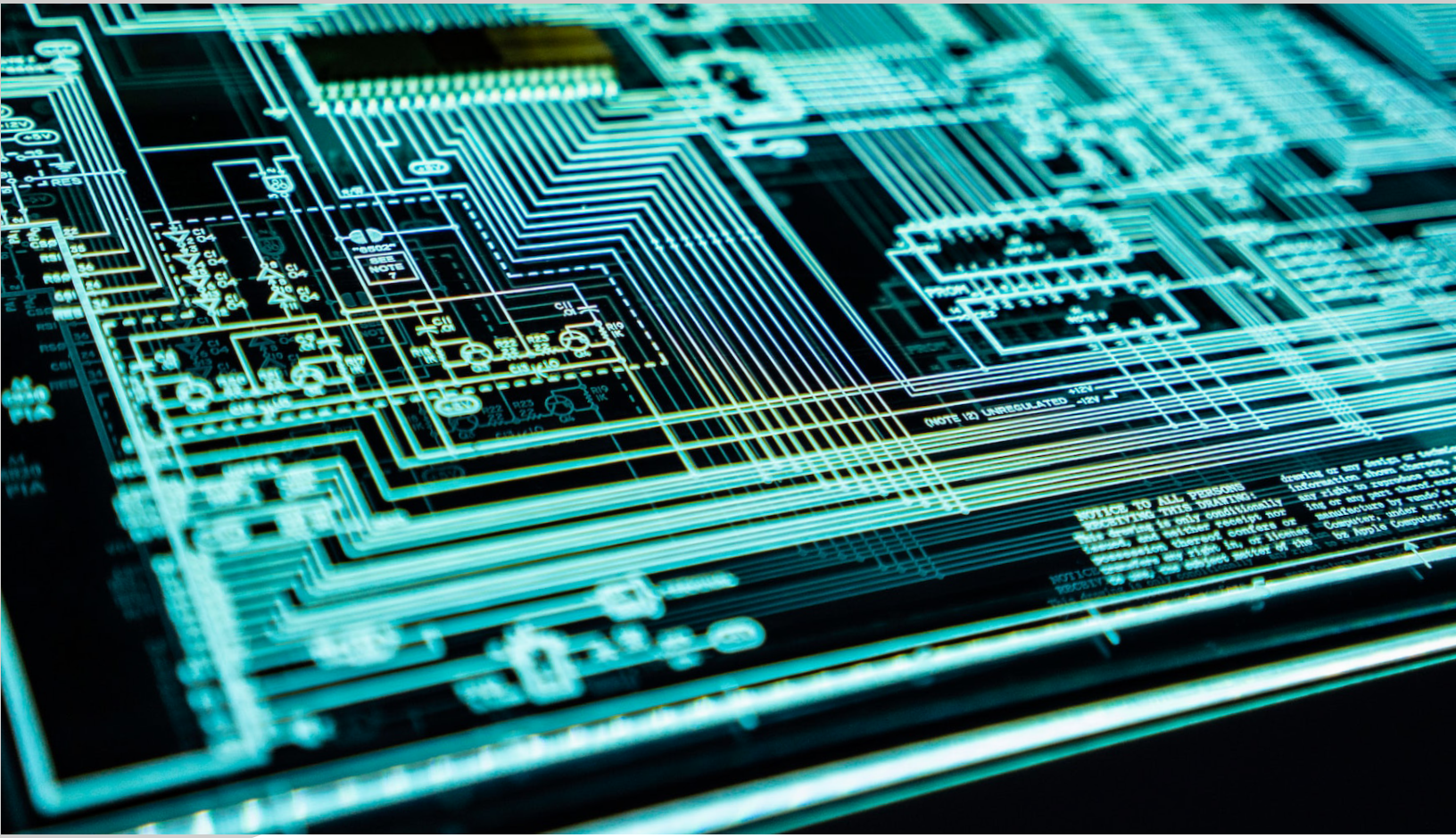
Quad
Critical & Emerging Technology Forum



Executive Summary Report
16–18 August 2023

Sponsored by: Near East South Asia Center for Strategic Studies, Daniel K. Inouye Asia-Pacific Center for Security Studies, Pacific Forum, Observer Research Foundation, University of Tokyo, and Australian National University

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Quad Critical & Emerging Technology Forum

Report/Executive Summary
16–18 August 2023
Location: San Diego, California
Sponsors: NESA Center, DKI APCSS, Pacific Forum, Observer Research Foundation, University of Tokyo, and Australian National University

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EXECUTIVE SUMMARY:

From 16–18 August, a collection of partnered institutions from the Quad member states conducted the first Quad Critical and Emerging Technology Forum in San Diego, California. The forum had thirty-one participants representing industry, research laboratories, academic institutions, and government departments/ministries from each of the Quad member states. The forum was organized around three pillars: intra-Quad cooperation in critical and emerging technologies, Quad technological support for the Indo-Pacific, and Quad efforts in domain awareness and information sharing.

Conversations amongst the participants covered artificial intelligence, quantum computing, STEM workforce development, public-private partnerships, information sharing, cybersecurity, and countering disinformation in detail. A second iteration of the forum will occur in 2024 to continue refining ideas, proposals, and recommendations. The report that follows provides notable data points from conversations, along with a set of recommendations for Quad member states, specific industries, and research institutions.

DATA POINTS:

- Prioritization within each Quad member state and among the Quad member states on what critical and emerging technology should be prioritized first. Possible approaches diverge between what is most accessible currently in terms of policy advances – in essence the lowest hanging fruit, or prioritization based upon regional market needs.

- Future meetings of the forum should make the addition of legal experts from the four states, as regulatory conversations emerged routinely.

- Industrial policy regarding technology emerged routinely, both from those supportive and those concerned about the viability of such an effort.

- Participants recommend a greater focus by the forum on two areas – cybersecurity and the space domain. There is considerable interest in how cybersecurity elements are aligned among the Quad and discussed in the region. Likewise, the commercial revolution in space has many believing this is a real comparative advantage of the Quad that can be relayed into effective regional outreach.

- What is the status of the Quad Investors Network? This was a common refrain among participants and is viewed as a possible breakthrough for the Quad into the region or another half-baked concept that goes nowhere.

- The Quad as a market creator, incubator for innovation, and industry encourager was consistently mentioned.

- Beyond industry requests for market incentives to engage in Quad efforts, there is an overt request by research laboratories and private firms for the Quad states to establish clear and consistent policy on technological cooperation. Such a policy must lower barriers for market entry into the other Quad states and standardize options for firms to engage. Examples pointed to as a model is the Quad's cooperation in Open RAN.

- The Quad is concerned about cybersecurity, information warfare, disinformation, cyber controls, and digital speech. This is partially due to strategic competition and the trends of social media, but innovative responses to this challenge set is seen as something that the Quad can address.

- Strategic communications from the Quad member states must become more consistent and more adequately speak to Indo-Pacific regional concerns. Much about the Quad is released through joint statements after senior leader meetings, but how specific Quad elements are thriving, struggling, or evolving need to be part of regional conversations. A case in point is the state of the IPMDA. Another is the organizational status of the Quad Investors Network.

- Future efforts by the Quad can include a focus on data. Data protection, data privacy, data sharing, and data storage are each issues for private sector and public sector interests. Data

also overlaps with key focal areas of the Quad already – from AI to cybersecurity to domain awareness. A more overt focus on various data efforts can also propel regional conversations on digital standards and digital infrastructure.

- Discussions emphasized that future meetings should include an overt focus on the following issues: commercial space, rare earth minerals, supply chain resiliency, misinformation in the Indo-Pacific, and semiconductor manufacturing, supply, and logistical chains.

RECOMMENDATIONS:

Recommendations generated by the gathering are listed below:

- The Quad Infrastructure Fellowship is viewed as a win and should lead to conversations about further scholarships, guest workers, and special immigration conversations amongst the Quad member states. Recommendation is to expand such programs and make them equally distributed so that industry/academia/research are flowing amongst the Quad (not just in one direction).

- Public discussion of the Quad Investors Network must be part of each Quad member state's diplomacy. Eyes must be kept on its emergence and details of what it is working on need to be understood. If communication and proof of concept can be shown, then recommendation is to stand up a Center of Excellence that can be an incubator of investment, research, and policy formulation on technology. Such a center can also assist in attracting more investors.
    - If a COE is stood up, then it should have AI, Quantum, and cybersecurity as priority areas of focus.
    - Cyber engagement should include best practices, shared data/methods, and shared database of malware/cyber threat occurrences.

- A Quantum Software Network could be facilitated by the Quad member states, either as a formal effort or through encouragement among private sector actors. The creation of a larger Quantum community would further propel energy into the research realm.

- A specific conversation among formal working groups or in a Track 1.5 setting on Science and Technology Infrastructure. This form of infrastructure is essential for CET but is often overlooked in conversations about either technology or infrastructure.

AGENDA/RECORD:

Quad Critical & Emerging Technology Forum
August 16 – 18, 2023
Manchester Grand Hyatt San Diego
1 Market Place
San Diego, California, United States, 92101

DESCRIPTION:

Critical and emerging technology is becoming a primary pillar of strategic collaboration within the Quadrilateral Security Dialogue (or Quad). Technology is essential for the national interest of each Quad state. Policymakers are confronted with similar challenges in each country, such as the fact that private technology companies are outpacing the traditional acquisition and adoption mechanisms of state bureaucracies. There is increased political will amongst each Quad state to better harness connectivity between private and public actors, or what we could call public-private partnerships. There is equal energy amongst the Quad states to normalize technology connectivity, cooperation, and even joint effort. Throughout the Indo-Pacific, there is interest in seeing what roles the Quad will fulfill to further regional prosperity, with technology routinely highlighted as a sector that would benefit from Quad member state attention.

This effort, performed in partnership by institutions from each of the Quad member states, seeks to address how the Quad can remove barriers to technological engagement. Three pillars, each tied to technology, define this effort:

- Means for intensifying cooperation amongst the Quad in key technological sectors: quantum, AI, secure telecommunications, standard formalization, digital infrastructure, and cyber security, among others.
- Means for reducing obstacles to the wider Indo-Pacific Quad cooperation on supply chain adaptations, education/technical training, cybersecurity, standards regimes, and information sharing.
- Regional information cooperation leveraging technological advancements in the form of domain awareness (air, maritime, cyber), technical training/legal institutions, and capacity building (climate, information sharing).

The program will feature several plenary sessions, with small group breakouts tied to one of the three pillars filling out the remainder of the event. Each of the Quad member states will be represented by delegations. The event will take place over 2.5 days. Upon the conclusion of the workshop, the sponsoring institutions will designate a future time and location for follow-up meetings. The event is to take place from 16-19 August in the Manchester Grand Hyatt San Diego Hotel.

SESSIONS:

1st Session: The State of Quad Technological Cooperation

Question: What is the state of intra-Quad technology cooperation?

Background: Senior leaders from each of the Quad countries have emphasized the importance of cooperation between their national tech sectors. Joint statements by the Quad have emphasized critical infrastructure and software security principles, STEM fellowships and workforce development, Open RAN, and improved business environments. In the spring of 2023, the Quad Investors Network was launched. Between private sector interest, academic examination, and government-government engagement, technological cooperation is perceived as a key element of the Quad.

Panel Discussion: This panel will examine the development of Quad technological cooperation and provide insight into the state of that effort. Examples of progress will be highlighted, as will areas that need further development. Comprehensively, the panel serves as a baseline for conversations throughout the event. Subject matter experts or government officials from each of the Quad nations will provide initial remarks before opening the floor to all participants for questions and comments. Issues expected to come up for discussion include cooperative efforts in Artificial Intelligence, Biotechnology, and Quantum Computing.

2nd Session: Technology and Quad Information Sharing

Question: What is the current status of information sharing among Quad members? How might we improve information-sharing practices, cyber-security, and data security practices?

Background: The Quad states' interest in critical and emerging technology corresponds with a growing interest in data analysis and information sharing. Joint statements have emphasized the necessity of common principles for information security, the need for greater data resilience and digital connectivity, and enhanced mechanisms for data sharing on climate change.

Panel Discussion: Our speakers in this panel will provide remarks intended to anchor conversations relating to information sharing within the Quad. Success stories and missteps will be highlighted. Opportunities for the future will be brought up for discussion. Specific elements that will be discussed include information sharing for pertaining to public health, climate responsiveness, and disaster management, among others.

3rd Session: The Quad, Industry, Academia, and Public Private Partnerships

Question: How can public private partnerships help the Quad provide public goods in the field of technology across the Indo-Pacific?

Background: Successful cooperation among the Quad states cannot be achieved through government engagement alone. Industry, academia, NGOs, and a variety of other private sector

interest groups are critical to propel cooperation forward. Efforts like the Quad Indo-Pacific Oceans Research Alliance, the Quad STEM Fellowship, and the Quad Technology Business and Investment Forum are each an example of how Quad states recognize the essential nature of private interests. The concept of Public-Private Partnerships is woven into Quad cooperation.

Panel Discussion: Speakers on our third panel will provide short remarks on how the private sector is defining the overall success of Quad technological cooperation. Insights from academia, industry, and research institutions will be provided to reveal how the Quad can be understood beyond the mechanisms of government operations. Examples of how public-private partnerships among the Quad states are operating will be discussed, as will the way in which private sector interests conceive of the Quad within their operations.

4th Session: Technology Needs in the Indo-Pacific

Question: What technological public goods can the Quad provide to the Indo-Pacific?

Background: Interest abounds throughout the Indo-Pacific on how the Quad will impact the region. Each of the Quad states is committed to enhancing the development of the region in line with the Quad Principles on Technology, Design, Development, Governance, and Use. Announced efforts like the Quad International Standards Cooperation Networks are intended to help provide transparency and standardization to technological development, to ease regional economic development and maintaining the security of critical infrastructure.

Panel Discussion: Speakers in this panel will highlight technological areas where Quad expertise would be well-received. Comments will detail the state of Indo-Pacific outreach by the Quad and where more investment and attention are necessary. The comments will serve to inspire greater conversation about what regional technological role the Quad can fulfill. Specific areas of discussion will include regional/international standardization of information technology, technical aspects of cybersecurity, and telecommunications/critical digital infrastructure development.

5th Session: The Quad, Public Goods, and Commercial Safety

Question: How can the Quad assist in domain situational awareness?

Background: Information sharing is essential for the Quad's ongoing success. A specific form of information sharing, situational awareness, is vital for ensuring regional public safety, regional trade, and regional emergency response. The Quad's efforts in public health and the Indo-Pacific Partnership for Maritime Domain Awareness are clear examples.

Panel Discussion: The final formal panel of the event will feature speakers who will comment on the state of Quad efforts to enhance regional safety and situational awareness. Forward momentum will be highlighted, along with complications and future aims. Technology to make the Indo-Pacific more transparent and, by extension, safer will be discussed. These will include

specific information efforts to enhance safety at sea, the protection of environmental resources, and countering misinformation.

BREAKOUT SCENARIOS:

BREAKOUT SESSION 1:

Group 1: Critical & Emerging Technology Cooperation

- Group participants are requested to prioritize the technologies that are on the Quad technology list. The discussions should consider if prioritization should be adjusted based upon short-term or long-term planning. It should reflect each Quad member state's own priorities and how each nation's priorities match up with one another. Your discussions should include government perspectives, but also the perspectives of private sector interests in each respective state.
- The group should designate a notetaker for their discussions who shall compile the results of discussions and elect a speaker who will present their group's conclusions at the end of the workshop.

Group 2: Technology Assistance and Public Goods

- Group participants are requested to develop a list of technologies or technology-related efforts that are needed throughout the Indo-Pacific region. This list should be premised upon the Quad Principles on Technology Design, Development, Governance, and Use (copies are provided). The list should consider the degree of regional need and the feasibility of provision by the Quad member states. The format of regional engagement should also be discussed, including reference to existing efforts, such as the Quad Investors Network and the Quad Technology Business and Investment Forum, as well as discussing new options/programs/institutions.
- The group should designate a notetaker for their discussions who shall compile the results of discussions and elect a speaker who will present their group's conclusions at the end of the workshop.

Group 3: Quad Domain Awareness

- Group participants are requested to discuss how technology cooperation within the Quad can enhance information sharing among Indo-Pacific states on the topics of maritime domain awareness, climate change, humanitarian assistance/disaster relief, and other related topics where information sharing across states is essential. The conversation should include existing Quad member state government efforts, but also potential options emerging from the private sector.
- The group should designate a notetaker for their discussions who shall compile the results of discussions and elect a speaker who will present their group's conclusions at the end of the workshop.

BREAKOUT SESSION 2:

Group 1: Critical & Emerging Technology Cooperation

- Based upon the priorities developed in the previous breakout discussion, the group will map out how Quad member states can structure efforts to achieve those priorities. This mapping should factor in considerations such as financing, regulations, intellectual property/patents, timeframes, stakeholder designation, actor contributions, and communications, among others.

Group 2: Technology Assistance and Public Goods

- Based upon the list developed in the previous breakout discussion, the group will develop policy guidelines for outreach with Indo-Pacific regional states, explain engagement/diplomacy methodologies for regional communication, and detail the necessary institutions required to deliver technologies or technology-related efforts to the Indo-Pacific.

Group 3: Quad Domain Awareness

- Premised on the previous conversation, the group will detail how specific Quad member state policies, specialty technical tools, and technological applications can further information sharing capabilities. How can existing information sharing efforts be made more responsive or refined? How can new elements be added by technology to improve conditions?

BREAKOUT SESSION 3:

Group 1: Critical Technology Cooperation

- The group will compile their discussions over the previous two days into a set of recommendations. These recommendations can be directed at the Quad as a larger partnership, towards specific Quad member states, or specific organizations within a member state.
- Remember to compile your findings and prepare a presentation for the plenary.

Group 2: Indo-Pacific Technology Assistance and Public Goods

- The group will compile their discussions over the previous two days into a set of recommendations. These recommendations can be focused on specific areas of the larger Indo-Pacific, specific economic/infrastructural projects relevant to the Indo-Pacific, or comprehensive proposals for the entirety of the Indo-Pacific.
- Remember to compile your findings and prepare a presentation for the plenary.

Group 3: Quad Domain Awareness

- The group will compile their discussions over the previous two days into a set of recommendations. These recommendations can be directed to private sector firms/entities within the Quad member states, specific government operations/efforts of the Quad member states, or overarching models for the Quad partnership.
- Remember to compile your findings and prepare a presentation for the plenary.

GROUP 1 RESULTS:

A prioritized list for the Quad on Critical and Emerging Technology is as follows:

1. Rare earth minerals
2. Semiconductors
3. AI
4. Smart Infrastructure/Networked Digital Systems
5. Biotechnology
6. Quantum Computing
7. Green technology
8. Cybersecurity

The Quad can be a steppingstone for the following four recommendations on four technologies - AI, rare earth minerals, ICT Infrastructure, and cybersecurity.

1. Through AI-ENGAGE, Quad science agencies from the United States, Australia, India, and Japan are identifying joint funding opportunities to encourage collaborative research and innovation in AI, robotics, communications and sensing between Quad partners on how to leverage the latest science and technology advances to benefit farmers to increase crop yield and resilience. Since AI is not a monolith and an umbrella term for several technologies, to tangibly shape the agenda on AI, we could take a sector-specific approach. AI-ENGAGE could in that case become a proof of concept for strengthening collaboration throughout the lifecycle of AI starting from data sharing, leveraging Human Resources, infrastructure and conducting research and innovation and facilitate adoption amongst quad countries of the tools developed. The process of adoption would be helpful in shaping the procurement guidelines of AI solutions and facilitating responsible adoption of AI by operationalizing principles agreed upon. Initially, the partners for AI-ENGAGE could be research institutions and universities and can gradually open to the larger private sector.

2. While we recognize rare earth minerals are not explicitly mentioned in the recent May Summit Fact Sheet, we believe rare earths are an important part of supply chain resilience - minimum goal of independently meeting defense production needs, minimum necessary energy storage, ability to produce key medical devices, and so forth. Additionally, all Quad countries are leveraging their capabilities on this and engaging bilaterally amongst the Quad. Quad Mineral Security Partnership is designed to build on existing bilateral agreements (US-AUS, US-JP) and leverage existing capabilities of the Quad countries, for instance

expanding mining in U.S. and Australia, expanding processing from U.S., India, and Australia, and leveraging Japanese expertise in recycling (Quad stockpile). This could also prove to be an opportunity to partner with other countries like Denmark. In the long-term, Quad moonshot on synthetic materials with qualities of rare earths (see for example, U.S. Dept of Energy research from 2010s) could become an extension of this.

3. On Smart Infra, we believe telecommunications will certainly play a key role as the foundational element. This is where the digital infrastructure fund comes in (subsidized products and financing - bringing together consortiums of industries by incentivizing them). Along with it comes the Quad infrastructure Investment Network to work on smart cities and smart ports both to support governance and maritime security respectively or as we liked to call it techno-strategic and geo-strategic considerations. This could prove to be an excellent opportunity to leverage ASEAN partnerships considering the progress they have made in smart cities and to leverage existing ISO standards on smart cities to achieve alignment. Quad countries could also propose smart port principles, perhaps with a cluster of countries ahead of the curve. (Investors network could be useful to bring people together as massive resources are required and several vendors would have to be involved).

4. On cybersecurity, the Quad has agreed on the joint principles for cybersecurity of critical infrastructure, designed to strengthen the Indo-Pacific's defenses against cyber threats to critical infrastructure and services and principles to collectively improve software security by promoting minimum cybersecurity practices for governments to guide their development, use, and procurement of software. The Quad also organized the Quad cyber challenge to promote cyber awareness and empower participants across the Indo-Pacific to protect themselves online. We believe within the STEM fellowship a mini track on cybersecurity could be established considering its relevance to the Quad. It is also important to enhance the capability of government officials to operationalize the principles that the Quad has aligned on for cybersecurity to protect critical infrastructure and to improve software security. A program specific to this would be critical and must be explored. Quad countries can also do simulation exercises on cybersecurity to explore attacks on smart ports and assess the supply chain vulnerabilities to enhance awareness.

Common to all these recommendations is the opportunity for the Quad countries to explore joint funding and collaboration opportunities that address issues with existing mechanisms.

GROUP 2 RESULTS:

Key points and Summary: Group 2—Technology Assistance and Public Goods

- Importance of effective and sustained management of the Quad Relationship.
- Digital Infrastructure and robust broadband across the Indo-Pacific, effective plans, and active involvement of the private sector from the developed Quad partners, namely U.S. and Japan.

- If and when Quantum arrives, a call was issued to consider Quantum as a public good and not as a private good to be locked away only for the selective partners.
- Open Network platforms (a) Payment system; (b) telecommunications; (c) complex networks and broadband backbone; (d) Data Sharing; (e) Data Security and Data Privacy
- Emphasized that Quad partners need to appreciate that there are sensitivities involved in data-sharing issues.
- A series of bilaterals and trilaterals were proposed to overcome some of the challenges of Quad partnerships in areas of critical technologies.
- Proposed a multilateral funding project to push through technological cooperation and create the needed technology architecture in the region.
- Areas of emerging cooperation that are unlikely to be challenging: (a) HADR; (b) Health; (c) Vaccines; (d) environment; (e) education; (f) capacity building; (g) training and development; (h) cybersecurity; (i) resilience, especially in response to natural disasters and climate change.
- Other areas potential areas of cooperation: (a) IUU Fishing; (b) Piracy; (c) Maritime Militia; (d) IPMDA.
- Encourage more public-private partnerships that could channel funding into critically important emerging technology areas along the O-RAN model.

GROUP 3 RESULTS:

What is already being done for shared domain awareness?

- Indo-Pacific Maritime Domain Awareness (illegal fishing, PLAN submarine activity, etc.), but it is activities and effectiveness are unclear.
- Fusion Center (IOR)
- Commercial sale of security focused data – Hawkeye 360 and shipping companies are examples.
- All four countries have bilateral information sharing agreements for the military, but not a Quad multilateral data/information sharing agreement.

Proposed Data/Information sharing principles

- Sharing should be among states treated as equals, not asymmetric sharing and distribution.
- Data/information sharing, and action can be decoupled, but do not necessarily need to be.
- Data/information sharing can be government to government, company to company (supported by government), and government to company and vice versa.
- There should be a shared approach to interacting with ASEAN on maritime domain awareness, both for engagement and for standards. This may involve targeting individual countries, rather than the group.
- There should be agreement about what to share internally, and what to share with the entire world.

Challenges to successful information/data sharing

- The private sector is not incentivized to share data with competitors, as it would hurt their bottom line.
- There is a possibility that the United States receives information from other Quad states, then slowly trickles information to Japan and India, making them feel like pawns of an American system.
- Quad forums often meet, generate a degree of agreement, launch a press release, then begin preparing for the next Quad meeting. Implementation is opaque, and potentially nonexistent.
- Secrecy of implementation.
- Governments and companies are reluctant to admit they have been hacked due to the perception of weakness.

Potential Areas of Focus

- Reduce export controls among Quad countries to assist commercial to commercial information sharing.
- Joint strategic storage of critical materials or resources – this is not related to domain awareness. Beyond the often-discussed materials/minerals, this should include food and water resources.
- Grants to NGOs researching and producing value in security adjacent areas, such as illegal fishing.
- Confirm or create a Quad information-sharing mechanism.
    - The United States has bilateral information sharing agreements with the other Quad countries. We should have a regime and mechanism that allows certain information to flow freely among all four countries.
    - Encourage commercial information companies to operate among Quad countries.
    - Develop a mechanism to determine which information should be shared only among Quad countries, and which information should be shared publicly to encourage a free and open Indo-Pacific, using the Quad as a platform to gain credibility and generate a powerful narrative.
- Quad Regional Infrastructure Center –
    - Think tank or consortium that provides information to governments, companies, and civil society organizations about BRI and other infrastructure initiatives.
    - Targeted towards countries that are considering partnering in BRI or other PRC infrastructure projects. The intent is to a greater understanding of the flaws in a potential agreement.
    - Quad countries that learn about malign or dangerous PRC infrastructure activities can identify which Quad country has the best relationship with the major stakeholders in the country at risk, who will then act.
    - All quad member states would send representatives to participate in the Center.
    - Created either as a non-profit, or as a consortium of existing government funded non-profits.
- Quad Cyber Information Sharing Center – government to government and government to industry
    - Decision point

        - Non-partisan non-profit OR
        - Government entity with leadership representing major political parties from all quad countries.
    - Possible missions
        - Create shared awareness of cyber vulnerabilities and exploits.
        - Create shared awareness of foreign malicious information campaigns, especially AI-enabled information campaigns and create narratives that compete with malicious campaigns.
        - Track IO campaigns as they are developing, provide information about the campaigns as a public good.
    - Staffed by personnel from all four quad states.
    - Data shared from all four member states.
    - Phased approach
        - Phase 1: IO campaigns targeted against Quad populations
        - Phase 2: Partnership with other Indo-Pacific countries
        - Phase 3: Public education initiatives
- Funding mechanism for Indo-Pacific states to access commercial remote sensing imagery.

ADDITIONAL SOURCES/REFERENCES:

- https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/20/quad-leaders-summit-fact-sheet/
- https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/20/quad-leaders-joint-statement/
- https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/24/quad-joint-leaders-statement/
- https://www.state.gov/joint-statement-of-the-quad-ministerial-meeting-in-new-delhi/
- https://www.cnas.org/publications/commentary/a-techno-diplomacy-strategy-for-telecommunications-in-the-indo-pacific
- https://www.cnas.org/publications/reports/networked-techno-democratic-statecraft-for-australia-and-the-quad
- https://www.hinrichfoundation.com/research/wp/trade-and-geopolitics/friend-shoring-pharmaceutical-supply-chains-india/
- https://www.hinrichfoundation.com/research/wp/tech/friend-shoring-critical-mineral-supply-chains/
- https://www.hinrichfoundation.com/research/wp/tech/friend-shoring-battery-supply-chains/
- https://nsc.crawford.anu.edu.au/department-news/18328/quad-tech-network

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