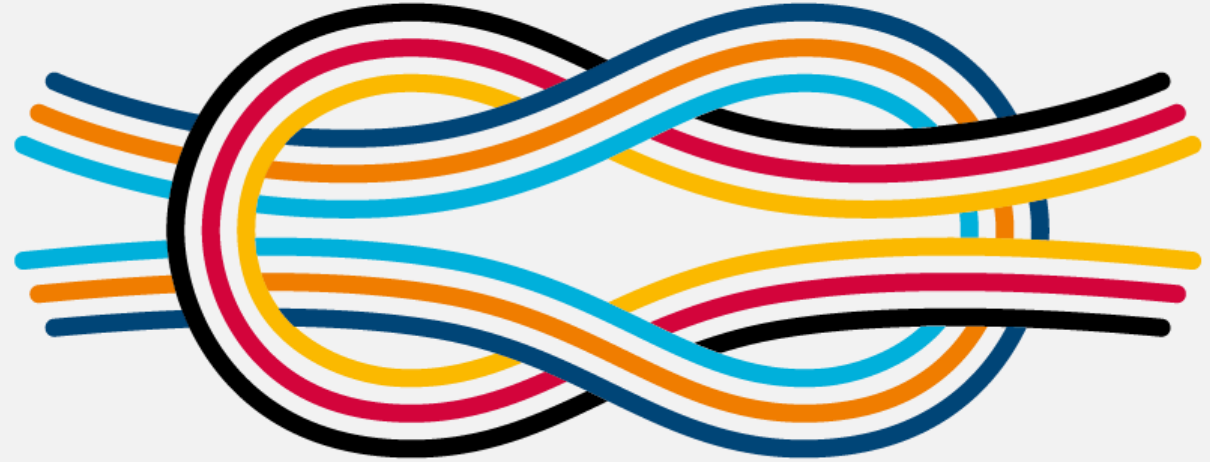


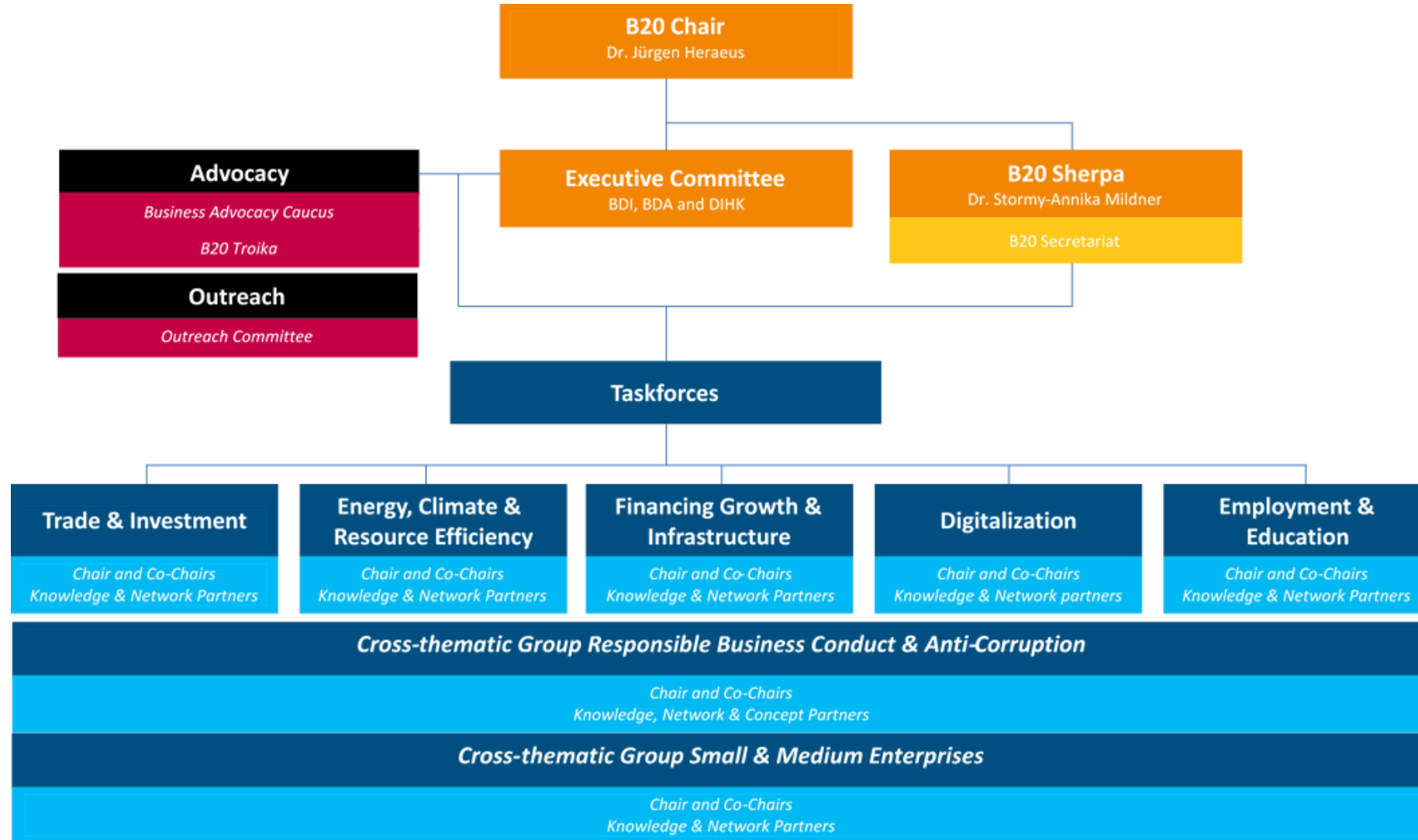
B20 Draft Recommendations Digitalization



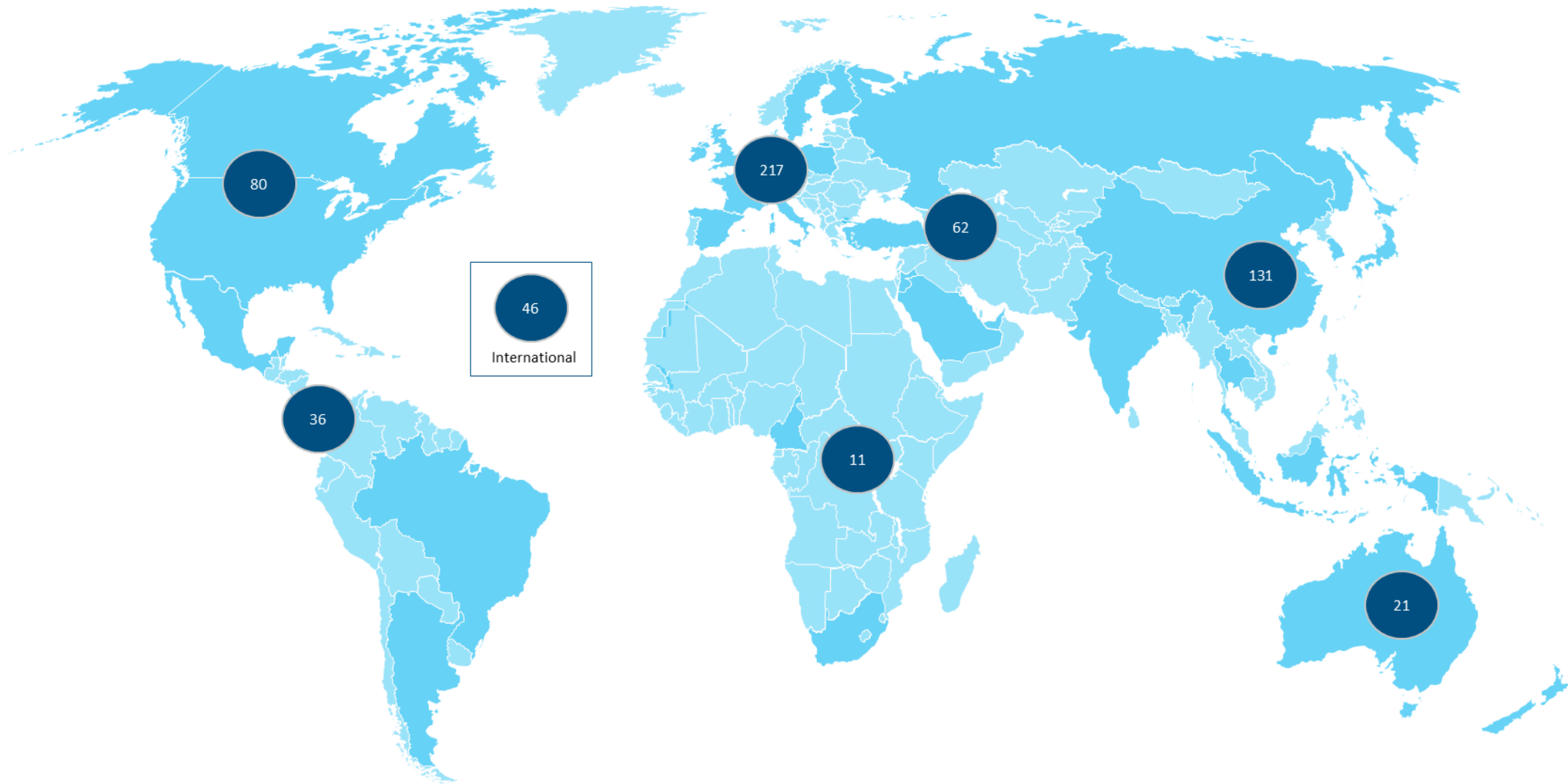
G20 GERMANY 2017

BUSINESS 20 DIALOGUE

B20-Organigramm



B20-Mitglieder



Digitalisierung ist ein themenübergreifender Fokus













Digitalization	Trade & Investment	SMEs	Financing Growth & Infrastructure	Employment & Education
<ul style="list-style-type: none">▪ Cybersecurity▪ Cross-border data flows▪ ICT Infrastructure▪ Industry 4.0▪ Standardization▪ Innovation▪ Artificial Intelligence▪ Smart infrastructure	<ul style="list-style-type: none">▪ Digital trade<ul style="list-style-type: none">▪ Capacity building▪ E-commerce-related policies▪ Trade rules	<ul style="list-style-type: none">▪ Internet access▪ Digital trade▪ Measurement▪ Digital financial inclusion	<ul style="list-style-type: none">▪ Digitalization of finance	<ul style="list-style-type: none">▪ Regulations▪ Skills▪ Entrepreneurship

Taskforce Digitalization

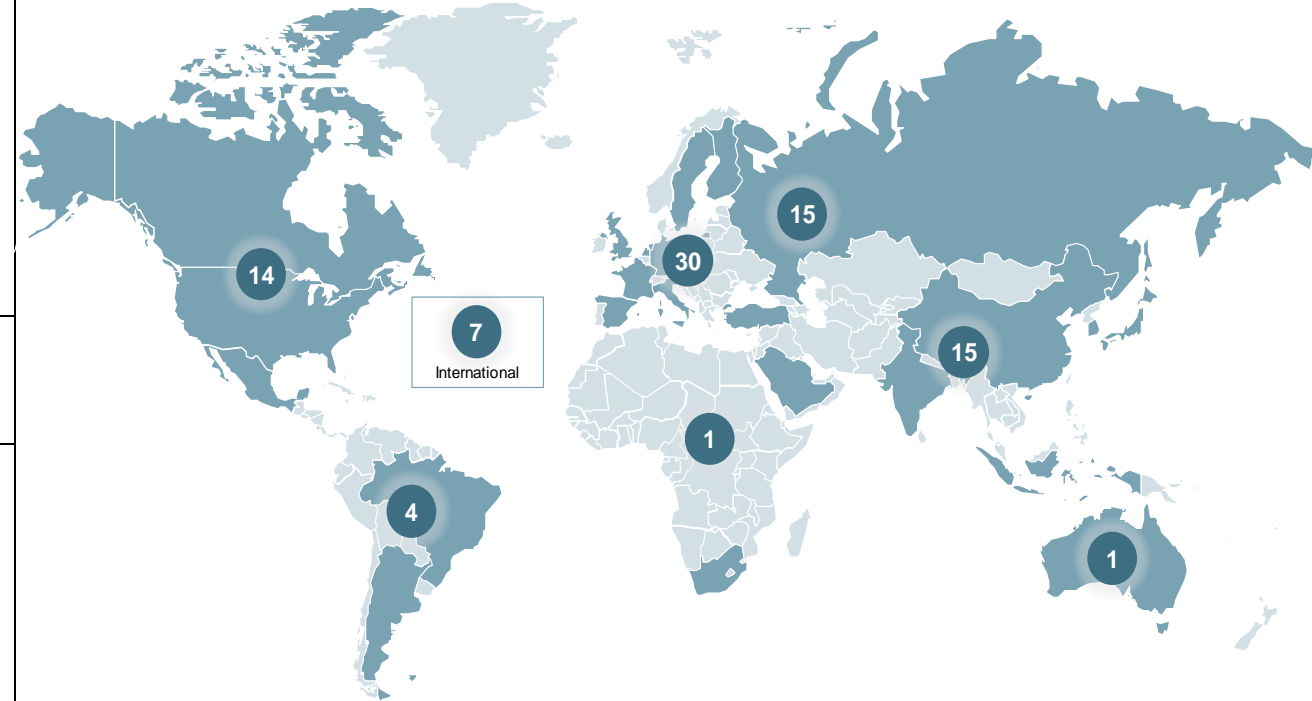
Digitalization

Draft Empfehlungen

Steuerungsgruppe

Chair			
	Klaus Helmrich Member of the Managing Board, Siemens		
Co-Chairs			
	Sabine Bendiek CEO Germany, Microsoft		Pierre Nanterme CEO, Accenture
	Hans-Paul Bürkner Chairman, The Boston Consulting Group		Klaus Rosenfeld CEO, Schaeffler
	Timotheus Höttges CEO, Deutsche Telekom		Rajeev Suri CEO, Nokia
Knowledge Partner			
	The Boston Consulting Group		
Network Partners			
	Global Business Coalition		
	The Business and Industry Advisory Committee to the OECD		
	International Chamber of Commerce		
	World Economic Forum		

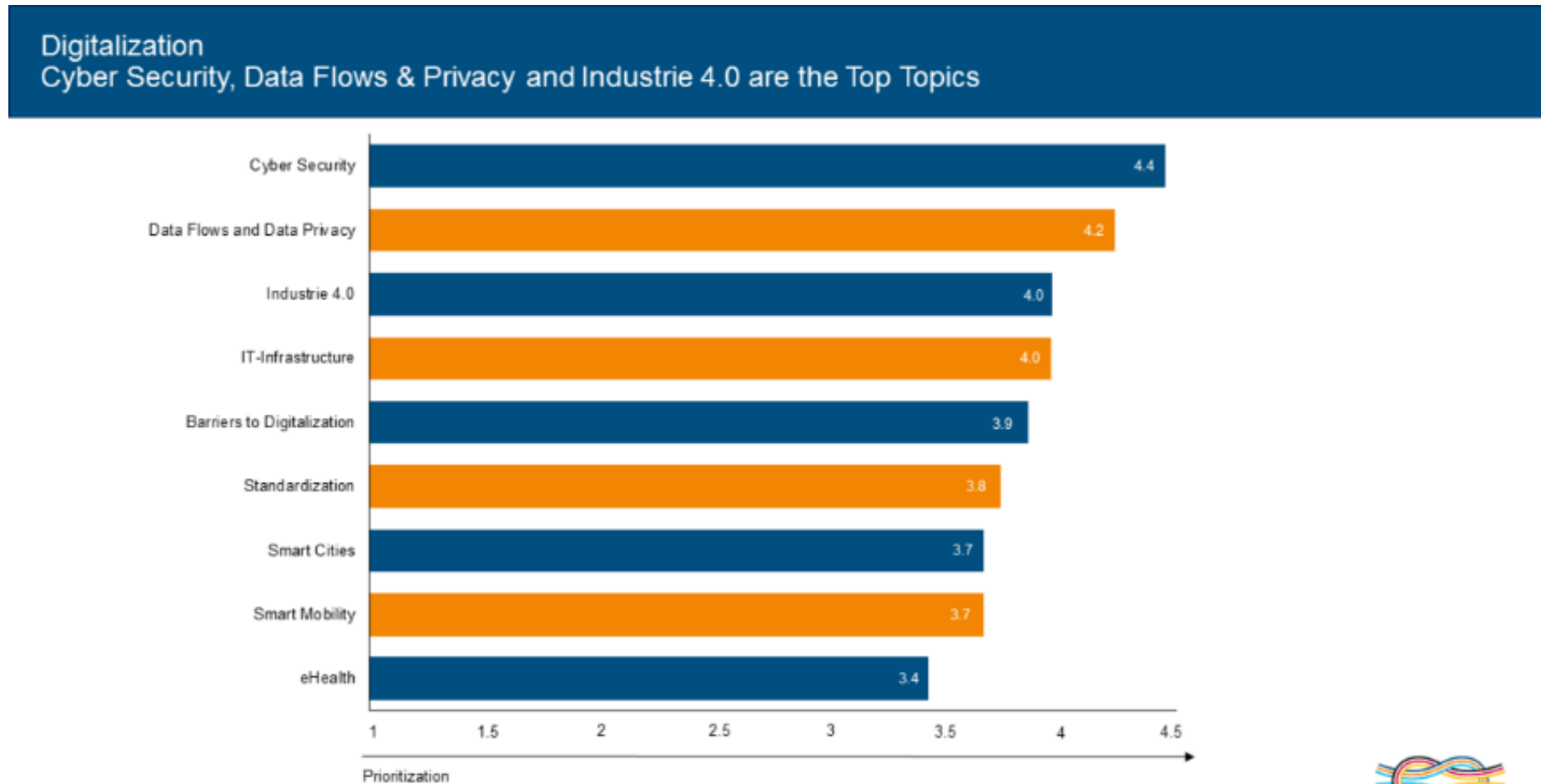
101 Mitglieder aus > 20 Ländern



Digitalization

Themenbestimmung

- Survey with B20 China members, G20 business associations, international business networks



Source: Survey Monkey*, September 2016.

* Result of survey among international business associations, former B20 taskforce members, and committees of BDI, BDA & DIHK on potential topics for B20 Germany.

Digitalization Fokusthemen

Global Connectivity



Cybersecurity



***Cross-Border
Data Flows***



ICT Infrastructure

Industry 4.0 & the Industrial Internet



Innovation



***ICT Infrastructure
for I4.0 & II***



***Global and
International
Standards***

Artificial intelligence



***Informed
Public Dialog***



***Favorable
Ecosystem***



***Smart
Infrastructure***

Digital-Related Topics in other Taskforces

Digital Trade
(Trade & Investment Taskforce)

Labor 4.0 & Skills
(Employment & Education Taskforce)

Financial Innovation
(Financing Growth & Infrastructure
Taskforce)

Digitalization of SMEs
(SME Cross-Thematic Group)

Digitalization

Recommendation 1 Global Connectivity

Global Connectivity



Cybersecurity



Cross-Border
Data Flows



ICT
Infrastructure

Policy Action 1.1

The G20 should improve cyber risk management by encouraging the **development of a harmonized cybersecurity baseline framework** as well as of a **global interoperable information-sharing platform concept** under OECD guidance, and support a UN process leading to **binding norms for responsible state behavior**.

- Given its crucial role for growth and the further success of digitalization, the G20 should make cybersecurity a **permanent agenda topic**.
- The G20 should encourage authoritative international institutions and agencies, international standardization bodies, and private sector technical experts to participate in the development of the **cybersecurity baseline framework** under **guidance and processual ownership of the OECD**.
- G20 members should foster **better private cyber risk management through security-by-design** by encouraging the adoption of secure software development practices.
- To implement the global **interoperable information-sharing platform concept**, G20 members should **adapt the concept to national needs**, set up national platforms and incorporate existing platforms, while ensuring the possibility of **global exchange** between national platforms.
- G20 members should adopt a declaration of intent to reach a **binding global agreement on norms for responsible state behavior in cyberspace until 2020** – negotiations could be facilitated by the **United Nations Group of Governmental Experts**.

Digitalization

Recommendation 1 Global Connectivity

Global Connectivity



Cybersecurity



Cross-Border
Data Flows



ICT
Infrastructure

Policy Action 1.2

To encourage free cross-border data flows, while **safeguarding privacy and security**, G20 members should implement **bans on data localization in trade agreements**, strengthen efforts for **interoperable data-protection standards**, further enable the **use of the accountability principle**, and pursue additional bilateral and plurilateral **agreements that facilitate cross-border data flows** in conjunction with **privacy requirements**.

- G20 members should address free **cross-border data flows** in their discussions on **digital trade**.
- To improve basic conditions for cross-border data flows, the G20 should ask UNCTAD and the OECD to guide a **dialog on interoperable data and privacy protection standards**, which should involve both G20 members as well as experts from private and public organizations.
- Based on the dialog on interoperable data-protection and privacy-protection standards, UNCTAD and the OECD should lead the **development of an interoperable framework of guiding principles on policies** that enable free data flows while safeguarding privacy and security.
- To increase legal transparency and predictability related to cross-border data-flows, G20 members should **review their existing mutual legal assistance treaties**.

Digitalization

Recommendation 1 Global Connectivity

Global Connectivity



Cybersecurity



Cross-Border
Data Flows



ICT
Infrastructure

Policy Action 1.3

To foster broadband access for all, G20 members should support private investments in ICT through **simplified, market-oriented, technology-neutral, and transparent regulations**, complemented by **investment incentives in less-profitable scenarios**, as well as investments for **skill and capacity building**.

- To achieve simplified, market-oriented, technology-neutral, and transparent regulations, G20 members should implement three policy principles: 1) **simplified and streamlined access regulation**, 2) **forward-looking spectrum policy to cover accelerated demand**, and 3) **competition policy with more emphasis on dynamic efficiencies**.
- To further support private investments, G20 members should **remove barriers to foreign direct investment, ensure fluid venture capital markets**, and **complement private investments with public funds in less-profitable investment scenarios**.
- To support the demand side of ubiquitous connectivity, G20 members should foster **public-private partnership initiatives for sufficient skill and capability building** - especially in developing countries.
- G20 members should ensure a **global level playing field and minimize the regulatory burden for operators and service providers**.

Digitalization

Recommendation 2 Industry 4.0 & the Industrial Internet

Industry 4.0 & the Industrial Internet



Innovation



*ICT Infrastructure
for I4.0 & II*



*Global & International
Standards*

Policy Action 2.1

G20 members should facilitate the use and dissemination of technology solutions for I4.0&II by increasing **awareness of use cases and opportunities** through the initiation of an **international knowledge exchange platform of practice** at the OECD and World Bank Group, and by **supporting demonstration systems** of private organizations and academia.

- The G20 should mandate the **OECD and the World Bank Group** to **lead the development** of the international knowledge exchange **platform** of practice for I4.0&II innovation. The **OECD, UNCTAD, and UNIDO** should be mandated to **compile and provide respective use cases** on I4.0&II in cooperation with businesses.
- G20 members should **financially incentivize** the **set-up of demonstration systems/plants of state-of-the-art I4.0&II implementations** through **tax deductions or research and development funding**. Such funding should also target the **cooperation between academia and business**.

Industry 4.0 & the Industrial Internet



Innovation



ICT Infrastructure
for I4.0 & II



Global & International
Standards

Policy Action 2.2

The G20 should **encourage multistakeholder cooperation** for setting specific **I4.0&II ICT infrastructure goals** that serve business needs and implement **forward-looking ICT infrastructure policies**, like **non-discriminatory spectrum allocation**, and the **facilitation of new business models as well as the use of new technologies** by avoiding restrictive regulations.

- The **definition of specific national I4.0&II ICT infrastructure goals** should pursue the implementation of chapter 4.5 (New Industrial Infrastructure) of the “**G20 2016 New Industrial Revolution Action Plan**” and involve industry representatives to ensure the integration of business needs.
- G20 members should **define national ICT infrastructure plans** that reflect specific business requirements, such as **broadband communication capacities and national infrastructure needs**, to implement the defined I4.0&II goals.
- To implement forward-looking ICT infrastructure policies, G20 members should adopt three principles: 1) **allocation of more spectrum**, 2) **facilitate new business models such as value-based pricing**, and 3) **support new technologies such as software-defined and virtual networks** by replacing outdated policies with flexible regulations.

Industry 4.0 & the Industrial Internet



Innovation



*ICT Infrastructure
for I4.0 & II*



*Global & International
Standards*

Policy Action 2.3

G20 members should foster the **development and use of globally interoperable standards and specifications** by funding **public-private cooperation and market driven standardization initiatives**, as well as referring to international standards and specifications in **public procurement**.

- G20 members should facilitate public-private cooperation of formal standard-setting organizations with open, voluntary, consensus-based standardization bodies and industry fora in I4.0&II by **incentivizing** – for instance through **program funding** – **market-driven standardization initiatives**, like RAMI4.0 within Plattform Industrie 4.0 or the Industrial Internet Consortium.
- G20 should draft a **living list of globally relevant informal standardization bodies**, to inform relevant stakeholders about standard setting organizations and foster potential cooperation.
- G20 members should contribute to the **use of global and international standards by referencing them in public procurement**.

Digitalization

Recommendation 3 Artificial Intelligence

Artificial Intelligence

 *Informed
Public Dialog*

 *Favorable
Ecosystem*

 *Smart
Infrastructure*

Policy Action 3.1

The G20 should encourage the **OECD** to set up a **multistakeholder initiative to analyze potential applications, benefits, and challenges** of AI and provide guidance for governments on an **informed public dialog** on AI.

- The G20 should acknowledge the importance of international cooperation to exploit the potential of AI, and make it a **G20 agenda item**.
- The G20 should ask the OECD to organize an **international forum** comprising representatives from business, governments, academia, and societal institutions and guide the preparation of a **report on opportunities, risks, and challenges related to AI**.
- The report should provide **guidance on how governments can foster an informed public dialog** on AI.

Digitalization

Recommendation 3 Artificial Intelligence

Artificial Intelligence

 *Informed
Public Dialog*

 *Favorable
Ecosystem*

 *Smart
Infrastructure*

Policy Action 3.2

G20 members should develop **forward-looking policies** that support the rollout of AI by **adjusting regulations to facilitate the use of big data** and **foster related investment and innovation**.

- G20 members should **review and adjust regulations that impede the use of emerging technologies** including big data and advanced data analytics.
- G20 members should **increase funding of AI research projects in academia** and **incentivize AI research and pilot projects in business** through tax deductions.
- G20 members should **make public-sector data available for analytics and research projects** to harness the related innovation potential.

Digitalization

Recommendation 3 Artificial Intelligence

Artificial Intelligence

 *Informed
Public Dialog*

 *Favorable
Ecosystem*

 *Smart
Infrastructure*

Policy Action 3.3

The G20 and its members should support the implementation of smart infrastructure by mandating the **Global Infrastructure Hub (GIH)** to provide – jointly with the private sector – **use and business cases to illustrate potential benefits, abolishing barriers to foreign direct investments in ICT and infrastructure, and complementing private investments in in less-profitable scenarios.**

- The G20 should mandate the **GIH to draft a report on the potential of smart infrastructure** including use and business cases as illustration and proof of value.
- The **GIH** should **catalog best practices that emerge from lighthouse projects** to accelerate smart infrastructure implementation.
- Utilizing the GIH best practices catalog, G20 members should further support the implementation of smart infrastructure by **informing standardization of interfaces between different smart infrastructure solutions and technologies.**

Taskforce Trade & Investment

Trade & Investment Fokusthemen

Open & Inclusive Trading System



*Better
Communication &
Greater Inclusiveness*



*Protectionism
Standstill and
Rollback*



*Liberalization under
the WTO Framework*

Digital Trade



*Capacity
Building*



*E-commerce-
related Policies*



*Trade Rules
for the Digital Age*

Investment Facilitation



*Reliable Legal
Environment*



*Sustainable
Investment
Facilitation*



*Multilateral
Investment
Framework*

Trade & Investment

Recommendation on Digital Trade

Digital Trade



**Capacity
Building**



**E-commerce-
related Policies**



**Trade Rules
for the Digital Age**

Policy Action 2.1

G20 members should accelerate the inclusive buildup of e-commerce capacities, especially in developing countries and for micro-, small-, and medium-sized enterprises (MSMEs).

- G20 members should develop and implement **country-specific initiatives to improve e-commerce readiness and digital literacy of developing countries and MSMEs.**
- G20 members and international organizations should **streamline existing Aid for Trade initiatives** towards capacity building for digital trade.
- G20 members should actively **support the eTrade for All initiative** and **develop an action plan** on how to support each of the initiative's seven key policy areas.
- In support of and complementarity with already existing initiatives such as Aid for Trade, governments should set up **frameworks that allow for further funding sources for e-commerce capacity building, such as foreign investments and public-private partnerships.**

Trade & Investment

Recommendation on Digital Trade

Digital Trade



Capacity
Building



E-commerce-
related Policies



Trade Rules
for the Digital Age

Policy Action 2.2

G20 members should encourage implementation of interoperable and non-discriminatory e-commerce-related policies, and strengthen the regulatory dialog with all relevant stakeholders.

- G20 members need to **align e-commerce-related policies with existing international standards and guidelines.**
- G20 members should establish **regulatory dialogs on national e-commerce-related policies** among each other, as well as with non-G20-members.
- G20 members should **engage in a dialog with private stakeholders in the eWTP.**

Trade & Investment

Recommendation on Digital Trade

Digital Trade



Capacity
Building



E-commerce-
related Policies



Trade Rules
for the Digital Age

Policy Action 2.3

The G20 should **instigate a WTO negotiation mandate on digital trade** at the next WTO Ministerial Conference, which should **address free cross-border data flows, trade in digital products and services, trade facilitation, regulatory coherence, and other identified legal gaps.**

- The G20 Trade and Investment Working Group should establish **consensus for the need of a digital trade agreement and the potential components of negotiations.**
- WTO members should **review the WTO telecommunications rules and its reference paper** to reduce barriers to trade in telecommunications services.
- The G20 should push for a **revitalization of the WTO Work Programme on Electronic Commerce.**

Cross-thematic Group SMEs

SMEs

Fokusthemen

Trade



SME Voice in Trade Agreements



Trade Capacity Building for SMEs



Ease Business Travel

Building Digital Capacities



Internet Access Outside Industrial Centers



Participation in Digital Trade



Measurement of the Digital Economy

Improving Access to Finance



Improving Financial Infrastructure for SMEs



Diversified Financial Instruments



Fostering Digital Financial Inclusion

Recommendation 2 Building Digital Capacities

Building Digital Capacities



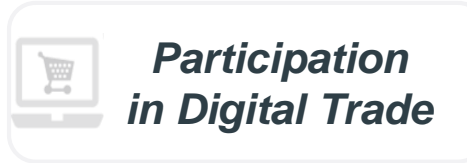
Policy Action 2.1

G20 members should foster SME Internet access by **strengthening digital infrastructure outside industrial centers**, incorporating comprehensive and targeted **Digital Strategies**, as well as **raising SME awareness and capabilities** through Innovation Hubs.

- G20 members should **endorse targets and draw up long-term national broadband strategies**, providing a country-specific framework for the coordination and organization of broadband development activities.
- G20 members should implement **sound policies in the telecommunication area, with a strong focus on competition and fair access**, to ensure returns on network investments are predictably attractive.
- Investment in ICT infrastructure should be prioritized in **G20 Investment Strategies**.
- G20 members should **establish SME Innovation Hubs** to encourage usage and knowledge of new applications, technologies, and innovation.

Recommendation 2 Building Digital Capacities

Building Digital Capacities



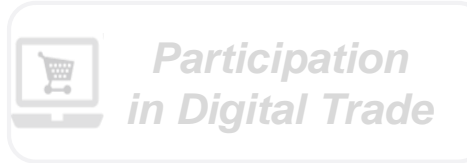
Policy Action 2.2

G20 members should foster SME participation in digital trade by **reducing regulatory barriers** and enhancing SME **e-commerce readiness** by leveraging support for **international multistakeholder initiatives** on e-commerce such as the eWTP and the SME Market Link of the World SME Forum.

- G20 members should **adapt their e-commerce-related policies to international standards and best practices**, and engage in international **multistakeholder dialogues on regulation**.
- G20 members should **enhance e-commerce readiness through streamlined Aid for Trade as well as knowledge and information exchange**.

Recommendation 2 Building Digital Capacities

Building Digital Capacities



Policy Action 2.3

G20 members, together with the respective international organizations such as the OECD, should **improve measurements of the digital economy**, paying close regard to SMEs, to create a **better basis for SME relevant policy-making**.

- In its G20-mandated efforts to improve the measurement of the digital economy the **OECD** should **work closely together with SMEs**.
- The **OECD should publish annually a SME Digital Access and Usage report**, to highlight specific SME requirements and provide SMEs with relevant information.
- G20 members should build on the G20 Data Gaps Initiative to **elaborate a set of specific actions** needed to develop more adequate and relevant **cross-country comparable metrics** on the digital economy.

Recommendation 3 Improving Access to Finance

Improving Access to Finance



*Financial
Infrastructure*



*Diversified
Financial
Instruments*



*Fostering Digital
Financial
Inclusion*

Policy Action 3.3

The G20 should **implement the G20 High Principles for Digital Financial Inclusion** **while** ensuring that the SME dimensions are considered in the drafting process of the country-level actions and by boosting financial literacy of SMEs.

- The G20 should **mandate the GPFI to examine good practices in moving SMEs from cash-based to electronic transactions**, also in order to inquire where tax and other regulatory systems might need to be reformed.
- The G20 should ask the IMF, the WB, the GPFI, the OECD and the Alliance for Financial Inclusion (AFI) to improve **the availability and quality of the data about demand and supply of finance to individuals and SMEs** in underserved markets.
- The G20 members should **adapt 'know your customer' (KYC) compliance requirements**, based on volume, size and nature of customer transaction, as many countries are doing with the so-called simplified models to specifically address financial exclusion.
- The G20 should **mandate the OECD to intensify work on the SME dimensions of financial literacy strategies**.
- The G20 members should **support measures investing in skills** – both financial and digital, including elements of book-keeping, sales, asset management, risk management, taxation and compliance, budgeting and cash flow management pension and retirement benefits.

Taskforce Financing Growth & Innovation

Financing Growth & Infrastructure

Fokusthemen

Boosting Infrastructure Finance



Promoting
Investible
Infrastructure
Projects



Enhancing the
Role of MDBs



Fostering Green
Finance

Designing Efficient & Effective Financial Regulation



Enhancing
Financial
Regulatory
Coherence



Advancing
Digitalization of
Finance

Fostering International Investment Flows



Improving
Regulatory
Certainty



Ensuring Greater
Legal Certainty in
Taxation

Financing Growth & Infrastructure

Recommendation 2 Designing Efficient & Effective Financial Regulation

Designing Efficient & Effective Financial Regulation

Policy Action 2.2

G20 members should facilitate the digitalization of finance by creating an **environment**, which **allows business to embrace digital innovation**, while at the same time carefully designing rules that **address risks and guarantee competitive neutrality** across all players and borders.



Enhancing
Financial
Regulatory
Coherence



Advancing
Digitalization of
Finance

- The G20 should task the **FSB** with the coordination of **regulatory capacity building in Fintech**, including by undertaking a **comprehensive assessment of Fintech regulatory regimes** in G20 countries, identifying **best practices**, with the objective of ensuring coherence in regulation.
- The G20 should mandate the **FSB** to facilitate a **dialogue on RegTech between financial institutions, regulators and business stakeholders** in order to appropriately address **compliance requirements, tackle challenges, and agree on possible solutions**.

Taskforce Employment & Education

Employment & Education

Fokusthemen

Open, Dynamic and Inclusive Labour Markets

Remove barriers to the labour market and promote various forms of work

Improve female entrepreneurship and labour market participation

Align migration policies with labour market needs

Technological Change and Education

Implement clear and consistent regulations to drive innovation

Invest in skills development by identifying the skills needs of each country

Promote entrepreneurship and entrepreneurship education

Global Level Playing Field and Fair Competition

Ensure better implementation and enforcement of human rights and national legislation

Promote UN and OECD guidelines to strengthen responsible business conduct

Promote initiatives promoting sustainable global supply chains

Employment & Education

Recommendation 2 Technological Change and Education

Technological Change and Education

*Implement clear and
consistent regulations to
drive innovation*

*Invest in skills
development by
identifying the skills
needs of each country*

*Promote entrepreneurship
and entrepreneurship
education*

Policy Action 2.1

G20 countries should implement clear and consistent regulations while reducing bureaucracy to drive innovation

- Governments need to establish **clear and consistent regulations** for businesses to operate and innovate in. Governments must closely cooperate with businesses to ensure an optimal regulatory framework to foster innovation.

Employment & Education

Recommendation 2 Technological Change and Education

Technological Change and Education

*Implement clear and
consistent regulations to
drive innovation*

*Invest in skills
development by
identifying the skills
needs of each country*

*Promote entrepreneurship
and entrepreneurship
education*

Policy Action 2.2

G20 countries should urgently invest in skills development by identifying the skills needs of each country and by instructing workers in skills that make them competitive in the new economy

- G20 Governments need to **implement** their commitments, i.e. the ILO **G20 training strategy**, the **G20 principles for quality apprenticeships** as well as the G20 apprenticeships initiative.
- **Technology should be utilized to maximize access to and delivery of quality skills based education**, this includes formal, institutional education and life-long learning.
- **Business needs to be closely involved in the setting and development of curricula** to ensure that courses are in line with labour market needs.
- Change perceptions of **vocational education** and training to make VET attractive to young people, their parents and mentors.
- Make the **portability and recognition of skills** learned on the job a policy priority.
- Employment services need to advise those who want to re/upskill.

Employment & Education

Recommendation 2 Technological Change and Education

Technological Change and Education

*Implement clear and
consistent regulations to
drive innovation*

*Invest in skills
development by
identifying the skills
needs of each country*

*Promote entrepreneurship
and entrepreneurship
education*

Policy Action 2.3

G20 countries should foster entrepreneurship.

- The G20 should **support** B20 actions regarding the **G20 SMART Innovation Initiative**, including: a regular convening of the **G20 SMART Innovation Forum**, the establishment of the **G20 SMART industrial park to boost the “G20 Young Entrepreneur Partnership”**, and the **set-up of the G20 SMART Innovation Fund**. Furthermore, the G20 countries should **follow up their Action Entrepreneurship Plan** established in 2016 annually.
- **Reduce administrative and regulatory barriers:** Set up support systems for start-ups through easily accessible and timely information and advice and make the registration of companies as easy as possible.
- **Link entrepreneurship to education:** Embed entrepreneurship education into school, VET, and university curricula.