

# Croatian Internet Governance Forum CRO-IGF 2020 – Final Report

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## What is Internet Governance Forum?

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The Internet Governance Forum (IGF) is a global initiative under the auspices of the UN with the idea of bringing together all interested parties to participate equally in discussions and issues relevant to Internet governance. The initiative was created in 2006 at the "World Summit on the Information Society" (WSIS) in Tunisia, decided by the UN Secretary-General, as an open platform for discussion on Internet governance issues. The immediate motivation for this decision was the need to dissolve the governance and regulation of the Internet to the involvement of the wider community, which provided insights that Internet governance topics spread from the topic of IP address to IP address, Internet protocols and domains. It is important that other stakeholders such as civil society, academia, industry and the private sector take active part in these debates along the state representatives.

The IGF does not have a decision-making mandate, nor does it adopt binding acts, but their results may affect the procedure, which have binding effects. The IGF, by drawing its conclusions and drawing attention to topics that are relevant, can influence decision makers and thus participate in forming an official national position or public policy in the field of internet governance.

The IGF is fully open to the participation of anyone interested in the issues of Internet stability, its security, usage and development. IGF is an annual event. Topics that will be discussed on the IGF can be suggested by anyone interested.

In addition to the global IGF initiative, there are regional (e.g. EuroDIG - European Dialogue on Internet Governance, SEEDIG - South East European Dialogue on Internet Governance), national (e.g. CRO-IGF), age (Youth IGF).

IGF initiatives, especially national and regional ones, are important because they promote communication among all stakeholders, foster the development of a culture of dialogue among different stakeholders on internet-related issues, which helps in anticipating different perspective and interests.

Important principles on which the IGF is based are:

- openness and transparency (allowing all interested parties to participate in the IGF, public insight into all parts of the IGF's work)
- inclusivity (enable active involvement of all concerned)
- bottom-up approach (involving the public in the creation of the IGF program)
- is not intended for sale of goods and services
- multi-stakeholder model (model of involvement of all stakeholders: academia, business sector and industry, civil society organizations and state and public administration)

## Why CRO-IGF?

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The National IGF has been running for five years now as a platform for open and inclusive multi-stakeholder discussions on Internet governance issues in Croatia. The first CRO-IGF was held in Zagreb on May 6, 2015 at the Faculty of Electrical Engineering and Computing, University of Zagreb. One of the topics discussed was about the benefits that CRO-IGF as a platform could bring to Croatia. Report from the first CRO-IGF is available at [http://www.intgovforum.org/cms/documents/igf-initiatives/igf-regional-and-national-initiatives/igf-regional-and-national-initiatives-2015-1 / 504-Croatia-igf2015-report-1](http://www.intgovforum.org/cms/documents/igf-initiatives/igf-regional-and-national-initiatives/igf-regional-and-national-initiatives-2015-1-504-Croatia-igf2015-report-1)

The goals of CRO-IGF are to:

- point out to various stakeholders the opportunities for involvement in Internet governance processes relevant to their business and activities, and to encourage dialogue and, if necessary, help in capacity building for better understanding Internet-related topics;
- empower and interest all stakeholders in Croatia to actively participate in national, and then directly or indirectly, regional and international Internet governance processes;
- identify Internet governance topics important to Croatia.

## CRO-IGF 2020 Preparatory Process

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The preparatory process for the 2019 annual event began in May 2019. The Organizing Committee prepared a call for topics and, based on the proposed topics, prepared a Forum program consisting of two panel discussions:

1. Security of 5G Networks
2. Strategic, legislative, ethical and linguistic aspects of artificial intelligence

## CRO-IGF 2020 Organizational Committee

<p><b><u>Academic Community:</u></b>          Dražen Dragičević, Faculty of Law, Univeristy of Zagreb          Marin Vuković, Faculty of Electrical Engeneering and Computing, University of Zagreb</p>	<p><b><u>Private sector/Industry:</u></b>          Milan Živković, Ericsson Nikola Tesla</p>
<p><b><u>Public Sector:</u></b>          Tihomir Lulić, Ministry of Foreign and Eurorpean Affairs          Leda Lepri, Ministry of Administration          Krešo Antonović, Ministry of Maritime Affairs, Transport and Infrastructure          Nataša Glavor, CARNET, MAG Member          Zdravko Jukić, HAKOM, GAC Representative</p>	<p><b><u>Internet Users/Civil Society:</u></b>          Kristijan Zimmer, Croatian Open Systems Users' Group, HrOpen</p>

### **CRO-IGF Organizational Committee Members:**

Tihomir Lulić, Ministry of Foreign and Eurorpean Affairs  
 Leda Lepri, Ministry of Administration  
 Krešo Antonović, Ministry of Maritime Affairs, Transport and Infrastructure  
 Dražen Dragičević, Faculty of Law, Univeristy of Zagreb  
 Marin Vuković, Faculty of Electrical Engeneering and Computing, University of Zagreb  
 Milan Živković, Ericsson Nikola Tesla, Zagreb  
 Nataša Glavor, Croatian Academic and Research Netowtk - CARNET, MAG member  
 Kristijan Zimmer, Croatian Open Systems Users' Group, HrOpen  
 Zdravko Jukić, Croatian Regulatory Authority for Network Industries (HAKOM)

### **CRO-IGF 2020 Executive Committee Members:**

Hrvoje Hadžić, Ericsson Nikola Tesla  
 Zdravko Jukić, HAKOM  
 Nataša Glavor, CARNET, CRO-IGF 2019 Chair

More detailed information on organizations with representatives on the CRO-IGF Organizing Committee:

Ministry of Foreign and Eurorpean Affairs	<a href="http://www.mvep.hr/">http://www.mvep.hr/</a>
Ministry of Administration	<a href="https://uprava.gov.hr/">https://uprava.gov.hr/</a>
Ministry of Maritime Affairs, Transport and Infrastructure	<a href="http://www.mmpi.hr/">http://www.mmpi.hr/</a>
Croatian Academic and Research Network - CARNET	<a href="http://www.carnet.hr/">http://www.carnet.hr/</a>
Faculty of Law, Univeristy of Zagreb	<a href="https://www.pravo.unizg.hr">https://www.pravo.unizg.hr</a>
Faculty of Electrical Engeneering and Computing, University of Zagreb	<a href="https://www.fer.unizg.hr">https://www.fer.unizg.hr</a>
Ericsson Nikola Tesla	<a href="http://www.ericsson.hr/homepage">http://www.ericsson.hr/homepage</a>
Croatian Open Systems Users' Group, HrOpen	<a href="http://www.open.hr/">http://www.open.hr/</a>

Croatian Regulatory Authority for Network Industries (HAKOM)	<a href="http://www.hakom.hr">http://www.hakom.hr</a>
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CRO-IGF web site is available at [http://www.carnet.hr/carnet\\_events/cro\\_igf](http://www.carnet.hr/carnet_events/cro_igf)

CRO-IGF community contact could be reached using email address [cro-igf@carnet.hr](mailto:cro-igf@carnet.hr)

## CRO-IGF 2020 Program

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The fifth Croatian IGF was held in Zagreb on December 13, 2019 at the premises of the Faculty of Electrical Engineering and Computing. This one-day event had the following agenda:

1. Welcome speeches by CRO-IGF Chair and President of the HAKOM Council
2. Security of 5G Networks
3. Strategic, legislative, ethical and linguistic aspects of artificial intelligence
4. Informal socializing

Tonko Obuljen, President of the HAKOM Council, greeted the attendees, after which Nataša Glavor of CARNET, the Chair of this year's CRO-IGF, gave an overview presentation of the current global Internet Governance issues.



Tonko Obuljen, president of the Council of HAKOM holds the opening statement



Nataša Glavor, CRO-IGF 2019 Chair gives an overview presentation of the current global IG issues

## Security of 5G networks panel discussion

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### Panel Participants:

#### Panelists

- Kristina Posavec, Deputy Secretary of State, Central Government Office for the Development of the Digital Society
- doc. dr. sc. Stjepan Groš, Faculty of Electrical Engineering and Computing, University of Zagreb
- Milan Živković, Director, Strategy and Business Development, Ericsson Nikola Tesla
- Hrvoje Nenadić, Cyber Security Officer, Huawei
- Zdravko Jukić, Deputy Executive Director, HAKOM

#### Moderator

- Tamara Tafra, Diplomatic Advisor (Cyber), Ministry of Foreign and European Affairs, Permanent Representation of the Republic of Croatia to the EU in Brussels

### Topics discussed in the panel:

- Security issues of 5G networks as a basis for new applications of communications networks
- Different approaches to cyber security worldwide
- Measures taken by manufacturers of electronic communications network equipment to ensure the high security of their products and solutions
- A common European approach to addressing the security of 5G networks



## **Messages from the panel discussion:**

Message 1: The telecommunications network is the basis for the application and development of other technologies, including the Internet of Things (IoT) and artificial intelligence. That is why it is of great importance to ensure the cyber security of that network. In the European Union, much attention is paid to the security of telecommunications networks, and in particular the new emerging 5G network, which is expected to provide a range of new services.

Message 2: Coordinated risk assessment action for 5G networks was carried out across the EU, at each Member State and EU level. In response to perceived risks, a Toolbox is being developed to mitigate security risks. Toolbox tools should be published and available for use by the beginning of the year 2020 to all EU Member States. As one of the tools in the Toolbox would be Certification of the device vendors and the network itself.

Message 3: The certification process brings many challenges. The certification process should prevent system security breaches to happen, but it cannot ensure it. Additional problem is that the certification process is taken from other domains, which do not develop as fast as digital technology, and there is a justifiable fear that certification would not solve the problem for which it was originally introduced.

Message 4: It is almost impossible to constantly check whether functionality that was not supposed to be there in the network is somehow installed in the network through a 5G device. That would require time, people and great financial resources. One possible scenario of a potential attack is, for example, spreading malware through the network using patch management infrastructure and procedures. There may be security tests that might help preventing this situation, but it's impossible to test something you don't know is there.

Message 5: Security of 5G networks is the responsibility of everyone - states, regulators, manufacturers, service providers. Everyone should show their share of responsibility and contribute to security in their domain.

Message 6: Certification may not be ideal tool, but it is a standardized framework for classifying the extent to which certain software is secure. It is a living process that needs to be constantly upgraded. It would be important to introduce greater transparency and to ensure the supply chain so that manufacturers have more suppliers at hand and do not depend on only one. That could help to disperse risk so that it is not passed on to telecommunications providers only.

Message 7: Providers should take care of the security of all parts of their network, having in mind security by design principles when designing and setting up the network. Knowledge transfer should be present, regularly assessing risks, monitoring vulnerabilities, managing software patches and upgrades, and having collaboration between telecom vendors and providers to prevent vulnerable systems exposure as soon as possible by installing upgrades, patches, or applying workarounds and preventing unauthorized access.

Message 8: Nobody thinks of vendors as malicious. But the fact is that the equipment supplier has privileged access to the network of service providers. This means that at any time, at least theoretically, vendor can access the core part of the network with highest access privilege granted. Normally, this equipment does not change for 10-15 years after installation on the network. This creates an opportunity for the 5G vendor to control the telecommunications provider.

Message 9: Huawei, for example, already has provider-aligned procedures in place that do not grant permanent access to the core network without access control. The equipment manufacturer receives

one-time access passwords from the telecommunications service provider upon the request which must contain the reasons for requesting access.

Message 10: A possible suggestion for improving the certification process could be that EU companies should be given more emphasis. The EU is seeking to encourage 5G manufacturers to counterbalance the global market. It needs to invest and collaborate with European companies such as Nokia, Ericsson. In the long run, this can help us to have this technology developed in the European Union.

Message 11: However, it is not realistic to expect citizens to think strategically, to buy perhaps more expensive and inferior services in the short term in order to secure an EU strategic advantage in the long run. The state strives for regulatory and legal frameworks to ensure that users do not care about manufacturers or bother with security issues.

Message 12: We doubt Croatia can be a leader in 5G technology. Hopefully the toolbox won't have a postlab test - it's not possible to test telecom software that way. The problem with depositing source code is copyright issue and this will not increase security. The foundation of security is trust, which cannot be tested. But there are procedures and standardization such as 3GPP (security by standards), standards in the production of telecom solutions (security by design), design, i.e. implementation of networks, and exploitation i.e. access controls. If we go in this direction, we as Europe have a chance to step out.

Message 13: The readiness of the Republic of Croatia for the 5G network will depend on telecommunication service providers and their business decisions on when to start deploying the 5G networks and at what pace. Regulation can shape this process to a certain extent.

Message 14: Educating and reporting on early failures can certainly help to point out the bad solutions, malicious behaviour and legal consequences that may have followed.

Message 15: To Huawei business comes first, and maintaining its image is its most important interest. All participants in this process should work to jointly assess the risks and minimize the harm that could be done by exploiting the vulnerabilities discovered.

Message 16: E.g. one of the non-technical measures could be that states that do not have an independent legislative system cannot enter the 5G race. The question is how to regulate it and even determine this is the case.

Message 17: The reasons for the EU's lag in 5G coverage is a fragmented market, decisions by countries to authorize the use of the frequency spectrum and unequal price for spectrum in European countries, where high prices prevent operators from investing.

Message 18: Ericsson Nikola Tesla has piloted 5G networks with two telecommunications providers. They believe Croatia will have a 5G network next year. Frequencies are expected to be authorized to use next year and everything should be ready for implementation.

Message 19: As part of the 5G Action Plan, a request for interest was sent that by the end of 2020, each EU Member State should have a larger city with a developed and enabled 5G network. One city in the Republic of Croatia was selected for this pilot project implementation where a 5G network would be commercially introduced. We hope to launch a wider commercial 5G implementations outside this designated 5G city next year.

Message 20: Frequencies for the 5G network will be available when the television transition is completed, and there is currently a public consultation for anyone interested in participating in this



process. Optical capacities are also needed to connect the 5G infrastructure, not everything will be possible to go by air. Legal restrictions regarding the deployment of optical infrastructure are currently an obstacle, but we expect that this will be addressed soon. A common EU firm stance on implementing 5G networks would be desirable.

Message 21: The reason why there are no longer vendors interested in testing and research in this area is of many entry barriers regarding in this field. Ericsson Nikola Tesla invests 17% of its profit in R&D. The Korean market is the most developed one. We expect that in the future, more focus will be on virtualisations and software development. Huawei also invests heavily in R&D, 5G is a demanding market and few companies can afford such long-term investment, manufacturers are more oriented to the application market where investments are lower.

Message 22: The market shows that, unlike the time when GSM was developed, when we had a dozen telecom vendors, today most of the big manufacturers have either disappeared from the market or merged with other manufacturers, so today we have only three or four companies globally. Companies enter their patents into standards, and it is very difficult for a company that is not active in standardization process to enter that market because it would depend on all companies that were active in developing standards, which in practice means that it would not be able to compete with them.

Message 23: 5G is just the next generation of mobile technology. The problem is that with the 4G network and smartphones, we have saturated, profits stagnate or fall. Technology that would reduce its price tenfold over 4G, and allow for further development of the carrier, was needed and that is why 5G emerged.

Message 24: There is a widespread concern about the danger of multiple base stations. And for 4G it takes a lot of base stations. 5G has directional antennas capability. With increasing frequency, the penetration of signals and radiation decreases. Rural areas will not be covered by 5G networks that offer low latency and very high speeds. Currently there is no 5G stand-alone, but 4G infrastructure is being used.

Message 25: Roads are being equipped with Internet infrastructure in the European Union to prepare for autonomous and semi-autonomous vehicles. How are we doing with these serious projects? Ericsson Nikola Tesla and its partners are working on the development of private 5G networks. Ericsson's new US factory is fully equipped with 5G infrastructure. Huawei worked on the application of 5G technology in remote mining. It was a surface mine, people operated remotely, semi-autonomous 5G technology is used.

Message 26: The Republic of Croatia is in the process of planning e-mobility activities and autonomous vehicles to be implemented next year. The CEF Regulation in the new CEF2 - Connecting Europe Facility, foresees new 5G corridors. The regulation will be adopted next year and the network of autonomous road corridors will be announced. Other programs also provide funding for this type of infrastructure. Completion of this strategic document is a priority according to the Prime Minister's statement.

Message 27: We do not know if the country has plans to contract with neighbouring states in that corridor and whether we as a state have a plan to define corridors with neighbouring states, regardless of these grants.

Message 28: State and regulators play the biggest role in achieving security of 5G networks, and the individual users can have very limited influence.

Message 29: There is still an open public hearing on 5G networks that everyone can get involved with, available at [https://e-rasprave.hakom.hr/erasprava/public/discussions/545#\\_Toc19714487](https://e-rasprave.hakom.hr/erasprava/public/discussions/545#_Toc19714487)

Message 30: Security of 5G networks will be a topical issue during the Croatian Presidency of the European Union first half of this year 2020.



Panel Participants on Security of 5G Networks

## Panel discussion on strategic, legislative, ethical and linguistic aspects of artificial intelligence

### Panel Participants

#### Panelists:

- Mario Antičić, Secretary of State, Ministry of the Economy, Industry and Crafts
- Marijana Šarolić Robić, Director of PWN Zagreb
- doc. dr. sc. Hrvoje Lisičar, Faculty of Law, University of Zagreb
- prof. dr. sc. Marko Tadić, Faculty of Philosophy, University of Zagreb
- prof. dr. sc. Sven Lončarić, Faculty of Electrical Engineering and Computing, University of Zagreb

#### Moderator:

- Tanja Ivančić (Newspaper Večernji list)

### Topics discussed in the panel:

- On a strategic document related to the development and application of artificial intelligence in the Republic of Croatia as part of the national legislation plan
- Ethical and moral dilemmas in the development and use of artificial intelligence
- On the need to regulate the field of artificial intelligence
- The importance of natural language in artificial intelligence

## **Messages that could be heard on the panel:**

Message 1: Artificial intelligence should be useful to everyone, not something to be feared of. It signifies a shift and change in the way society works. Artificial intelligence is not a new term, but its popularity has grown tremendously in the last few years. For about 40 years, we have been dealing with the intriguing idea that machines could do some repetitive work, that increasingly complex procedures could be automated and that new applications, such as autonomous vehicles, could be introduced.

Message 2: The ability of artificial intelligence algorithms to learn is not adaptive and particular caution should be taken when using the term "learning" while referring to machine learning.

Message 3: Although data show that 34% of people are globally familiar with the concept of artificial intelligence, the question is how many really understand what this is about. Artificial intelligence includes a wide range of technologies used.

Message 4: It is important to educate yourself and your children on how to check the relevance of information, which is not easy at a time of fake news.

Message 5: A strategic document is currently under development regarding the development and application of artificial intelligence in the Republic of Croatia, as part of the national legislation plan. The planned completion of the document is by the end of this year, 2019.

Message 6: We are not yet sufficiently aware that engaging in data-driven and artificial intelligence decision-making is our personal interest. This algorithms and the information used will soon influence whether you will be granted credit or not.

Message 7: It is important to decide what we want as a state through our strategy. From a government perspective, this is a strategic document, a framework in which the scientific sector, civil society, industry, and therefore all stakeholders, must also participate. It should be stated what are the strategic determinants of economy, research and development, smart specialization. The strategic document is the basis of the operational plan for the withdrawal of EU funds and the RH 20/30 strategy. We want to include artificial intelligence in all strategic settings, where all stakeholders will have the opportunity to get involved in withdrawing funds from EU, UN, Horizon funds and will be able to use it to develop and / or apply artificial intelligence.

Message 8: As far as ethical and moral dilemmas related to the development and use of artificial intelligence are concerned, it is global topic and something will certainly need to be done. There is no artificial intelligence without opening the data and using it. We may soon have a law on the use of artificial intelligence, we don't know that. In any case, we want artificial intelligence to benefit everyone, meaning humanity.

Message 9: We have given confidence to the economy, and instead of regulating the field of artificial intelligence, have chosen to co-regulate it. Indicators show that artificial intelligence will need to be regulated. One of the reasons for the weak regulation of new technologies is the fear of limiting creativity, development and investments. However, we are now facing situations when democracy is threatened. Artificial intelligence regulation is needed as soon as possible. Priority is given to autonomous vehicles and autonomous weapons for military purposes.

Message 10: Ethical guidelines adopted at EU level concern legality, ethics and robustness. The document was created as a policy document and a recommendation for investment, and it shows the

direction in which the European Union is heading in terms of regulation, which is learning from mistakes, so that the system can be further improved. It is important to say that there are 52 members in this high level group within the European Commission, most of them related to the IT industry, with very few members of civil society and academia. The agenda is imposed on us by the industry itself and that is not good. Protecting fundamental human rights, a derivative of protecting privacy right is the key. It is time for EU countries to realize the seriousness and the threat of producers and vendors building regulation.

Message 11: It is recommended that new technologies, including artificial intelligence, be provided with legality through the possibility of more detailed special regulation.

Message 12: So far, more attention has been paid to ethical principles in the development and application of artificial intelligence, and less to regulation. Now is the time for regulation.

Message 13: On the other hand, over-regulation discourages investors.

Message 14: The economy has done a lot to implement the General Regulation on the Protection of Personal Data. However, the state has not done enough. GDPR shows the direction state wants to go in regulating artificial intelligence - transparency and accountability are fundamental principles.

Message 15: The Centre for Artificial Intelligence at the Faculty of Electrical Engineering and Computing recently opened. FER has been addressing this topic since long. It is increasing the visibility of AI technology to the economy by fostering a connection with the economy and offering research sites for smaller companies that cannot afford strong R&D.

Message 16: Artificial intelligence can be divided into weak and strong intelligence. Strong intelligence possesses human capabilities - read texts, interpret images. Current artificial intelligence systems are not able to have strong intelligence. What can be accomplished right now is poor intelligence - solving highly specialized tasks. E.g. in search engines after typing the term, you are offered similar content, this analysis was made using artificial intelligence.

Message 17: In dealing with artificial intelligence, the ability to use natural language (passing the Turing test) is important. A new term - language technology - has been introduced. It is important to understand technology and linguistics in this area, preferably in one person, and there are few such experts. The use of natural language is important, we will have robots in the house soon. We will interact with them naturally. Only part of the natural language can be covered by the rules. Each of us uses words in a slightly different way. Artificial intelligence does not know what to do with metaphors. Will artificial intelligence overcome this barrier? If the computer manages to recognize speech and understand the message, connect it to the plenary concept, where we are here with Croatian language. It is important to incorporate language technologies into the national AI strategy.

Message 18: Croatian is the 24th official language of the EU and this information is extremely important. The Republic of Croatia must take care to preserve the language as a cultural heritage. Research shows that 50% of customers shop at a web shop only if the store web page is in their language. 60% of customers would pay more if there was a product description on the store's website in their language. Unless we take care the Croatian language takes place in the field of artificial intelligence and emerging technologies, we will remain on the other side of the digital divide of the digital single market. One part of the EU funds available through the CEF telecoms fund is provided for digital translation, e.g. you can access Europeana (<https://www.europeana.eu/>) in your own language.

Message 19: Until recently, the main paradigm was statistical machine translation, and the current one is neural machine translation. E-Translation is a service provided by the European Commission to public administrations, academia, small and large businesses and can be used to translate from one EU language to another, including Icelandic, Norwegian.

Message 20: For the time being, artificial intelligence in medicine is being applied mostly in the field of computer vision through projects at FER. Examples of image or text analysis are examples of data analysis. How easy it is to fool algorithms. How to teach them not to make mistakes? How far are we from self-driving cars? It's already here. This should always be seen as helping the driver. This area needs to be regulated, autonomous vehicles are allowed on the road provided there is a person in the car. A lot is being done in the area of maritime transport. Legal regulation should be seriously considered.

Message 21: The problem with source code publishing is that it is copyrighted. You cannot find out what the algorithms that made using your data look like. The question arises of responsibility for the errors made in the algorithm.

Message 22: The issue of responsibility is not a new question. Earlier, there was a possibility that the engineer had wrongly connected a mechanical or electrical part in, for example, a car, causing damage and someone getting hurt. This happened even before the widespread use of artificial intelligence.

Message 23: The strategy cannot specify details, such as exactly what jobs can be replaced by robots. But human resources management and education is an important part of the strategy. Some jobs will disappear, others will be created. Germany is the country with the largest number of robots, and they are looking for a worker now more than ever. Predictions are that digital technologies will be just as important in schools as subjects of Croatian language and mathematics. In the next half year, the South East European Center for Entrepreneurial Learning (SEECCEL) at Kajzerica in Zagreb should be completed and ready for operation.

Message 24: When you need to develop some language technology, you have to invest a certain amount of research hours, which is of course easier to do in larger and richer countries. Industries are eager to participate in the development of artificial intelligence and other emerging technologies. We are fortunate that the Croatian language is one of the official languages of the EU and that EU funds are available to us for the development of language technologies and for "smaller" languages.

Message 25: The question is whether we will give legal personality to robots. We have not yet reached the level that artificial intelligence decides human destinies. Artificial intelligence is at the level of assistance and automation of individual processes. One of the important uses of artificial intelligence is to analyse radiological images to assist radiologists.

Message 26: Can artificial intelligence make the wrong decision or deliver the wrong information? It can, as a human being can. But for a human being there is a certified system that ensures his or her level of knowledge and skills. Will we also have such protocols for robots?

Message 27: It is important to teach children the ability to think abstractly, learning grammar, math, and music can greatly help. Algebra is at the root of each of these areas. It is important to learn meta grammar, that is, to learn that you can easily learn any grammar.



Participants in the panel discussion on artificial intelligence

## Audience

The Forum was attended by 70 participants. The presence of participants from different stakeholders was fairly evenly distributed among the government, private sector and academia, while civil society representatives were less represented.



The audience actively participates in panel discussion on 5G networks

## Conclusions

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The main conclusions of the Forum are that in Croatia it is necessary to continue to support and develop a dialogue on issues related to the Internet and in particular Internet governance, which should be open and inclusive to all interested stakeholders. Emphasis was placed on the need to urgently regulate the use of artificial intelligence for autonomous weapons and similar activities that directly threaten human rights.

## Special Thanks

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CRO-IGF's annual event was made possible by the positive attitude and efforts of all organisations represented on the CRO-IGF Organizing Committee. Special thanks to the Faculty of Electrical Engineering and Computing in Zagreb that hosted this year's forum. Financial support from the RIPE NCC Organization was very important in organizing CRO-IGF 2019 event. Thanks everyone!

## More Information and Contact

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You can contact the Croatian multi-stakeholder community for Internet governance issues by email: [cro-igf@carnet.hr](mailto:cro-igf@carnet.hr)

Zagreb, 20. January 2020