on the maritime border and the land border for
11 India.

12 DR. LALWANI: Just to add to that, in
13 addition to the, sort of, government or state
14 survey vessels, there's also fishing fleets
15 that are operating now in the Indian Ocean
16 that I think there is reason to suspect that
17 they might be enabling PLA, PLAN sort of
18 activity.

19 It was particularly conspicuous during
20 the May, 2025 war, if you'd see sort of
21 satellite imagery of sort of where they're
22 lined up on sort of the edge of the Indian
23 EEZ. And then in terms of dual-use
24 infrastructure, in addition to sort of like
25 the traditional ones we think about like

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1 airfields, ports, things like that, there's
2 also dual-use sensing.

3 And that can sort of be masked in terms
4 of research and development collaborations at
5 scientific institutions, universities. There
6 was a particular case, I believe in Sri Lanka
7 of like a radar installation that was placed
8 within a university that was ostensibly sort
9 of a scientific sort of collaboration, but
10 probably -- potentially had sort of other
11 uses.

12 MS. MADAN: I'll just add a couple of
13 other things that is of concern to India. One
14 is what these loans, particularly that number
15 these countries have taken from China is doing
16 to their debt burdens, and what the sometimes
17 the inability to pay those is leading to, in
18 terms of, for example, taking -- the Chinese
19 company taking over the port of Hambantota.

20 So the terms of the agreements, what
21 they're doing to debt burdens in these
22 countries, but also then what that means in
23 terms of the political and strategic influence
24 that that buys China within these countries.
25 And India's concern in part has been is that

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1 China has used that -- used that influence to
2 shape these countries choices in terms of a
3 more anti-India direction.

4 And so not just in terms of, for example,
5 getting them all to reiterate their one China
6 policies, but also to actively curb their,
7 their kind of -- their, their informing India
8 or looping India in on things like a visit of
9 a Chinese submarine, for example.

10 Or, for instance, not just kind of
11 lobbying for things that India is doing --
12 lobbying against things that India is doing,
13 but also the US. For example, we saw this
14 with the Millennium Challenge Coproration
15 Compact with Nepal, where you actively saw
16 China lobby against that and use
17 disinformation and misinformation against
18 India, but also against the US, Japan and
19 others.

20 MR. STIVERS: Okay. One other question,
21 which is a big question, and I only have 40
22 seconds. But can, can one of you -- I'm not
23 sure who the best person would be -- kind of
24 give a quick assessment of the current India-
25 Russia relationship?

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1 It's my understanding that, that India,
2 you know, even before this -- the agreement
3 that was made, you know, in the last few weeks
4 on, on not purchasing more Russian oil, that
5 only about three percent of Indian's --
6 India's oil comes from Russia. What -- can
7 you just give a quick assessment of what that
8 relationship is strategically and
9 economically?

10 MS. MADAN: Russia will remain India's --
11 one of India's closest partners. There is 0--
12 it's not just nostalgia. There is a defense
13 dependence which Dr. Lalwani has written about
14 that will remain for a while even though India
15 has diversified largely away from Russia in
16 recent years towards the US, France, Israel,
17 South Korea, and others.

18 So it will -- it will choose to maintain
19 those relationships in different ways. They
20 are trying to make it a more diversified
21 relationship away from defense.

22 Having said that, it is just the reality
23 for India today that Russia is not as relevant
24 to India's interests as it was in the past for
25 various reasons, including it is not as

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1 essential for India's economic and
2 technological transformation, and because of
3 Russia's close partnership with China that
4 limits how much Russia can play a balancing
5 role against China, not just in Eurasia, but
6 in the Indo-Pacific as well.

7 MR. BRANDS: Okay. Thank you. Next up,
8 we have Commissioner Hodges joining virtually.

9 MR. HODGES: Hi. Good morning. Yes.
10 This is a question for, for each of you. So
11 you, you referenced India's continued
12 orientation towards Russia, and given
13 Beijing's widespread material support for
14 Russian aggression in Europe, effectively
15 underwriting the war, how do policymakers in
16 New Delhi reconcile that with India's own
17 security anxieties about Chinese power on its
18 northern border?

19 And does that contradiction shift the
20 calculus structurally and create an opening
21 for the US to press India towards a cleaner
22 break from those in Russia that are not
23 pursuing peace?

24 MS. MADAN: Thank you, Commissioner, for
25 that question. Just I would say that one of

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1 the things that has been least effective
2 sometimes in terms of getting India to rethink
3 where Russia fits in its strategy is when
4 others tell India how to deal with Russia.

5 One of the things that's been helpful is
6 that India has recognized on its own that
7 there are these limits to its Russia
8 partnership, because Russia is -- for example,
9 in the last Sino-Indian border crisis, Russia
10 stayed neutral in that crisis. Unlike the US,
11 Australia and Japan, it did not actively come
12 out in support of India.

13 This is something India recognizes that
14 it will set limits because India sees and
15 assesses most relationships today through a
16 China prism.

17 And so I think some of it is, as to the
18 extent possible, sharing with India
19 assessments and encouraging our European
20 allies to share assessments of China-Russia
21 relations, the depth and breadth of that
22 relations, and potential implications for not
23 just Sino-Russian cooperation in Eurasia, but
24 potentially in the Indo-Pacific as well, where
25 they have started doing more, for example,

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1 exercises with Iran, with South Africa, and
2 others.

3 DR. LALWANI: So I would say --

4 MR. HODGES: Thank you.

5 DR. LALWANI: Should I say three things
6 real quick? So, one, I mean, even going back
7 to the previous question, the Russia-China
8 relations or the, the, the Russia relations
9 with India, in terms of defense material, I
10 still think that there are some narrow areas
11 where India will continue with Russia, right?

12 So air defense, missiles, cruise
13 missiles, the BrahMos Missile program really
14 depends on some Russian ramjet propulsion.
15 And the third would be a nuclear submarine
16 which the Russians are on schedule to provide
17 the Indians, a nuclear attack submarine.
18 There's just no other alternative that India
19 has right now.

20 To Tanvi's point, I would add, yeah, the,
21 the, the model should be show, don't tell. I
22 think there are real reasons for India to be
23 concerned about the components going into
24 future S400 systems, both in the interceptor
25 missiles as well as the radars.

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1 There's also real reasons to be concerned
2 that China sort of has gotten into the back
3 doors of that or at least sort of knows the
4 vulnerabilities of it, having operated it for
5 many years. And I think it would be useful
6 for us to sort of show an assessment of that
7 as opposed to just sort of chiding India for
8 it.

9 MS. FORD: Thank you. I would just add,
10 I think India's sort of idea of an
11 omnidirectional foreign policy fundamentally
12 relies on the belief that India can create a
13 wedge between China and Russia. I think the
14 increasing difficulty of India being able to
15 do that is something that is going to be very
16 challenging to break Indian policymakers of.

17 And so I would also echo that I just
18 think sharing information versus looking as if
19 we are lecturing on the way of the world is a
20 more effective approach with Indian partners.

21 Second, I think we need to recognize that
22 if we are wanting India to further diversify
23 away from Russia, it will create real sense of
24 vulnerability for India, that if the United
25 States does not look like we are willing to

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1 step up in providing things militarily that we
2 have not been able or willing to do in the
3 past, we should have no expectation that India
4 will want to walk away from what has been a
5 very long term relationship and military
6 reliance.

7 And then third, I do think there are some
8 interesting areas though. For example, the
9 growing Pakistan-Russia relationship as well
10 as India's growing relationship with European
11 partners who are not going to look very fondly
12 on Indian ties with Russia. That also create
13 opportunities for India to have a deeper
14 understanding of how relationships with Russia
15 are more complicated and fraught than in the
16 past.

17 MR. HODGES: Thank you. No more
18 questions.

19 MR. BRANDS: All right. Commissioner
20 Kuiken.

21 MR. KUIKEN: Ms. Ford, you actually just
22 went where I wanted to have the whole panel
23 go, which is the issue of Europe. We've
24 talked a lot about Southeast Asia and how
25 we're thinking about trying to persuade the

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1 Indians to, to diversify away from Russia.

2 Can you talk about that and can the whole
3 panel talk about this in the context of
4 Europe, Canada, Japan, Korea, and sort of all
5 of the countries right now that are -- that
6 are re-evaluating or thinking about their
7 relationship with the US and how we should
8 look at through that in the -- through the
9 India lens?

10 MS. MADAN: I think to -- what you've
11 been seeing, which a number of other countries
12 have discovered now, but India has long had a
13 strategy. It's perhaps the most consistent
14 element of its foreign policy across
15 governments of very different political
16 stripes, to basically have a strategy of
17 diversification when it comes to their foreign
18 policy partnerships.

19 And it is based on this understanding
20 that while India would like to have its own
21 independent capabilities, that it needs
22 partners. And what it wants to do is
23 diversify its dependence and make itself more
24 resilient to, for instance, opportunities for
25 coercion that countries might have.

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1 And so you've seen India long seek these
2 relationships with others. They also think,
3 whether it's Europe, whether it's Japan,
4 whether it's other partners, having these
5 countries be strong is essential to what they
6 want in terms of a multipolar world. And so
7 what you've seen in recent years is an
8 acceleration.

9 It did not start this year. You have
10 seen it perhaps in the last, I think, six to
11 seven years, an acceleration of this
12 diversification with Europe, with the UK now
13 separately as well. You've seen it with Japan
14 in the last few months. You've seen it with
15 Korea. But you're also seeing it with, with
16 countries that are in, for example, larger
17 countries in Latin America and Africa as well,
18 and in the Middle East.

19 The UAE, for instance, has become a major
20 partner for India. And part of this is saying
21 you don't want another -- something in common
22 that a lot of these countries have, they are
23 not China. So India is maintaining its
24 relationship with China, but in India's
25 diversified portfolio partners, any hopes that

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1 China would grow has -- have really been
2 stemmed.

3 And so you're seeing this diversification
4 because they think these countries can help
5 them, not just kind of in terms of growing
6 India's capabilities, but also helping them in
7 their balancing strategy in, in the region,
8 but also globally as well.

9 MS. FORD: Yeah. It's a great question.
10 I think that the India's relationship with
11 Europe and sort of growing ties there have
12 real advantages, but they also have a couple
13 of limitations.

14 First, I think Europe has taken a
15 somewhat harder line than it has had in the
16 past on China policy. But if Europe is going
17 to look elsewhere other than China, especially
18 economically on, on the industrial front, it
19 frankly has to have a closer relationship with
20 India.

21 And so I think there are real advantages
22 there in the closer manufacturing economic and
23 trade ties that we see coming up right now
24 between India and Europe. I think quite
25 frankly it is also helpful because India has a

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1 very hard and realistic view of some of the
2 technology challenges posed by Beijing that
3 frankly it is sometimes helpful for our
4 European partners to hear.

5 India moved faster than everybody else on
6 ripping -- you know, ripping China out of the
7 telecom sector, out of social media apps. And
8 I think in some ways that relationship can
9 help harden Europe's spine when it comes to
10 China policy.

11 The relationship also I think provides a
12 real military backstop for India in ways that
13 can be helpful. Specifically we look at the
14 May, 2025 crisis, India has a fighter gap
15 problem. They know that and they don't know
16 how they're going to address it.

17 The current effort both to work with
18 France on co-development of jet engines as
19 well as new purchases of French fighters will
20 help India in that regard. And there are
21 additional opportunities with the UK, with
22 Germany, and other partners where maybe Europe
23 can do things that the United States can't or
24 won't right now.

25 However, real limitations that I would

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1 say, when it comes to thinking about the
2 crises or conflicts at home that will matter
3 most to India, a lot of European partners, I
4 think, have reasonably close ties with
5 Pakistan in ways that India finds problematic
6 and difficult to reconcile.

7 When we look at the India-China border
8 situation, it's hard to imagine which European
9 partner would actually step in to be helpful
10 were there to be a crisis between India and
11 China on the border. And then we look more
12 broadly in the Indo-Pacific and all of China's
13 military activities across the region that
14 India finds problematic.

15 And frankly, Europe has a limited ability
16 militarily to step in and do something about
17 it. So there are real areas where I think
18 there is not a substitute for the United
19 States for India.

20 MR. KUIKEN: Commissioner Brands, do you
21 mind if we just let DR. LALWANI answer?

22 DR. LALWANI: I'll just add two points to
23 that. So in terms of middle power
24 cooperation, I think there's actually
25 something really important happening between

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1 India and Japan that took place particularly
2 on Prime Minister Modi's visit before he went
3 to China in end of August.

4 The, the substance of the defense
5 cooperation agreements signed with Japan,
6 including on radar and naval antenna
7 technologies, I think presages sort of a
8 greater sort of middle power collaboration.

9 The second point on Europe, I do think
10 that Indian's industrial scale is going to be
11 of great appeal to Europe as they try to spend
12 more on defense procurement and defense
13 manufacturing. India is going to be a natural
14 partner. I think we're seeing that coming out
15 of the trade agreement.

16 And I would say that given that, we can
17 allow Europe to sort of be -- take the lead in
18 sort of forcing the issue with India on its
19 relationship with Russia, right? Russia --
20 Europe has much higher stakes in this. I
21 think they're going to be sharper about it and
22 they'll make very clear trade-offs in terms of
23 sort of what the defense technology access
24 potential is between the two.

25 So I think in a way, the United States

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1 could like sort of ride in, in Europe's wake
2 on that conversation.

3 MR. KUIKEN: Thank you.

4 MR. BRANDS: Commissioner Price,

5 MS. PRICE: Good morning. Thank you all
6 for your excellent testimony this morning and
7 for being here. So, this week, in honor of
8 Losar Tibetan new year, I'm going to ask a
9 question related to Tibet. Dr. Lalwani, you
10 mentioned it. Dr. Madan, you had it in your
11 written testimony. And, Ms. Ford, please feel
12 free to give us your thinking also.

13 As a succession discussion moves forward,
14 it isn't, if it is a problem, it's the Dalai
15 Lama is 90, so I wish him many, many, many
16 years to come, but he is a 90-year old. Can
17 you all address a bit security implications,
18 domestic reverberations in India? Is India
19 developing policy? Do they talk about policy?

20 They've been very welcoming of the Dalai
21 Lama and of the Tibetan community, but where
22 all of that will evolve? Thank you.

23 MS. MADAN: I'll perhaps let Dr. Lalwani
24 talk about the security implications. I will
25 just say that I think, you know, you've seen

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1 an India that has been thinking about this for
2 years. What you rarely hear them do is talk
3 about it. In fact, they're usually more
4 discreet about this than even talking about
5 Taiwan.

6 And some of that is related to the fact
7 that there is a sense that the last time the
8 two countries fought a war in 1962, it was
9 based in part of Chinese concerns about
10 India's Tibet policy. So India tends to be
11 quite, while it is very much focused on this
12 issue, it realizes that it will have direct
13 implications. They tend at least not to talk
14 about it publicly.

15 Having said that, there are certain
16 things they've been quite consistent about,
17 saying that Tibetans are welcome in India,
18 saying that the only people who have the right
19 to choose the next Dalai Lama are the Tibetans
20 themselves and no other country or capital has
21 an interest.

22 The other thing that politicians in India
23 have to be sensitive about is that this has in
24 the past been a sensitive issue. Parties
25 still label previous governments as having

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1 caved China on Tibet. And so there is a
2 certain amount of attention that this issue
3 gets in India that, for instance, Taiwan
4 doesn't get.

5 But because it is of direct implications
6 to India, you see India at least having been
7 hesitant to talk. One thing there has seemed
8 to be a bit of change though in recent years
9 is a willingness to engage with the US much
10 more about this. And I think that is a good
11 sign.

12 I do think the US, India and others have
13 to start thinking about what the response will
14 be when the question of succession comes up.

15 You do see China very actively going and
16 talking to countries that have a number of
17 Buddhists or who would have interests and
18 potentially will try to get them to endorse
19 whatever, whoever the Dalai Lama -- whoever
20 China decides to name as a successor. And I
21 think it is important for like-minded
22 countries to ensure that that does not happen.

23 DR. LALWANI: Just to add, in terms of
24 what -- in the event of the Dalai Lama's
25 passing, I think there's plausible reason that

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1 you could see security measures being taken on
2 either side of the border just for -- again,
3 for defensive purposes or for protective
4 purposes that could be misread, you know, by
5 the other side, and that sort of leads to sort
6 of this conflict spiral of sorts.

7 And, particularly, given the amount of
8 forces pre-positioned that close to the
9 border, including in close proximity to
10 Tawang, another holy site for Tibetans, that
11 it would -- you could imagine a conflict
12 spiral arising.

13 And just to Tanvi's point, to add on to
14 this, I do think this is something worth not
15 just dialoguing on and we certainly should be
16 talking about sort of policy sort of in the -
17 in these scenarios, but also war gaming on.

18 And that doesn't mean necessarily sort of
19 military war gaming, but in terms of scenario
20 exercises to, to figure out exactly sort of
21 what are the potential contingencies that we
22 need to be coordinating on in the future and
23 potential uncertainties that arise.

24 MS. PRICE: Okay. Dr. Lalwani, can you
25 go back to -- when you talk about war gaming,

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1 can you get into some detail about what you're
2 concerned about?

3 DR. LALWANI: So I think I'll speak from
4 sort of a previous game having played, that
5 there are -- you know, if there's unrest on
6 either side of the border, you can imagine
7 forces being activated and moved forward. And
8 in the past, you know, sort of forward
9 deployment of forces has been misread as sort
10 of aggression in some way.

11 And then there's just a premium --
12 there's a first mover advantage on this border
13 in the -- in the Himalayas. And so what I
14 would worry about is that, and I think it's
15 sort of unlikely, but I still think it's a
16 scenario that's worth sort of teasing out the
17 possibility that that first mover advantage
18 creates an incentive for offensive
19 mobilization.

20 MS. PRICE: Thank you,

21 MR. BRANDS: Commissioner Schriver.

22 MR. SCHRIVER: Thank you. Good morning.
23 I really appreciate all the witnesses, your
24 contributions to this hearing. This is really
25 an all star cast and a great opportunity for

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1 us to, to hear from you. I have a question
2 for each that are unrelated to each other, if
3 there's time or if there's a -- if I need a
4 second round.

5 Dr. Lalwani, your comments about
6 cooperation during a Taiwan contingency I
7 found very interesting. I think it was a
8 little more forward leaning than what my
9 expectations might be. But I'm wondering if
10 that's something we should be more proactive
11 on.

12 I mean, I get it sort of conceptually, if
13 there's a contingency, it wouldn't be great if
14 India sort of tied down China in the Indian
15 Ocean and held things at risk. That would
16 divert China's attention.

17 But are we actually talking to the
18 Indians about this? Are we actually planning
19 and doing the war gaming in the scenario
20 discussions? And would the Indians even know
21 what the expectations might be? Are they
22 training to it, Are they equipping to it? Or
23 are we just at this very sort of nascent stage
24 of, "Conceptually this is what sounds good to
25 us, but we haven't really pushed it."?

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1 DR. LALWANI: I don't work for the US
2 Government. I, I talk to them about it. And
3 I do think that -- I can't speak for how the
4 US Government approaches this conversation,
5 but I do think it would -- it would behoove us
6 to do so. Because I do see India's public
7 debates on this moving at a pace that I would
8 not have expected five years ago.

9 And so, yeah, there are these different
10 scenarios out there that are -- that are
11 hypothesized. I think we should be exploring
12 different ones. I think some are more likely
13 than others. I think sort of maybe more
14 passive things like logistics and overflight
15 and over-the-horizon, you know, technology
16 support like satellite support are more
17 plausible than sort of opening up a second
18 front.

19 But I think there are, you know, things
20 in between that could be of substantial
21 benefit to the US. Again, covering down the
22 Indian Ocean I think has many forms. And so,
23 yes, I do think we should be talking about it
24 but I'm not certain we are.

25 MR. SCHRIVER: Well, you're, you're

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1 seated next to somebody who may have been
2 involved in that, but I'll -- and welcome any
3 comment you might have on that, Ms. Ford, but
4 I wanted to ask you a question about one of
5 your recommendations about defense industrial
6 cooperation.

7 I mean, I feel like this is a bit of an
8 iceberg I've been staring at for a couple
9 decades and it tends to go in the same
10 direction every time. India wants technology
11 transfer, US Industry wants the sales. And,
12 again, you were a little bit -- you sounded a
13 little bit more optimistic than, than maybe I
14 would have been in terms of how this might
15 unfold going forward.

16 Can you -- am I characterizing your, your
17 view correctly? And if so, how can you make
18 me a little more optimistic?

19 MS. FORD: Yeah. I think I am overall
20 optimistic because I think we have learned
21 some lessons from stuff that has not worked in
22 the past that we have an opportunity to do
23 differently.

24 The reason that I focused on INDUS-X,
25 which is the Defense Innovation Accelerator,

Audio Transcription

1 is specifically because the, the premise there
2 was that we were going to focus on dual-use
3 technologies that would have commercial
4 applications as well as military applications.

5 That explicitly means that you're going
6 to be working with private sector Indian
7 companies and you're going to be talking about
8 sort of near term wins and gains when it comes
9 to defense tech. I think that's really
10 important in the past where we have gone wrong
11 almost every single time, is we put big US
12 defense primes up against Indian private
13 sector SOEs and they just don't work together.

14 And we focused on ambitious projects that
15 would take like 10 to 20 years to materialize.
16 And so both sides kind of threw up their hands
17 at some point in that process and decided
18 nothing is working. So short discreet
19 commercial tech that has a broader application
20 I think is the way to go. And India's defense
21 and tech community has enough startups now
22 that that is more possible than I think it has
23 been in the past.

24 MR. SCHRIVER: Thank you. I'll try to
25 squeeze the third one in. Dr. Madan, there

Audio Transcription

1 hasn't been much discussion about the, the
2 strategic landscape with respect to nuclear
3 capabilities.

4 And we're in an environment now that
5 could change quite rapidly with the ending,
6 you know, of the START agreement with Russia,
7 with China surging to maybe 1,000 warheads
8 according to the Department of Defense with
9 Under Secretary of State, DiNanno, just saying
10 a few weeks ago that China was conducting low
11 yield underground tests.

12 So how do the Indians view the, the
13 landscape with respect to strategic weapons
14 and how's that affecting their thinking and
15 their own modernization plans, etc.?

16 MS. MADAN: I think, you know, some of
17 this is, is hard to know from the outside.
18 Another subject they tend not to talk about.
19 You have seen discussions in the last number
20 of years about whether or not India should be
21 reviewing its doctrine. You've also seen the
22 strengthening of the triad.

23 But I think there's also been this sense
24 that when India -- you're hearing a lot about
25 the idea that as countries talk about

Audio Transcription

1 strategic stability, that having -- you know,
2 there's often kind of moving on from US-Russia
3 to US-China, that India should be at the table
4 as well, because there is a domino effect in
5 terms of decisions that China is making which
6 might be focused on the US, India then has to
7 respond to.

8 So even recognizing that China's nuclear
9 program is not just or even primarily about
10 India, that those will have implications,
11 implications for, for India. Just one -- a
12 couple of things on, on the Taiwan question
13 and why it is essential, I think to have this
14 discussion.

15 If there are not a discussion between
16 India and the US on Taiwan scenarios, this
17 will set the relationship up more broadly for
18 disappointment because there will be
19 misaligned expectations. And so I think it is
20 important.

21 And I think this would be facilitated by
22 the fact that as Dr. Lalwani indicated,
23 there's been a lot more understanding in India
24 that thanks in part to the Russian invasion of
25 Ukraine, that this is an actual reality. But,

Audio Transcription

1 second, that what happens in the Western
2 Pacific won't stay in the, the western Pacific
3 and will have implications for India.

4 So sitting on the fence is not really an
5 option when this is closer to home as well.

6 MR. BRANDS: Commissioner Shmavonian.

7 MS. SHMAVONIAN: Thank you. This
8 question is for Dr. Lalwani. Can you talk
9 through the risks for India and other
10 downstream countries of China's damming of the
11 headwaters of the Tibetan Plateau and, and how
12 that may be leveraged.

13 DR. LALWANI: I'm, I'm truly sorry,
14 Commissioner. I don't have any particular
15 expertise on this area so I would just be
16 filibustering. I apologize.

17 MS. MADAN: Okay.

18 MS. SHMAVONIAN: No worries. Anyone else
19 want to take that?

20 MS. MADAN: Yeah. I, I can just add.
21 The concern that India has had, has
22 everything. There, there have been
23 environmental concerns. There have been
24 concerns about diversion of river waters.
25 The, the Brahmaputra goes through some of the

Audio Transcription

1 most populated parts of the country. There
2 are also concerns that this can be used down
3 the line.

4 And, and, India, even in the middle of
5 this re engagement process that they've been
6 undergoing in the last six to eight months has
7 expressed deep concern about the announcement
8 of a new large dam that the Chinese have
9 announced that they will be building.

10 There is a concern about potential
11 coercion though there has been various studies
12 that indicate that India can actually -- would
13 not be as adversely affected as some might
14 indicate if, for example, China uses kind of
15 water as a weapon, so to speak. So there are
16 some mixed views about that.

17 People talk about large portions of that
18 river being rain fed when it comes to the, the
19 Indian sections. Having said that, you have
20 seen and India has acknowledged that in the
21 last two crises you did see China stop sharing
22 hydrological data during these crises.

23 And so that was read as China indicating
24 that it would actually at least use parts of
25 this issue during security crises between the

Audio Transcription

1 two countries.

2 MS. SHMAVONIAN: Great. Thank you. This
3 question is for anyone on the panel, but I
4 think we'll start with Ms. Ford. And this has
5 been hinted at through a couple of responses.

6 I'm interested in further exploring the
7 India-Pakistan relationship and how that
8 informs or shapes the India-China
9 relationship, the India-Russia relationship,
10 India's relationships with other potential
11 strategic partners.

12 MS. FORD: I think that the way we need
13 to think about the India-Pakistan relationship
14 today is the more that India is forced to
15 focus on its border with Pakistan and with
16 both deterring and responding to cross-border
17 attacks coming out of Pakistan, the less
18 bandwidth that it has to focus on what I think
19 most Indian policymakers would tell you is
20 really the more existential strategic threat
21 that they face. And that is the one from
22 China.

23 And so what concerns me about the
24 situation we're in right now is that coming
25 out of May, 2025, India is looking at

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1 emergency procurements. It is thinking about
2 where it puts its forces. And the more that
3 those are on one border, there are some pretty
4 zero sum trade-offs with what it can do on
5 other border. There are also real differences
6 in kinds of force structure and capability it
7 needs to deal with Pakistan versus what it
8 needs to deal with China.

9 And so I think in a lot of ways, Indian
10 policymakers would probably acknowledge that
11 Pakistan is not the existential threat that
12 China is, but it is also a political reality
13 that they can't afford to ignore. And so they
14 have to deal with that near term situation and
15 get that border more stable in order to be
16 able to focus on Beijing.

17 MS. MADAN: I'll just add on the
18 Pakistan-Russia issue. One of the things that
19 India would be deeply concerned about and has,
20 has indicated that it would be, is not just
21 China or Russia moving from neutral to taking
22 China's side in an -- in an India-China
23 crisis, but also the coming together of
24 Russia, China, and Pakistan.

25 So when we worry here about an axis that

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1 involves China, Russia, Iran, North Korea,
2 they worry about -- at times they've worried
3 about China, Russia, Afghanistan, Pakistan
4 less so now because of the Taliban's
5 differences with the Pakistani government.
6 They have worried about China, Russia, North
7 Korea, and Pakistan.

8 And so for them, they partly engage --
9 one of the reasons for engaging and
10 maintaining ties with the Russians is to
11 ensure that that China-Russia-Pakistan
12 alignment doesn't come about. China has
13 actively and the Pakistani leader at the time,
14 Imran Khan, was in Russia the week of the
15 Russian invasion.

16 And he publicly said that that visit was
17 facilitated by the Chinese. This is the kind
18 of thing India worries about and it's also the
19 kind of thing that Russia actually uses to try
20 to keep India on side.

21 MS. SHMAVONIAN: Thank you.

22 MR. BRANDS: Commissioner Slevin.

23 MR. SLEVIN: Thank you. And thanks to
24 our witnesses. I'd like to pick up on
25 Commissioner Shmavonian's last questions as

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1 well as it relates to the May, 2025 conflict,
2 maybe starting with Dr. Lalwani.

3 You, you alluded to questions that New
4 Delhi is asking since then and maybe certain
5 assumptions that were broken, and that the
6 support from the Chinese were -- was, you
7 know, material and, and digital as well.

8 So I invite all panel to, to respond, but
9 maybe starting with Dr. Lalwani. Do you see
10 this as having been a more episodic event
11 responding to specific set of circumstances,
12 terrorist attack? Do you see it suggesting
13 more of an aggressive posture on the part of
14 India? And with that, what kinds of questions
15 you think are derived from, from those, those
16 questions?

17 DR. LALWANI: So to the, the last
18 question about whether it's episodic, I
19 actually think this is a trajectory, but I
20 think the trajectory is on the -- on the
21 Chinese side where you're starting to see
22 greater involvements in, in picking a side.

23 There were -- about 25 years ago, China
24 would be following the US -- the US lead in
25 terms of calling for de-escalation or

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1 ceasefires or, or, or mediation in some ways.
2 And I think, today, we are seeing China more
3 and more putting its thumb on the scale in, in
4 this conflict.

5 And it goes to the previous question and
6 point, which is that it, it is in China's
7 interest to see India diverted to the Pakistan
8 border, specifically, and so diverted away
9 from not only the northern border with China,
10 but also from the Indian Ocean.

11 So there's a -- there's a utility to
12 India being "bogged down" or contained within
13 the South Asian subcontinent rather than sort
14 of being a maritime power. I do think, in
15 this case, it was a stepwise jump in terms of
16 China's involvement.

17 I think all Indian analysts or/and
18 officials recognized China's materially
19 benefited and enabled Pakistan's military from
20 sort of nuclear technology, enrichment
21 missiles, to now sort of a wide range of you
22 know, military -- advanced military hardware.

23 But I think its active involvement, its
24 live involvement, particularly through radars
25 and sensors and intelligence and even

Audio Transcription

1 guidance, I think was a surprise to the
2 Indians and presaged something far more
3 challenging in, in the future that they're
4 trying to prepare for.

5 MS. FORD: I would add, I guess that, you
6 know, India has often talked about sort of the
7 notion of like a two front crisis as like the
8 real existential threat that it -- that it
9 could potentially face. And I think that post
10 May, 2025, it looks like that is now here.
11 That is not a tomorrow problem, that is a
12 today problem for India.

13 And one thing I would say is that in, in
14 the same way that the United States often
15 tries to say to Indian colleagues like, "Hey,
16 this wedge strategy that you have with China
17 and Russia is not actually going to work the
18 way that you think," I think Indian
19 counterparts say to the United States, "Hey,
20 this wedge strategy that you think you're
21 trying to run with Pakistan, between Pakistan
22 and China, is not going to play out in the way
23 that you think."

24 And I do think that the Pakistan, you
25 know, relationship with China today is so much

Audio Transcription

1 further advanced than what it was a decade
2 ago.

3 It behooves the United States to
4 interrogate a little more the degree to which
5 some of the things that Indian colleagues
6 raise as concerns, whether that's tactics
7 training and procedures that Pakistan could
8 pick up from Western countries flowing
9 eventually into China, or whether that's
10 inadvertent tech flowing from Pakistan into
11 China.

12 It behooves the United States and other
13 Western countries to actually interrogate
14 those questions a little more.

15 MR. SLEVIN: Would you agree with that,
16 Dr. Lalwani?

17 DR. LALWANI: Absolutely. And I do think
18 that there are certain aspects that we should
19 be asking ourselves and our partners. There's
20 one area where the Indians have pointed out
21 where they believe that the Pakistanis were
22 able -- or the Chinese were able to stitch
23 data links between Chinese fighter jets,
24 Swedish AWACS systems, and potentially even US
25 original -- originated ground radars.

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1 And that should be a concern to all of us
2 if the Chinese are getting into those, those
3 data links.

4 MR. SLEVIN: Dr. Madan.

5 MS. MADAN: Just to add one thing. A
6 dimension that didn't necessarily play out but
7 could -- in this crisis, but could in the
8 next, is the naval side. And that is another
9 space where China is -- it doesn't get as much
10 attention, but China is actively modernizing
11 Pakistan's naval forces as well. Just
12 delivered another submarine to the Pakistanis.

13 And so this will not stay on the
14 continent. It will eventually involve a
15 maritime domain which also goes to that point
16 that if we want India focusing on China, and
17 we have long argued that, you know, you need
18 to think about the maritime space partly
19 because it has certain advantages there, is
20 China will seek to actually impinge on those
21 advantages.

22 But also that the more China can hold
23 India down on the continental side, the less
24 India will be able to do itself in the
25 maritime side. And China -- and it's not just

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1 a China story there, it's a Pakistan one as
2 well.

3 MR. SLEVIN: Thank you.

4 MR. BRANDS: So we have a few minutes
5 left. If people have second round questions,
6 I, I have one. Just caught my eye if, if you
7 have one as well. So let me -- actually, I
8 just want to pick up on this subject. So Dr.
9 Lalwani, in your written testimony, you talked
10 about the potential for an Indian offset
11 strategy to deal with the two front dilemma.
12 What, what does that look like and does it
13 have any implications for the defense
14 relationship with the US?

15 DR. LALWANI: It certainly can. I, I
16 think that there are at least three ideas I've
17 pulled from, again, public debates that are
18 literature. One is just sort of thinking
19 about how to lean more on nuclear forces to
20 offset Chinese advantages, particularly on the
21 LAC. And this is sort of an idea that has
22 floated in the past.

23 I don't think it's really that serious,
24 but it could be a direction India goes.

25 The second is just, just greater military

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1 spending. That doesn't necessarily mean like
2 a strategic offset strategy, but there have
3 been parliamentarians who've said maybe we
4 need to just be spending four percent of GDP.
5 Again, I think it's highly unlikely. But that
6 conversation I think could start to percolate.

7 And you certainly saw in the last defense
8 budget a significant increase in capital
9 expenditures that I haven't seen in a long
10 time.

11 The third is leaning on partners or, you
12 know, I would call them alliances or proto
13 alliances. But I think that there's an
14 urgency that India sees now given sort of the,
15 the state of the China-Pakistan threshold
16 alliance that they need to offset. And so
17 that I think opens the door, not just the
18 United States, but as I said, middle powers as
19 well.

20 MR. BRANDS: Commissioner Kuiken and then
21 Commissioner Price and then Commissioner
22 Slevin.

23 MR. KUIKEN: Thank you, Commissioner
24 Brands. I have two questions I'll put to the
25 panel. I'll just -- I'll throw the questions

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1 out right up front so we can burn through my
2 time before Commissioner Brands gets me in
3 trouble.

4 Industrial capacity. The last time I was
5 in India, one of the things that just
6 absolutely is striking is the industrial
7 capacity of the country. And so I, I asked
8 that question in the context of co production
9 and tech transfer or both. One of the things
10 you hear when you're in India is they always
11 want co-production or they want tech transfer.

12 And this is one of the sort of common
13 tension points in all the discussions that
14 relate to the defense industrial base or even,
15 you know, civilian aerospace and some of the
16 other areas where we have an economic
17 relationship that has a lot of potential but
18 hasn't been fully tapped.

19 Can you each just talk about those -- the
20 sort of tensions between tech transfer, co-
21 production, or both, and then also comment?
22 And you have sort of in passing, but very
23 directly, on the, the idea of industrial
24 capacity and sort of how we should evaluate
25 that in the context of a, a US-China

Audio Transcription

1 relationship and dynamic.

2 MS. FORD: So I think I'll just speak to
3 this question mainly from the defense
4 perspective. I, I think there are things that
5 both the United States and India need to do
6 here. So, specifically, I think that the
7 United States can probably be more forward
8 leaning than we have been in the past when it
9 comes to tech transfer, right?

10 Honestly, that's not just true with
11 India. That's probably true in a lot of
12 places. And I think it behooves the State
13 Department, the Defense Department to look
14 more specifically at some of the capabilities
15 that Indian counterparts have asked for in the
16 past and do an updated risk assessment and see
17 if the decision today still lands in the same
18 place.

19 Because I think there are areas where we
20 could lean farther forward. From India's
21 perspective. I think it needs to recognize a
22 couple of things if it wants this tech
23 transfer and it wants to do co-production.

24 One, the United States is going to demand
25 essentially that if you want the crown jewels

Audio Transcription

1 of US technologies, there are certain things
2 when it comes to your own tech security, or
3 how you -- you know, how you use and employ
4 those capabilities in the future, that we're
5 want to -- going to want to get a vote in.
6 India has not always wanted to do that in the
7 past.

8 And then the second thing, I think,
9 pacing. India has a lot of industrial
10 capacity, but they don't always have the
11 ability to immediately move to co-production
12 as quickly as they would like. And so
13 sometimes Indian counterparts need to be more
14 comfortable with a ramp toward that co-
15 production than they have sometimes been.

16 DR. LALWANI: I would just add to this.
17 I think that refrain that I also have been
18 tracking for a decade or so usually came from
19 the public sector, as, as, as Lindsey said,
20 state owned enterprises. And they oftentimes
21 was either in bad faith or sort of out of like
22 a misunderstanding of how technology transfers
23 occur and what the potential for co-production
24 are.

25 I think the private sector has become

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1 much more welcomed in the Indian defense
2 ecosystem. You're seeing that the -- very
3 explicit, the Indian government has said the
4 fifth generation fighter will be led by a
5 private sector entity. It's the first time
6 that -- and I think that was a real shock to
7 the system.

8 So I do think there's more openings for a
9 more reasonable business case to be made with
10 the, the US private sector and the Indian
11 private sector. I think US Primes are
12 actually very interested in this. There are a
13 lot of US Primes that are in India right now
14 that do see opportunities for scaling their,
15 their business and exports and defense sales
16 through co-production.

17 The hang up, I think, has also come at
18 some times on the US side in terms of
19 technology release, like either license
20 decisions or services -- or service decidings
21 or uncertain about sort of whether they want
22 to transfer this. So it would probably
23 require some more political push, but I do
24 think the business case is now much clearer.

25 MS. MADAN: I'd just add that I think,

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1 you know, the, the broader tension in, in --
2 for India in this space is the same as its
3 broader tension even when it comes to
4 industrial capacity beyond the, the defense
5 side, which is how much to actually open up,
6 to build capacity, versus wanting kind of
7 indigenous capacity. And this, this kind of
8 how much to open up and how much to just
9 develop into indigenous capacity.

10 This, this debate about self reliance is
11 a constant. Having said that, you have seen
12 change. You will see it on the ground even in
13 terms of Indian companies and US-India joint
14 ventures becoming integral parts of American
15 defence companies supply chains.

16 Now, the example I like to give is that
17 the empanadas of every one of the C-130s
18 produced in the world is now produced in
19 India. I don't think, you know, that would
20 have been possible, but it's also shown it can
21 be done.

22 I think you've also seen a shift in the
23 debate in terms of saying technology transfer
24 ideally, but otherwise the importance of
25 knowledge transfer, and thinking about -- and

Audio Transcription

1 even knowledge sharing, given that in some of
2 the new critical and emerging technology
3 spaces, it's actually sometimes India that has
4 these capabilities.

5 Even some of the startups which both Ms.
6 Ford and Dr. Lalwani have worked with, who are
7 actually developing some of these capabilities
8 for US companies and the Defense Department as
9 well.

10 MR. BRANDS: Commissioner Price.

11 MS. PRICE: Thank you. Last year the
12 commission spent a good amount of time talking
13 about Southeast Asia. And in our travel and
14 discussions here there was a huge concern
15 about transnational crime. And it wasn't
16 something any of you raised. But I'd love to
17 hear your opinion or any kind of discussion
18 that you've had, if you have had, on that
19 issue. And how big of a problem is that
20 between China and the Chinese in, in India.
21 Thanks.

22 DR. LALWANI: First, something real
23 quick. Because I remember my, my colleague,
24 former colleague, Jason Tower was one, one of
25 the people who testified on this. And my

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1 recollection is that there was a fair number
2 of Indian nationals who have been, you know,
3 kidnapped in these, in these call centers or
4 these scam centers.

5 And so I do think, at, at the very least,
6 this would be a useful point of discussion
7 between the US and India on how we can sort of
8 collaborate on counteracting that. Because I
9 do think the Indian government will be very
10 concerned about its own citizens being held
11 hostage in these situations.

12 MS. MADAN: I think along with that
13 issue, and it's, it's played out with India --
14 Indians in Cambodia most recently. It is a
15 subject that India has been -- the Indian
16 government has been following, but also having
17 to try to, to get some of these Indian
18 released.

19 The other issue along with kind of some
20 of these scam centers is there have been
21 instances of Chinese apps that have been --
22 that have been kind of been used in India to
23 try and scamming Indians of, of money mostly
24 there.

25 And you have seen the Indian Home

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1 Ministry actually try to crack down on this in
2 recent years. So I think those are the two
3 big areas you've really seen on the -- on this
4 issue that there has been -- has been a
5 problem.

6 MS. PRICE: Ms. Ford, anything to add?
7 Okay. I also want to talk about
8 disinformation involvement in elections or
9 involvement in just trying to change public
10 opinion. Have you done any research in that
11 area as well?

12 MS. MADAN: So one of the things that,
13 you know, you've seen and you've seen some
14 collaboration in at least Chinese and
15 Pakistani entities during crises. But the --
16 you -- one of the things that has been
17 noticeable is I don't think China is actually
18 very effective or that India's fertile ground
19 for this as much.

20 The Russians frankly do a better job.
21 They understand the Indian psyche far more.
22 They tend to amplify Chinese messages through
23 their platforms, etc. Some Chinese platforms
24 are not allowed there in India.

25 One of the reasons and several years ago,

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1 even before the India-China border crisis, you
2 saw India ban certain Chinese browsers that
3 came as default browsers on -- at that time
4 most phones that were being used in India were
5 produced in China. They were actually
6 manipulating search results according to
7 Chinese preferences.

8 And you saw the Indian government, after
9 reading an American study, actually ban the --
10 ban some of those browsers. So I think here
11 too, as has been said by others, I think
12 information sharing in terms of the biggest
13 concerns and what we're seeing in other places
14 would be helpful. But you're seeing attempts
15 at this.

16 But I think you've also seen, at the same
17 time, both Chinese platforms tend to either
18 not have access or be as welcome. But, also,
19 I think, you know, because of the broader
20 India China tensions, they don't have as much
21 kind of -- you just don't see them as
22 effective as maybe in other spaces.

23 The one area -- one other area I would
24 say that's worth watching this space, you do
25 see China very actively trying to shape media

Audio Transcription

1 in India, including through, for example,
2 using social media -- TikTok is banned in
3 India, but other platforms taking Indian
4 influencers.

5 So it might not be kind of
6 disinformationist stuff, but they do really --
7 they are trying to shape the narrative and
8 even do things like, for example, attract
9 Indian engineers or high skilled workers to go
10 to China, for instance, that have -- and
11 actively saying that, you know, "You've been
12 chucked out of the US. Why don't you come to
13 China instead??"

14 MS. PRICE: Thank you.

15 MR. BRANDS: Commissioner Slevin.

16 MR. SLEVIN: I'll try to pick up on that
17 a little bit. But, Ms. Ford, I think in
18 response to Commissioner Brands, you talked
19 earlier about some of the -- of the last year,
20 some frictions and weight may be given to some
21 voices within among Indian policymakers about
22 the US-China -- the US-India relationship. I
23 was wondering if you could invite the rest to
24 comment.

25 Like what's the debate like among Indian

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1 policymakers as it relates to the threat from
2 China? Is there consensus, is there real
3 debate? And how does this narrative shifting
4 you just alluded to Dr. Madan influence any of
5 the politics?

6 MS. FORD: I think that -- I think there
7 is probably a good degree of alignment in
8 India's sort of strategic thinking community
9 about the nature of the China threat.

10 I actually think in all of the
11 conversations I had in government with Indian
12 counterparts, they had some of the most clear
13 eyed perspectives about the nature of the
14 threat from Beijing that were pretty aligned
15 with where we were in the United States most
16 of the time. I think where the debate is in
17 India is what to do about it.

18 And so where I think there have been --
19 as Dr. Madan said, a lot of folks within the
20 Indian government, the strategic thinking
21 community who have been arguing that that
22 necessitated a closer defense partnership with
23 the United States, I think today, both because
24 of what has happened on the US-India trade
25 front, but also because quite frankly India is

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1 not quite sure where US policy is going toward
2 China.

3 There is an increasing amount of
4 conversation about diversifying elsewhere,
5 whether that's to Europe as well as thinking
6 about what needs to happen in the Russia
7 relationship in the future. And, and so
8 that's where I think the risk is.

9 MS. MADAN: Just to add that what you see
10 is kind of the debate also. I think the two,
11 two areas of debate are kind of the -- not
12 that China is a threat, but the urgency and
13 the immediacy. Sometimes it's, you know, for
14 example, is the border going to flare up
15 again? How or what are China's intentions?
16 And as, as, as Ms. Ford said, you know, how to
17 approach it.

18 The, the one other kind of broader area
19 where you are seeing a debate and it's pretty
20 fast moving because it, it changes, is on how
21 much to and where and how to selectively
22 economically reengage with China.

23 Because as mentioned kind of in opening
24 remarks that there are certain places where
25 India, both for its civilian kind of desire to

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1 build up manufacturing capacity, but also in
2 kind of broadly to, to become part of global
3 supply chains to open up to China both in
4 terms of industrial inputs as well as kind of
5 technical expertise.

6 In fact, it's sometimes American
7 companies saying to India, "We want you to be
8 -- to enable more economic ties with China."
9 So I think the dilemma for India in that and
10 that you do hear a debate is how much, where,
11 because they want to take advantage of this
12 for their own growth.

13 Having said that, their dilemma still is
14 that they deeply worry about kind of over-
15 dependence on China. And you're seeing them
16 actively try to diversify ways I'm sure in the
17 next panel we'll talk about. I think one
18 other thing though -- I think as you see this
19 debate, as Ms. Ford said, India watches US-
20 China relations very, very closely.

21 Because it shapes what they think will
22 happen in India-China relations. Because they
23 think China sees India through a US Prism in
24 part. So they're deeply concerned whenever
25 there's talk of US China engagement, just like

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1 we have concern sometimes when we see India
2 dealing, engaging with, with china. But I
3 will say, when we talk about what -- in India
4 hedging, there is no debate about India
5 hedging between the US and China anymore.

6 Where India is hedging and has been
7 hedging, is hedging against over-dependence on
8 the US and on uncertainty about the US. And
9 I think you've seen that accelerate. But this
10 does not mean India will walk a middle path or
11 that there's any debate about India walking a
12 middle path between US and China.

13 DR. LALWANI: I'll just add on, on one
14 sort of small sliver of this, which is on
15 artificial intelligence. I generally think
16 that the Indian state has been very careful
17 about trying to keep India out of digital
18 infrastructure.

19 There's a kind of a middle ground space
20 on something like connected vehicles, where
21 despite the fact that, as far as I can tell,
22 there's been no joint production production in
23 India. There's still a lot of BYD vehicles
24 being sold throughout India. So there might
25 be some risk in connected vehicles that I

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1 haven't sort of really fully explored.

2 But the area that I wanted -- that I
3 think is should be of concern is Chinese LLMs,
4 right? Sort of enterprise use of, of open
5 source DeepSeek models in applications.
6 Because it is being used. There's no
7 regulation of this.

8 It's hard to, to obviously regulate even
9 in the United States. And the -- we, we don't
10 fully sort of know what the, the scope or risk
11 of that is, but I think that's something that
12 we should be drawing more incentive to.

13 MR. SLEVIN: Great. Thank you.

14 MR. BRANDS: Quick one from Commissioner
15 Stivers.

16 MR. STIVERS: Oh, I hope this is quick,
17 but I want to zoom out for a minute here. I
18 think the US-India relationship, I think the,
19 the formal name is a comprehensive global
20 strategic partnership, which sounds like a lot
21 of word solid to me.

22 But despite all the mutual interests and
23 strong relationships between the people of the
24 US and India, there's still a lot of reasons
25 why there's not a formal alliance with India.

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1 I think -- I think -- Ms. Ford, I think you
2 said there will never be a formal alliance
3 between the US and India.

4 If a new administration were to come in,
5 or even this administration and they wanted to
6 make India their top priority, what, in a big
7 scheme of things, what is a big idea that the
8 US could offer India that they would care
9 about the most?

10 Would it be breaking relationships with
11 Pakistan or something like that? Or what,
12 what would -- what would they want that would
13 be a big thing that could really build trust
14 between the US and India?

15 MS. FORD: I think we already had this in
16 a sense, and we have tossed it a little bit by
17 the wayside at the moment.

18 So the logic of the Biden administration
19 creating iSAT, which was the Initiative on
20 Critical and Emerging Technologies, was, I
21 think, a recognition that what India cared
22 most about was when it came to a handful of
23 emerging technologies, artificial
24 intelligence, semiconductors, quantum, more
25 rapidly advancing its own industrial capacity

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1 at home, and that it needed a partnership with
2 the United States to do that.

3 And we were willing to lean into helping
4 India do that because in a lot of ways we're
5 also, frankly, really dependent on Indian
6 talent, engineering and design talent, to
7 advance those sectors ourselves.

8 So to me, we had the big idea, which I
9 think both countries still have an interest in
10 working on, but it's been somewhat paralyzed
11 for the last year, despite the fact that the
12 Trump administration, you know, renamed it and
13 said that we were going to continue to work on
14 these areas together. So I think we kind of
15 need to pick up what, what we already had.

16 DR. LALWANI: Yeah. I think five years
17 ago we could have said compute and
18 semiconductors. And I do think that the, the
19 last administration moved big on that and I
20 think the private sector is already doing it
21 now. So there's probably a missed opportunity
22 for government to kind of claim credit for it,
23 right?

24 There was 67.5 billion in committed
25 investments in data centers in India last fall

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1 that I would have loved to see the United
2 States sort of -- government sort of be at the
3 front end of that, that message.

4 In terms of defense, though, I think, I
5 think something similar to like sort of the
6 guided munitions program that we're doing with
7 Australia would be a really value -- great,
8 great value to India. We don't have sort of
9 an offensive strike capability that we've
10 jointly developed. This is the thing that the
11 Indians point to with the Russians all the
12 time.

13 They're the ones who sort of work with us
14 on a BrahMos cruise missile, which then played
15 out fairly well in, in the recent sort of war
16 with Pakistan last, last May. And I do think
17 India does need more long range strike options
18 if it wants to hold China at risk.

19 MS. MADAN: I think beyond the specifics,
20 I think two broader things would be helpful
21 is, one, taking that convergence in China and
22 on shared visions of the Indo-Pacific and
23 taking that to drive cooperation. It has --
24 the governments tend to deny this is about
25 China, but what that strategic convergence on

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1 China has done is drive that deeper
2 cooperation, I would argue, even alignment.

3 And it has helped the two sides manage
4 those differences which are going to continue
5 to exist on Russia and Pakistan. And so I
6 think convergence in China and making sure
7 that at the very least both sides are read in
8 on each other's policy. I think second is
9 just consistency.

10 I think the thing across the board is
11 just consistency because that is the argument,
12 not just Russia makes to India, but even
13 European countries like France, is that you
14 know that we are going to be a consistent
15 partner. And so you see India then signing
16 certain deals or working with France in
17 certain ways that it perhaps is not the case
18 with us.

19 So I think consistency on our part, not
20 just in terms of US policy towards India, but
21 US policy towards China as well.

22 MR. STIVERS: Okay. Thank you.

23 MR. BRANDS: Thank you very much. This
24 has been terrific and I'm sure we could keep
25 mining your insights for another couple of

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1 hours, but I'll just close things out by, by
2 saying thank you again. And we will reconvene
3 after a 10-minute break for panel number 2.

4 (The meeting was adjourned.)

5 MR. STIVERS: Good mid morning. I think
6 we'll start a few minutes early since we have
7 everyone here. Our second panel today will
8 examine India and China's bilateral economic
9 relations. India is an alternative investment
10 destination for companies seeking to move
11 production out of China and India as a partner
12 to the United States in critical emerging
13 technologies.

14 We'll begin with Dr. Soumya Bhowmick.
15 Excuse me if I make any of the pronunciations
16 wrong and please feel free to correct. He is
17 a fellow, fellow at the Observer Research
18 Foundation. Dr. Bhowmick's work focuses on
19 India's economic relations with China and the
20 broader region.

21 He will provide testimony on cross-border
22 trade and investment dynamics and the economic
23 statecraft efforts both India and China
24 utilized in the relation -- have utilized in
25 the relationship.

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1 Next, we'll hear from Tarun Chhabra, a
2 distinguished visiting fellow at the Hoover
3 Institution. Previously he served as deputy
4 assistant to the president and coordinator for
5 technology and national security at the
6 National Security Council.

7 His testimony will explore India's AI and
8 semiconductor ecosystem, India as a China plus
9 one destination for technology investment, and
10 US-India government initiatives to enhance
11 defense and technology partnerships.

12 And then we'll hear from Dr. Chan
13 Harjivan, a visiting fellow at Duke
14 University's Margolis Institute for Health
15 Policy. Dr. Harjivan has more than 25 years
16 of experience spanning public health,
17 government, and the biopharmaceutical
18 industry.

19 He has worked at the White House as a
20 special assistant to the president and with
21 leadership of nearly every major
22 pharmaceutical company. His testimony will
23 pertain to India's position in the
24 pharmaceutical supply chains and biotechnology
25 innovation landscape.

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1 Thank you all very much for your
2 testimony. I'd like to remind all of our
3 witness to please keep their remarks to seven
4 minutes to preserve time for questions. And
5 Dr. Bhowmick, we'll begin with you.

6 MR. BHOWMICK: Thank you, Co-Chair Brands
7 and Stivers and distinguished members of the
8 commission. Thank you for the opportunity to
9 appear before you. I offer my remarks today
10 in my personal capacity as India based policy
11 researcher focused on globalization,
12 economics, and diplomacy.

13 Well, in the Indo-Pacific today, the most
14 consequential context is not only over the
15 lines on a map, but over who can keep
16 factories running, networks trusted, and
17 supply chains resilient under strategic
18 stress. In the last financial year, India-
19 China merchandise trade reached a record high
20 of US\$ 128 billion with a trade deficit of
21 approximately US\$ 100 billion.

22 China also accounted for 16 percent of
23 India's total imports, and these figures
24 highlight the fact that China for India is not
25 just a marginal trading partner, but it is a

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1 system scale supplier whose inputs are deeply
2 embedded in Indian production. The most China
3 reliant segments for India are not just
4 consumer goods. They are upstream enablers of
5 industrialization such as electronic
6 components, sub-assemblies, industrial
7 machinery, chemicals, active pharmaceutical
8 ingredients, etc.

9 And in these critical sectors, Indian
10 policymakers and businesses have, have shown a
11 bit of concern over the lack of reciprocity in
12 trade with China over the years, especially
13 more than tariff barriers, but instead non-
14 tariff barriers in the sense of processes,
15 friction, delays, documentation which
16 essentially increase the transaction cost of
17 trade with China.

18 India's approach therefore is not just
19 trade and security as two different boxes. It
20 is more of managed interdependence under
21 strategic competition, which essentially means
22 keeping commercial channels functional where
23 they support growth and upgrading, but also
24 tightening guardrails around sensitive nodes.

25 A key point for the Commission is to

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1 understand the fact that trade deficit with
2 China is not seen as a moral failing for
3 India. It just becomes strategically salient
4 when scale, composition, and concentration
5 intersect.

6 A large persistent trade gap and
7 increasing trade gap over the years with China
8 does indicate capability deficit to a large
9 extent. And at the same time India also
10 recognizes the fact that these trade, trade
11 deficits is essentially a structural
12 constraint that affects the entire Indo-
13 Pacific, where China is not merely a seller of
14 finished goods, but it remains a central
15 upstream processing and component hub.

16 Now, in terms of -- in terms of
17 alternating suppliers and moving some of the
18 assembly, it is a rather immediate -- it's
19 kind of impossible to find an immediate
20 ability to replace China linked upstream
21 inputs at scale at the moment.

22 Now, since 2020, India's policy response
23 to China related exposure have been rather
24 layered than absolute, both security and
25 espionage concerns alongside growth needs. On

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1 the investment front, India has tightened
2 screening for investors from countries sharing
3 land borders with India.

4 The point is not a blanket ban but also
5 higher security in sensitive cases such as
6 digital platforms, data rich applications
7 leading to the fact that 59 banned -- apps
8 were banned in 2020. There has also been some
9 tightening permissions in power equipment,
10 especially enduring heightened tensions
11 between India and China.

12 Well, in retrospect it also helps to
13 understand that this kind of tightening and
14 making the climate more -- making the
15 technology climate more, more compatible with
16 the technology direction that India is going
17 towards helps -- has helped in the AI
18 transformation that the country is witnessing
19 right now as we speak before the Commission
20 today.

21 India holds the AI Impact Summit, the
22 largest AI summit which is hosted by any
23 global south country at the moment, and the
24 conversations that range from safety to
25 implementations in AI.

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1 Now coming to the question, if India can
2 meaningfully reduce dependence on China, the
3 answer is, yes. But only if it is understood
4 as a medium term capability and ecosystem
5 project, not a short term political slogan.

6 The production linked incentive framework
7 reflects that logic across multiple sectors
8 where India not only wants to enhance domestic
9 capability but also increase export
10 competitiveness through these kind of
11 policies.

12 Looking ahead, the most likely trajectory
13 for India-China economic relationship is
14 neither clean decoupling nor full return to
15 business as usual. It, it is continued
16 selective de-risking with tactical
17 stabilization.

18 When -- where relationships improve, it
19 is more likely through calibrated low risk
20 steps such as commercial connectivity,
21 dialogue mechanism, etc., rather than
22 wholesale rollback of post 2020 screenings.

23 The most durable US approach is to deepen
24 cooperation with India in ways that expands
25 the menu of credible options, treating

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1 resilience as a shared strategic objective by
2 reducing choke point dependence in electronic
3 inputs, pharmaceutical supplies, clean chain
4 components.

5 It also means that technology cooperation
6 that is scalable and predictable so through
7 mechanisms like iSAT becomes pipelines for
8 joint R&D. Export control practice also
9 remains crucial with partnership realities by
10 maximizing predictability and minimizing
11 transaction costs.

12 It also means managing sanctions and the
13 current trade frictions that India and the US
14 have currently been witnessing. Deepening
15 defense industrial cooperation remains another
16 major segment. And, finally, it also means
17 building a joint playbook for supply chain
18 shocks that we currently experience in the
19 volatile world that we live in.

20 The recommendations to the congress do
21 draws from the essence of my testimony, which
22 means that India plans to look at managing
23 interdependence with China again under
24 strategic competition. Thank you and I look
25 forward to the questions.

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1 MR. STIVERS: Thank you. Mr. Chhabra.

2 MR. CHHABRA: Thank you, co-chairs and
3 commissioners. It's great to be here today.
4 Thank you for the invitation. I come to this
5 hearing's topic from the vantage of having
6 worked in the US Government to try to
7 strengthen US-India technology and security
8 ties.

9 While serving on the National Security
10 Council staff, I worked to conceive and launch
11 the Initiative on critical and emerging
12 technologies in 2022 and 2023, which
13 established, as, as you know, a framework for
14 US India cooperation across semiconductors,
15 artificial intelligence, civil nuclear energy
16 and many other sectors.

17 This framework, of course, was succeeded
18 by the Trump administration's trust framework.
19 These initiatives, I think, are critical
20 because India represents the single most
21 important swing state in our global technology
22 competition with the Chinese Communist Party.

23 These choices that India will make over
24 the next decade about its technology ecosystem
25 will fundamentally shape whether the broader

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1 Indo-Pacific operates within a US-led
2 democratic technology ecosystem or a CCP led
3 authoritarian one. We have a foundational
4 interest, in my view, in shaping those
5 choices.

6 So let me touch on four areas this
7 morning, India as a scale market for US
8 companies, two, sectoral opportunities in
9 nuclear energy, defense, biotech, and AI and
10 semiconductors, three, the importance of
11 aligning trusted technology standards between
12 the two countries, and, four, a rough
13 framework for addressing US concerns regarding
14 India's relations with Russia versus China.

15 First, India is a scale market for US
16 companies. The strategic partnership with
17 India is about both allied scale to compete
18 with China as well as our commercial
19 competitiveness in what will be the world's
20 most consequential growth market in the next
21 couple decades.

22 The Trump administration's interim
23 framework announced on trade in February
24 represents a step forward here in that both
25 countries have committed to substantially

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1 increasing trade and technology products,
2 including AI chips for data centers and
3 expanding joint technology cooperation. And
4 the logic here is powerful.

5 India is the only market on earth that
6 combines more than 1.4 billion consumers, a
7 rapidly expanding digital economy, and broad
8 alignment with the United States on the China
9 challenge. US Companies operating at scale in
10 India embed trusted American technology
11 standards in Indian infrastructure.

12 They scale revenue needed to compete with
13 China's technology companies globally. And
14 they expand markets globally with trusted
15 supply chains.

16 Let me speak a bit about sectoral
17 opportunities. With respect to civil nuclear
18 cooperation, this is an area that has been at
19 once one of the most celebrated and under
20 realized opportunities in the US-India
21 relationship and one where China competitions
22 vary relevant.

23 There's now finally movement in this
24 sector thanks to actions taken in 2024 and
25 2025 by both the Trump and Biden

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1 administrations. But China and Russia are
2 already competing aggressively in this space,
3 particularly with respect to small modular
4 reactors. And American companies in this
5 sector need scaled purchase commitments to
6 bring prices down and to compete globally.

7 Congress should press both governments on
8 a timeline for resolving remaining barriers,
9 including on the question of nuclear
10 liability.

11 With respect to defense sales, which you
12 heard about in the last panel, we -- I would
13 say it's evolving definitely in the right
14 direction, but the pace needs to accelerate.
15 Given the urgency of the strategic
16 environment, we should prioritize first co-
17 production of crown jewel technologies such as
18 the GE Aerospace engine deal that's being
19 finalized.

20 This represents, I think some of the most
21 deep technology cooperation we have offered to
22 a non-treaty ally and would enable India to
23 become the first country to produce advanced
24 jet engines, joining the United States,
25 Russia, France, and the United Kingdom.

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1 But in certain contingencies, as all of
2 you know, mass, cheap attritable drones,
3 loitering munitions, and distributed sensors
4 could matter as much as exquisite platforms.
5 The Autonomous Systems Industry Alliance
6 launched during the Prime Minister's trip to
7 Washington last year has a compelling logic.

8 The United States brings cutting edge
9 autonomy, AI software defined warfare
10 capabilities, and India brings manufacturing
11 scale, engineering talent, and complex
12 operational environments for testing and
13 refinement.

14 Again, I think congress could push for an
15 execution roadmap with measurable milestones.
16 I will not spend as much time on biotech and
17 pharmaceutical supply chain since we have a
18 former colleague who's a deep expert in that
19 area. But let me say a word about
20 semiconductors and AI.

21 Semiconductors and AI represent the most
22 consequential arenas of US-China technology
23 competition and India's trajectory in both
24 sectors could materially shape the balance of
25 power given the strategic significance of AI.

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1 US policy must be to reassure to the United
2 States far more semiconductor manufacturing
3 than we are currently projected to achieve.

4 But we should look to support allies and
5 strategic partners like India for production.
6 That is unlikely to be reassured, especially
7 where the likely alternative could be China.

8 India is also an AI application layer
9 powerhouse. The country or countries that
10 figure out how to deliver AI powered
11 diagnostics to 800 million rural Indians or AI
12 driven crop advisories to 150 million farmers
13 could set de facto global standards for how AI
14 is deployed across the developing world.

15 India is pursuing semiconductor
16 manufacturing, a data center build out and AI
17 application layer investment as an integrated
18 stack. For the United States, this represents
19 a significant commercial and strategic
20 opportunity.

21 One of the most strategically significant
22 and least discussed opportunities in the US-
23 India partnership is the alignment of
24 information and communications technology
25 services, security policies that could create

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1 a common market for trusted technology.

2 But these efforts, I believe, remain
3 largely uncoordinated. The strategic
4 opportunity to -- is to align the US and
5 Indian ICTS restrictions on PRC origin,
6 connected vehicles, telecommunications
7 equipment, and other network goods and
8 services not only for fully valid security
9 reasons, but also to create the foundation of
10 a common market for trusted technology.

11 ICTS barriers effectively operate as an
12 extremely prohibitive tariff. If the US and
13 India apply such barriers implemented through
14 consistent standards for what constitutes a
15 trusted ICTS vendor, they create a combined
16 market of nearly 2 billion people operating
17 within a shared technology framework. And
18 that's without bringing in other like-minded
19 democracies like Japan, South Korea, Australia
20 and our European allies.

21 This is an enormously powerful tool, and
22 particularly an important incentive for US-
23 Indian and allied technology companies to
24 build products to a common standard.

25 An understandable but consequential

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1 analytical error in US policy to India is a
2 tendency to treat Russia and China in a single
3 bucket of demands. But they are different.
4 On Russia, the United States must press India
5 to wind down inherited dependencies while
6 winding up alternatives.

7 The ask on China is different and should
8 be much more ambitious for the reasons that
9 were made clear in the previous panel. The,
10 the opportunity here is pragmatic, persistent,
11 step by step confidence building a series of
12 strategic plays that builds momentum, trust,
13 and resilience. I'll leave it at that and
14 look forward to our discussion.

15 MR. STIVERS: Thank you. Dr. Harjivan.

16 MR. HARJIVAN: Chairman, Vice Chairman,
17 members of the Commission, thank you for the
18 opportunity to testify. I'd also like to
19 thank my wife and son for joining me here in
20 person and my daughter online.

21 Leadership in biotechnology and the
22 security of America's medicine supply is no
23 longer a narrow health policy issue. It has
24 become an urgent core question of economic
25 certainty, technological leadership, and

1 strategic resilience.

2 Beijing and New Delhi planned and
3 invested over the long term and now shape the
4 development, availability and affordability of
5 essential medicines relied upon daily by the
6 American public, the US Military, and, in
7 fact, the world.

8 Let me frame my discussion in three -- in
9 three facts. First, China dominates the
10 upstream. China -- sorry. China dominates
11 the upstream, India the downstream. If China
12 restricts the exports of critical inputs,
13 ripple effects cascade into India's
14 manufacturing base and ultimately into US
15 pharmacies. It's a single point of failure
16 network that jeopardizes patient care and
17 national security.

18 Number 2, the United States does not lack
19 manufacturing capability. It lacks economic
20 alignment. Margins are razor thin for, for
21 generics. Quality investment is under
22 rewarded. Redundancy is economically
23 irrational under current payment models. So
24 concentration and vulnerability persist.

25 Third, the US and its democratic allies

1 must lead the biotechnology revolution that is
2 underway. Together, AI is turning biology
3 into programmable infrastructure, accelerating
4 innovation while strengthening resilience.

5 McKinsey predicts biologic innovations
6 could impact up to 60 percent of physical
7 inputs into the global economy. This is not a
8 China versus India versus US story. India is
9 both a strategic partner and a structural
10 choke point. China is both a low cost
11 manufacturing powerhouse and a geopolitical
12 competitor. Both have made medicines cheaper
13 and thus more accessible globally.

14 The question for the US policy is not how
15 to decouple completely, but how to de-risk and
16 lead. Let me turn to my three
17 recommendations.

18 Recommendation number 1, and this is so
19 simple, greater visibility into the supply
20 chain and paying for resilience. Congress
21 should amend existing law to require
22 manufacturers to report tier 2 and tier 3
23 suppliers for medicines. These mechanisms
24 need not be burdensome.

25 In fact, this could both increase

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1 profitability for suppliers and reduce costs
2 for consumers. With better data, the
3 government and industry can identify single
4 points of failure and together work to address
5 them before crisis hit.

6 USPs mapping of manufacturing would still
7 need to, to continue, but it will be more
8 timely, more comprehensive, and more
9 actionable. Policy tools could -- should
10 continue to include supply chain capital
11 investments. But these could create sporadic
12 output without demand.

13 Many companies in the Medical Commenters
14 Coalition invest at risk. This is not
15 sustainable. A better mechanism is a
16 predictable market for supply. The Federal
17 Government through CMS, the VA, DoD, and the
18 SNS should shift procurement criteria to
19 explicitly reward multi-year purchasing
20 contracts and pay for resilience.

21 If quality and redundancy reduce systemic
22 risk, they should be economically recognized.
23 If the VA or the DoD won't pay modestly for
24 reduced medicine dependence on China, why
25 would the private sector? Rios Partners

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1 actually has developed some cost saving models
2 around this.

3 Recommendation number 2, and this one is
4 so common sense, build a multilateral
5 resilience compact with our democratic allies
6 with guardrails. India is central to US
7 supply. The -- this strategic move is not to
8 sideline India or other democratic allies, it
9 is to structure the relationship like what we
10 are seeing with critical minerals under
11 President Trump.

12 In fact, we talk about friend-shoring and
13 nearshoring. There is no shoring with Canada
14 and Mexico.

15 We started the Bio 5 under the Biden
16 administration with Tarun, my colleague, a
17 multilateral resilience framework that
18 included, number 1, joint mapping, number 2,
19 coordinated stockpiling, 3, shared quality
20 oversight, 4, planned diversification, and, 5,
21 aggregation of demand. This should be
22 expanded.

23 But guardrails matter with supply
24 assurance commitments with our friends during
25 crises. Resilience cannot be one-way.

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1 Recommendation number 3, and this one is
2 about hegemony, innovation in manufacturing
3 and regulatory frameworks. Artificial
4 intelligence is, is transforming life
5 sciences. AI enabled process control and
6 manufacturing drugs allows real time
7 monitoring, early detection of deviations, and
8 predictive quality management, reducing
9 shortages and waste.

10 AI also supports continuous and modular
11 biomanufacturing enabling smaller and
12 distributed production systems that can be
13 reconfigured rapidly. Fungibility. Federal
14 funding should prioritize innovation standards
15 for manufacturing medicine, and Apex has good
16 recommendations here.

17 This is not for efficiency, it is for
18 geopolitical leverage. There is a direct
19 parallel between biotechnology today and the
20 Internet in the 1990s. The United States did
21 not dominate the Internet by restricting
22 others, it dominated by defining the
23 architecture.

24 DARPA funded the early protocols, US
25 institutions developed TCP/IP. The standards

1 were open, interoperable, and scaled through
2 American universities and companies. Once
3 those standards became embedded, the global
4 digital economy, economy ran on them. Meta,
5 Google, Uber, Netflix, Amazon are all US
6 Companies.

7 Will the bioindustrial companies in the
8 next decade be American or Chinese? If we
9 build the open interoperable architecture
10 first and tie it to access to the world's
11 largest pharmaceutical market, the US, the
12 global firms will design to US standards.

13 Let me close with this. Pharmaceuticals
14 are not simply consumer goods. China
15 understands this and has pursued a long term
16 industrial policy accordingly. India
17 understands this and it has positioned itself
18 as a global manufacturing hub.

19 So three things. If we provide supply
20 chain visibility and world resilience, the
21 private sector will deliver. We can't make or
22 stockpile every drug -- every input for those
23 drugs. But with allied cooperation we can.

24 And finally we can own the AI
25 biotechnology revolution as we did the

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1 Internet revolution. The commission's work
2 has been and will be critical because economic
3 security and health security are now
4 inseparable. Thank you and I look forward to
5 your questions.

6 MR. STIVERS: Thank you all for your
7 expert testimonies. I appreciate -- we
8 appreciate you all being here, especially Dr.
9 Bhowmick who I believe travel traveled 30
10 hours and just arrived from India. Thank you.
11 Thank you so much for being here.

12 So we'll now move to questions and I'll,
13 I'll go first, taking chair's prerogatives.
14 It's my understanding that estimated 269
15 million Indians have been lifted out of
16 poverty over the last few years, since, I
17 believe, 2022 is a stat that I read. If
18 that's even close to true, that's a remarkable
19 number.

20 I think, you know, in comparison we've
21 spent a lot of time talking about China's
22 economic model and over, I think, 25 to 30
23 years, only 750 million only. 750 million
24 people were lifted out of poverty during that
25 time in a much different economic model than

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1 what India has pursued.

2 So, you know, these numbers are
3 debatable. And, and -- but they're -- if
4 they're even close to true, it says a lot
5 about India's recent economic growth model.

6 And so it's -- but it's essential to, to,
7 to understand how India has done that. You
8 know, they've done it within a democratic
9 framework. They've relied more on market
10 competition, services led growth, and direct
11 benefits transfers to citizens.

12 And so -- and so moving forward, I guess
13 I would ask, and we can start with Dr.
14 Bhowmick, what policy choices does India --
15 should India be making over the next 5 to 10
16 years that would continue that growth? And
17 then specifically related to China, does
18 India's dependence on China, does de-risking
19 from China, does that jeopardizes that
20 economic growth?

21 Because that economic growth is not just
22 important for India. That building of a
23 middle class in India, that drives economic
24 growth for the entire world over the next,
25 again, 5, 10, 15 years. It is such an

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1 important engine. Can you talk about how
2 China, well, specifically what, what choices
3 India would need to make then how dependence
4 on China would fit into that.

5 And maybe if the other witnesses could
6 talk about, you know, the, the tech and AI
7 ecosystems and then health and
8 pharmaceuticals, and how that -- and what you
9 think about, about India's choices there?

10 MR. BHOWMICK: Thank you for the
11 question. Well, I believe that one of the
12 major, in terms of de-risking with China is
13 concerned, India's labor intensive sectors are
14 the main sectors that essentially increase
15 income for the financial classes that are not,
16 --I mean, just above the poverty line.

17 The lack of reciprocity in trade with
18 China is which kind of essentially creates
19 impediment for labor intensive sectors. So
20 that is somewhere where de-risking with China
21 and finding alternative routes for Indian
22 supply markets is something that would be very
23 relevant in terms of Indian policy choices,
24 especially when we speak about India's
25 developmental as well as poverty objectives.

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1 Thank you.

2 MR. CHHABRA: Commissioner, I would say
3 that not reducing some of these dependencies
4 will put in jeopardy, in my view India's long
5 term growth for a couple of reasons. One is,
6 as Chan talked about, you know, resilience as
7 an economic value and we need to be thinking
8 about that. And I do think Indian
9 policymakers are doing that.

10 But just on its own terms. India is
11 facing the same challenge that many other
12 developing economies are facing as well when
13 it comes to China's overcapacity, which is
14 being inundated with manufactured goods that
15 will put out of business Indian manufacturers
16 that are trying to climb the value chain right
17 now. And I think there's a recognition of
18 that. And the challenge of course, as we've
19 seen here, is there are short term economic
20 incentives to maintain some of those links
21 that over the long term will undermine India's
22 growth prospects.

23 MR. STIVERS: Thank you. Dr. Harjivan.

24 MR. HARJIVAN: Yeah. I think there's,
25 you know, three steps. You know, first, in

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1 the 1970s is the green revolution. India
2 became self sufficient in food. Number 2,
3 under Mohan Singh, the Prime Minister, they
4 opened up the economy internally. And through
5 that we saw the development of Infosys, but
6 also vaccine manufacturing, drug
7 manufacturing.

8 It was often focused on scale and low
9 cost. We also saw retinal surgery, etc.,
10 became a leader in, in the low cost-high
11 impact health outputs. I think what we're
12 seeing now is, if they can open up the economy
13 even further internationally, I think we'll
14 see a lot of these companies use data from not
15 just India, but from other countries as well
16 and move up the value chain as Tarun was
17 saying.

18 I think there's lots of opportunities
19 here in combining both that efficiency, that
20 scale, and then the AI together, especially in
21 healthcare. And this can be a big focus on
22 that because of their digital architecture
23 with, with the cards they have around using
24 health data as well, using that health data to
25 clinical trials faster, to looking at health

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1 impacts, adverse events, etc.

2 MR. STIVERS: Okay. Thank you,
3 Commissioner Brands.

4 MR. BRANDS: Thank you very much. Thanks
5 also to our panelists. I have three questions
6 triggered by Mr. Chhabra's testimony, but I'd,
7 I'd welcome thoughts from our other two
8 panelists as, as well.

9 First, in your, your written statement,
10 you mentioned possibilities for export
11 control, alignment, and critical minerals
12 reciprocity. Could you say a little bit more
13 about those subjects and how they might play
14 in the future of US-India cooperation?

15 MR. CHHABRA: Great. Thank you. Thank
16 you, Commissioner.

17 So I think the export control point I
18 think was made well by Ms. Ford in the
19 previous panel, which is a -- I think a sine
20 qua non of further technology sharing which
21 should be in the cards, and the relationship
22 must be accompanied by stronger alignment on
23 not just the pro forma, the, the de jure
24 export controls, but actual implementation
25 capability and enforcement capability. And

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1 then connectivity between our bureaucracies
2 and theirs on this.

3 And that matters not just in the China
4 context, but it matters in the Russia context
5 as well. I think there's movement actually in
6 that direction. I think at a high level
7 there's an understanding about it. But
8 whenever there is some sort of breakdown on
9 that or some sort of incident that
10 precipitates concern, it has to be addressed
11 immediately in that relationship.

12 I think with the respect to critical
13 minerals, there is a lot of regulatory
14 harmonization that could happen.

15 But the core of it is essentially what we
16 need to do with many other allies, not just
17 India and partners as well, which is to create
18 more barriers over time as we develop more
19 capacity in the US and like-minded ecosystem,
20 but not be afraid to kind of put up -- put up
21 very significant barriers, purchase
22 commitments just as we were talking about in
23 the -- in the pharma and healthcare space as
24 well.

25 And I think there's movement in that

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1 direction, but India should be part of that
2 solution.

3 MR. BRANDS: If we think about the US-
4 China competition as something that extends
5 globally, how should we be thinking about
6 India as a potential competitive asset to the
7 United States in regions beyond South Asia?
8 I'm thinking about Africa. I'm thinking about
9 issues like digital payments. There may --
10 there may be other and better examples. But
11 is this a subject that you've thought at all
12 about?

13 MR. CHHABRA: Yes. Absolutely. So I'll
14 give you an example of that, which is I think
15 the US posture toward India's digital public
16 infrastructure, right? Which I think for some
17 time had been somewhat hostile.

18 I think the effort in the previous
19 administration was to try to have an extended
20 discussion with India, the Indian government,
21 but also their own providers and partners in
22 that effort to bring in US companies, other
23 like minded companies as well.

24 Because that infrastructure can reach
25 many countries around the Indo-Pacific, Sub-

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1 Saharan Africa as well. But it need not be at
2 the expense of, of US, whether financial
3 services or US Digital service providers. So
4 I think we've actually moved significantly in
5 that particular space and I think it sets a
6 good example.

7 I think the, the other -- the other area
8 here is, and, and I think Sameer mentioned
9 this in the previous panel as well, we should
10 be thinking quite a bit about whose AI is
11 powering applications that are going to be
12 deployed globally. I think there's
13 significant reason to worry about the security
14 and trustworthiness of China's AI models for a
15 variety of reasons that we could get into.

16 And I think there's scope for us to have
17 something like a trusted framework for AI or a
18 framework for trusted AI that we could agree
19 on with India, with many other countries,
20 because that's going to matter not just at the
21 digital layer, but also the physical layer
22 when increasingly goods are going to be kind
23 of carrying models and application layers for
24 models.

25 MR. BRANDS: And one, one last question.

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1 You made the, the overarching point that none
2 of this is going to work if left to normal
3 bureaucratic processes and requires top level
4 political leadership. Could you just expand
5 on that a little bit?

6 MR. CHHABRA: Yes. Thanks for that
7 question in, in particular. I mean, my
8 experience has been that the bureaucratic
9 default in both Washington and Delhi when it
10 comes to deepening the relationship is
11 caution, delay, lowest common denominator
12 outcomes for a very -- for, for a variety of
13 reasons.

14 Most of the significant plays that we
15 should be Undertaking entail the interests of
16 a variety of agencies in the United States and
17 a variety of ministries in the United States.
18 And the only way to get things done is with
19 head of state office involvement.

20 That's been true for some time. The,
21 the, the, the US-India nuclear deal during the
22 Bush administration would not have happened
23 without that as well. So that need not be
24 with a particular person or office, but head
25 of state involvement. Finding a designee is

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1 absolutely crucial or very little happens.

2 MR. BRANDS: Thank you very much.

3 MR. STIVERS: So virtually we have
4 Commissioner Hodges. Oh, I'm sorry. Okay.

5 MR. HODGES: Hey. Good morning. Yeah.
6 Hi, I'm here. Yeah. Mr. Chhabra, you've
7 described the next few years as a critical
8 window for building trusted frameworks with
9 like minded democracies. And today you
10 discussed India as a potential scale market
11 for the US. I agree this is a unique
12 opportunity and a necessary step.

13 I want to talk a little bit of about how
14 we build a genuinely trusted framework with
15 India without creating a back channel that
16 Beijing is set to exploit. As has been
17 discussed earlier, India remains structurally
18 dependent on Chinese components across its
19 technology supply chains.

20 And you, you just flagged that Cloud and
21 API access are significant loopholes at
22 existing export controls.

23 And as you know, given your time at the
24 NSC, Beijing exploits a number of methods,
25 whether through Chinese linked components and

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1 infrastructure, third country subsidiaries,
2 and commercial relationships.

3 So my question to you is, can you share a
4 little bit more about the alignment on ICT
5 barriers and steps the US and India can take
6 to make the potential scale market more likely
7 in a trusted way?

8 MR. CHHABRA: Thank you, Commissioner,
9 for that. So the, the, the -- first, I'd say
10 there's good news in that since 2020, India
11 has taken some significant steps as was
12 discussed in the previous panel.

13 They banned a number of Chinese software
14 applications. They also undertook a very
15 significant effort to create standards for
16 trusted supply chains when it comes to
17 critical communications and goods as well, and
18 I think -- and actually setting an example for
19 a number of other countries as well.

20 So I think there's actually a will to do
21 that. The question is how much cost to incur
22 and at what level to kind of cut off some of
23 these supply chains and, and, and the
24 importation of these goods. I think this is
25 where bringing the ICTS conversation into

1 broader trade talks is actually quite
2 important.

3 Because the trade consequences would
4 actually be quite significant. And this is
5 where if we were to come into better alignment
6 both on the security risks of disposal,
7 discrete IoT goods, of cloud services, of
8 Chinese connected vehicles, also then talk
9 about what the market implications of that
10 could be.

11 I think we can actually again create a
12 common trusted market and hopefully one that
13 we -- into which we could bring a much broader
14 array of like-minded countries and developing
15 countries as well.

16 MR. HODGES: Perfect. Thank you. And a
17 quick follow-up on that is how much of this is
18 government led versus business engagement
19 from, from Delhi to, to the US? Is there a
20 role for the private sector to engage directly
21 to push this or do you think it needs to be
22 government led, thinking about your earlier
23 comments on sort of the, the appetite for
24 engagement.

25 MR. CHHABRA: I'd, I'd certainly welcome

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1 my co-panelists views on this as well, but I
2 would say both are essential. You know, the
3 practice the previous administration engaged
4 in was to have national security advisor led
5 missions with senior business leaders on the
6 US side meeting with counterparts on the
7 Indian side as well. I think we found that by
8 doing that, deals that might have taken years
9 could instead happen over the course of weeks
10 or months or at least be catalyzed that way.

11 MR. HODGES: Great. Thank you

12 MR. STIVERS: Commissioner Slevin.

13 MR. SLEVIN: Thank you. Picking up on
14 Commissioner Hodges questions, Mr. Chhabra, on
15 the ICTS coordination, what role -- you know,
16 as a commission we provide recommendations to
17 Congress.

18 And so interested in your thoughts and
19 invite the other panelists as well as to, how
20 can Congress kind of deal with these
21 complicated issues that do require some speed
22 and agility that the executive branch is best
23 positioned to often conceive and execute, but
24 where there's a need for durability across
25 administrations?

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1 MR. CHHABRA: I think it can start with
2 strong oversight of the ICTS authorities that
3 the Commerce Department already has and which
4 you know very well, Commissioner. I think
5 ensuring that the department is adequately
6 addressing the risks of goods that are being
7 imported from China which are going to be
8 deeply networked into all sorts of IoT related
9 networks.

10 So the way I think we have to think about
11 this is cars are going to be integrated into
12 smart cities. The, the, the -- these cars
13 will also be integrated into our grid to some
14 degree as well.

15 So we have to stop thinking about these
16 as kind of discrete goods, but rather
17 something being plugged into a network where
18 we already know that China has, has, has, has
19 placed malware to essentially preposition for
20 massive disruption.

21 Why would we create more vulnerabilities
22 for these goods and why would we not go to
23 like minded countries around the world that
24 are already facing similar sort of cyber
25 threats to kind of align on what the threat

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1 landscape looks like and how we could come up
2 with a common framework for preventing that
3 from happening and then again creating a
4 positive market for, for goods produced in
5 each of our countries?

6 MR. SLEVIN: Thanks for that. Dr.
7 Harjivan.

8 MR. HARJIVAN: You know, I would just --
9 I would just add that if we think about, you
10 know, the trope of data being the new oil, I
11 think health data, and I'm a bit biased here,
12 is a nuclear fuel, right? Everyone's got
13 their health data except for you. And often
14 it's in silos because of incumbents.

15 I think my view is that this needs to be
16 government nudged but consortium led. And the
17 idea is to have common data architecture to
18 collect data in, in similar forms because
19 whoever understands genomic data, clinical
20 data, manufacturing data will own the next
21 bioeconomy. And that means working with our
22 multilateral partners to define those data
23 architecture.

24 We've got a very disparate healthcare
25 system but if you look at the NHS or Ontario

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1 and Canada, they've got unified cradle to
2 grave healthcare data. India's got a similar
3 model as well. If we can develop AI models
4 around that, we can not just develop new drugs
5 faster, we can develop new products for the
6 economy.

7 That could be things like using, you
8 know, keratin for, for plastic cups, etc. So
9 this becomes very important. But first is
10 getting the architecture right and working in
11 a multilateral environment. It has to be
12 industry led. But they're not going to do
13 this on their own because they're incumbents
14 who want siloed data as well. It needs to be
15 nudged by the government.

16 MR. SLEVIN: Thank you.

17 MR. BHOWMICK: Thank you. I -- my co-
18 panelist, Mr. Chhabra has essentially
19 explained the supply chain on critical
20 minerals very well. I just want to make a
21 point on that particular supply chain to co-
22 chair's question.

23 Post 2020, when the tightening around
24 Chinese imports was in place In India, in 2023
25 there was a complete export ban on germanium

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1 and gallium and other kind of imports from
2 China to India, and which essentially led to
3 the larger highlighting of ICET during that
4 time frame.

5 And which also brings me back to what Mr.
6 Chhabra mentioned, that, you know, this -- the
7 time is right and it is also urgent where you
8 find like minded countries for these kind of
9 partnership, not only as a hedge but also in
10 terms of diversifying your own domestic
11 capabilities. Thank you.

12 MR. SLEVIN: Thanks Commissioner.

13 MR. STIVERS: Commissioner Shmavonian,
14 who is on -- with us virtually.

15 MS. SHMAVONIAN: Great. Thank you. I'm
16 going to -- I'm going to build off
17 Commissioner Slevin's questions related to
18 supply chain risk and economic coercion.

19 We have seen, as has been pointed out by
20 this panel, China's weaponization of supply
21 chains to restrict and control exports of
22 critical inputs require disclosure that
23 products aren't going to, to US defense
24 purposes.

25 And that is layered on top of some of the

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1 challenges, broad challenges related to the
2 China Shock 2.0 where China is flooding the
3 market with low cost goods and, and inputs
4 and, and really depressing the ability of
5 domestic manufacturers to produce those
6 products.

7 So this, this question is to the panel
8 but would really welcome your views on, on how
9 you would assess China's, China's economic
10 coercion strategy, their toolkit and the
11 ability of the Indian government to respond
12 effectively, especially as we are concurrently
13 talking about greater integration of our
14 supply chains and looking to India as a
15 potential secure supplier as we move away from
16 China.

17 MR. HARJIVAN: I, I can go first there as
18 well. So, so to me this one should be fairly
19 easily in -- at least in the pharma space. So
20 we know how much India depends on China for,
21 for KSMs, etc. But actually I kind of want
22 some of my drugs to come from China because
23 they're cheap. I just don't want all my drugs
24 to come from China. We need diversification
25 of supply.

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1 And I think there's a lot of countries
2 who are willing to meet that need, including
3 the US. The US is a high cost market, so we
4 need innovation to lower the cost. But
5 there's alternative sources as well. I always
6 make it akin to the fact that a fast food
7 restaurant has got three suppliers of
8 tomatoes. They may come from Mexico, they may
9 come from California, they may come from
10 Texas.

11 But when our drugs, we've got one single
12 supplier. And not just the KSMS, but it could
13 be a reagent or a solvent. And we've got
14 multiple points of failure in the drug supply
15 chain. We need diversification across all
16 three to achieve that. And at least for
17 drugs, it's a very low cost solution, is
18 advanced market commitments.

19 So right now, at least for drugs, it's a
20 spot market where the cheapest player can come
21 in and supply the drugs. If we have longer
22 term contracts, five years with, with known
23 players who've got visibility into the supply
24 chain, we can solve for that problem. We can
25 have better predictability of supply. We also

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1 have better diversity through that supply as
2 well.

3 So to me, at least for drugs, it's not
4 that hard of a problem. It's actually easy to
5 solve. I think it's harder for things like
6 semiconductors, we need fabs, etc. But for
7 drugs, this is a pretty fungible manufacturing
8 base.

9 MR. BHOWMICK: I mean, thank you for the
10 question. In terms of economic coercion in
11 the supply chains linked to China, between
12 India and China, you know, in my opinion, it's
13 not something that is very recent. This is
14 something which is implemented over the years,
15 but the effects of it is very long term. It's
16 not something that you can do away with in a
17 very short period of time.

18 So that being there, the kind of
19 frameworks that, you know, India is choosing
20 currently not only in terms of its domestic
21 capabilities, but also I believe that since
22 multilateral frameworks in terms of trade and
23 economic partnerships are turned to be
24 volatile from what we have seen.

25 From what our experience has been over

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1 the last few decades, the current focus is
2 also on bilateral partnerships within
3 multilateral frameworks that, you know, help
4 bring supply chain resilience across these
5 critical and sensitive nodes that India has
6 been concerned about over the last few years.
7 Thank you.

8 MR. CHHABRA: I would just underscore
9 that India, like the United States, Japan,
10 Australia, Canada, South Korea, the
11 Philippines, Europe, has been a target of
12 Chinese economic coercion.

13 And so as a result of that, I thought it
14 was actually good news that despite some of
15 the trade tensions over the last several
16 months, India's response to that has been to
17 double down with technology cooperation
18 initiatives with many of those same countries
19 to find ways to reduce their supply chain
20 dependencies on China rather than increasing
21 those or moderating those long standing
22 efforts to reduce those dependencies.

23 So I think that's a balance that we
24 should be taking advantage of.

25 MS. SHMAVONIAN: Thank you

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1 MR. STIVERS: Commissioner Schriver.

2 MR. SCHRIVER: Thank you and thanks to
3 the witnesses. I appreciate your testimony
4 and, and particularly colleagues who recently
5 served in government. Thank you for your
6 excellent work there. Maybe start with Mr.
7 Chhabra.

8 What is your understanding of and maybe
9 assessment of Pax Silica? And is this a, a
10 potential platform to achieve some of the
11 objectives you were describing? Has, has
12 India expressed, you know, optimism about this
13 as a -- as an initiative and platform?

14 MR. CHHABRA: Thanks, Commissioner. My,
15 my understanding is that India is interested
16 in, in, in being a part of Pax Silica. And I
17 think the ambition is quite high for it, which
18 is great. I think the question is where will
19 they focus?

20 Because as I mentioned earlier, I think
21 the challenge, long, long standing challenge,
22 as you mentioned yourself in the previous
23 panel, is often high ambition and, and, and
24 not so much on the execution side. And so I
25 think the key question for Pax Silica will be,

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1 where do we want to bring India in?

2 Where do we want to enmesh them? Whether
3 it's on the critical mineral side, whether
4 it's on the pharmaceutical side, whether it's
5 on the data center side. What are some
6 various key deliverables that, again, at the
7 head of state level we can hold our
8 bureaucracies accountable for achieving and
9 set clear goals for the private sector as
10 well?

11 MR. SCHRIVER: Appreciate it. The other
12 two witnesses, you both in, in, in your
13 respective areas talked about resilience. And
14 Mr. Harjivan, you, you mentioned this is so
15 simple and this is so obvious. And whenever I
16 hear something like that, you know, it makes
17 me think, well, if it's that simple, why
18 hasn't it happened?

19 And what are the obstacles that have
20 prevented a mapping of the supply chain? What
21 are the obstacles? We, we actually had a, a
22 discussion and, and a recommendation that was
23 adjacent to what you're talking about last
24 year. We, we see the need for data.

25 But, you know, and, and, Mr. Bhowmick,

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1 you talked about -- or Dr. Bhowmick, you
2 talked about sort of a resilience playbook,
3 early warning, and rather than ad hocing it.
4 You know, so what has stood in the way? Just
5 people haven't come up with the idea or we
6 haven't had a, a single belly button saying
7 I'm going to take charge of this, make it
8 happen. Or what's -- what have been the
9 obstacles?

10 MR. HARJIVAN: I, I mean, I, I think it's
11 natural company behavior. If you're an
12 incumbent, you don't want things to change,
13 right? In the health care system, you know,
14 everyone says they're poor, but actually
15 everyone makes a whole lot of money, right?
16 We know how much of the GDP is within the
17 healthcare system.

18 So when I said it's very simple, I was
19 being a bit glib, but it is very simple in the
20 sense of supply chain transparency. When I
21 buy a T-shirt, I can find out where the cotton
22 was made, I can find out where the -- where
23 the labor was, the carbon footprint. When I
24 put a pill in my mouth, I have no idea where
25 it's from, right?

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1 So it's not like this is new ground to
2 say we need visibility into the supply chain.
3 We need tier 2, tier 3 supplier visibility
4 like we do with automotive. When you go buy a
5 car, it says X percent is made in Mexico, X
6 percent is made in Canada. So that's what I'm
7 saying. It's not hard. Other industries have
8 it, they just don't want to change. They need
9 a bit of a nudge.

10 In terms of the price for generics, if
11 you look at the value to society, generics are
12 incredible. I mean they save lives, they,
13 they, they make lives more livable, but
14 they're way too low in terms of cost. Now,
15 actually, we don't need to actually spend more
16 for those drugs. We can actually get cheaper
17 costs because right now there's no
18 predictability in demand.

19 So if a certain purchaser, a PBM can
20 change their mind immediately and buy another
21 low cost supplier of that medication, often
22 Chinese or Indian, right? If we simply said
23 to a US or allied manufacturer, "we'll give
24 you a five year contract for X number of doses
25 at X number of price," we'll get -- they'll

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1 get that predictability demand. They can make
2 that capital infrastructure.

3 It just takes someone to make that step.
4 I've had a lot of conversations with the VA
5 and with, with Tricare, etc., and I think
6 there's a bit of lethargy in this. And it's
7 like, "Why try harder?" is kind of the mantra
8 versus, "Let's, let's make a little bit of
9 initiative here." But this is an easy problem
10 to solve with these smaller levers.

11 The AI infrastructure, I think those are
12 a lot harder challenges. Certainly, I spent a
13 lot of time with, with Tarun in the situation
14 room talking about the China threats. What
15 I'm talking about is not really a China threat
16 or an India threat. It is simply a mitigation
17 for our current US economic models which are
18 not optimized.

19 MR. BHOWMICK: Thank you. I'll just add
20 a point to Mr. Harjivan's thing. I think when
21 you -- when you look at the Indian markets,
22 they are very, very price sensitive. For
23 example, if you compare it to, say, a Japanese
24 market or somebody, somebody's buying a garlic
25 from a supermarket, they will try to look at

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1 where the garlic is coming from.

2 But when you look at a 1.4 billion
3 market, it's very price sensitive, and this
4 is, you know, somewhere where it, it, it
5 really, the -- more than the footprint, the
6 price indication, and how the market mechanics
7 work becomes more important.

8 Coming to your question on the supply
9 chain playbook, I mean, there has to be
10 multiple points. But say, for example, if I
11 pick up the US-India FDA, that's, that's being
12 negotiated right now, I think right now
13 confusion is the biggest tariff.

14 For example, if, if you look at the
15 domestic, in a domestic sense, without
16 reaching any kind of finalization or any kind
17 of agreement, there is a lot of disruption
18 just over the confusion of it. So I think,
19 although that is a very strong recommendation,
20 but we are quite far away from it when we look
21 at, say, in terms of economic partnerships.

22 There has to be more concrete and more
23 transparency on what you're looking at in
24 terms of partners partnerships so that you can
25 make your supply chains more resilient. So

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1 that is, I think, one of the major roadblocks.
2 And the US-India FDA is just one of the
3 examples of it. Thank you.

4 MR. STIVERS: Commissioner Price.

5 MS. PRICE: Thank you. And thank you to
6 all of you for your testimony. The, the most
7 important part of our job as a commission is
8 to give recommendations to Congress. So I
9 want to stop a moment and, and sort of focus
10 on that.

11 Dr. Bhowmick, you gave wonderful
12 testimony. Your written testimony has more
13 suggestions on recommendations. I want to
14 give you two minutes to talk about your top
15 recommendation that you think would be most
16 impactful.

17 MR. BHOWMICK: Thank you for the
18 question. My top recommendations remain the
19 same, that there has to be more clarity so
20 that you bring down transaction costs for --
21 in terms of economic partnerships. That
22 remains my top recommendation in terms of
23 supply chain resilience.

24 But when, say, the Congress is looking at
25 India-China and the balance of power in the

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1 Indo-Pacific, it has to come out of binary
2 assumptions of India and China specifically,
3 because India does not. India does -- is
4 taking up a strategic interdependence with
5 China which you cannot do away with over, you
6 know, a short period of time.

7 So I think this, this -- you know, coming
8 from a point of having binaries in what you
9 must choose between India and China, that is
10 not something that is practical when you're
11 implementing it in terms of supply chain
12 resilience.

13 And the second one being, and the most
14 important one being what I just, you know,
15 previously explained, that clarity in economic
16 partnerships, be it the India-US FDA, be it in
17 critical minerals or IC-8, more, more
18 structured partnerships and how, how --
19 wherever it is going makes more sense not only
20 in terms of diplomacy but also helps bring
21 down the costs for producers.

22 Because like I mentioned, it is a very
23 price sensitive market. The delays, the time
24 cost of it has a very high impact on how it
25 plays out in the market. Thank you.

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1 MS. PRICE: Thank you. And Dr. Harjivan,
2 thank you for your excellent testimony. As
3 our, our chairman mentioned last year, we did
4 have a recommendation in terms of increasing
5 visibility into the pharmaceutical supply
6 chain. We are not an advocacy organization so
7 we give our suggestion and we push them and
8 don't get very far sometimes. Other times
9 we're way more successful.

10 If you had a message, obviously your
11 testimony, but a shorter message that we
12 should be using to get their attention or get
13 the public's attention so that they can push
14 members of Congress, what would that be or how
15 would you say it?

16 MR. HARJIVAN: Yeah. I think supply
17 chain visibility will, I think, the most,
18 reduce costs for medications. It is not an
19 extra burden. It will reduce costs because if
20 you have that visibility, you can have that
21 guaranteed purchase commitments as well.
22 Those commitments are trivial in terms of the
23 cost.

24 So for penicillin, amoxicillin, 14 days
25 supply, right now we, we depend almost wholly

Audio Transcription

1 on China for the precursors for amoxicillin.
2 If we simply said, "Let's map the supply
3 chain, understand where the choke points are,
4 pay a little bit more for resilience." And
5 again for a 14 day supply, I'm talking about
6 increasing it from \$10 to maybe \$11 at most.

7 And in fact, if you have longer term
8 contracts, that supplier may actually -- and
9 I've talked to a lot of these suppliers, they
10 may even reduce the price because now they
11 know they've got a five year commitment. So
12 your antibiotic may go down to \$8 for a course
13 of therapy.

14 So we're going to reduce costs and
15 resolve the supply, supply chain resiliency or
16 choke point issue as well. So this is why I'm
17 saying I'm a bit glib but this is easy thing
18 to solve because it doesn't cost more money.
19 In fact you could save costs and it would
20 improve patients lives as well.

21 MS. PRICE: So, so making it into a
22 social media post, something as simple as
23 "Decrease cost for constituents. Map your,
24 your supply chain."

25 MR. HARJIVAN: Better quality drugs, you

Audio Transcription

1 know where they're made, you know how they're
2 made, the quality increases and it's cheaper.
3 So you're getting better quality drugs at a
4 lower cost that, that don't go -- don't go
5 into shortage. Those are my three points.

6 MS. PRICE: Thank you. Mr. Chhabra,
7 what's your, your best recommendation that you
8 would like to see Congress do?

9 MR. CHHABRA: Again, I, I think there's
10 enormous opportunity in aligning our ICTS
11 restrictions with China because it's not just
12 a matter of security but it's a matter of
13 creating a common market and much more
14 predictability for kind of joint efforts on
15 manufacturing and, and, and opportunities in a
16 consumer and industrial market too.

17 A couple things we haven't talked about
18 but was touched on the last panel, number 1,
19 on the defense side, we could be focusing much
20 more I think on defense articles that are at
21 their core commercial goods and then are
22 supplemented with more sensitive items. We've
23 seen deals there go much, much quicker, co-
24 production opportunities.

25 Anduril comes to mind, for example, is,

Audio Transcription

1 is a company that's been pursuing
2 opportunities there. And then I would take
3 that, tie it to our cooperation in the Indian
4 Ocean space where there's a real strategic
5 need both here and in India as well to have
6 much better awareness and cooperation and look
7 at co-production opportunities that could
8 specifically address our shared strategic
9 concerns.

10 MS. PRICE: Thank you all.

11 MR. STIVERS: Commissioner Kuiken.

12 MR. KUIKEN: Thank you. I'd like to put
13 this question to the panel. So one of our
14 former commissioners, Mike Wessel, when I
15 joined the commission, took me out to
16 breakfast one morning and told me the
17 commission was the over-the-horizon
18 commission, not the alligator closest to the
19 boat commission.

20 And so I'm trying to think about looking
21 out 24 months or 36 months as I -- as I hear
22 all of you talk and everything feels like it's
23 sort of in the next 12 months.

24 As we think about biotech, not
25 pharmaceuticals but bioindustrials, bio-

Audio Transcription

1 materials and things like that, as we think
2 about quantum, as we think about the
3 convergence of artificial intelligence with
4 some of those emerging technologies, how
5 should we think about the US-India opportunity
6 and where should we be making investments that
7 aren't going to pay dividends in the next 12
8 months but maybe in the next three years?

9 As Mr. Chhabra told me when he was still
10 in government, you know, India is a strategic
11 partner. We need to think about it, not in
12 sort of in the day to day, all the time, but
13 in the sort of over-the-horizon piece, just
14 like Commissioner Wessel used to say. So I
15 welcome your reaction to that, and then I
16 might have some follow-ups.

17 MR. HARJIVAN: So I'll go first. I mean,
18 to me it's all about data standards,
19 interoperability, at least in healthcare. So
20 you mentioned quantum, you mentioned AI, you
21 mentioned manufacturing, these all kind of
22 converge within the biotechnology space.

23 Data is everywhere, but we need to have
24 common metrics around it, metrology. So I'll
25 give an example. So I worked in Operation

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1 Warp Speed. I was there since day one, and I
2 remember all the different choke points. We
3 solved them through a very robust multilateral
4 system, by the way, right?

5 But one of the things that I saw was
6 there was an adjuvant for vaccines that were
7 from Chilean tree bark. The only source of
8 this adjuvant, the (indiscernible) Shingrix
9 and Novavax, was this Chilean tree bark. I
10 left Operation Warm Speed, started my own
11 company, where we're, we'er making it in cell
12 culture.

13 But we made that, that adjuvant exactly
14 the same as the tree bark because the federal,
15 --the FDA regulations had to be exactly the
16 same. So this tree made this adjuvant to
17 fight off insects. We're now putting, you
18 know, in vaccines because it creates a greater
19 immune response, works well. But that was
20 making exactly the same.

21 With AI, I can now tailor that product to
22 the actual pathogen or what I want to make it.
23 However, I'm now using generative AI. I
24 worked with Lawrence Livermore. We created
25 10,000 molecules.

Audio Transcription

1 Now, when I started consulting, the cost
2 to develop a drug, it was in 2000, was about
3 \$500 million. 2010, it's now \$1 billion
4 dollars. Now, it's \$2 billion. We're not
5 seeing the, the return of technology in drug
6 development. Because while I'm able to
7 develop 10,000 novel molecules, the regulatory
8 process is still one molecule at a time.

9 And so we need to create standards by
10 which we can accelerate through innovative
11 methods, but -- with India and with the multi-
12 allies standards, so that data can come in, we
13 can look at toxicity, we can look at
14 manufacturability, we can look at efficacy in
15 a very rapid way. Using AI to almost look at
16 the AI, generative AI. That needs to occur,
17 so.

18 MR. KUIKEN: Well, again, I'll hand it to
19 the panel. But Mr. Harjivan, I did not think
20 you were going to lead with data, so you had
21 me at, "Hello."

22 MR. CHHABRA: So, Commissioner, let me --
23 let me just paint a picture of what the world
24 could look like if we don't stay on the case
25 here. So 10 years from now we could have,

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1 let's say, a third country that's setting up
2 subsidized data centers in India offering
3 genetic screening and services, hoovering up,
4 you know, a billion people's genetic data.

5 We could have -- half of India's cars
6 could be Chinese connected vehicles. We could
7 have most of the IoT goods in the country
8 running Chinese AI models and, and, you know,
9 continued dependence on Russian legacy
10 technology because we haven't pressed hard
11 enough. And then data centers that are built
12 by third parties but that are closely
13 connected to China.

14 That's, that's a default course that we
15 could end up on without concerted policy. In
16 a scenario like that, let's think about a
17 Taiwan contingency let's think about a border
18 scenario. The vulnerabilities that India
19 already has and that our joint cooperation
20 already have would be, you know, far, far
21 worse by orders of magnitude.

22 And yet that's a world that we could
23 easily be headed toward without very, very
24 concerted action.

25 MR. BHOWMICK: Thank you for the

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1 question. It's -- you know, it's, it's, it's
2 quite remarkable that this -- we are
3 discussing the question on emerging tech on
4 the eve of the AI Impact Summit where the CEOs
5 of OpenAI and Google are all discussing
6 implementability as well as scalability and
7 US-India partnerships in emerging tech.

8 I specifically believe that India-US
9 partnerships in AI and emerging tech must be
10 built and on two specific pillars. One is
11 trust with -- and the second one being, being
12 development. In terms of trust, we -- there
13 we have burnt our fingers in terms of
14 collaborating with quite a few Chinese tech
15 companies.

16 And because of which there has been quite
17 a little bit of protectionism in the last few
18 years. What I also feel is very important in
19 terms of -- and what India is seeking in, in
20 terms of leveraging emerging tech is its
21 developmental objectives, which is advancing
22 people, planet, and prosperity.

23 So the implementation of AI is not only
24 bringing people out of poverty, but also
25 essentially making climate action work ranging

Audio Transcription

1 from healthcare to, say, other sustainability
2 goals, is, is, you know, what the basis should
3 form of US-India partnerships in this domain.

4 Thank you.

5 MR. KUIKEN: Let me just do one more
6 question for the panel. We'll start down at
7 your end, Mr. Bhowmick, since you traveled 30
8 hours to be here. Can you, all of you, just
9 talk about how we should think about the India
10 space industry? One of the things that we
11 talked about last year was sort of what US-
12 China competition looks like in the space
13 industry.

14 But an area that I think India actually
15 does very well as a country is in space. How
16 should we evaluate the sort of space industry,
17 space ecosystem there? Should we think it is
18 something that's organic or something where
19 they already sort of have historic investments
20 or cooperation with Russia that's sort of
21 gotten there?

22 How do we think about India space and
23 where are the opportunities that we should
24 think about as we look towards recommendations
25 at the end of this year?

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1 MR. HARJIVAN: I'll, I'll actually go
2 first with no comment.

3 MR. CHHABRA: I think this is actually an
4 enormous opportunity. Thanks for the -- for
5 the question. You know, we're going to see
6 enormous commercial activity with significant
7 strategic implications too around lunar
8 exploration, for example, in the coming years.

9 The opportunity to bring Indian firms,
10 including very -- you know, very exciting
11 startups in India into that space commercially
12 and then potentially do more sensitive things
13 in the future, I think is enormous.

14 It was one of the driving force behind
15 our -- the bid in the previous administration
16 to bring India into the Artemis Accords, which
17 I think was a significant strategic decision
18 actually on their part given the kind of the,
19 the legacy issues with their, with their space
20 program. And, and we've already seen this
21 happening as well.

22 I think there's also just a significant
23 kind of popular dimension to this. It was a
24 big deal, I think, to kind of have an American
25 and Indian astronaut travel together in, in,

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1 in a recent -- a recent mission. And we
2 should be doing a lot more of that because,
3 again, it provides more ballast in the
4 relationship and excitement about what we
5 could be doing together in this sector.

6 MR. BHOWMICK: Well, space is not exactly
7 my domain of expertise, but, you know, overall
8 I'd say that while India is looking at
9 something called frugal AI, and like, you
10 know, Mr. Chhabra mentioned about, there's
11 quite a few exciting startups working in, in
12 the space domain.

13 What I specifically think is important
14 and is a -- is a bilateral symbiotic
15 relationship with the US in this particular
16 domain would be effective technology that
17 comes at a low cost. That's a win-win for
18 both the countries. That's a particular space
19 -- in terms of space that, that, you now, we
20 can look into. Thank you.

21 MR. KUIKEN: Thank you. If Commissioner
22 Stivers will give me one more, I won't even
23 take a second round, if you give it to me.

24 MR. STIVERS: You can go.

25 MR. KUIKEN: I'll just -- I'll just give

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1 it to the panel, again. Your frugal AI
2 comment just made me think about this. One of
3 the areas that the Commission's research
4 working group is looking at right now is the
5 open source ecosystem, and how, if you look at
6 something like hugging face, 17 of the top 20
7 open source models are currently Chinese
8 models.

9 How should we think about the open source
10 ecosystem as we look at it through sort of
11 India and the frugal AI approach? How should
12 we look at it more broadly? What are your
13 thinking -- what's your thinking on open
14 source AI and related issues?

15 MR. BHOWMICK: I, I -- you know, I feel
16 that frugal AI is very relevant to India
17 because like I mentioned, it's a price
18 sensitive market. If you kind of price
19 technology, it is not something that reaches
20 the masses. So, you know, I, I wouldn't have
21 a specific answer to that, but I'd, I'd like
22 to say that, you know, this is something that
23 investments are required to, to -- you know,
24 to keep the inclusivity aspect on in terms of
25 technology. Thank you.

Audio Transcription

1 MR. CHHABRA: I think the, the price
2 sensitivity in the Indian market is something
3 that American firms have navigated before,
4 and, and, and quite successfully in, in many
5 cases. I think, though, it's important to be
6 very clear about what some of the risks are of
7 using China's AI models.

8 And, you know, those -- I mentioned it a
9 bit earlier, but let me say a little bit more
10 about it. Those include misalignment. They
11 include what some researchers have called
12 sleeper agents, where you could kind of
13 activate it -- activate certain behaviors in
14 the models that you don't want to see a, a, a
15 political bias as well.

16 And, and, and also, you know, using
17 models where the product has actually been
18 built from what's called distillation, which
19 is essentially kind of industrial espionage as
20 well. And so, I think, those need to be
21 known. That, that actually has nothing to do
22 whether, whether -- with whether a model is
23 open or proprietary.

24 It's really about whether you trust the
25 vendor. And so, to some degree, I think, you

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1 know, there's -- I'm, I'm a little bit puzzled
2 as to why we don't have more of a focus on
3 trusted AI. We had a significant policy
4 focus, which I think was excellent, on trusted
5 telecom. AI is going to be much more
6 pervasive, right? Across the economy in terms
7 of strategic significance.

8 And we need to have a framework for trust
9 there as well, independent of the question of
10 whether models are open or proprietary.

11 MR. HARJIVAN: I'm just going to build on
12 that and harp on my notion about interoperable
13 architecture. Trust is so important, and, you
14 know, I think India doesn't have -- sorry --
15 China doesn't have a lot of trust. India's
16 got a lot of data. It could be frugal AI
17 system, it could be open. We don't know
18 what's going to emerge.

19 But I do think the United States, not
20 alone, but with its multilateral partners, can
21 develop these interoperable architectures.
22 And if we do that, it can be trusted. And
23 industry likes predictability. Once you
24 create these standards, I think whether the US
25 companies, our democratic allies, will invest

Audio Transcription

1 more in these and we'll see more outputs as
2 well.

3 We've got to create that, that
4 architecture by which they can invest against,
5 that is trusted. And so consumers-trusted
6 investors-trusted, etc. Right now, it's, it's
7 a wild west. I understand that. But if we
8 create that, that standard platform, we can
9 accelerate things, but with trust and with
10 higher output.

11 MR. STIVERS: Dr. Bhowmick, we've, we've
12 talked a lot today about defense, technology,
13 supply chains. We actually haven't talked
14 that much about trade. Agreement, about two
15 weeks ago, the US agreed to reduce tariffs
16 from 50 percent to 18 percent. From what I've
17 read, India reduced tariffs on industrial
18 goods to, to 13.5 percent. What's your
19 opinion of the trade relationship and the new
20 deal that was just announced two weeks ago?

21 MR. BHOWMICK: I mean, that's what we
22 see, that it's going to be reduced from 15 to
23 18 -- 50 to 18 percent but that is not yet
24 confirmed. What I -- what I see in terms of
25 the sector specific of the trade agreement is

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1 that while a lot of agricultural and labor
2 intensive sectors are said to be protected,
3 but we are yet to have clarity on that.

4 So that is one very sensitive point of
5 the FDA that still needs sort of a solution.
6 But, like, apart from that, what I previously
7 mentioned that, in terms of the US-India FDA
8 right now, confusion is the biggest tariff.

9 We still don't have clarity which is
10 leading to quite a bit of, say, domestic --
11 quite a lot of domestic sectors feeling
12 disturbed, I'd say, in their natural
13 transaction and in their forecasting of the
14 hedging processes that needs to be undertaken.
15 So that is -- that, that stays one of the main
16 points.

17 Apart from that, of course, labor
18 intensive sectors, be it dairy, agriculture,
19 textiles, that is one aspect that needs to be,
20 you know, looked into. Thank you.

21 MR. STIVERS: Okay. Thank you
22 Commissioner Price.

23 MS. PRICE: Thank you. Just a couple of
24 technical questions. And I -- first, I was
25 going to ask -- I'll start with Mr. Chhabra.

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1 You talked in your testimony about these --
2 creating these trusted standards, and then we
3 just talked about it several more times.

4 Can you just get into the weeds a little
5 bit with me? Government doing it, industry
6 doing it, partnership doing it, how would this
7 work and what needs to happen to get it
8 started?

9 MR. CHHABRA: Thank you for that
10 question, Commissioner. I, I think government
11 needs to do this in part because the, the
12 basis of this is really about security
13 concerns. And that, that, that necessarily
14 involves the assessments of the intelligence
15 community and resources that are available
16 only to the government.

17 I think a good example of this is the
18 connected vehicle rule that the ICTS office
19 published during the previous administration
20 and, and, and then more case-specific rules
21 that they published as well on, on kind of
22 particular investments from China and the
23 United States, say in the telecom sector as
24 well.

25 I think we want to take that, the

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1 framework that inform that kind of reporting
2 and try to encourage India and other like
3 minded countries to adopt similar frameworks
4 and create a similar basis of expertise so we
5 have kind of a community talking to one
6 another.

7 We -- just some of this work began
8 actually under the auspices of the State
9 Department bringing around 15 countries to
10 talk about some of these issues. But it was
11 in, you know, early 2024, and I think that
12 needs to be carried forward.

13 I think this relates also to the question
14 about the trade deal, which is hopefully we
15 can now get to the next stage of kind of
16 discussions, which I think is what are the
17 steps we can take, including regulatory
18 alignment like this, that help us both reduce
19 the -- our vulnerability to China's economic
20 coercion and also reduce our exposure to
21 China's economic predatory practices?

22 If that's kind of the shared goal, I
23 think there's a lot we could do in the
24 regulatory space together.

25 MS. PRICE: Are there standards that we

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1 use already and this would be building on it,
2 or are you saying it's wild west?

3 MR. CHHABRA: I, I think the standards
4 that were promulgated by the Commerce
5 Department, for example, in connected
6 vehicles, were quite good and could be adopted
7 easily by other countries. I think similarly,
8 there are standards around security for data
9 centers as well.

10 And, again, I, I, I would suggest that
11 there should be a framework around trusted AI
12 that's more nascent, but something I think a
13 lot of industry actors would be happy to work
14 with the government on.

15 MS. PRICE: Thank you. One last
16 question, Dr. Bhowmick. As I was looking at
17 the end of your testimony and you're, you're
18 talking about looking to help -- US policy
19 that looks to help India build redundancy and
20 capability, etc. As we talk to industry here,
21 what will they say are their barriers when
22 they try and start new enterprises with India?

23 MR. BHOWMICK: Yeah. I think there is a
24 -- you know, in terms of redundancy, there's a
25 lot of streamlining that is required,

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1 especially in terms of the labor input that
2 goes into the US-India supply chain,
3 specifically the services sector.

4 So there needs to be more kind of
5 standards and training processes over there to
6 reduce redundancies in that particular aspect
7 where the dependence is not only on low cost
8 labor, but on high skilled labor, so. Yeah.
9 Thank you.

10 MS. PRICE: But would industry say they
11 can't do something or they can't invest more,
12 because there are certain other kinds of
13 barriers, regulation, things like that?

14 MR. BHOWMICK: The barriers will mostly
15 be in terms of cost barriers. Because when I
16 talk about skilling and you move towards high
17 skilled labor inputs, there's a lot of
18 investment that is required for that.

19 Given the labor is abundant, if you -- if
20 you move towards high skilling processes, it
21 would need a sort of investment which, which
22 leads to be a little bit costly for the
23 industry. So so long there is no support from
24 the government or other forms of, say, funding
25 sources, that remains one of the barriers.

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1 MS. PRICE: Thank you very much.

2 MR. STIVERS: Commissioner Hodges has a
3 question virtually.

4 MR. HODGES: Hi. Thank you. Yes. Mr.
5 Harjivan, I want to thank you for your
6 recommendations on identifying single points
7 of failure due to over reliance on China.
8 It's an issue that goes beyond APIs in the
9 medical community. The vulnerabilities don't
10 stop at the pharmacy.

11 Many of the same Chinese chemical
12 manufacturers supplying pharmaceutical
13 precursors also dominate production of
14 intermediaries using agriculture, advanced
15 materials, everyday household needs, and
16 defense relevant manufacturing.

17 So hoping to ask you today, because when
18 -- in your written testimony, you, you
19 mentioned that US chemical industry, unlike
20 Europe, is in a position to act.

21 So I just want to ask you sort of plainly
22 today, looking beyond pharma, should the US do
23 more to protect its sectors to avoid these
24 types of future choke holds that the Chinese
25 are looking to create? And if so, what steps

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1 should the US consider when it looks into
2 these areas, specifically related to the
3 chemical industry and biotechnology?

4 MR. HARJIVAN: Yeah. If you look at the
5 US drug industry, it started in New Jersey,
6 outside of the petroleum industry, right?
7 Because it was -- it was adjacent to it. So
8 Merck, J&J, all these great companies were
9 adjacent to oil refineries because the
10 precursors do come from petroleum products.

11 So there, there, there's an analogy there
12 already of US companies being successful with
13 that. What happened was simply the cost
14 drivers, environmental issues as well, that,
15 that pushed it to China. I think, you know,
16 my view is -- still is that I'm happy to get
17 some of my drugs or precursors from China,
18 just not all of them.

19 I don't care whether it comes from Idaho,
20 Ireland or India. We just don't need one
21 source. And we need to look at the whole
22 value chain. We may -- what, what happens
23 often, we'll say, "oh well, the final dosage
24 form needs to be made here in the US," but
25 then the -- we realize the APIs come from

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1 India, etc.

2 During operation Warp Speed, as I
3 mentioned, we realized choke points that we
4 never realized would happen. We, we had to
5 get -- there was a -- there was a darth of
6 sand for, for, for, for (indiscernible). I
7 didn't know there's a shortage of sand in the
8 world, fine sand.

9 Rolled steel from China. We sought
10 sativa bags from, from, from France. So this
11 is where the visibility starts coming in. You
12 need to understand where those choke points
13 are and then diversify those, those, those
14 choke points.

15 I think what we also want to make sure is
16 that when we look at the end product, I said
17 pay more for these drugs, we want to make sure
18 it's not just the, the end supplier extracting
19 those economic rents. So we can't have a PBM,
20 simply we pay them more and they pay the, the,
21 the, the tier, tier 2 and tier 3 suppliers the
22 same amounts, because those players will still
23 exit.

24 So it's about managed diversification.
25 And also I think at the same time, I think

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1 there's real opportunity for investing in
2 innovation for new manufacturing technologies
3 as they are emerging. But we need to
4 accelerate those as well.

5 But I think it's actually, in this case,
6 again, to sound glib, it's easy to, to, to
7 diversify some of that manufacturing because
8 the costs are not that high to move from,
9 let's say, China to India or even to other
10 countries that can supply those precursors.

11 But the first step is to understand all
12 the choke points along the way. If there's a
13 certain reagent, that can gum things up
14 immediately. And as Tarun just mentioned, the
15 Chinese actually and other adversaries are
16 very adept at understanding where those choke
17 points are.

18 And, simply, if, if we are in a
19 heightened political situation, could use
20 those choke points just simply to create
21 confusion. If you're -- you know, if the --
22 if you're -- you can't get steel for your car,
23 that's one thing. If you can't get your
24 medication to survive, that's a very different
25 thing. And that can cause a lot of confusion

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1 in, in a global environment.

2 MR. HODGES: Thank you.

3 MR. STIVERS: Well, unless there's any
4 other questions from commissioners, we will
5 close. In closing, thank you again to all the
6 witnesses for your excellent testimonies
7 today. You can find those testimonies as well
8 as a recording of the hearing on the uscc.gov
9 website.

10 I'd like to note that the commission's
11 next hearing will take place on Monday, March
12 2nd. That hearing is titled, "Part of your
13 World, US-China Competition under the Sea."
14 Apparently there's a Little Mermaid theme.
15 And with that bold observation, we are
16 adjourned.

17 (End of audio recording.)

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