

G20茨城つくば貿易・デジタル経済大臣会合
および大阪サミットの結果について

第27回IGCJ会合
2019年 7月

総務省 国際戦略局
G20デジタル経済タスクフォース共同議長 飯田 陽一

2016

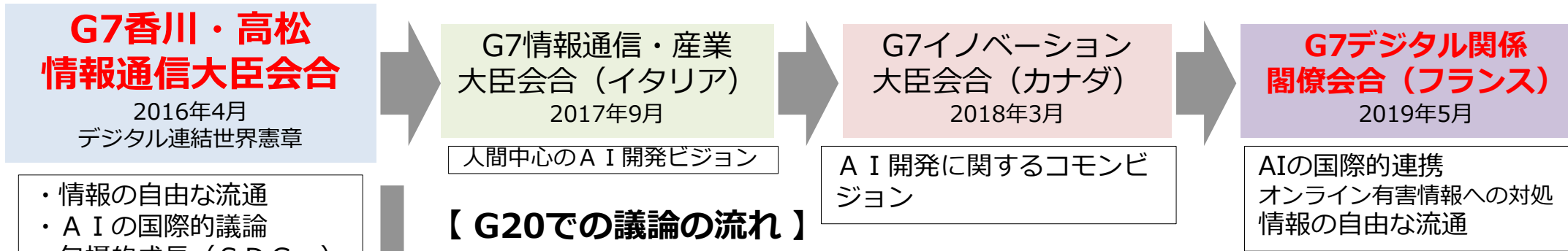
デジタル化の進展・IoT時代の幕開け
 国連SDGsの推進

デジタル社会・Society 5.0の実現
 SDGsの実現

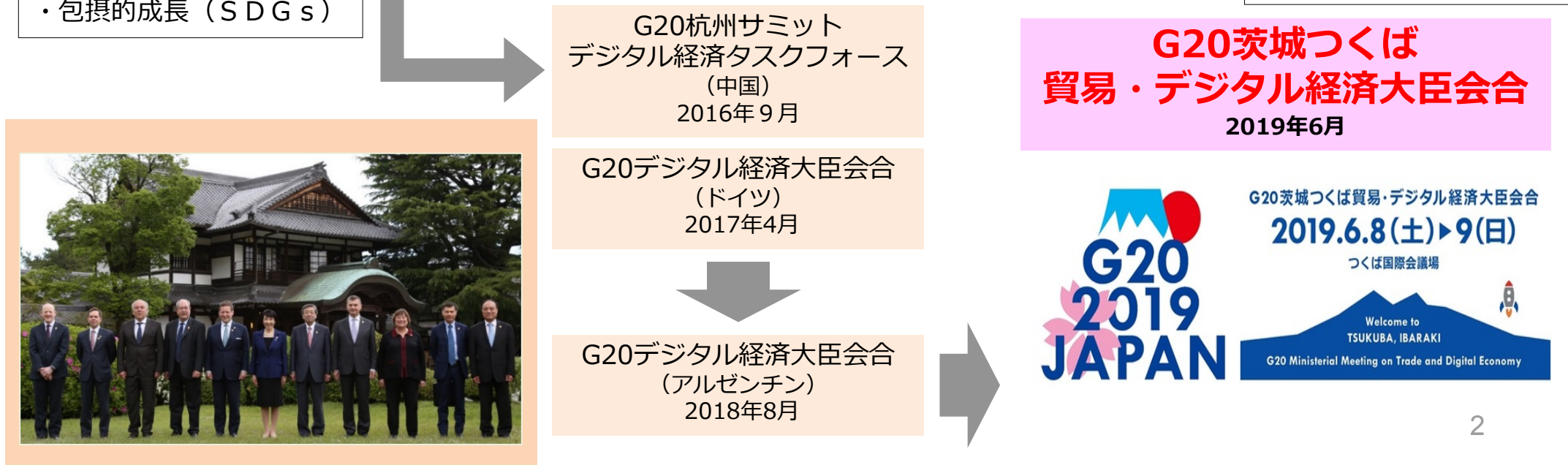
IoTの発展・普及、AIの登場

AIの発展・普及、あらゆる分野のデジタル化

【G7での継続議論の流れ】



【G20での議論の流れ】



Main Items for Discussion

- 1 Overview: Towards Society 5.0
- 2 Data free flow with trust
- 3 Human Centric AI
- 4 Governance Innovation
- 5 Security
- 6 SDGs and Inclusion
 - (1) SDGs and Inclusive Development
 - i) Priority Areas and Action Plan
 - ii) Proposal on Initiative for SDGs through Digitalization
 - (2) Tackling the Digital Divide
 - i) Inclusion of all genders
 - ii) Inclusion of SMEs and entrepreneurs
 - iii) Inclusion of all ages /handicaps

1. 日時・場所

- 日時：2019年6月8日（土）・6月9日（日）
- 場所：茨城県 つくば市 つくば国際会議場

2. 参加国・国際機関（デジタル経済パート）

- 【日本側】石田総務大臣（共同議長）、世耕経産大臣（共同議長）、河野外務大臣（共同議長）
佐藤総務副大臣、國重総務大臣政務官
- 【参加国】G20各国、スペイン、シンガポール、オランダ、ベトナム
チリ、エジプト（アフリカ連合議長国）、
セネガル（NEPAD議長国）、エストニア、ナイジェリア（合同セッションのみ）
国際機関（APT、ERIA、世銀、ITU、IMF、WTO、OECD、UNCTAD）



3. 議題（デジタル経済パート）

- デジタル経済 午前セッション：DFFT、ガバナンスイノベーション
- デジタル経済 午後セッション：人間中心のAI、デジタルセキュリティ、SDGsと包摂性
- 貿易・デジタル経済合同セッション：データの自由な越境流通、WTO電商、デジタル貿易における途上国の包摂

※ なお、6/9の貿易パートでは、現下の国際貿易情勢、市場主導の投資判断を促進する健全なビジネス環境（以上午前）、持続可能・包摂的な成長に貢献する貿易投資促進、WTO改革と二国間・地域貿易（以上午後）が議題となった。

4. 開催結果のポイント

- ① AIの開発や利活用の促進に向け、G20ではじめて「人間中心」の考えを踏まえたAI原則に合意
- ② AIにより新たな雇用や産業が創出されるとの考えの下、AI時代の新たな社会モデルの検討の必要性を共有
- ③ IoTを含む新技術の急速な拡大に伴い、G20ではじめてデジタル経済におけるセキュリティの重要性に合意
- ④ 日本の進める「Society 5.0」の考え方と、人間中心の未来社会を実現するとの方向性に合意
- ⑤ 国連の持続可能な開発目標（SDGs）の達成に向け、デジタル技術の活用が有効であるとの認識を共有
- ⑥ 信頼を構築し、データの自由な流通を促進するため、データフリーフローウィズトラスト（信頼性のある自由なデータ流通）の概念に合意

デジタル経済パートにおける主な議論

- ① **データフリーフローウィズトラスト (Data Free Flow with Trust / 信頼性のある自由なデータ流通)**
 - ・ 個人データやプライバシーの確保を通してデジタル空間の信頼性を向上させることで、信頼性のある自由なデータ流通 (DFFT) を実現することの重要性について複数の国から発信があった。
 - ・ 他方、自由な流通にはセキュリティの確保が前提として、サイバーセキュリティ強化に関する自国の法制度について紹介する国もあった。
- ② **ガバナンスイノベーション-デジタル経済の機動的で柔軟な政策アプローチ-**
 - ・ イノベーション促進を実現するためには政府自体がデジタル化し、柔軟な規制体系を採る必要があることについて指摘する意見があった。特に、規制のサンドボックスを用いた事例について複数国から紹介があった。
- ③ **人間中心の人工知能(AI)**
 - ・ AIの普及による経済・社会の劇的な変容への期待といった、AIのポジティブな可能性に言及する国が多くあった。こうした期待を実現するための、様々な分野でのAIの具体的な活用策について複数の国から紹介があったほか、AIに関する教育の強化の必要性の指摘があった。
 - ・ 他方、発展途上国からは、AIが雇用に与える負の影響や、格差拡大への懸念が表明され、人間中心のアプローチに基づき、AIに関する国際的な政策連携を推進していく必要が明らかになった。
 - ・ 今回採択のG20原則の実行が重要である旨指摘があった。
- ④ **デジタル経済におけるセキュリティ**
 - ・ デジタル経済の信頼を構築するべく、国際連携を強化し、各国の取組に関するベストプラクティスの共有を図ることの重要性について支持を得た。
- ⑤ **SDGsと包摂的成長**
 - ・ 「地球上の誰一人として取り残されない包摂的成長」の実現における課題に関する指摘等があった。具体的には、先進国と途上国間でのデジタルディバイドや、デジタル経済におけるジェンダー格差解消、中小零細企業によるデジタル技術の導入等が挙げられた。

議題項目ごとの概要①

①概要：人間中心の未来社会

- 持続可能な開発目標（SDGs）の達成に向けた現実世界と仮想世界の一層の融合を通じて、経済成長と社会課題の解決を実現する「Society5.0」の考えを共有。
- AIや5G、IoTといった新興技術によってもたらされる恩恵は、新たなサービスや雇用等の機会を創出するものであり、個人及び企業の更なる幸福や一層の包摂性に結びつくことを認識。
- 自由、オープン及び安全なインターネットを推進し、暴力過激主義及びテロリスト目的のためのインターネットの利用との戦いへのコミットメントを再確認。特に、デジタル産業が全てのステークホルダーと協働しインターネット及びソーシャルメディアの暴力過激主義及びテロリスト目的のためのインターネットの利用と戦うことを奨励。

②データフリーフローウィズトラスト（Data Free Flow with Trust / 信頼性のある自由なデータ流通）

- データ、情報、アイデア及び知識の越境流通は、生産性の向上やイノベーションの増大をもたらすと同時に、データの自由な流通が一定の課題を提起することを認識。
- プライバシー、データ保護、知的財産権、セキュリティに関する課題に引き続き対処することにより、さらにデータの自由な流通を促進し、消費者及びビジネス界の信頼を強化することができる。信頼を構築し、データの自由な流通を促進するためには、国内的及び国際的な法的枠組みの双方が尊重されることが必要である。このようなデータフリーフローウィズトラスト（data free flow with trust / 信頼性のある自由なデータ流通）は、デジタル経済の機会を活かすものである。

③人間中心の人工知能(AI)

- AI技術が、包摂的な経済成長を促進し、社会に大きな恩恵をもたらし、個人に力を与えることができることを認識。AIの責任ある利用によってもたらされる恩恵は、労働環境と生活の質を改善し、女性と女児及び社会的弱者を含む全ての人に機会を与える人間中心の未来社会を実現する可能性を生み出すことができる。
- 同時に、AIが他の新興技術と同様に、労働市場の変化、プライバシー、セキュリティ、倫理的問題、新たなデジタル格差及びAIに関する人材育成の必要性を含む社会的課題を提起し得ることも認識。AI技術への人々の信頼と信用を醸成し、その潜在能力を十分に引き出すために、非拘束式の「G20 AI原則」に同意し、同原則によって導かれるAIへの人間中心のアプローチにコミットする。（同原則は、閣僚声明の附属文書として合意）

議題項目ごとの概要②

④ ガバナンスイノベーション-デジタル経済の機動的で柔軟な政策アプローチ-

- よりイノベーションを生み出しやすい政策立案のアプローチから、新たな技術の可能性を最大限に利用するという利益が得られることを認識。政策、規制、あるいは規制的制約の除去により、経済成長及び途上国や零細中小企業の包摂的な発展を加速することができる。
- デジタル時代のガバナンスは、法的な確実性を損なわないようにしつつも、イノベーションにつながりやすく、それ自体が革新的である必要があることを認識。よりよい政策アプローチを採用し、技術的なイノベーションに導くため、G20構成国の中で優良事例を共有することを支持。

⑤ デジタル経済におけるセキュリティ

- デジタル経済におけるセキュリティは、デジタル技術やデジタル経済全体における人々の信用を強化するために不可欠であると認識。IoTを含む新興技術の急速な広がりとともに、デジタル経済におけるセキュリティについての議論の価値が高まっており、G20構成国は、これらの緊急の課題への更なる取組の必要性を認識。
- デジタル経済におけるセキュリティの世界的な観点とともに、ローカル化されカスタマイズされたセキュリティの枠組や方法論を発展させる必要を認識。
- デジタル経済におけるセキュリティを向上させる取組の重要性について、理解を高める必要性を認識。これらの課題についてさらに議論するため、民間や技術コミュニティ、市民社会、関係する国際機関をはじめとするステークホルダーの果たす役割について認識。

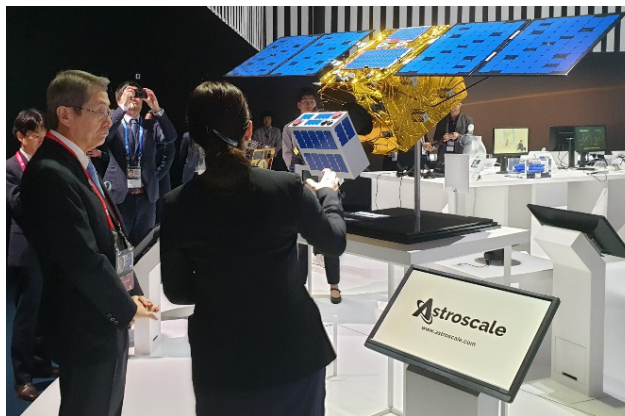
⑥ SDGsと包摂性

- 改善された接続性及びブロードバンドアクセスがデジタル経済の発展に必要な条件であると同時に、包摂的な成長と持続可能な開発の強力な実現要因であることを認識。2025年までに全ての人々によるインターネットへの普遍的かつ手頃な価格でのアクセスを推進するというG20共通の目標を奨励。
- デジタルリテラシーのためのスキル開発や、デジタルアクセスの向上及び特にデジタルの男女格差に配慮したデジタル技術の採用といった方法でデジタル格差を解消することの重要性を再確認。
- また、中小零細企業がデジタル経済に積極的に参加できるような促進的な環境は、包摂的で持続可能な社会を構築するのに役立つとの認識を共有。G20は、デジタル起業の推進と拡大に関する慣行を交換し共有することを奨励する。
- グッドプラクティスや共有された知識を活用することで、全てのステークホルダーがそれぞれの役割において協働し、発展途上国及び地域並びに世界規模でデジタル化を推進することを奨励。この知識共有の活動は、既存の権限及び能力の範囲内で世界銀行及びその他の国際機関に支援され、関心のあるG20構成国及びその他の国によって管理される。

- 日程：2019年6月28日（金）・29日（土）
- 会場：インテックス大阪（大阪市）
- 出席国等：G20構成国、招待国、国際機関
- 議題等：世界経済、貿易と投資（セッション1）、**イノベーション（セッション2）**、不平等への対応、包摂的かつ持続的世界の実現（セッション3）、気候変動、環境、エネルギー（セッション4）。
このほか、**デジタル経済首脳特別イベント**、女性のエンパワーメントに関する首脳サイドイベントを開催。

デジタル経済に関する首脳特別イベント

- 信頼性のある自由なデータ流通、WTOにおける電子商取引に関する国際的なルール作りを加速させる「**大阪トラック**」が開始され、宣言文書（「**デジタル経済に関する大阪宣言**」）が取りまとめられた。
- 本イベントには、**石田総務大臣**（および世耕経産大臣、河野外務大臣）も出席。
- イベントでは、安倍総理の冒頭・総括発言のほか、習中国国家主席、ユンカー欧州委員長、トランプ米大統領、アゼベドWTO事務局長から発言。
- 宣言文書のポイントは以下のとおり。
 - ・ データとデジタル経済の活用に向けた国内的・国際的な政策討議の促進の重要性を確認
 - ・ 本年1月の電子商取引に関する共同声明に参加する他のWTO加盟国とともに、**電子商取引に関するWTOの国際ルールづくりを進めるとのコミットを示すプロセスである「大阪トラック」の立ち上げを宣言。**
 - ・ 2020年のWTO閣僚会議（MC12）までに実質的な進捗を達成するために努力
 - ・ そのための国際的な政策討議に関与し、関連する国際的なフォーラムに参加
- サミット終了後の議長国会見において、**安倍総理から大阪トラックの開始を大きな成果の一つとして紹介**



<石田大臣による展示視察>



<デジタル経済に関する首脳特別イベント>

首脳宣言

- 2日間の議論を踏まえ、首脳宣言が取りまとめられた。デジタル経済関係では、「**イノベーション：デジタル化、データフリーフローウィズトラスト**」のセクションに合意。
- 同セクションには、G20茨城つくば貿易・デジタル経済大臣会合の閣僚声明から、以下の主要要素が盛り込まれた。
 - ・ イノベーションは経済成長の重要な原動力であり、**持続可能な開発目標（SDGs）**への前進及び包摂性向上にも寄与
 - ・ 我々は、**ソサエティ5.0**として日本によって促進されつつある**人間中心の未来社会の観念を共有**
 - ・ **信頼性のある自由なデータ流通は、デジタル経済の好機を活用**
 - ・ **人工知能（AI）の責任ある開発及び活用は、SDGsを推進し、持続可能で包摂的な社会を実現するための原動力**となり得る
 - ・ **AIへの人間中心のアプローチにコミットし、経済協力開発機構（OECD）のAI勧告から引用された拘束力を有さないG20AI原則を歓迎**
 - ・ **デジタル経済において、セキュリティを促進**すること及び**セキュリティギャップと脆弱性に対処**することの重要性が高まっていることを認識

独立文書（テロ及びテロに通じる暴力的過激主義によるインターネットの悪用の防止）

- 首脳宣言とは別に、NZクライストチャーチにおける事件を契機とした**テロリスト等によるインターネットの悪用への対処**の在り方について、独立文書を出すことを豪州が提案。各国と調整を行い、首脳声明として合意された。
- 主要なポイントは以下のとおり。
 - ・ G20として、**あらゆる形態のテロ行為への最大級の非難**を再確認し、テロリスト及びテロに通じる暴力主義によるインターネットの悪用から人々を守るために行動することを確認。
 - ・ 開かれた、自由で、安全なインターネットを守りつつ、オンラインプラットフォームに対して、**テロ・暴力コンテンツを検出し、アップロードや拡散を防ぎ、削除等の対応を積極的**に取ることを促す。
 - ・ 産業横断的課題を推し進めるために「**テロ対策のためのグローバル・インターネット・フォーラム（GIFCT）**」が現在行っている作業に留意。
 - ・ **各国の経験を共有し、産業における進歩に参画し、市民社会、消費者及び投資家に対しても行動を奨励**。

1. Overview: Human-centered Future Society

7. We, G20 Ministers for the Digital Economy discussed how we can design and implement our digital policies to maximize benefits and minimize the challenges from the development of the digital economy, and to overcome challenges with special attention to developing countries and underrepresented populations.

8. The G20 started the policy discussion on the digital economy under the Chinese Presidency in the Hangzhou Summit process in 2016, in which G20 members engaged in comprehensive discussion on digital economy, innovation and new industrial revolution. Germany established the first G20 Digital Economy Ministerial Meeting and created an overall perspective on digital policy with the G20 Roadmap on Digital Economy and the Ministerial Declaration. In 2018, Argentina focused on digital government, the digital gender divide, infrastructure deployment and the measurement of the digital economy, in addition to creating the G20 Repository of Digital Policies. The Digital Economy Ministers issued a declaration, which noted that it is essential to continue the work on further understanding of the market impact of emerging technologies and new business models, like online platforms and the need to advance a fair, predictable, transparent, competitive and non-discriminatory business environment.

9. Recalling these discussions, we exchanged views on how to achieve an inclusive, sustainable, safe, trustworthy and innovative society through digitalization. We share the notion of a human-centered future society which is being promoted as Society 5.0 in Japan. Society 5.0 is a vision of human-centered future society promoted by the Japanese government to achieve an advanced society, which realizes economic growth and solves social challenges, by advancing towards Sustainable Development Goals (SDGs) through the increasing convergence of the physical world and the virtual world.

10. Digitalization is expected to continue creating benefits for our economies and societies as a whole. The benefits brought by increased productivity through the use of emerging technologies such as artificial intelligence (AI), fifth-generation mobile telecommunication technologies (5G), the Internet of Things (IoT), Distributed Ledger Technologies (e.g. block chain) will empower all individuals and firms by creating new opportunities, and generate new services and employment, all of which can lead to greater well-being and further inclusiveness for individuals and firms.

1. Overview: Human-centered Future Society (続き)

11. While digitalization has tremendous potential to deliver benefits to society, it also raises certain concerns. Digital divide should be addressed with a commitment to evidence-based policy approaches together with the efforts to improve the measurement of the digital economy that enable the widest possible adoption and use of innovative technology. We should come together to promote trust in the digital economy to harness the benefits brought by digitalization as well as to mitigate the associated challenges.

12. The G20 also reaffirms its commitment to fighting exploitation of the Internet for violent extremist and terrorist purposes, as well as promoting a free, open and secure internet, and encourages the digital industry to continue to work together with all stakeholders in fighting use of the Internet and social media for violent extremist and terrorist purposes, and addressing content that incites terrorist acts.

13. We share the view that the digital society must be built on trust among all stakeholders including governments, civil society, international organizations, academics and businesses through sharing common values and principles including equality, justice, transparency and accountability taking into account the global economy and interoperability. We note the views given at the G20 Digital Economy Multi-stakeholder Conference, and look forward to the multi-stakeholders discussion at the 14th United Nation's Internet Governance Forum at the end of November 2019 in Berlin and the WSIS Forum at the end of March 2020 in Geneva.

14. Building upon the commitments and achievements of previous years, we, as G20 Ministers, commit to sharing and promoting national experiences and international policies to maximize and share the benefits from digitalization of our economies and societies through the following efforts.

2. Data Free Flow with Trust

15. Reaffirming the commitments made in Hangzhou, Dusseldorf, and Salta, we share the understanding that digitalization gives us the opportunity to promote inclusive and sustainable economic growth. Digitalization also promotes social and cultural progress and development, fosters innovation, and empowers individuals and businesses, including micro, small, and medium-sized enterprises (MSMEs) to benefit from emerging technologies and data.

16. Cross-border flow of data, information, ideas and knowledge generates higher productivity, greater innovation, and improved sustainable development. At the same time, we recognize that the free flow of data raises certain challenges. By continuing to address challenges related to privacy, data protection, intellectual property rights, and security, we can further facilitate data free flow and strengthen consumer and business trust. In order to build trust and facilitate the free flow of data, it is necessary that legal frameworks both domestic and international should be respected. Such data free flow with trust will harness the opportunities of the digital economy. We will cooperate to encourage the interoperability of different frameworks, and we affirm the role of data for development.

3. Human-centered Artificial Intelligence (AI)

17. Recognizing the efforts undertaken so far by all stakeholders in their respective roles including governments, international organizations, academia, civil society and the private sector, and mindful of how technology impacts society, the G20 endeavors to provide an enabling environment for human-centered AI that promotes innovation and investment, with a particular focus on digital entrepreneurship, research and development, scaling up of startups in this area, and adoption of AI by MSMEs which face disproportionately higher costs to adopt AI.

18. We recognize that AI technologies can help promote inclusive economic growth, bring great benefits to society, and empower individuals. The responsible development and use of AI can be a driving force to help advance the SDGs and to realize a sustainable and inclusive society, mitigating risks to wider societal values. The benefits brought by the responsible use of AI can improve the work environment and quality of life, and create potential for realizing a human-centered future society with opportunities for everyone, including women and girls as well as vulnerable groups.

19. At the same time, we also recognize that AI, like other emerging technologies, may present societal challenges, including the transitions in the labor market, privacy, security, ethical issues, new digital divides and the need for AI capacity building. To foster public trust and confidence in AI technologies and fully realize their potential, we are committed to a human-centered approach to AI, guided by the G20 AI Principles drawn from the OECD Recommendation on AI, which are attached in Annex and are non-binding. This Annex includes the following principles of “inclusive growth, sustainable development and well-being”, “human-centered values and fairness”, “transparency and explainability”, “robustness, security and safety” and “accountability”. The Annex also offers guidance for consideration by policy makers with the purpose of maximizing and sharing the benefits from AI, while minimizing the risks and concerns, with special attention to international cooperation and inclusion of developing countries and underrepresented populations.

20. In pursuing human-centered AI, G20 members recognize the need to continue to promote the protection of privacy and personal data consistent with applicable frameworks. The G20 also recognizes the need to promote AI capacity building and skills development. We will each continue to strive for international cooperation and endeavor to work together with appropriate fora in areas such as research and development, policy development and information sharing through the G20 Repository of Digital Policies and other open and collaborative efforts.

4. Governance Innovation - Agile and Flexible Policy Approaches in the Digital Economy -

21. We recognize that harnessing the full potential of emerging technologies would benefit from more innovation enabling approaches to policy making than in the past. We will strive for innovation-friendly policies to capitalize the potential of digital technologies and look to remove barriers to innovation accordingly.

22. We recognize that various countries have already taken steps with the intention of making policy approaches more flexible, holistic, and agile, for example through the use of regulatory sandboxes. Policies, regulations, or the removal of regulatory barriers can contribute to and accelerate economic growth, and inclusive development by developing countries as well as MSMEs.

23. We recognize that governance in the digital era needs to be not only innovation-friendly but also innovative itself, while not losing legal certainty. Interoperable standards, frameworks and regulatory cooperation can help in this regard. International as well as national policy formulation with the involvement of all relevant stakeholders in their respective roles is instrumental to address a wide range of societal challenges and facilitate discussion on how technology can be better incorporated into policy tools.

24. To adapt better policy approaches and guide technical innovation, we support the sharing of good practices between G20 countries, including by utilizing the G20 Repository of Digital Policies established under Argentina's presidency. We note the work of relevant international organizations.

5. Security in the Digital Economy

25. Security in the digital economy is essential for strengthening our public's confidence in digital technologies and the entire digital economy. We recognize the importance for governments and other stakeholders within their respective roles to address security gaps and vulnerabilities. These have a negative impact on digital innovations, and trust by consumers and businesses, and thus hinder us from taking full advantage of the benefits of digitalization. Security in the digital economy is also important for governments in providing their services.

26. Along with the rapid expansion of emerging technologies, including IoT, the value of an ongoing discussion on security in the digital economy is growing. We, as G20 members, affirm the need to further work on these urgent challenges.

We recognize the global aspect of security in the digital economy together with the need to develop localized and customized frameworks and methodologies. Industry-led and market-led global technical standards, developed based upon principles of openness, transparency, and consensus help deliver interoperability. These promote trust, which is essential for enabling the benefits of the global digital economy.

27. We recognize the need to raise awareness on the importance of actions to enhance security in the digital economy. We also recognize the role played by stakeholders such as private sector, the technical community and civil society, and relevant international organizations to further discuss those issues. We note relevant international organizations working on security in the digital economy within their existing mandates and efforts in security in the digital economy.

6. SDGs and Inclusion

[Tackling the Digital Divide and Promoting Digitalization]

28. Digital Infrastructure

We recognize that improved connectivity and broadband access is a necessary condition for the development of the digital economy, as well as a powerful enabler of inclusive growth and sustainable development. Therefore we support initiatives aimed at the promotion of investment in domestic and international digital connectivity infrastructure, including fiber optic cables, 5G and other ultra-high-speed connectivity technologies, scaling-up the fiber optics infrastructure to avail fiber connectivity to a greater number of individuals and connectivity redundancy. We acknowledge the relevance of appropriate policy approaches that, while recognizing national circumstances, promote a pro-investment, fair, competitive, and non-discriminatory marketplace enhance the accessibility, affordability, quality and security of connectivity and digital services, and increase access to digital economic growth. We encourage the G20 common goal of promoting universal and affordable access to the Internet by all people by 2025. G20 members also encourage promoting connectivity in rural areas for rural prosperity with a particular focus on poverty eradication and distance learning.

29. Digital Literacy

The digital divide recently is no longer just about access to technology, it is also about having the right skills and knowledge to use it. Possessing the right skills and knowledge as well as creating consumer oriented digital environment has a direct impact on the ability of people to reap the benefits of digitalization for their personal and professional life. We encourage G20 countries to promote digital literacy strategies with a special focus on vulnerable groups and for labor market transformation.

30. Bridging the Digital Gender Divide

We reconfirm the importance of bridging the digital divide in ways such as development of skills for digital literacy, enhancing digital access and adopting digital technologies with special attention to the digital gender divide, while working towards the 25 by 25 goal that G20 members committed to in Brisbane, and to people who are living in remote areas as discussed in earlier DETFs under the German and Argentinian presidencies. With our continuous support of EQUALS and G20 #eSkills4girls initiative, we reaffirm that the participation of women and girls in the digital economy supports stronger economic growth, innovation, and inclusiveness and enhances societal well-being. We further encourage G20 countries to take actions to bridge the digital gender divide, including through the development of frameworks to measure and track sex-disaggregated data, and to make efforts to increase women's access to digital networks while addressing abuse and violent online behavior toward women, enhance women and girls' participation in STEM (Science, Technology, Engineering and Mathematics), support women's entrepreneurship in digital business and work within existing partnerships and frameworks. Technology should be accessible for all. The G20 could explore using the existing G20 Toolkit for Measuring Digital Economy to add indicators on women in digital.

6. SDGs and Inclusion (続き)

31. Inclusion of MSMEs and Entrepreneurs

MSMEs and entrepreneurs are important drivers of innovation and the digital economy. Facilitative environment in which MSMEs can actively take part in the digital economy, including by using leapfrog technologies, are helpful to create an inclusive and sustainable society. The G20 will seek to exchange and share practices on the promotion and scale up of digital entrepreneurship.

32. Inclusive Design for people at all ages /Persons with disabilities

In addition to an approach where people develop additional skills to use digital technology, we acknowledge that digital technology, should be user-friendly and human-centered, and should be designed for use by a diverse group of persons, including persons with disabilities, older persons, or those with lower digital skills. For example, the use of new digital interfaces such as sensors and VUI (Voice User Interface) could support inclusion of persons with disabilities and older persons.

33. Digital transformation of industries

Digitalization can contribute to economic growth and social development in a variety of sectors. Manufacturing, which is one of the most crucial industries in the global economy, is becoming more digitalized, networked and intelligent. The G20 will share good practices and experiences regarding digital industrial policy with a view to promoting high quality inclusive development of all sectors including manufacturing sector, and take actions to create a favorable environment globally.

34. Smart Cities

To contribute to sustainable and inclusive growth in urban areas where most of the world's population and energy consumption are concentrated, the G20 encourages networking and experience-sharing among cities for the development of smart cities, recommended by the Business 20 and the Urban 20. Implementations of smart cities should take into account transparency, resiliency, privacy, security, efficiency, and interoperability. Cities and networks of cities that express an interest may join a Global Smart City Coalition, which has been proposed to be established in October. The G20 notes the upcoming "Super City/Smart City Forum" planned to be held on 29th of June in Osaka.

6. SDGs and Inclusion (続き)

[Plan for action towards SDGs through digitalization]

35. In order to share the benefits of digitalization globally to contribute to the implementation of the G20 action plan on the 2030 agenda on sustainable development and leave no one behind, we will endeavor to share good practices and lessons learnt from their experiences in solving social problems by using the G20 Repository of Digital Policies.

36. We encourage all stakeholders in their respective roles to work together in facilitating digitalization in developing countries and regions, as well as globally, by making use of good practices and knowledge-sharing. For this objective, all G20 members and other interested countries are invited to discuss how to make use of good practices and knowledge and to set actions into motion to collaborate, cooperate and support the efforts for digitalization, including advance progress towards SDGs in developing countries and regions. We consider that digital governance is an essential leverage of prosperity, social inclusion and environmental sustainability with measurable results. We note the work of the Development Working Group for the Guiding Principles for the Development of Science, Technology, and Innovation for SDGs Roadmaps. We are committed to capacity-building around the world as a vehicle for implementing SDGs.

37. The knowledge sharing activity will be supported by the World Bank and other relevant international organizations, within their existing mandates and core competencies and managed by interested G20 members and other interested countries.

7. Way Forward

38. We will continue to work toward a human-centric future society, and emphasize the importance of working with all interested parties and stakeholders in sharing good practices and experiences, including inclusive digital economy business models, in digitalization to advance globally inclusive development of digital society.

39. We recognize the role and contributions of the G20 engagement groups and other civil society groups in the G20 process. We thank International Organizations, including the APT, ERIA, IMF, ITU, OECD, UNCTAD, WB, and WTO for contributing their expertise to the work of the G20 DETF and welcome their efforts to maximize the positive impact of the digital economy.

Ⅲ. Interface between Trade and the Digital Economy

64. We, the G20 Trade Ministers and Digital Economy Ministers, recognizing the growing impact of digitalization on our societies and economies including in trade and commerce, reaffirmed the importance of the interface between trade and the digital economy as stated in the Buenos Aires Leaders' declaration. We discussed related issues on the interface between trade and the digital economy.

65. We exchanged views on various issues including the concept of data free flow with trust, WTO discussions on electronic commerce, and needs for capacity building, bearing in mind the importance of ensuring that all countries are able to realize their opportunities. Discussions should continue with a view to enhance the benefits of digitalization, which is transforming every aspect of our economies and societies, and can contribute to economic growth, job creation, inclusion, development and innovation.

Ⅳ. Towards the Osaka Summit

66. With a view to deepening G20 cooperation in the area of Trade and Digital Economy, we jointly recommend our Leaders consider these important topics at the Osaka Summit.

ANNEX G20 AI Principles

The G20 supports the Principles for responsible stewardship of Trustworthy AI in Section 1 and takes note of the Recommendations in Section 2.

Section 1: Principles for responsible stewardship of trustworthy AI**1.1. Inclusive growth, sustainable development and well-being**

Stakeholders should proactively engage in responsible stewardship of trustworthy AI in pursuit of beneficial outcomes for people and the planet, such as augmenting human capabilities and enhancing creativity, advancing inclusion of underrepresented populations, reducing economic, social, gender and other inequalities, and protecting natural environments, thus invigorating inclusive growth, sustainable development and well-being.

1.2. Human-centered values and fairness

a) AI actors should respect the rule of law, human rights and democratic values, throughout the AI system lifecycle. These include freedom, dignity and autonomy, privacy and data protection, non-discrimination and equality, diversity, fairness, social justice, and internationally recognized labor rights.

b) To this end, AI actors should implement mechanisms and safeguards, such as capacity for human determination, that are appropriate to the context and consistent with the state of art.

1.3. Transparency and explainability

AI Actors should commit to transparency and responsible disclosure regarding AI systems. To this end, they should provide meaningful information, appropriate to the context, and consistent with the state of art:

- i. to foster a general understanding of AI systems;
- ii. to make stakeholders aware of their interactions with AI systems, including in the workplace;
- iii. to enable those affected by an AI system to understand the outcome; and,
- iv. to enable those adversely affected by an AI system to challenge its outcome based on plain and easy-to-understand information on the factors, and the logic that served as the basis for the prediction, recommendation or decision.

1.4. Robustness, security and safety

a) AI systems should be robust, secure and safe throughout their entire lifecycle so that, in conditions of normal use, foreseeable use or misuse, or other adverse conditions, they function appropriately and do not pose unreasonable safety risk.

b) To this end, AI actors should ensure traceability, including in relation to datasets, processes and decisions made during the AI system lifecycle, to enable analysis of the AI system's outcomes and responses to inquiry, appropriate to the context and consistent with the state of art.

ANNEX G20 AI Principles (続き)

c) AI actors should, based on their roles, the context, and their ability to act, apply a systematic risk management approach to each phase of the AI system lifecycle on a continuous basis to address risks related to AI systems, including privacy, digital security, safety and bias.

1.5. Accountability

AI actors should be accountable for the proper functioning of AI systems and for the respect of the above principles, based on their roles, the context, and consistent with the state of art.

Section 2: National policies and international co-operation for trustworthy AI

2.1. Investing in AI research and development

a) Governments should consider long-term public investment, and encourage private investment, in research and development, including inter-disciplinary efforts, to spur innovation in trustworthy AI that focus on challenging technical issues and on AI-related social, legal and ethical implications and policy issues.

b) Governments should also consider public investment and encourage private investment in open datasets that are representative and respect privacy and data protection to support an environment for AI research and development that is free of inappropriate bias and to improve interoperability and use of standards.

2.2. Fostering a digital ecosystem for AI

Governments should foster the development of, and access to, a digital ecosystem for trustworthy AI. Such an ecosystem includes in particular digital technologies and infrastructure, and mechanisms for sharing AI knowledge, as appropriate. In this regard, governments should consider promoting mechanisms, such as data trusts, to support the safe, fair, legal and ethical sharing of data.

2.3 Shaping an enabling policy environment for AI

a) Governments should promote a policy environment that supports an agile transition from the research and development stage to the deployment and operation stage for trustworthy AI systems. To this effect, they should consider using experimentation to provide a controlled environment in which AI systems can be tested, and scaled-up, as appropriate.

b) Governments should review and adapt, as appropriate, their policy and regulatory frameworks and assessment mechanisms as they apply to AI systems to encourage innovation and competition for trustworthy AI.

2.4. Building human capacity and preparing for labor market transformation

a) Governments should work closely with stakeholders to prepare for the transformation of the world of work and of society. They should empower people to effectively use and interact with AI systems across the breadth of applications, including by equipping them with the necessary skills.

b) Governments should take steps, including through social dialogue, to ensure a fair transition for workers as AI is deployed, such as through training programs along the working life, support for those affected by displacement, and access to new opportunities in the labor market.

c) Governments should also work closely with stakeholders to promote the responsible use of AI at work, to enhance the safety of workers and the quality of jobs, to foster entrepreneurship and productivity, and aim to ensure that the benefits from AI are broadly and fairly shared.

ANNEX G20 AI Principles (続き)

2.5. International co-operation for trustworthy AI

- a) Governments, including developing countries and with stakeholders, should actively cooperate to advance these principles and to progress on responsible stewardship of trustworthy AI.
- b) Governments should work together in the OECD and other global and regional fora to foster the sharing of AI knowledge, as appropriate. They should encourage international, cross-sectoral and open multi-stakeholder initiatives to garner long-term expertise on AI.
- c) Governments should promote the development of multi-stakeholder, consensus-driven global technical standards for interoperable and trustworthy AI.
- d) Governments should also encourage the development, and their own use, of internationally comparable metrics to measure AI research, development and deployment, and gather the evidence base to assess progress in the implementation of these principles.

*** This Annex draws from the OECD principles and recommendations.**