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NORTHEAST ASIA DEFENSE TRANSPARENCY INDEX 2020-21

M. Patrick Hulme and Tai Ming Cheung

SUMMARY

Growing distrust in East Asia, especially in the security arena, is increasingly critical as new and long-standing hotspots—including the Taiwan strait, Korean peninsula, East China Sea, and South China Sea—become more volatile. The need for confidence-building measures is clear, and a central tool of confidence building is defense transparency.

The Defense Transparency Index (DTI), a project of the University of California's Institute on Global Conflict and Cooperation, ranks six countries on their efforts to promote transparency in defense and national security, including the People's Republic of China, Japan, the Democratic People's Republic of Korea (DPRK), the Republic of Korea, and the major external powers most involved in the region—the United States and Russia.

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Key Takeaways

- ◆ The average score for 2020–21 was 0.541, up 6 percent from 2018–19, representing a modest increase in transparency.
- ◆ Improved scores were driven primarily by adjustments in routine practices, for example, China’s publication in 2019 of its defense white paper, and South Korea’s resumption of timely reporting to the UN. Though positive, these actions are not emblematic of fundamental reform.
- ◆ Japan retained its first place ranking in 2020-21. The United States and South Korea maintained their close second and third place positions.
- ◆ A decade of DTI reports shows an overall decline in defense transparency between 2012-18, with modest improvements in the past two years. The three liberal democracies—the United States, Japan, and South Korea—have consistently higher levels of openness; there is less transparency among Russia and China, though Russia has made improvements in recent years; and North Korea consistently ranks last.

Introduction: Growing Global Tensions

Growing distrust in East Asia, especially in the security arena, is increasingly critical as new and long-standing hotspots—including the Taiwan strait, Korean peninsula, East China Sea, and South China Sea—become more volatile. The North Korean nuclear program continues to pose a threat; and the South Korean-Japanese relationship remains tense. While China’s disputes with Taiwan and in the South China Sea have consumed media attention, the Chinese-Japanese dispute over the Senkaku-Diaoyu islands is ongoing, and China’s recently passed law giving its coast guard the authority to use force has caused unease throughout the region. Meanwhile, Sino-Russian ties have deepened to their greatest extent since the Sino-Soviet split of the 1960s. At the same time, tensions between the United States and China are rising, with some concerned about a new [“Cold War.”](#)

In an increasingly volatile world, mutual trust and confidence among defense establishments is critical. Growing arms competition and security anxiety in Northeast Asia—one of the most strategically important but politically volatile regions of the world—underscores the need for confidence-building measures, a central tool of which is defense transparency.

The Link Between Peace and Defense Transparency

The annals of history are full of examples of [mistrust](#) and misperception among and between states, often leading to conflict or even war. Though the [leaders](#) of adversarial states—or their domestic political systems—are often assumed to be the

true driver of conflict, the anarchical nature of the international system itself is often a primary cause of [security spirals](#).

Political scientists have [shown](#), however, that mutual mistrust and security competition are not inevitable. Confidence building measures—specifically the availability of information—can help to prevent conflict. Contemporary international relations research considers lack of information one of the main [causes of war](#) and [conflict](#). When defense transparency improves, so too do prospects for peace. The Open Skies Treaty, for example, has provided defense information verification in the post-Cold War era, allowing countries to “trust but verify” the military movement of other states.

The Defense Transparency Index

What constitutes “defense transparency” is contested, and there is a lack of agreed-upon definitions and standardized means of measurement. The Defense Transparency Index (DTI) addresses this gap by providing a framework for defining and measuring defense transparency. Produced by the University of California’s Institute on Global Conflict and Cooperation since 2010, the DTI quantifies the state of defense transparency among major powers in Northeast Asia, including the United States, Russia, Japan, North Korea (DPRK), South Korea (ROK), and the People’s Republic of China (PRC).

The index focuses on three key concepts: (1) Information-sharing processes, (2) Domestic institutions and hierarchies, and (3) Signals and intentions. We rank countries across eight indicators to come up with overall rankings and for each country, providing a rigorous measurement of this essential but contested concept:

1. Disclosures in defense white papers
2. Information available on official defense websites
3. Reporting to the United Nations
4. Openness of defense budgets
5. Robustness of legislative oversight
6. Robustness of media independence and reporting
7. Disclosures of international military activity
8. Disclosures of cybersecurity activities

Defense Transparency Defined

Defense transparency is an ongoing process in which governments credibly transmit timely, relevant, and sufficient information about their military power and activities, budgetary matters, and intentions to allow other states and domestic audiences to assess the consistency of this information with declared strategic interests and institutional obligations to reduce misperception, ensure good governance, and build mutual trust.

2020-21 Results: How Are Countries Doing?

While the 2018-19 DTI update showed a significant decrease in overall transparency, the 2020-21 Index provides room for cautious optimism as scores have increased overall. There were no changes in country rank, however, and Japan still holds the top position. Little change was seen in areas controlled by formal legal institutions: budget transparency, legislative oversight, and media access. In other areas, however, there was significant change. Cybersecurity, for example, is an area in which consistent expansion in transparency has been observed over the past ten years.

Table. Country Scores and Rank, 2020-21 versus 2018-19.

	2020-21 Total	2018-19 Total	2020-21 Rank	2018-19 Rank	Change in Rank
Japan	0.786	0.763	1	1	↔
United States	0.763	0.717	2	2	↔
ROK	0.749	0.663	3	3	↔
Russia	0.545	0.500	4	4	↔
PRC	0.388	0.342	5	5	↔
DPRK	0.002	0.002	6	6	↔
Overall Regional Score	0.541	0.498	–	–	

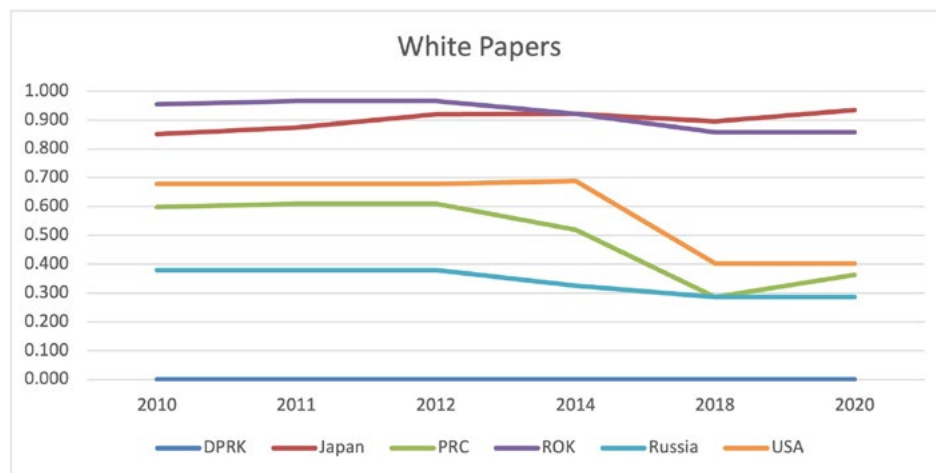
KEY TAKE-AWAYS FROM 2020-21 INDEX

- ◆ The average score for 2020–21 was 0.541, up 6 percent from 2018–19, representing a modest increase in transparency. While this is a welcome trend in an era of intensifying regional security tensions, it should be considered in context. The main drivers of this increase are adjustments in routine practices such as the issuance of the Chinese defense white paper for the first time in several years, and the resumption by South Korea of timely reporting to the UN. Though positive, these actions are not emblematic of fundamental change.
- ◆ Overall, defense transparency declined between 2012-2018, but recovered slightly over the past two years.
- ◆ Japan retained its first place ranking in 2020-21. The United States and South Korea maintained their close second and third positions.

WHITE PAPERS ¹

The U.S. decision to halt publication of the quadrennial defense review and instead issue a shorter [National Security Strategy](#) and declassified [summary](#) of the National Defense Strategy, drove a decrease in its transparency score in 2018-19. Changes made during the second half of the Trump administration—publication of the [Indo-Pacific Strategy Report](#) in 2019, and declassification of the [United States Strategic Framework for the Indo-Pacific](#) in early 2021—helped the U.S. score rebound.

Based on past practice, the Biden administration is expected to release a new National Security Strategy in its first year.



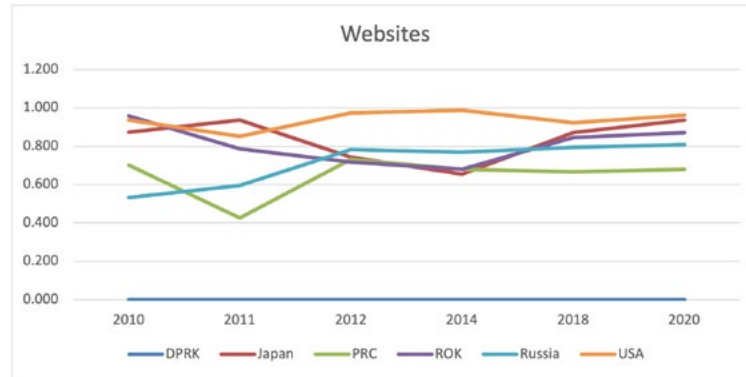
The People’s Republic of China, likewise, exhibited increased transparency over the past two years. The 2019 publication of its [“China’s National Defense in the New Era”](#) was the first general strategic white paper published since 2015 (China published a more narrowly focused white paper, [“China’s Policies on Asia-Pacific Security Cooperation”](#), in 2017). Japan continued its long tradition of publishing its [Defense of Japan](#) report annually—only South Korea comes close to this frequency, publishing its [Defense White Paper](#) every two years (although the 2020 version remains unavailable). The Japanese report is also the most extensive report among the countries scored.

Russia earned lower marks for white paper transparency due to the sporadic nature of its defense policy document publication. North Korea remains last among the group, having never released a publicly available defense white paper.

¹ White Papers are defined as document(s) that describe the strategic environment and military strategy.

DEFENSE MINISTRY WEBSITES

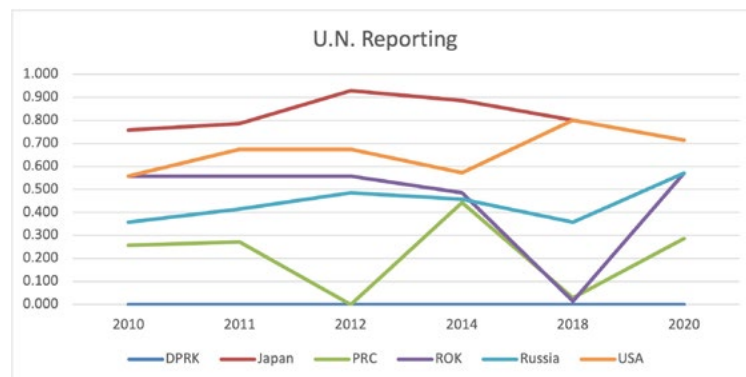
The availability of defense information on country websites has improved substantially over the past decade. Russia in particular has improved greatly on this dimension and now has a website similar to those of the liberal democracies. China, however, has failed to converge with the other states and still makes substantially less information available electronically.



Overall scores associated with transparency as measured by information provided on defense ministry websites increased by 3.7 percent. The United States outperformed all other countries in the Index by making information on its force posture and operations available on its Department of Defense website. While Japan and South Korea likewise publish some defense information online, a significant portion of their data is only available in the national language, making them less valuable to external audiences. Russia, despite its reputation for secrecy, continues to publish much of its information in a variety of foreign languages, including Spanish, French, and Arabic. However, its website structure is complicated and information is hard to access.

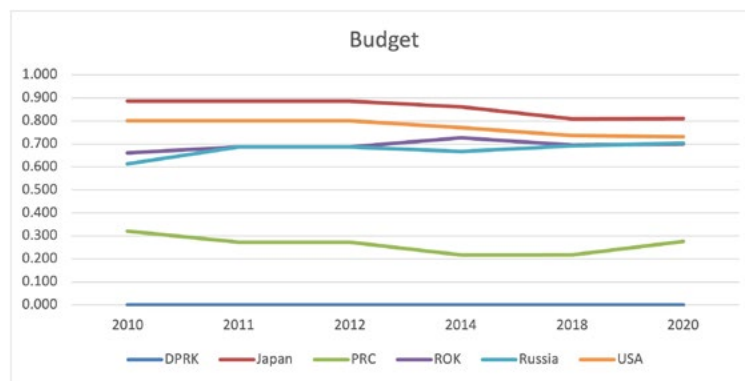
REPORTING TO THE UNITED NATIONS

Submissions to the United Nations have fluctuated substantially over time, with countries missing reporting deadlines over the years. Overall, the average score increased by 43 percent in 2020-21—a major improvement since 2018. Though the U.S. and Japan scores decreased modestly, there were major improvements by China, Russia, and ROK.



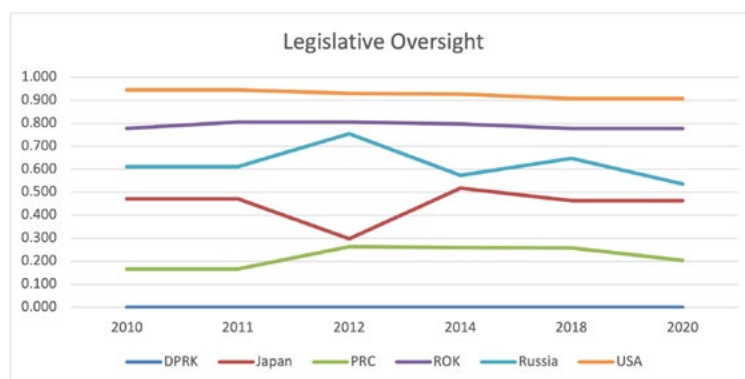
BUDGET TRANSPARENCY

Given the formal institutions involved in much of the budget process—and the fact that formal institutions tend not to change rapidly over time—it is little surprise that overall budget transparency has remained relatively constant over the past decade. Japan is consistently the most open in its defense budget process. This is likely due not only to the fact that it is a liberal democracy, but also to the pacifist nature of the country since the end of the World War II. China came in fifth place in 2020-21—only ahead of DPRK. Russia’s budget transparency is similar to the levels seen in the United States, ROK, and Japan.



LEGISLATIVE OVERSIGHT

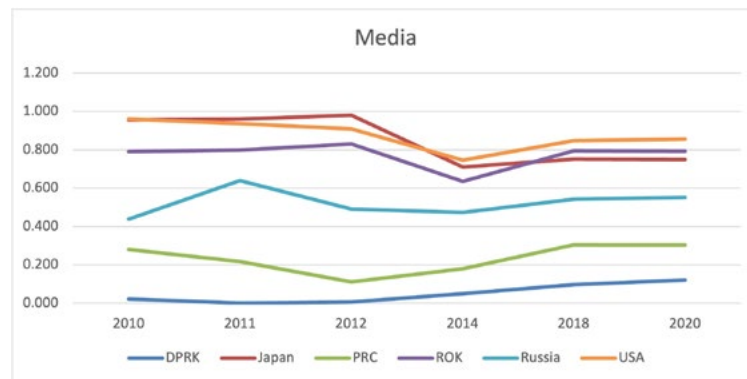
Legislative oversight is, like budget transparency, driven by formal legal institutions that tend to remain relatively constant across all countries over time. Notably, no country has changed its ranking in legislative oversight over the past decade. The United States has consistently exhibited the highest performance on this metric, while the otherwise high-performing Japan has consistently ranked fourth place.



MEDIA OVERSIGHT

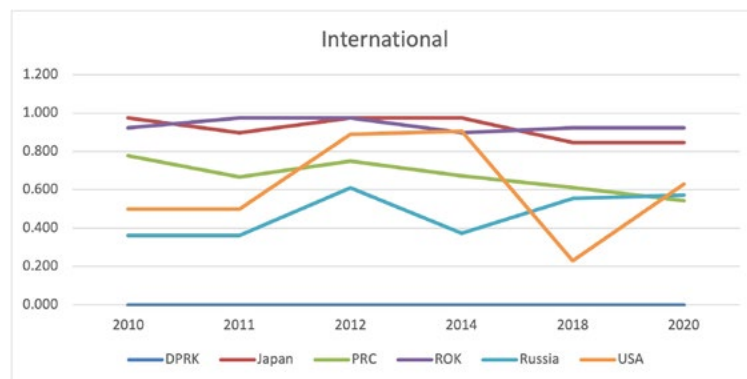
The average media oversight score in 2020-21 increased from 0.55 to 0.56—up 1 percent from 2018-19. Scores have stayed relatively stable over the past two years, though ROK's score increased in 2018 due to improved overall media freedom.

Freedom of the press, being determined largely by formal institutions, has been consistently higher over the past decade in Japan, South Korea, and the United States, while Russia, PRC, and DPRK consistently score lower in this area. Interestingly, North Korea made some improvement over the decade, despite clearly ranking in last place.



PUBLICATION OF INTERNATIONAL ACTIVITIES

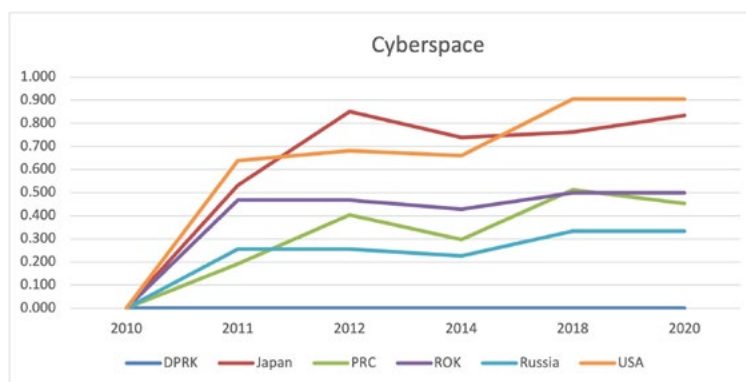
Transparency surrounding international activities has varied significantly over the past ten years. Notably, China has performed reasonably well. South Korea and Japan have been leaders in this category over time, while the United States, Russia, and China cluster together at a lower level of transparency.



The U.S. score dropped precipitously in 2018 when the Trump administration discontinued the quadrennial defense review, and instead released a summary of the National Defense Strategy, which lacked detailed information on international activities such as the number of personnel deployed in international missions. Further clarification is now being provided on the Department of Defense website, contributing to a greatly improved score.

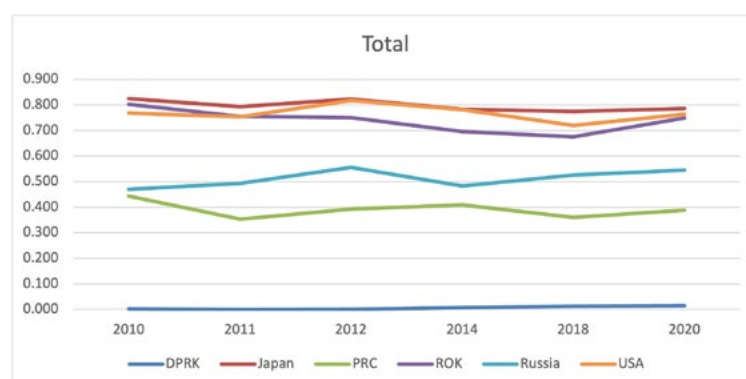
CYBERSECURITY

The world of cyberspace has become increasingly transparent over the past decade. While the domain was new at the beginning of the 2010s, and thus absent from many countries' defense strategies, today, cyberspace and cybersecurity are core components of countries' defense strategies, and countries that are more transparent are including cyber in the content they share publicly. The United States, for example, published a summary of its [cyber strategy](#) for the first time in 2018, which contains previously missing information, such as cyberspace doctrine. Other states have similarly included dedicated cyber sections in their white papers. A number of cybersecurity related documents have been published by the ROK, but they are not as detailed as their U.S. and Japanese counterparts.



Trends in Defense Transparency

The countries ranked in the Defense Transparency Index have been slow to increase transparency over the past decade. The clearest pattern is a consistent higher level of openness among the three liberal democracies—the United States, Japan, and South Korea—compared to the three non-democratic states. While Russia began the decade in a position virtually identical to the People's Republic of China, the two states have diverged as Russia has exhibited a higher level of transparency. North Korea has consistently been the worst performer.



Conclusion

Defense transparency has improved modestly since the 2018-19 DTI, which is reason for optimism. Moreover, the Biden administration's stated commitment to transparency—at least in the domestic context—may bode well for continued high levels of transparency by the United States. Nonetheless, several areas of concern remain. The U.S.-Russian relationship continues to be strained and Sino-American relations remain at their lowest point in half a century. Japanese-Korean relations, likewise, continue to pose a challenge, and the North Korean nuclear program remains an unsolved problem for all parties. The growing pressure among powers to compete will likely remain high for the foreseeable future, and may incline countries towards secrecy, which would be a blow to efforts to reduce the likelihood of conflict in Northeast Asia—and beyond.

**LEARN MORE ABOUT THE DEFENSE TRANSPARENCY INDEX.
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DTI Methodology

IGCC's Defense Transparency Index includes sub-scores for transparency indicators in eight areas: disclosures in defense white papers; information available on official defense websites; reporting to the United Nations; openness of defense budgets; the robustness of legislative oversight; the robustness of media independence and reporting; disclosures of international military activity; and disclosures related to cybersecurity activities. Scores for white papers are based on the depth of information contained in the most recent strategy document(s) released by the respective countries. The information available on the websites of the defense ministries of the respective countries is also scored—with attention to both the English and native language versions of the websites. UN reporting is scored for completeness and timeliness. Budgetary transparency scores are based on the publicly available information regarding the financial resources devoted to the countries' militaries, with particular attention paid to the particularity and specificity of the accounting entries. Legislative oversight is judged by nongovernmental organization (NGO) reports, official government publications, academic writings, and media reports. Media oversight is likewise judged by the level of press freedom found in the country, primarily as reported by third party NGO's. The publicity of international activities is judged by the announcement and recognition of such activities by states in white papers, on their websites, in press briefings, and in press releases. Lastly, cybersecurity transparency is based not only on officially published cyber strategies, but also on pertinent portions found in the white papers and on the websites of the respective countries focusing on such activities. Overall transparency scores are based on the equal weighting of all eight subindices.

Table. Methodology for the 2020-21 Defense Transparency Index

Category	Data Source	
Information-Sharing Process	White Papers	100% of information examined comes from Defense White Papers
	Websites	100% of information examined comes from Defense Ministry websites
	UN Reporting	100% of information examined comes from UN reports
Domestic Institutions and Hierarchies	Budget	44% from Open Budget Index scores, 56% from IGCC-crafted, defense-focused scores
	Legislative Oversight	44% from Open Budget Index scores, 56% from IGCC-crafted, defense-focused scores
	Media	75% from Reporters Without Borders (RWB) index scores, 25% from IGCC-crafted, defense-focused scores
Signals and Intentions	International Activities	75% for information provided, minus up to 25% for inconsistency with declared intentions
Domain Case Study	Cybersecurity	75% for information provided, minus up to 25% for inconsistency with declared intentions

Authors

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About IGCC

The UC Institute on Global Conflict and Cooperation (IGCC) addresses global challenges to peace and prosperity through rigorous, policy-relevant research, training and engagement on international security, economic development and the environment. Established in 1982, IGCC convenes expert researchers across UC campuses and the Lawrence Livermore and Los Alamos National Laboratories, along with U.S. and international policy leaders, to develop solutions and provide insights on the most profound global security challenges.