



**THE FOURTH INDUSTRIAL REVOLUTION:
IMPACTS ON INTERNATIONAL SECURITY AND THE RESHAPING OF GLOBAL
ORDER**

OVERALL DESIGN FOR SECURITY POLICY IN 2019

KONRAD ADENAUER FOUNDATION

RIO DE JANEIRO OFFICE

Background 3

Preparatory Meetings 6

Speakers' Internal Meeting..... 7

Open Conference: International Security Conference Forte de Copacabana 9

The Fourth Industrial Revolution: Impacts on International Security and the Reshaping of Global Order

The International Security Conference Forte de Copacabana, in its 16th edition, has established itself as the main and largest discussion forum on international security topics in Latin America. The Forte de Copacabana Conference was compared, in recent editions, to other strategic international meetings on international policy, such as the Munich Security Conference, and it continues along the path of increasing its importance to the international policy dialogue amidst the worsening of international crises in other continents. The absence of major international conflicts in Latin America adds to the relevance of this dialogue in the region with European partners, as a way to use this potential for peace for other complex scenarios in other continents. The strategic partnership between Latin America and Europe serves as an important starting point for strategically analyzing issues that affect both regions; and it also contributes to better understanding more serious issues in other continents.

With the emergence of new security threats in past decades, international security has become increasingly intertwined with new actors and technologies. Worldwide, the erosion of the State monopoly on the use of force is closely connected with the emergence of private security governance schemes led by non-state actors associated to organized crime and terrorism. This phenomenon assumes particular features within urban environments, placing additional challenges for effective state action. In this context, international cooperation remains key to addressing transnational organized crime and terrorism. However, international experience demonstrates the constant tension between security enforcement and human rights, especially in urban environments. Urbanization has also contributed to the consolidation of a new type of governance, where mayors, urban planners, police officers and other local actors form networks of cooperation. Furthermore, where national policies have failed to meet security challenges, cities may offer useful platforms for effective action - the refugee policies adopted by some European and US cities are cases in point. It is increasingly evident, however, that technological capacity, grounded on solid national strategies, play an important role in the adoption of effective security policies.

Even further, technological competition has become a key factor influencing the distribution of global power and the reshaping of the global order. For instance, it is widely agreed among international security analysts that the current “trade war” is a consequence of competition for leadership within the Fourth Industrial Revolution. In this respect, justifications for US trade retaliations against China are grounded on the National Security Strategy launched in December 2017. The Chinese government, on the other hand, has set in motion an ambitious plan aiming to secure leadership in the technological race: Made in China 2025. Recently, the German government has convened Europe to

face this issue through the document “National Industrial Strategy 2030”. In South America, Brazil has also engaged with Industry 4.0 as part of its strategy to overcome its recent crisis. In this respect, it is worthy of note the broad study carried by the National Confederation of Industry (CNI), through the project Industry 2027. Furthermore, the new government lists as “strategic priority” the implementation of the National Plan for Cyber Defense, considered a key issue to allow the country to enter the global trend of digitalization in production.

Despite new technologies making things easier, it is currently observed in various functions of the armed forces around the world that modern defense and security policies have failed regarding personnel and technical training, even reducing investments in this field. Many of the important functions of the armed forces still require strong human capital in order to succeed because the development and control of new technologies specifically depends on qualified personnel proficient in leadership principles. The urgent need for personnel in strategic defense areas in many countries, including Germany and the United States, has caused an increase in the hiring of external experts and outsourcing to private companies for work with national defense institutions.

The future of international defense and security is yet to face tougher challenges in reference to another question: the use of artificial intelligence for defense purposes. If, on the one hand, the topic of replacing of human beings with software and autonomous equipment in the armed forces is controversial, on the other hand, the development of human capital is crucial for a successful interaction between humans and machines. Military organizations should be ready for a future even more based on intelligent technologies, regarding not only their development, but also regarding how to foster the creation of a new field of interaction between artificial intelligence and the military. The need for training military personnel capable of engaging with norms on the use of autonomous technologies in conflicts is also very important.

Furthermore, In order to engage in the most fruitful manner different social actors in international security projects it is crucial to face gender issues. In spite of this urgent need for new and skilled human capital in the armed forces, gender issues are, for instance, quite often taboo subjects, and may be listed as a determining factor for providing and balancing personnel development among the military. Internationally, UN Security Council's historic Resolution 1325 serves as the main document guiding national policies considering the connection between women, peace and security. European countries are at the forefront of bringing down barriers for the role of women in the military service and other positions that contribute to order and predictability while, in Latin America, a limited number of countries have been able to develop efficient policies in this regard.

The implications for international security and global power of the Fourth Industrial Revolution already poses a big challenge in itself. Gender issues and the progress of artificial intelligence particularly increase the pressure on what leadership principles will be like in the future. The 16th edition of the International Security Conference Forte de Copacabana aims at contributing to the mutual learnings of Europe and Latin America by addressing the broad topic of international security from the perspective of the Fourth Industrial Revolution, the integration of artificial intelligence in defense and international security issues and its relationship with gender issues in the armed forces through three major panels: (Panel i) “The Fourth Industrial Revolution: Impacts on International Security and the Reshaping of Global Order”; (Panel ii) “Artificial Intelligence in the Balance of Power in International Politics”; and finally, (Panel iii) “The Gender Factor in International Security”. The present document is, above all, the basis for work to be carried out throughout the year by the Konrad Adenauer Foundation and its local partners in the area of international security and includes not only details on the open conference, but also information on prior preparatory meetings.

PREPARATORY MEETINGS

1st Preparatory Meeting: Discussion on “**The Fourth Industrial Revolution and Artificial Intelligence: Impacts on International Security, the Balance of Power and the Global Order**” and production of one preparatory document for the 16th International Security Conference “Forte de Copacabana”.

June 14th at the Ministry of Defense in Brasília

Discussion especially focusing on “**The Fourth Industrial Revolution and Artificial Intelligence**”. One preparatory document for the open conference is to be produced with conclusions from this meeting.

Suggested Participants: Colonel Franco Azevedo, Professor at the Brazilian Army Command and General-Staff College (ECEME), Secretary for Federal Intervention (GIF); Ronaldo Carmona (ESG); William Moreira (EGN).

Moderator: Monica Herz (IRI-PUC-Rio/CEBRI)

2nd Preparatory Meeting: Discussion on “**The Gender Factor in International Security**” and production of one preparatory document for the 16th International Security Conference “Forte de Copacabana”.

August 5th at the Brazilian Naval War College in Rio de Janeiro

Discussions on “**The Gender Factor in International Security** ”. One preparatory document for the open conference is to be produced with conclusions from this meeting.

Suggested Participants: TBN (Igarapé Institute); Paula Drummond (IRI-PUC/Rio); Ligia Fabris (FGV Law School); Major Christiane Lima, Brazilian Peace Operations Joint Training Center; Representative of the UN Women to Brazil; Representative of the Ministry of Justice and Public Security;

Moderator: Monica Herz (IRI-PUC-Rio/CEBRI)

SPEAKERS' INTERNAL MEETING

Hilton Copacabana - September 19, 2019

12:00 Lunch at Hilton Copacabana

14:00 Opening

Anja Czymmeck, Representative, Konrad Adenauer Foundation in Brazil • **José Pio Borges**, Chairman of the Board of Trustees, Brazilian Center for International Relations, Brazil • **TBN**, Ambassador, Delegation of the European Union to Brazil

14:15 Parallel round table discussions on the topics of the next day

Round table of the panel 1: “The Fourth Industrial Revolution: Impacts on International Security and the Reshaping of Global Order” Round table discussion with the presentation of “*policy oriented*” conclusions at the end of the allotted time for discussions.

Name, Position, Institution, Germany • **Antônio Sampaio**, Research Associate, International Institute for Strategic Studies, United Kingdom • **Ronaldo Carmona**, Professor, Brazilian War College, Brazil • **Name**, Position, "EU Digital Agenda / Digitalization of Industry", Europe

Moderator: André Clark, President and CEO, Siemens Brazil (*confirmed*)

Round table of the panel 2: “Artificial Intelligence in the Balance of Power in International Politics”

Round table discussion with the presentation of “*policy oriented*” conclusions at the end of the allotted time for discussions.

Guido Amins Naves, Official General of the Brazilian Army's Cyber Defense Command • **Michel Servoz**, Senior Advisor for Robotics and Artificial Intelligence to the President of the European Commission, Brussels • **Alcides Vaz**, Professor, University of Brasilia, Brazil • **Benjamin Fricke**, Security Policy Advisor, Konrad Adenauer Foundation, Germany (*confirmed*)

Moderator: Carlo Masala, Professor, Bundeswehr University Munich, Germany

Round table of the panel 3: “The Gender Factor in International Security”

Round table discussion with the presentation of “*policy oriented*” conclusions at the end of the allotted time for discussions.

Dalva Mendes, Rear Admiral, Brazilian Navy, Brazil • **Name**, Representative, UN Women Brazil • **Laura Albornoz Pollmann**, Senior Fellow, Adriene Arsht Latin American Center, Chile • **Mari Marinaki**, Principal Advisor on Gender, European External Action Service, Brussels

Moderator: Irene Giner- Reichl, Ambassador, Embassy of Austria, Brazil (*confirmed*)

16:00 **Coffee Break**

16:30 **Presentation of the conclusions of each table**

17:00 **Strategy discussion on the future of the International Security Conference Forte de Copacabana**

Moderator: Jan Fuhrmann, CDU/CSU Parliamentary Group, German Federal Parliament (Bundestag), Germany

18:30 **Transportation to dinner**

19:00 **Dinner at Rubaiyat Rio**

Dinner Speech

Name, Position, Institution, Country

INTERNATIONAL SECURITY CONFERENCE FORTE DE COPACABANA

Brazilian Naval War College (EGN) – September 20, 2019

09:30 Opening

Anja Czymmeck, Representative, Konrad Adenauer Foundation in Brazil

José Pio Borges, Chairman of the Board of Trustees, Brazilian Center for International Relations, Brazil

TBN, Ambassador, Delegation of the European Union to Brazil

10:00 Keynote Speeches: The Reshaping of Global Power from the Perspective of the Fourth Industrial Revolution

Fernando Azevedo e Silva, Minister of Defence, Brazil

11:00 Panel 1: The Fourth Industrial Revolution: Impacts on International Security and the Reshaping of Global Order

- What are the security implications of the Fourth Industrial Revolution and of the national strategies adopted worldwide to engage in it?
- To what extent is the current race for global technological leadership reshaping the balance of power and the global order?
- How can technological capacity and international cooperation assist in combating transnational organized crime, terrorism and urban violence?

Introductory Speech: Name, Position, Institution, Germany

Antônio Sampaio, Research Associate, International Institute for Strategic Studies, United Kingdom

Name, Position, "EU Digital Agenda / Digitalization of Industry", Europe

Ronaldo Carmona, Professor, Brazilian War College, Brazil

Moderator: André Clark, President and CEO, Siemens Brazil (*confirmed*)

12:30 Lunch at Brazilian Naval War College (EGN)

14:30 Panel 2: Artificial Intelligence in the Balance of Power in International Politics

- What are the current limitations to using artificial intelligence in international conflict areas?
- To what extent will human capital be gradually replaced by weapons equipped with artificial intelligence in war zones?
- What are the risks and opportunities in using autonomous weapons in conflicts?

Introductory Speech: Guido Amins Naves, Official General of the Brazilian Army's Cyber Defense Command

Michel Servoz, Senior Advisor for Robotics and Artificial Intelligence to the President of the European Commission, Brussels

Alcides Vaz, Professor, University of Brasilia, Brazil

Benjamin Fricke, Security Policy Advisor, Konrad Adenauer Foundation, Germany
(confirmed)

Moderator: Carlo Masala, Professor, Bundeswehr University Munich, Germany

16:15 Panel 3: The Gender Factor in International Security

- How to expand women's participation in decision-making levels for international conflict resolution?
- To what extent are women differently impacted by international conflicts, urban violence and insecurity?
- What are the potential benefits of enhancing female participation in conflict resolution and peace construction efforts?

Introductory Speech: Dalva Mendes, Rear Admiral, Brazilian Navy, Brazil

Name, Representative, UN Women Brazil

Laura Albornoz Pollmann, Senior Fellow, Adriene Arsht Latin American Center, Chile

Mari Marinaki, Principal Advisor on Gender, European External Action Service, Brussel

Moderator: Irene Giner- Reichl, Ambassador, Embassy of Austria, Brazil (confirmed)

17:45 **Closing**

Augusto Heleno Ribeiro Pereira, Minister of the Institutional Security Cabinet, Brazil

19:30 **Dinner at Alloro, Hilton Copacabana**

